

Southern Utah Wilderness Alliance – Center for Biological Diversity – Coalition to Protect America’s National Parks – Great Old Broads for Wilderness – Living Rivers – National Parks Conservation Association – Natural Resources Defense Council – Old Spanish Trail Association – Partnership for the National Trails System – Public Employees for Environmental Responsibility – The Wilderness Society – Utah Chapter of the Sierra Club – Waterkeeper Alliance – Western Watersheds Project – WildEarth Guardians

Comments submitted via ePlanning comment portal and e-mail (blm_ut_lease_sale@blm.gov) – exhibits sent via USPS First Class Mail only

July 9, 2020

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RE: September 2020 Competitive Oil and Gas Lease Sale, DOI-BLM-UT-0000-2020-0004-EA

Greetings:

The Southern Utah Wilderness Alliance, Center for Biological Diversity, Coalition to Protect America’s National Parks, Great Old Broads for Wilderness, Living Rivers, National Parks Conservation Association, Natural Resources Defense Council, Old Spanish Trail Association, Partnership for the National Trails System, Public Employees for Environmental Responsibility, The Wilderness Society, Utah Chapter of the Sierra Club, Waterkeeper Alliance, Western Watersheds Project and WildEarth Guardians (collectively, SUWA) provide the following comments on the Utah BLM September 2020 Competitive Oil and Gas Lease Sale, DOI-BLM-UT-0000-2020-0004-EA (June 2020) [hereinafter, “Lease Sale EA” or “EA”].

For the reasons discussed herein the Lease Sale EA violates, among other laws, the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 *et seq.*, the Administrative Procedure Act (APA), 5 U.S.C. §§ 551-559, 701-706, Mineral Leasing Act, 30 U.S.C. §§ 181 *et seq.*, Federal Land Policy and Management Act (FLPMA), 43 U.S.C. §§ 1701 *et seq.*, National Trail Systems Act (NTSA), 16 U.S.C. §§ 1241 *et seq.*, and the regulations and policies that implement these laws.

I. SUWA Incorporates Its June 2020 Lease Sale Comments

The June 2020 lease sale parcels have been added to the September 2020 lease sale. *See* EA at 1. As a result, SUWA incorporates in their entirety the comments and attachments provided for the June 2020 lease sale environmental assessment. *See generally* SUWA et al., Comments RE: Utah

June 2020 Competitive Oil and Gas Lease Sale, DOI-BLM-UT-0000-2020-0002-EA (March 26, 2020) (SUWA Comments on June 2020 Lease Sale) (comments and exhibits thereto attached). SUWA's prior comments remain applicable here because, as discussed in more detail below, BLM has repeated many of the same mistakes it made for that sale. This includes:

- BLM failed to analyze all direct, indirect, and cumulative impacts of oil and gas leasing and development. *See id.* at 1-15.
- BLM's consideration of alternatives violated NEPA. *Id.* at 15-18.
- BLM relied on unlawful sections of Instruction Memorandum No. 2018-034, *Updating Oil and Gas Leasing Reform—Land Use Planning and Lease Parcel Review* (Jan. 31, 2018) (IM 2018-34) (attached). *Id.* at 18-20. And,
- BLM failed to analyze impacts to cultural resources, in violation of NEPA. *Id.* at 20.

Thus, SUWA incorporates its prior comments (and exhibits thereto) on the June 2020 lease sale.

II. BLM Cannot Rely on Unlawful Sections of IM 2018-34

The Lease Sale EA arbitrarily relies on sections of IM 2018-34 that have been set-aside by a Federal court as unlawful. As SUWA has previously explained, BLM is enjoined from relying on sections of IM 2018-34 and must instead comply with the reinstated sections of Instruction Memorandum No. 2010-117, *Oil and Gas Leasing Reforms—Land Use Planning and Lease Parcel Reviews* (May 17, 2020) (IM 2010-117) (attached). *See generally* SUWA Comments on June 2020 Lease Sale at 18-19. *See also* SUWA Letter to BLM, RE: Pending Oil and Gas Lease Sale Decisions Conducted in Violation of Law (March 20, 2020) (explaining that BLM must follow the reinstated provisions of IM 2010-117) (attached).

In *Western Watersheds Project v. Zinke*, the court set-aside and enjoined BLM from relying on the following sections of IM 2018-34:

- Section III.A (“Parcel Review Timeframes”).
- Section III.B.5 (“Public Participation”).
- Section III.D (“NEPA Compliance Documentation”).
- Section IV.B. (“Lease Sale Parcel Protests”).

See --- F. Supp. 3d ---, 2020 WL 959242, at *30 (D. Idaho Feb. 27, 2020). The court reinstated the corresponding sections in IM 2010-117, which BLM must follow in all lease sales involving greater sage-grouse habitat. *Id.* at *30-31. However, BLM should follow IM 2010-117 in all lease sales, including the September 2020 sale. This is because the court's reasoning can easily be extended to non-greater sage-grouse leases because IM 2018-34, as the court explained, is

procedurally invalid, substantively invalid, and thus, arbitrary. *See id.* at *27 (noting the “seriousness of BLM’s errors” regarding IM 2018-34).

Relevant here, the Lease Sale EA and BLM’s underlying leasing process for the September 2020 lease sale followed the above-cited unlawful sections in 2018-34, and failed to comply with the reinstated sections of IM 2010-117. For example:

- BLM plans to hold a “10-day protest period.” EA at 4. The 10-day protest period comes from section IV.B of IM 2018-34, which the court set-aside as unlawful. *See W. Watersheds Project*, 2020 WL 959242, at *30 (enjoining BLM’s “use of IM 2018-034, Section IV.B). Instead, IM 2010-117 section III.H requires “[a] 30-day protest period.”
- BLM plans to post the Notice of Competitive Lease Sale (NCLS) 45-days prior to the sale scheduled for September 29, 2020. *See* EA at 4 (“The parcels would be available for sale at an online auction held by the BLM, tentatively scheduled for September 29, 2020”); BLM, Utah Oil and Gas Lease Sales, <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/utah> (tentative posting of NCLS scheduled for August 10, 2020 i.e., 45 days before the September 29, 2020 sale). However, pursuant to the reinstated section III.H of IM 2010-117, BLM must post the NCLS “at least 60 days” before the sale.
- As noted *infra*, BLM must, pursuant to IM 2010-117 section III.E, analyze three NEPA alternatives. However, in the EA, BLM analyzed only two: the lease everything and lease nothing alternatives. *See* EA at 22-23.
- BLM followed the six month EOI review requirement in IM 2018-34 section III.A rather than take a deliberative approach that allowed the agency to “devote sufficient time and resources,” as required by IM 2010-117 section III.A. *See, e.g.*, EA at 3 (stating that BLM considered lease nominations received “[a]fter the EOI cutoff date”—a requirement of IM 2018-34 § III.A).
- BLM failed to follow a rotating lease sale schedule. *See, e.g.*, IM 2010-117 § III.A (requiring BLM to emphasize “rotating lease parcel review responsibilities among field offices . . . to allow each field office to devote sufficient time and resources”). Instead, the September 2020 lease sale follows the unlawful IM 2018-34 § III.A, which states that “BLM will no longer use a rotating schedule for lease sales.” *See* EA at 1 (September 2020 lease sale parcels are located in the Fillmore, Moab, Price, Richfield, and Vernal field offices).

Therefore, BLM must revise its EA and postpone the September 2020 lease sale in order to comply with IM 2010-117. The agency cannot continue to rely on sections in IM 2018-34 found to be unlawful—and enjoined—by a Federal court.

III. BLM Must Acknowledge the Proposed NEPA Regulation Revisions

As discussed *infra*, in the EA, BLM unlawfully postponed meaningful NEPA analysis past the point of irretrievable commitment of resources. Among other rationales, the agency did so because—allegedly—BLM will analyze site-specific impacts at some unknown future date (*e.g.*, the application for permit to drill (APD) stage). *See, e.g.*, EA, App. D at 299 (making this assertion with regard to cultural resources), 300 (same but for Native American religious concerns), 301 (same but for migratory birds), 304 (same but for threatened and endangered species), 313-15 (same but for water resources), 316 (same but for soils), 320 (same but for paleontological resources).

These promises ring hollow in light of the fact that the Trump administration CEQ has proposed to significantly gut and revise the NEPA regulations. *See generally* 85 Fed. Reg. 1684 (Jan. 10, 2020). Specifically, the CEQ NEPA revisions propose to, among other changes:

- Limit actions covered by NEPA. 85 Fed. Reg. at 1709 (“CEQ proposes to add two sentences to the definition to make clear that this term does not include non-Federal projects with minimal Federal funding or minimal Federal involvement such that the agency cannot control the outcome on the project.”);
- Eliminate requirements to analyze indirect and cumulative impacts. *Id.* at 1707-08 (proposing to strike reference to “indirect” and “cumulative” effects “to simplify the definition of effects”);
- Limit geographic scope of review. *Id.* at 1714 (proposing to revise NEPA scope of review by stating, “agencies may consider, as appropriate, the affected area (national, regional, or local) (emphasis added);
- Limit the agency’s obligation to obtain relevant information. *Id.* at 1703. (proposing to change the language in 40 C.F.R § 1502.22 from “not exorbitant” to “not unreasonable”); and,
- Take the heart out of NEPA by curtailing consideration of alternatives. *Id.* at 1701-02 (eliminating the direction “to rigorously explore and objectively evaluate” NEPA alternatives and deleting “all” before the phrase “reasonable alternatives”).

In the event the proposed CEQ regulations are finalized and withstand judicial review, BLM’s future NEPA reviews would be significantly different, and likely inadequate. In order to comply with NEPA, BLM must not “lease now, think later” when offering the proposed leases for development. *S. Utah Wilderness All. v. Norton*, 457 F. Supp. 2d 1253, 1267 (D. Utah 2006). For example, it is unlikely that BLM will take a hard look at cumulative impacts to water resources at the APD stage because—when that time comes—the agency will have no such obligation under the revised NEPA regulations. EA, App. D at 314 (asserting that “[f]urther examination and a thorough analysis would be included when an APD is received and before drilling is allowed”).

Furthermore, as SUWA has previously explained, BLM’s promise to perform meaningful NEPA analysis at the APD stage is a shell-game. The agency routinely does not analyze these impacts at the APD stage. To illustrate this point, SUWA provides the following example:¹

- The EA prepared for BLM’s December 2017 lease sale did not analyze impacts to water resources. *See* BLM, December 2017 Competitive Oil and Gas Lease Sale, Environmental Assessment, DOI-BLM-UT-G010-2017-0028-EA, App. E at 205-07 (Jan. 2018) (listing groundwater and surface water as “NI” or “NP” in the IDT Checklist).²
- SUWA and others commented on the leasing EA and, among other issues, explained that BLM violated NEPA by not analyzing impacts to water resources. *See generally id.*, App. G.
- In response to these comments, BLM explained that it did not need to analyze such impacts at the lease sale stage because it would do so at the APD stage. *See, e.g., id.*, App. G at 280 (Response 15: “Further analysis of hydraulic fracturing would occur at the APD stage if development of a specific well includes the use of hydraulic fracturing”); *id.* at 283 (Responses 22, and 23: “Please note that no surface disturbing activities will be authorized as a result of this EA. If the leases are issued and if development is proposed, then additional NEPA would be completed . . .”).
- The December 2017 lease sale included UTU-92679 (parcel 46) and UTU-92680 (parcel 47). *See* December 2017 Final Oil & Gas Lease Sale List at 18.³ BLM approved APDs on these leases in July 2019. *See* BLM, Environmental Assessment, Finley Resources Inc. Aurora and OPNX Wells, DOI-BLM-UT-G010-2019-0034-EA (July 2019).⁴ BLM did not analyze impacts to water resources in that EA. *See id.*, App. A at 7-8 (identifying water resources as “NI” and “NP” in the IDT Checklist).

Thus, BLM’s promise of future site-specific NEPA analysis is unsupported by record evidence and arbitrary. BLM’s failure to analyze and disclose to the public the impacts of its leasing decision violates NEPA, as further described herein.

IV. BLM’s Prioritizing of Leasing of Lands with Little or No Potential for Oil and Gas Development Violates FLPMA and the MLA.

BLM’s prioritization of oil and gas leasing of lands it readily recognizes as essentially worthless for oil and gas development but have exceedingly high values, such as scenic, recreational and wilderness-caliber lands, violates FLPMA and the MLA.

¹ SUWA has dozens of these examples but provides just this one in order to avoid unnecessary duplication.

² Available at https://eplanning.blm.gov/public_projects/nepa/80165/130450/158729/Final_Vernal_EA.pdf.

³ Available at <https://eplanning.blm.gov/epl-front-office/projects/nepa/80165/119124/145380/2UtahDec2017FinalSaleList.pdf>.

⁴ Available at <https://eplanning.blm.gov/epl-front-office/projects/nepa/120271/176870/215543/2019-0034-EA.pdf>.

A. Legal Background—FLPMA

Under FLPMA, BLM is required to manage the public lands on the basis of multiple use and sustained yield and in a manner that does not unduly or unnecessarily degrade other uses and resources. *See* 43 U.S.C. § 1732(a). BLM “shall” manage the public lands in a manner that prohibits “unnecessary or undue degradation” of those lands. *Id.* § 1732(b). In recognition of the environmental components of the multiple use mandate, courts have repeatedly held that under FLPMA’s multiple use mandate, development of public lands is not required, but must instead be weighed against other possible uses, including conservation to protect environmental values. *See, e.g., New Mexico ex rel. Richardson*, 565 F.3d at 710 (“BLM’s obligation to manage for multiple use does not mean that development *must* be allowed. . . . Development is a possible use, which BLM must weigh against other possible uses — including conservation to protect environmental values, which are best assessed through the NEPA process.”); *Rocky Mtn. Oil & Gas Ass’n v. Watt*, 696 F.2d 734, 738 n.4 (10th Cir. 1982) (“BLM need not permit all resource uses on a given parcel of land.”).

Federal courts have consistently rejected efforts to affirmatively elevate energy development over other uses of public lands. In the seminal case, *N.M. ex rel. Richardson v. BLM*, the Tenth Circuit put to rest the notion that BLM must manage chiefly for energy development, declaring that “[i]t is past doubt that the principle of multiple use does not require BLM to prioritize development over other uses.” 565 F.3d at 710; *see also S. Utah Wilderness All. v. Norton*, 542 U.S. 52, 58 (2004) (defining “multiple use management” as “striking a balance among the many competing uses to which land can be put”). Other federal courts have agreed. *See, e.g., Colo. Envtl. Coalition v. Salazar v. Salazar*, 875 F. Supp. 2d 1233, 1249 (D. Colo. 2012) (rejecting oil and gas leasing plan that failed to adequately consider other uses of public lands).

B. Legal Background—MLA

Under the MLA, BLM can only lease lands for oil and gas development “which are known or believed to contain oil or gas deposits.” 30 U.S.C. § 226(a). *See also Vessels Coal Gas, Inc.*, 175 IBLA 8, 25 (2008) (“It is well-settled under the MLA that competitive leasing is to be based upon reasonable assurance of an existing mineral deposit”). Any offered lease must then foster responsible oil and gas development, which the lessee must carry out with “reasonable diligence.” 30 U.S.C. § 187. The MLA is structured to facilitate actual production of federal minerals, and thus its faithful application should discourage leasing of low (or no) potential lands.

Taken together, FLPMA and MLA prohibit BLM from offering the leases at issue here because they encompass public lands that BLM acknowledges contain little or no potential to produce oil and gas resources but are extremely important for other resource values, including wilderness characteristics and wildlife.

C. The Proposed Leases Have Little or No Development Potential

BLM concedes that the proposed leases contain insignificant oil and gas production potential, meaning that the development thereof will almost certainly result in the unnecessary degradation

of important environmental resource values with no economic return to the American public. In the EA, BLM anticipates that approximately only half of the leases will be developed. EA at 19, tbl. 4. This includes zero wells on the Vernal Field Office lease parcels and twenty-four wells on the fifty-three leases in the Canyon Country District. *Id.* In fact, BLM recognizes that nationally less than five percent of all issued leases result in oil and gas production. *Id.* at 19, n. 12. In Utah, the percentage is even lower with less than four percent of issued leases having resulted in production. *Id.*

In addition, the price of oil has significantly declined, even plummeting below zero dollars per barrel in April. *See, e.g.,* Stanley Reed and Clifford Krauss, NY Times, *Too Much Oil: How a Barrel Came to Be Worth Less Than Nothing* (April 20, 2020) (attached). As a result, the Department of the Interior issued guidance to prop-up the oil and gas industry in hopes of avoiding wide-spread bankruptcies and layoffs. This included providing royalty relief to operators who could not economically produce oil and gas from their existing leases. *See, e.g.,* Ctr. for W. Priorities, *Tracking Oil & Gas Pandemic Handouts* (providing detail on BLM’s royalty relief efforts).⁵

Notably, to date, eighty leases in Utah have received royalty relief, encompassing approximately 95,000 acres of public lands—the majority of which are adjacent and near the leases proposed for sale at issue here. *See* SUWA Map – September 2020 Leases and Royalty Relief Leases (attached). In other words, BLM is moving forward with new leases while publicly acknowledging that leases in the same area cannot be economically developed. *See* Dino Grandoni, The Washington Post, *The Energy 202: Trump administration pauses some oil and gas leasing amid coronavirus pandemic* (May 27, 2020) (explaining that BLM is moving forward with leasing while “offer[ing] existing wells near proposed lease sites an economic lifeline”) (attached).

Moreover, BLM’s ill-conceived push for “energy dominance” in these areas threatens irreplaceable resource values including National Parks, National Monuments, lands with wilderness characteristics, wildlife, air quality and the climate. *See, e.g.,* Letter from Moab City Council to BLM, RE: City of Moab Request for Cancellation of Bureau of Land Management September 2020 Oil and Gas Lease Sale at 1 (June 23, 2020) (objecting to the lease sale because, among other reasons, “[t]he iconic views that drive Moab substantial tourism economy . . . will be compromised by power lines, access roads, pipelines, air pollution, industrial truck traffic, and other developments”) (attached); Grand County Comm. Letter to BLM, RE: Grand County Opposition to Bureau of Land Management September 2020 Oil and Gas Lease Sale Affecting Acreage in Grand County at 2 (July 7, 2020) (objecting to the lease sale because it is “unlikely to produce significant revenue or jobs for Grand County”) (attached). The elevation of admittedly speculative oil and gas leasing and development over the protection of other resource values will result in their unnecessary and unlawful degradation.

⁵ Available at https://westernpriorities.org/tracker-trump-administration-oil-and-gas-handouts-during-global-pandemic/?utm_source=Master+Press+List+2.0&utm_campaign=6cd34a805d-EMAIL_CAMPAIGN_2020_06_11_08_37&utm_medium=email&utm_term=0_79fad8be67-6cd34a805d-84303649 (last updated July 7, 2020).

In sum, BLM, the City of Moab, and Grand County have recognized that the parcels BLM is offering for oil and gas leasing and development are essentially worthless for that purpose. Because the overwhelming majority, if not all, of these parcels do not contain oil and gas resources, the speculative development thereof will unnecessarily degrade (if not entirely destroy) critical and irreplaceable environmental resource values, in violation of FLPMA and the MLA.

V. BLM's Consideration of Alternatives Violated NEPA

The Lease Sale EA failed to analyze alternatives through the proper lens of the Tenth Circuit Court of Appeal's "rule of reason" standard.

A. NEPA Alternatives—Legal Standard

An EA must "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved resource conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E); *see* 40 C.F.R. § 1508.9(b); *Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1277 (10th Cir. 2004) ("An agency's obligation to consider reasonable alternatives is 'operative even if the agency finds no significant environmental impact.'" (quoting *Highway J Citizens Grp. v. Mineta*, 349 F.3d 938, 960 (7th Cir.2003))). Though less detailed than an EIS, an EA must demonstrate that the agency took a "hard look" at alternatives—a "thoughtful and probing reflection of the possible impacts associated with the proposed project" so as to "provide a reviewing court with the necessary factual specificity to conduct its review." *Silverton Snowmobile Club v. U.S. Forest Serv.*, 433 F.3d 772, 781 (10th Cir. 2006) (quoting *Comm. to Preserve Boomer Lake Park v. Dep't of Transp.*, 4 F.3d 1543, 1553 (10th Cir.1993)); *see also* 40 C.F.R. § 1508.9(a)(1).

The range of alternatives an agency must analyze in an EA is determined by a "rule of reason and practicality" in light of a project's objective. *Davis v. Mineta*, 302 F.3d 1104, 1120 (10th Cir. 2002) (quoting *Airport Neighbors All., Inc. v. United States*, 90 F.3d 426, 432 (10th Cir. 1996)). "NEPA 'does not require agencies to analyze the environmental consequences of alternatives it has in good faith rejected as too remote, speculative, or impractical or ineffective[.]'" *New Mexico ex rel. Richardson*, 565 F.3d at 708 (quoting *Colo. Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1174 (10th Cir. 1999)). But the number and nature of alternatives must be "sufficient to permit a reasoned choice of alternatives as far as environmental aspects are concerned." *Id.* (quoting *Dombeck*, 185 F.3d at 1174).

As in an EIS, the range of alternatives an agency must analyze in an EA depends on its purpose and need statement. *See Davis*, 302 F.3d at 1119; *see also* 40 C.F.R. § 1508.9(b) (requiring that EAs include "brief discussions of the need for a proposal" and alternatives to it). "Alternatives that do not accomplish the purpose of an action are not reasonable." *Custer Cty. Action Ass'n v. Garvey*, 256 F.3d 1024, 1041 (10th Cir. 2001). Stated differently, "[i]t is the BLM purpose and need for action that will dictate the range of alternatives and provide a basis for the rationale for eventual selection of an alternative in a decision." BLM, National Environmental Policy Act, Handbook H-1790-1 § 6.2, pg. 36 (Jan. 2008) (BLM NEPA Handbook).⁶ After "defining the

⁶ Available at https://www.ntc.blm.gov/krc/uploads/366/NEPAHandbook_H-1790_508.pdf.

objectives of an action,” the agency must “provide legitimate consideration to alternatives that fall between the obvious extremes.” *Dombeck*, 185 F.3d at 1175.

Notably, “[t]he broader the purpose and need statement, the broader the range of alternatives that must be analyzed.” BLM NEPA Handbook § 6.2.1, pg. 36; *see also id.* § 6.6.1 at 49-50. “In determining the alternatives to be considered, the emphasis is on what is ‘reasonable’ rather than on whether the proponent or applicant likes or is itself capable of implementing an alternative.” *Id.* § 6.6.1, pg. 50. Likewise, NEPA’s alternatives analysis requirement is independent of and broader than BLM’s obligation under NEPA to determine whether oil and gas leasing and development will have a significant impact to the environment:

[C]onsideration of alternatives is critical to the goals of NEPA even where a proposed action does not trigger the EIS process. This is reflected in the structure of the statute: while an EIS must also include alternatives to the proposed action . . . the consideration of alternatives requirement is contained in a separate subsection of the statute and therefore constitutes an independent requirement. The language and effect of the two subsections also indicate that the consideration of alternatives requirement is of wider scope than the EIS requirement. The former applies whenever an action involves conflicts, while the latter does not come into play unless the action will have significant environmental effects. . . . Thus the consideration of alternatives requirement is both independent of, and broader than, the EIS requirement.

Bob Marshall All. v. Hodel, 852 F.2d 1223, 1228-29 (9th Cir. 1988) (citations omitted). BLM must also analyze and disclose the greenhouse gas (GHG) emissions associated with each alternative, so it can meaningfully consider a reasonable range of alternatives that would decrease the emissions resulting from its actions. The Council on Environmental Quality’s (CEQ) 2016 final guidance on the consideration of GHG emissions and the effects of climate change instructed: “[w]hen conducting the analysis, an agency should compare the anticipated levels of GHG emissions from each alternative – including the no-action alternative – and mitigation actions to provide information to the public and enable the decision maker to make an informed choice.”⁷ It also instructed agencies to “consider reasonable alternatives and mitigation measures to reduce action-related GHG emissions or increase carbon sequestration in the same fashion as they consider alternatives and mitigation measures for any other environmental effects.”⁸

⁷ Council on Env’tl. Quality, *Exec. Office of the President, Memorandum for Heads of Federal Departments and Agencies, 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* 15 (2016), available at: https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/nepa_final_ghg_guidance.pdf [hereinafter, *CEQ Final Guidance*]. Although CEQ withdrew the CEQ Final Guidance in response to President Trump’s Executive Order 13783, “Promoting Energy Independence and Economic Growth,” Withdrawal of 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, 82 Fed. Reg. 16,576 (Apr. 5, 2017), this does not preclude agencies from utilizing the tools contained therein to consider the impacts of its actions on climate change when conducting environmental reviews, as required by NEPA and relevant case law.

⁸ *Id.*

Three recent cases are instructive. In *Western Organization of Resource Councils v. BLM*, the court invalidated BLM’s EISs for the Buffalo and Miles City resource management plans because the agency failed to consider a reasonable alternative that reduced the amount of coal made available under the plans. 2018 WL 1475470 at *9 (D. Mont. March 26, 2018). The court found that “BLM’s failure to consider any alternative that would decrease the amount of extractable coal available for leasing rendered inadequate the Buffalo EIS and Miles City EIS in violation of NEPA.” *Id.* at *9. The court explained, “BLM cannot acknowledge that climate change concerns defined, in part, the scope of the RMP revision while simultaneously foreclosing consideration of alternatives that would reduce the amount of available coal based upon deference to an earlier coal screening that failed to consider climate change.” *Id.* at *17.

In *Wilderness Workshop v. U.S. Bureau of Land Management*, the court found that BLM failed to consider reasonable alternatives by omitting any option that would meaningfully limit leasing and development within the planning area. 342 F. Supp. 3d 1145, 1167 (D. Colo. 2018). Similarly, as is the case with this lease sale, the court found that a reasonable alternative would be for BLM to consider what else may be done with the low and medium potential lands if they were not held open for leasing. *Id.* at 1166 (internal citations omitted). The court held that an alternative that closes low and medium potential lands when BLM admits there is an exceedingly small chance of them being leased would be “‘significantly distinguishable’ because it would allow BLM to consider other uses for that land.” *Id.* at 1167. More recently, in *High Country Conservation Advocates v. U.S. Forest Service*, the court found that the U.S. Forest Service failed to consider a reasonable range of alternatives when the agency arbitrarily dismissed an alternative and its “explanation for doing so was inconsistent with its stated purpose.” 951 F.3d 1217, 1225 (10th Cir. 2020).

B. BLM Established an Exceedingly Broad Purpose and Need for the Lease Sale EA

BLM’s stated purpose and need for the EA, and “decision to be made,” are exceedingly broad. *See* EA at 5. These sweeping objectives govern BLM’s range of alternatives and dictate the reasonableness of recommended alternatives including those proposed herein by SUWA.

C. SUWA’s Recommended Alternatives

In addition to alternatives that will decrease the GHG emissions resulting from BLM’s actions, SUWA recommends the following alternatives, which will accomplish BLM’s stated objectives, are technically and economically feasible, and will reduce impacts to the environment:

- A “cultural resource preservation” alternative. Under this alternative, BLM would not offer leases in areas where any of BLM’s Class I site type models predict a high probability for cultural resources. BLM could achieve this objective by adjusting lease boundaries to avoid such areas.
- A “National Historic Trail preservation” alternative. As discussed *infra*, many of the lease parcels are located near the Old Spanish National Historic Trail (OSNHT). Under this alternative, BLM would not offer leases within the viewshed of the

OSNHT. This alternative would allow BLM to coordinate with the National Park Service (NPS) to conduct viewshed analysis to determine whether the view from the OSNHT would be impacted, and to what degree before offering leases for development.

- An alternative eliminating oil and gas leasing in areas determined to have only moderate or low potential for oil and gas development to allow BLM to consider other uses for those lands.

In addition, BLM must analyze the two alternatives that it claims to have “considered but [did] not analyze[] in detail” pursuant to the Tenth Circuit’s rule of reason standard, based on the agency’s exceedingly broad objectives for this lease sale and broad statutory mandate under FLPMA. *See* EA at 23 (dismissing alternatives from further consideration). *See also High Country Conserv. Advocates*, 951 F.3d at 1227 (holding that the Forest Service arbitrarily rejected a recommended alternative because “[t]hat alternative was not ‘remote, speculative, or impractical or ineffective’ as judged against the Forest Service’s statutory mandate and the project goals”). It is arbitrary for BLM to reject any of these alternatives, including those recommended by the public, based on the inapposite Board decision rather than after having applied the proper Tenth Circuit standard. *See* EA at 23 (relying on *Biodiversity Conservation All. et al.*, 183 IBLA 97 (2013)).

SUWA’s recommended alternatives satisfy the “rule of reason” and therefore should be considered by BLM in the EA. Moreover, these alternatives, and the alternatives BLM has already rejected from further consideration, all fall within BLM’s statutory mandate and authority under FLPMA. For example, these alternatives allow BLM to “consider” the expressions of interests for oil and gas leasing and thus, satisfy BLM’s stated objectives. *See* EA at 5. They also satisfy BLM’s “decision to be made” because they afford the agency the ability to “determine whether or not to offer to lease the nominated parcels and, if so, under what lease terms and conditions (stipulations and/or notices).” *Id.*

Moreover, as noted *supra*, BLM must now follow IM 2010-117 Section III.E, which requires consideration of three NEPA alternatives, at a minimum:

The EA will analyze a no action alternative (no leasing), a proposed leasing action (lease the parcel(s) in conformance with the land use plan), and any alternatives to the proposed action that may address unresolved resource conflicts.

The EA—by its own admission—falls short of this requirement. *See* EA at 22-23 (analyzing two alternatives).

Importantly, FLPMA and the MLA afford BLM broad authority over the management of public lands, as recognized for decades by both the Board and Federal courts. BLM routinely conditions its authorizations related to oil and gas exploration and development on public land through the use of such protective measures. *See* Ken Kreckel, Feasibility of Utilizing a Phased Development Approach to the Horse Bench Natural Gas Development, Environmental Assessment, DOI-BLM-UT-G020-2015-0011-EA (March 2018) (explaining the feasibility of requiring a phased

development approach and highlighting several instances where BLM required such an approach) (attached). As such, BLM must analyze and disclose to the public a reasonable range of alternatives, which would include the alternatives recommended herein.

VI. BLM Failed to Take a Hard Look at the Direct, Indirect, and Cumulative Impacts of Oil and Gas Leasing and Development.

NEPA and its implementing regulations are our “basic national charter for the protection of the environment.” 40 C.F.R. § 1500.1. The primary purpose of NEPA is two-fold: (1) “[i]t ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts,” and (2) “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). Thus, while “NEPA itself does not mandate particular results, but simply prescribes the necessary process,” *id.* at 350, agency compliance with NEPA’s action-forcing statutory and regulatory mandates helps federal agencies ensure that they are adhering to NEPA’s noble purpose and policies. *See* 42 U.S.C. §§ 4321, 4331.

NEPA imposes “action-forcing procedures . . . requir[ing] that agencies take a ‘hard look’ at environmental consequences.” *Methow Valley Citizens Council*, 490 U.S. at 350 (citations omitted). These “environmental consequences” may be direct, indirect, or cumulative. 40 C.F.R. §§ 1502.16, 1508.7, 1508.8.

A. The EA Failed to Analyze Site-Specific Impacts.

In the EA, BLM recognizes that many resources will or likely will be impacted by oil and gas development on the leases parcels but the agency concluded that detailed analysis for those resources is not warranted at this time for two primary reasons: (1) lease stipulations and notices, and Best Management Practices (BMP) have been attached or will be required when the leases are developed, and (2) BLM will analyze site-specific impacts at the application for permit to drill (APD) stage. *See generally* Lease Sale EA, App. D (Interdisciplinary Team Checklist for each field office—making these claims for nearly all unanalyzed resource values). These rationales are arbitrary.

First, lease issuance is the “point of no return” (*i.e.*, the point at which time BLM makes an irrevocable commitment of resources) for purposes of NEPA analysis. *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 66 (D.D.C. 2019). BLM itself identifies lease issuance as the point of ir retrievable commitment of resources:

The BLM has a statutory responsibility under NEPA to analyze and document the direct, indirect and cumulative impacts of past, present and reasonably foreseeable future actions resulting from Federally authorized fluid minerals activities. By law, these impacts must be analyzed before the agency makes an irreversible commitment. In the fluid minerals program, this commitment occurs at the point of lease issuance.

BLM, H – 1624-1 – Planning for Fluid Mineral Resources § I.B.2, at I-2 (Jan. 28, 2013) (emphasis added) (BLM Handbook 1624) (attached).⁹ It is at this point that BLM must analyze all direct, indirect, and cumulative impacts of its leasing decision. *See, e.g., WildEarth Guardians*, 368 F. Supp. 3d at 65-66; *see also* 40 C.F.R. §§ 1508.7, 1507.8.

Reasonably foreseeable impacts cannot be deferred to the APD stage because at that point “the ‘No Action Alternative’ is no longer on the table with respect to the non-NSO leases.” *Ctr. for Biological Diversity v. U.S. Forest Serv.*, --- F. Supp. 3d ---, 2020 WL 1429569, at *11 (E.D. Ohio March 13, 2020). As the court in *Center for Biological Diversity* stated when it recently rejected a similar attempt by the Forest Service to postpone its NEPA “hard look” obligation to the APD stage:

Defendants’ decision not to conduct further review . . . was based on the assumption that there was no significant impact at the leasing stage because no surface disturbing activities [at the time of lease issuance] would occur. But this Court joins other courts in finding that this conclusion “fell short of NEPA’s requirements with respect to leases lacking NSO stipulations . . . because at the leasing stage ‘the agency made an irrevocable commitment to allow *some* surface-disturbing activities,’ and it was therefore required to analyze those activities before it could no longer preclude them.

Id. at *12 (internal citations and alterations omitted).

BLM fails to comply with NEPA when it fails to perform the analysis that NEPA requires. *See, e.g., Diné Citizens Against Ruining Our Envtl. v. Bernhardt (Diné CARE)*, 923 F.3d 831, 857 (10th Cir. 2019); *San Juan Citizens All. v. U.S. Bureau of Land Mgmt.*, 326 F. Supp. 3d 1227, 1254 (D.N.M. 2018); *WildEarth Guardians*, 368 F. Supp. 3d at 65. “[A]ssessment of all ‘reasonably foreseeable’ impacts must occur at the earliest practicable point, and must take place before an ‘irretrievable commitment of resources’ is made.” *San Juan Citizens All.*, 326 F. Supp. 3d at 1254.

Second, lease stipulations and notices (and their accompanying BMPs and mitigation measures) do not constitute NEPA analyses. Thus, even though BLM has attached them to the leases at issue, this does not excuse the agency from its separate legal obligation to take a “hard look” at the potential impacts of its leasing decisions. *See, e.g., EA*, App. D (citing to lease stipulations and notices attached to each lease for certain resource protection measures as justification for not having analyzed impacts). Stipulations and notices are used to comply with FLPMA and the MLA, and are not a substitute for a NEPA analysis. *See, e.g.,* 43 C.F.R. § 3101.1-3; 43 U.S.C. § 1732(a). They also do not excuse BLM from compliance with its applicable policies such as Manual 6840, Manuals 6310 and 6320, and IM 2010-117.

Finally, in the EA, BLM confusingly acknowledges that oil and gas leasing and development will impact resources other than the four resources brought forward for detailed analysis, further

⁹ Available at https://www.blm.gov/sites/blm.gov/files/uploads/Media_Library_BLM_Policy_Handbook_H_1624_1.pdf.

highlighting the arbitrariness of the agency's decision to postpone analysis until the APD stage. For example:

- Lease parcels encompass and/or are near Areas of Critical Environmental Concern (ACEC). *See* EA, App. D at 294 (stating that parcel 116 “overlaps the Behind the Rock ACEC”), 322 (“The Old Woman Front ACEC is 2.4 miles away from parcel 030”), 333 (parcels encompass the proposed Mussentuchit ACEC).
- Development will occur in and near migratory bird habitat including for raptors and eagles. *Id.*, App. D at 301-02, 324, 335, 346, 357.
- Parcels cross over and are near the OSNHT. *Id.*, App. D at 294, 322.
- Development will have visual impacts. *Id.*, App. D at 297, 322, 333.
- Lease parcels encompass lands with wilderness characteristics. *Id.*, App. D at 298-99.
- Development will impact threatened and endangered wildlife species. *Id.*, App. D at 302-05, 324-25, 335-36, 346-47.
- Lease parcels encompass “sensitive” wildlife species. *Id.*, App. D at 305-07, 325-26, 336-37, 347-48, 357.
- Lease parcels encompass “sensitive” plant species. *Id.*, App. D at 308-09, 326-27, 338, 348-49.
- Development will impact water resources including surface and groundwater. *Id.*, App. D at 313-15, 328-29, 340-41, 350-51, 359-60.
- Lease parcels encompass wetlands and riparian areas. *Id.*, App. D at 315-16, 329-30, 341, 351, 360.
- Lease parcels encompass lands with high paleontological potential. *Id.*, App. D at 320-21.

However, BLM unlawfully failed to analyze and disclose to the public the impacts to these resources in the EA. When effects are reasonably foreseeable BLM must analyze them prior to making an irretrievable commitment of resources, as explained by the court in *Center for Biological Diversity*:

But the problem with Defendants' argument is that the regulatory language does not ask the agencies to review whether any surface disturbance will occur by is action; rather, the agencies are tasked with determining whether the proposed action will have “any irreversible and irretrievable commitment of resources.” As such, the lack of immediate physical disturbance cannot equate to “no irretrievable commitments of resources.”

2020 WL 1429569, at *9 (citation omitted). Here, BLM’s decision to postpone meaningful NEPA analysis past the point of an irretrievable commitment of resource “circumvent[s] the very purposes of NEPA.” *Id.* at *10.

To illustrate further the arbitrariness of BLM’s postponement of site-specific NEPA analysis, SUWA provides the following examples regarding Wild and Scenic Rivers, Labyrinth Canyon Wilderness, impacts to water resources, including from hydraulic fracturing, and Capitol Reef National Park.

i. Wild and Scenic Rivers

In the EA, BLM states that site-specific NEPA analysis is not necessary for waters included in the National Wild and Scenic Rivers System (WSR) in the Moab field office because “[t]here are no parcels within or adjacent to a suitable WSR segment.” EA, App. D at 298. This conclusion is unsupported and incorrect.

In March 2019, Congress designated the segment of the Green River as “scenic” under the WSR located in Townships 24-26 south, Ranges 16-17 east—the segment that runs immediately west of many of the lease parcels. *See* 16 U.S.C. § 1274(a)(224)(C); Public Law 116-9, John D. Dingell, Jr. Conservation, Management, and Recreation Act § 1241(C) (116th Cong.) (2019-2020) (signed into law March 12, 2019) (excerpt attached). *See also* BLM, Emery County Public Land Management Act of 2018 Overview Map (Feb. 5, 2019) (depicting the WSR segment designated as “scenic” in the Dingell Act) (attached).¹⁰

Importantly, several of the proposed leases are located less than a quarter-mile from the designated scenic WSR segment. *See* SUWA Map – Viewshed and WSR Segment (attached). Nonetheless BLM failed to analyze potential impacts to the outstandingly remarkable scenic values. *See* EA, App. D. 298 (concluding—wrongly—that there is no WSR segment). This includes, but is not limited to, potential auditory, visual and scenic impacts. *See* BLM, Manual 6400 – Wild and Scenic Rivers – Policy and Program Direction for Identification, Evaluation, Planning, and Management (Public), Chapter 7 (July 13, 2012) (providing BLM’s management directives for designated WSRs) (attached).¹¹ BLM must analyze all reasonably foreseeable impacts to the Green River designated WSR scenic segment pursuant to NEPA, and Manual 6400, among other laws and policies, prior to offering these leases for oil and gas development.

ii. Labyrinth Canyon Wilderness

In the EA, BLM states that some lease parcels are “across the Green River from the recently designated Labyrinth Canyon Wilderness Area” but that detailed analysis of impacts to that area is not warranted because the parcels “are designated No Surface Occupancy” and “BMPs from the Moab MLP to address noise and night skies . . . would mitigate impacts to the wilderness area.” EA, App. D at 298. This conclusion is unsupported and incorrect.

¹⁰ Available at https://www.blm.gov/sites/blm.gov/files/EmeryCounty_020519_v1%20%281%29_0.pdf.

¹¹ Available at https://www.blm.gov/sites/blm.gov/files/uploads/mediacenter_blmmanual6400.pdf.

First, BLM finalized the Moab MLP in 2016, two and a half years before Congress designated the Labyrinth Canyon Wilderness Area in the Dingell Act. Thus, BLM did not—and could not have—analyzed potential impacts to that resource value in the MLP. *See generally* Moab MLP FEIS, Chapter 4 (BLM never analyzed impacts to Wilderness Areas including Labyrinth Canyon because there were no such areas in the MLP planning area).

Second, the NSO stipulations are not attached to all lease parcels that are visible from the Labyrinth Canyon Wilderness. *See* SUWA Map – Viewshed and WSR Segment. The MLP NSO stipulations apply—at most—to only a subset of the leases and thus, any development on the non-NSO leases would potentially impact Wilderness values, a factor not considered in the EA. *See, e.g.*, Moab MLP, Map 11 (oil and gas leasing stipulations). Thus, BLM’s conclusion that NSO stipulations will prevent all impacts to the Labyrinth Canyon Wilderness is not supported by evidence.

Finally, there is no record evidence to support BLM’s claim that noise and night sky impacts will be mitigated by lease stipulations, notices, and BMPs. BLM has no evidence to support this claim because it has never actually considered the potential impacts to the recently designated Labyrinth Canyon Wilderness, including in the MLP which predated that designation. *See S. Utah Wilderness All. v. U.S. Dept. of Interior*, 2016 WL 6909036, at *4-7 (D. Utah Oct. 3, 2016) (BLM violated NEPA by relying on unrepresentative data and by failing to analyze potential noise impacts to Green River recreation). BLM does not, for example, have the necessary baseline data regarding ambient noise and night sky levels in the Labyrinth Canyon Wilderness to determine whether mitigation measures—drafted for an entirely different area and purpose—will reduce these (or other) resource impacts. *See, e.g., Or. Natural Desert Ass’n v. Rose*, 921 F.3d 1185, 1190 (9th Cir. 2019) (“Without establishing the baseline conditions before a project begins, there is simply no way to determine what effect the project will have on the environment and, consequently, no way to comply with NEPA.”) (citations and internal alterations omitted).

iii. Water Resources and Hydraulic Fracturing

In the EA, BLM failed to analyze impacts to water resources including from hydraulic fracturing. *See generally* EA, App. D (BLM did not identify water resources as an issue requiring detailed analysis). The applicable land management plans also did not analyze these site-specific impacts. *See, e.g.*, Moab MLP FEIS at 4-134 to -135 (discussing potential impacts only in broad terms). Federal courts have made it clear that BLM must analyze these impacts prior to issuing leases for oil and gas development. *See San Juan Citizens All.*, 326 F. Supp. 3d at 1252-54 (BLM failed to take hard look at impacts to water quantity and effect of water withdrawal to the environment); *Center for Biological Diversity*, 2020 WL 1429569, *10-12 (holding that impacts to water including from hydraulic fracturing were reasonably foreseeable at the leasing stage).

In *San Juan Citizens Alliance*, the court explained that at the leasing stage BLM must, at a minimum: “estimate the quantity of water which would be used,” and “discuss and consider the effects of such water use on the environment.” 326 F. Supp. 3d at 1254. This analysis must include “estimates of potential water usage for the different methods of hydraulic fracturing”—information which is necessary in order for BLM to “decid[e] whether the action results in a significant impact.” *Id.* When an agency fails to consider this information at the lease sale stage

it “fail[s] to meet its duty to take a hard look at the environmental impacts of the proposed action.” *Id.*

Similarly, in *Center for Biological Diversity*, the court held that at the leasing stage “the environmental impacts of leasing the land for fracking, as a whole, were reasonably foreseeable.” 2020 WL 1429569, at *11. Among other reasons, the court explained that BLM had “estimated the number of wells per well pad” and based on its long history of approving oil and gas activities knew the approximate quantity of water needed for development activities. *Id.* Notably, the court rejected BLM’s attempt to defer this analysis to the APD stage because “that any environmental impacts will be considered at the APD stage is not particularly reassuring given that . . . BLM will compare the APD . . . against the current [land use plan], in which fracking was not even considered.” *Id.* “And, more importantly,” the court explained, “at the APD stage, the ‘No Action Alternative’ is no longer on the table with respect to the non-NSO leases.” *Id.*

These decisions are directly on-point and undercut BLM’s attempt to postpone meaningful analysis until the APD stage. For example, in the EA, BLM has not “estimate[d] the quantity of water” to be used, nor has it “discuss[ed] and consider[ed] the effects of such water use on the environment.” BLM also has “estimated the number of wells” per lease and has a long history of permitting oil and gas development in Utah. *See, e.g.*, EA at 19, tbl. 4 (estimating 41 wells); *id.*, App. G at 373 (anticipating that the wells will be drill via hydraulic fracturing methods). And none of the relevant land use plans analyzed impacts of hydraulic fracturing in meaningful detail (or at all). Nonetheless, BLM is attempting to postpone its consideration of this issue past the point of irretrievable commitment of resource, *i.e.*, to a time at which the no leasing alternative is “no longer on the table.”

Second, BLM must analyze impacts to water resources because there are potentially significant impacts from leasing and development. For example, many of the lease parcels overlie the “Entrada” aquifer. *See* Moab MLP FEIS, Map 3-45. The Entrada aquifer is “near the surface with no confining layer about it . . . This makes the aquifer very sensitive to contamination from the surface which could affect water quality in water wells, springs, and seeps.” Moab MLP FEIS at 3-85. BLM has recognized that riparian areas are “among the most important” resources. *Id.* at 3-56. The proposed lease parcels that overlie the Entrada aquifer are non-NSO leases. *See* EA, App. C at Fig. 11. Thus, it is all the more important that BLM analyze potential impacts to these “sensitive[s]” and “important” resources including from, but not limited to, hydraulic fracturing, water drawn down, and surface disturbing activities associated with lease development. This also includes the potential impacts to water wells, springs, and seeps related to the aquifer as well as the wildlife and plant species that depend on these resources.

Finally, in the Moab MLP, BLM explains that—at that time—there were only two waterways listed on the state of Utah’s Clean Water Act 303(d) list of impaired waters. *See* Moab MLP FEIS at 3-72 (Fisher Creek and Colorado River). The Moab MLP FEIS relied on the state of Utah’s 2010 “Integrated Report” (IR) for this information. *See id.* at 3-82. That information is no longer accurate since it was replaced by the 2016 IR. *See* DEQ, Chapter 3: Rivers and Stream Assessments, 2016 Final Integrated Report (attached). In the 2016 IR several new waters were listed on the 303(d) list of impaired waters including, but not limited to, Kane Spring Wash, Mill

Creek, and the Dolores River. *See id.* at 6 at 7. The Lease Sale EA must analyze this new information.

iv. Capitol Reef National Park

In the EA, BLM purports to analyze impacts to Capitol Reef National Park. *See* EA at 54-55. However, this “analysis” constitutes nothing more than stating that the “sights and sound from development could be seen and heard in the Park” and that dark night skies may be impacted. *Id.* at 55. On this point, BLM cites to “GIS analyses” from Key Observation Points (KOPs) that, allegedly, determined “there could be viewshed impacts to [the KOPs].” *Id.* However, the KOPs and viewshed analysis are not identified or provided for public review in the EA. In fact, none of BLM’s data and information relating to these potential impacts is made available in the EA so members of the public cannot independently review it or provide informed and meaningful comments on the information BLM relied upon. *See Methow Valley Citizens Council*, 490 U.S. at 349 (NEPA “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”).

Moreover, in 2015, BLM proposed leasing for oil and gas development a few miles north of Capitol Reef National Park. *See generally* BLM, November 2015 Oil and Gas Lease Sale, Environmental Assessment, DOI-BLM-UT-G021-2015-0031-EA (Aug. 2015) (attached). Notably, in that EA, BLM analyzed impacts to a much broader range of resource values including hydrology, water quality, springs and riparian, soils, prime and unique farm lands, threatened, endangered plant species, cultural resources, ACECs, recreation, and visual. *See id.* Chapter 4. BLM must explain why it thought it was necessary to analyze potential impacts to those resources at that time, but now summarily concludes that such analysis is no longer necessary.

Importantly, the National Park Service (NPS) protested BLM’s 2015 leasing decision. *See* Letter from Leah McGinnis, Superintendent, to Jenna Whitlock, Acting State Director (Sept. 16, 2015) (attached). NPS protested the decision because BLM had failed to properly analyze impacts to Wilderness, viewsheds, soundscapes, dark night sky, and air quality. *Id.* Based, at least in part, on NPS’s concerns, BLM deferred all of the leases located north of the Park.

Here, BLM has prepared significantly less analysis and data than the agency compiled in 2015 and thus, its leasing proposal is even less supported now than it was at that time. BLM must provide additional rationale for why leasing—on less analysis—is not arbitrary in light of these facts.

B. Cumulative Impacts

To comply with NEPA, BLM must analyze all reasonably foreseeable cumulative impacts. The Tenth Circuit Court of Appeals recently held that the preparation of a reasonably foreseeable development scenario (RFDS) makes it reasonably foreseeable that the number of wells identified would be drilled, and NEPA therefore requires BLM to consider the cumulative impacts of those wells in its lease sale NEPA analysis. *Diné CARE*, 923 F.3d at 853. As the

Tenth Circuit explained, once an RFDS has been issued, the wells predicted in that document were “reasonably foreseeable future actions.” *Id.* (citing 40 C.F.R. § 1508.7). Thus, for purposes of NEPA, those reasonably foreseeable wells must be considered in the agency’s cumulative impact analysis. *See id.* at 853.

Relevant here, BLM has prepared RFDSs for the field offices at issue. This includes, but is not limited to:

- The Moab field office. *See generally* BLM, Reasonably Foreseeable Development Scenario for Oil and Gas, Moab Field Office (2005) (attached); BLM, Reasonably Foreseeable Development Scenario for Oil and Gas in the Moab Master Leasing Plan Area, Canyon Country District (Aug. 2012) (attached).
- The Price field office. *See generally* BLM, Price Field Office, App. 21, Fluid Mineral Reasonably Foreseeable Development (attached)
- The Richfield field office. *See generally* BLM, App. 12-Reasonably Foreseeable Development Scenario for Oil and Gas and Geothermal Resources (attached).
- The Vernal field office. *See generally* BLM, Vernal Field Office, App. A, Oil and Gas Development Potential (attached); BLM, Greater Uinta Basin Oil and Gas Cumulative Impacts Technical Support Document (March 2012) (attached) [hereinafter, Greater Uinta Basin TSD].

Each RFDS anticipated the drilling of a certain number of oil and gas wells over a certain period of time (*e.g.*, 128 wells over a fifteen year period). For example, in the Vernal RMP RFDS, BLM anticipated 6,530 wells would be drilled over a 15-year period. *See* Vernal RMP RFDS at A-1. BLM updated this RFDS in 2012 to predict the drilling of 28,417 new oil and gas wells. *See* Greater Uinta Basin TSD at 10, tbl. 3-2. And the Moab MLP RFDS anticipated the drilling of 128 wells over a fifteen year period. *See* Moab MLP RFDS at 1.

In the EA, BLM failed to analyze the cumulative impacts of the wells anticipated in the aforementioned RFDSs—wells the Tenth Circuit has held are “reasonably foreseeable future actions.” Instead, BLM analyzed only the cumulative impact of 41 wells. *See* EA at 19, tbl. 4. This inappropriately narrow cumulative impacts analysis violates NEPA. By limiting its analysis in this manner BLM failed to analyze all reasonably foreseeable impacts to the following resources, among others:

- Air quality (including the NAAQS for ozone and current nonattainment designation in the Uinta Basin).
- Greenhouse gas emissions and climate.
- Water quantity and quality, including the amount of water required during development of the leases (*e.g.*, horizontal, directional, and vertical drilling), how that

water will be obtained (and the effects from the drawdown of groundwater resources), and hydraulic fracturing.

- Cultural, archaeological and historical including the OSNHT.
- Wildlife and plants including BLM “sensitive” species and threatened, endangered, and candidate species, and migratory birds.
- National Parks, National Monuments (*i.e.*, Bears Ears), and State Parks (*i.e.*, Dead Horse Point).
- Lands with wilderness characteristics including the Hatch Point, Lockhart Basin, Horse Thief Point, and Labyrinth Canyon areas.
- The Green River “scenic” WSR segment.
- The Labyrinth Canyon Wilderness Area.

BLM must analyze the cumulative impacts to the foregoing resources from all past, present, and reasonably foreseeable projects including, but not limited to, oil and gas leasing and development. *See, e.g., WildEarth Guardians*, 368 F. Supp. 3d at 76-78; 40 C.F.R. §§ 1508.7, 1508.25(c); *see also Wildearth Guardians v. BLM*, ---F. Supp. 3d---, 2020 WL 2104760, *9-10 (D. Mont. May 1, 2020) (BLM’s failure to fully analyze the cumulative impacts of its oil and gas leasing decisions violates NEPA).

Moreover, in *Southern Utah Wilderness Alliance*, the Interior Board of Land Appeals (Board) held that BLM violated NEPA when it failed to analyze reasonably foreseeable cumulative impacts to migratory birds prior to approving a vegetation treatment project located in Grand Staircase-Escalante National Monument. *See generally* IBLA No. 2019-94, at *4-7 (Sept. 16, 2019) (attached).¹² The Board held that BLM was aware of other proposals for public lands near the proposed action that would also impact migratory birds and thus violated NEPA by not analyzing those projects when viewed with the proposed action. *Id.* at *6-7. The Board’s holding on this point does not tread new legal ground but instead is in accordance with well-established law. *See, e.g., WildEarth Guardians*, 368 F. Supp. 3d at 76-78; *Diné CARE*, 923 F.3d at 853; *WildEarth Guardians*, 2020 WL 2104760, at *9-10.

In the present case, BLM is likewise aware of other past, present, and future projects in the same areas at issue in the March 2020 lease sale—activities that will impact the same resource values. For example:

- BLM has offered and issued oil and gas leases near and adjacent to proposed leases at issue here at the agency’s March 2018, September 2018, December 2018, September 2019, and December 2019 lease sales, among others. *See* SUWA Map – Piecemealed

¹² Available at <https://suwa.org/wp-content/uploads/2019-94-Decision-Set-Aside.pdf>.

Oil and Gas Leasing (attached). The Utah School and Institutional Trust Lands Administration (SITLA) has also issued leases in these areas. *See id.*

- BLM has approved development activities near and adjacent to proposed leases. *See* SUWA Map – Oil and Gas Projects in the Moab Field Office (attached). *See also* BLM, Natural Gas Gathering Line System for the Dead Horse Lateral Pipeline and Amendment of Right-of-Way UTU-67385 Dead Horse Lateral Natural Gas Pipeline, Environmental Assessment, DOI-BLM-UT-Y010-2014-0115-EA (Oct. 2014) (attached).
- BLM is in the process of approving oil and gas development proposals for lands adjacent to and within the proposed leases. *See* SUWA Map – Oil and Gas Projects in the Moab Field Office. *See also* BLM Letter to Interested Party, RE: Fidelity’s West Fertilizer 16-Pad Oil and Gas Project – Progress Update (March 2, 2016) (attached); SUWA et al., Scoping Comments – Fidelity West Fertilizer 16-Pad Oil and Gas Project, DOI-BLM-UT-Y010-2015-0198-EA (Aug. 28, 2015) (attached); Fidelity Ex. & Prod. Co., Hatch Point Master Exploration Plan (May 8, 2015) (attached); SUWA et al., Scoping Comments – Fidelity Hatch Point 7-Pad Oil and Gas Project, DOI-BLM-UT-Y010-2015-0239-EA (Oct. 8, 2015) (attached).
- BLM and SITLA have both issued numerous lithium leases and have received lithium project proposals near and adjacent to proposed leases. *See* SUWA Map – Lithium Leases and Projects (attached). *See also* Anson Resources Ltd., Paradox Basin Brine Project (May 6, 2019) (describing in detail the proposed lithium test plant) (attached).
- BLM is currently working on the Canyon Rims Travel Management Plan and Labyrinth / Gemini Bridges Travel Management Plan—both of which involve public lands in and near proposed lease parcels. *See, e.g.,* BLM, Canyon Rims Travel Management Area Environmental Assessment, DOI-BLM-UT-Y010-2018-0220-EA¹³; BLM, Utah Travel and Transportation, <https://www.blm.gov/programs/recreation/recreation-programs/travel-and-transportation/utah> (showing the areas for which a travel management plan is required pursuant to a settlement agreement in *S. Utah Wilderness All. v. U.S. Dept. of the Interior* including in the Moab Field Office). *See also* SUWA Map – September 2020 Lease Sale and TMP (attached).

These projects have or will impact the same resources that are impacted by the proposed leases. However, BLM failed to analyze all potential cumulative impacts. Instead, in the EA, BLM analyzed impacts to only four resource values and provided arbitrary rationales for having not analyzed impacts to more resources—resources that will be impacted by development in these areas. This is true of all resources impacted by BLM’s proposed lease sale but the following discussion regarding the Green River “scenic” WSR segment, Labyrinth Canyon Wilderness, GHGs and the climate illustrate the larger problem.

¹³ Available at <https://eplanning.blm.gov/eplanning-ui/project/113775/510> (last updated May 1, 2020).

i. Green River “Scenic” WSR Segment

As noted above, in the EA, BLM arbitrarily concludes that there are no WSR river segments on the Green River that would be impacted by the proposed lease sale. That conclusion is wrong. Moreover, over the past couple of years BLM has offered and issued other leases for development near the Congressionally-designated WSR scenic Green River segment.

The EA failed to analyze the potential impact of these leasing decisions to this world-class resource. For example, both the September 2018 and September 2019 lease sales included lease parcels near the Green River scenic segment. *See generally* BLM, September 2018 Oil and Gas Lease Sale, Environmental Assessment, DOI-BLM-UT-0000-2018-0001-EA (Oct. 2018) (September 2018 Lease Sale EA);¹⁴ BLM, September 2019 Competitive Oil and Gas Lease Sale, Moab Field Office, DOI-BLM-UT-0000-2019-0003-OTHER-NEPA-MbFO-EA (Dec. 2019);¹⁵ SUWA Map – Viewshed and WSR Segment.

However, in the EA, BLM failed to analyze the potential cumulative impacts to the Green River WSR segment from development on these leases because the agency—wrongly—concluded that that resource does not exist.

ii. Labyrinth Canyon Wilderness

As noted above, the EA does not analyze impacts to the Labyrinth Canyon Wilderness except to say that stipulations, lease notices, and BMPs prepared for the Moab MLP will—allegedly—protect the Wilderness values. This conclusion is arbitrary for the reasons discussed above. In addition, it is arbitrary because it ignores the fact that BLM and SITLA in the past couple of years have offered and issued leases for development in and near the Labyrinth Canyon Wilderness. BLM failed to analyze the cumulative impacts of these leasing decisions.

At the September 2018 lease sale, BLM offered and issued a large block of leases in the San Rafael Desert region including in and near the now-designated Labyrinth Canyon Wilderness. *See generally* September 2018 Lease Sale EA; SUWA Map – Emery County Wilderness September 2018 Lease Parcels (attached). In that EA, BLM anticipated that eleven wells would be drilled on these leases, with accompanying roads, pipelines, and other infrastructure. *See* September 2018 Lease Sale EA at 12.

At the December 2018 lease sale, BLM offered and issued a lease in the now-designated Labyrinth Canyon Wilderness. *See, e.g.*, BLM, Price Field Office December 2018 Competitive Oil and Gas Lease Sale, Determination of NEPA Adequacy, DOI-BLM-UT-G020-2018-0057-DNA (Oct. 2018).¹⁶ The lessee for that lease—Twin Bridges Resources, LLC—has submitted a Notice of Staking (NOS) for that lease. *See* BLM, 30-Day Posting of APDs and NOS (showing

¹⁴ Available at https://eplanning.blm.gov/public_projects/nepa/103243/160364/196062/Leasing_EA_Price_Richfield_Final.pdf.

¹⁵ Available at https://eplanning.blm.gov/public_projects/nepa/121035/20010574/250013585/2019-12-18-Sep19-MbFO-DOI-BLM-UT-0000-2019-0003-EA-Final.pdf.

¹⁶ Available at https://eplanning.blm.gov/public_projects/nepa/116617/166175/202487/2019-02-08_-_PFO_DNA_Final.pdf.

that on June 19, 2020, BLM received a NOS for UTU-93713, *i.e.*, lease parcel 257 at the December 2018 lease sale) (attached).

And SITLA has also issued mineral leases in the Labyrinth Canyon Wilderness. *See* SUWA Map – Active SITLA & BLM Oil/Gas Leases Found Within Labyrinth Canyon Wilderness (attached). However, the Lease Sale EA failed to analyze the cumulative impacts of development on these leases to the Labyrinth Canyon Wilderness. Instead, BLM concluded that stipulations, notices, and BMPs—prepared for a different project, in a different area, and before Congress designated the Wilderness—adequately analyzed all potential impacts.

iii. Greenhouse Gas Emissions and the Climate

a. Climate Change Impacts are Already Occurring and Must be Analyzed and Disclosed

A large and growing body of scientific research demonstrates, with ever increasing confidence, that climate change is occurring and is caused by emissions of GHGs from human activities, primarily the use of fossil fuels. The 2018 Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5°C found that human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, and that warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate.¹⁷ The IPCC also found that “[i]mpacts on natural and human systems from global warming have already been observed.”¹⁸ Additional warming will likely lead to further impacts according to the IPCC, including:

- Warming of extreme temperatures in many regions. The number of hot days is projected to increase in most land regions;¹⁹
- Increases in frequency, intensity, and/or amount of heavy precipitation in several regions;²⁰
- Increase in intensity or frequency of droughts in some regions;²¹
- Rise in global mean sea level, which could potentially expose millions of people to related risks including increased saltwater intrusion, flooding and damage to infrastructure;²²

¹⁷ 2018 Intergovernmental Panel on Climate Change, *Summary for Policymakers, in* Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty 6 (Valérie Masson-Delmotte et al. eds., 2018), *available at*: https://www.ipcc.ch/site/assets/uploads/sites/2/2018/07/SR15_SPM_version_stand_alone_LR.pdf [hereinafter, *Summary of IPCC 1.5°C Report*].

¹⁸ *Id.* at 7.

¹⁹ *Id.* at 9.

²⁰ *Id.*

²¹ *Id.*

²² *Id.* at 10.

- Impacts on biodiversity and ecosystems, including species loss and extinction associated with forest fires, the spread of invasive species, transformation of ecosystems from one type to another, loss of geographic range, and other climate related changes;²³
- Increases in ocean temperature as well as associated increases in ocean acidity and decreases in ocean oxygen levels, and resultant risks to marine biodiversity, fisheries, and ecosystems, and their functions and services to humans;²⁴
- Shifting the ranges of many marine species to higher latitudes, increasing the amount of damage to many ecosystems; loss of coastal resources and reduced productivity of fisheries and aquaculture; irreversible loss of many marine and coastal ecosystems;²⁵
- Ocean acidification-driven impacts to the growth, development, calcification, survival, and thus abundance of a broad range of species;²⁶
- Risks to fisheries and aquaculture via impacts on the physiology, survivorship, habitat, reproduction, disease incidence, and risk of invasive species;²⁷
- Disproportionately higher risk of adverse consequences to certain populations, including disadvantaged and vulnerable populations, some indigenous peoples, and local communities dependent on agricultural or coastal livelihoods. Poverty and disadvantage are expected to increase in some populations as global warming increases;²⁸
- Negative consequences for human health including heat-related morbidity and mortality, ozone-related mortality, amplified impacts of heatwaves in cities resulting from urban heat islands, and increased risks from some vector-borne diseases, such as malaria and dengue fever, including potential shifts in their geographic range;²⁹
- Net reductions in yields of maize, rice, wheat, and potentially other cereal crops, particularly in sub-Saharan Africa, Southeast Asia, and Central and South America, and in the CO₂-dependent nutritional quality of rice and wheat;³⁰ and
- Potential adverse impacts to livestock, depending on the extent of changes in feed quality, spread of diseases, and water resource availability.³¹

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.*

²⁶ *Id.* at 11.

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

The 2018 United States Fourth National Climate Assessment (hereinafter, NCA4) found, “that the evidence of human-caused climate change is overwhelming and continues to strengthen, that the impacts of climate change are intensifying across the country, and that climate-related threats to Americans’ physical, social, and economic well-being are rising.”³² Like the IPCC, the authors of NCA4 found that impacts are already occurring, concluding that “[t]he impacts of global climate change are already being felt in the United States and are projected to intensify in the future—but the severity of future impacts will depend largely on actions taken to reduce greenhouse gas emissions and to adapt to the changes that will occur.”³³

Specifically, for the Southwest region, which includes Arizona, California, Colorado, New Mexico, Nevada, and Utah, NCA4 found that:

- Climate change is altering ecosystems and their services through major vegetation shifts and increases in the area burned by wildfire;³⁴
- Water resources can be scarce because of the arid conditions of much of the Southwest and the large water demands of agriculture, energy, and cities. Water supplies change with year-to-year variability in precipitation and water use, but increased evapotranspiration due to higher temperatures reduces the effectiveness of precipitation in replenishing soil moisture and surface water;³⁵
- Greenhouse gases emitted from human activities have increased global average temperature since 1880 and caused detectable warming in the western United States since 1901. The average annual temperature of the Southwest increased 1.6°F (0.9°C) between 1901 and 2016. Moreover, the region recorded more warm nights and fewer cold nights between 1990 and 2016, including an increase of 4.1°F (2.3°C) for the coldest day of the year. Parts of the Southwest recorded the highest temperatures since 1895, in 2012, 2014, 2015, 2016, and 2017;³⁶
- Extreme heat episodes in much of the region disproportionately threaten the health and well-being of individuals and populations who are especially vulnerable;³⁷
- Communicable diseases, ground-level ozone air pollution, dust storms, and allergens can combine with temperature and precipitation extremes to generate multiple disease burdens;³⁸

³² U.S. Global Change Research Program, *Fourth National Climate Assessment: Volume II Impacts, Risks, and Adaptation in the United States* 36 (David Reidmiller et al. eds. 2018), available at: https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf (emphasis omitted).

³³ *Id.* at 34.

³⁴ *Id.* at 1107.

³⁵ *Id.*

³⁶ *Id.* at 1108.

³⁷ *Id.*

³⁸ *Id.*

- Native Americans are among the most at risk from climate change, often experiencing the worst effects because of higher exposure, higher sensitivity, and lower adaptive capacity for historical, socioeconomic, and ecological reasons. With one and a half million Native Americans, 182 federally recognized tribes, and many state-recognized and other non-federally recognized tribes, the Southwest has the largest population of Indigenous peoples in the country. Over the last five centuries, many Indigenous peoples in the Southwest have either been forcibly restricted to lands with limited water and resources or struggled to get their federally reserved water rights recognized by other users. Climate change exacerbates this historical legacy because the sovereign lands on which many Indigenous peoples live are becoming increasingly dry;³⁹
- Climate change affects traditional plant and animal species, sacred places, traditional building materials, and other material cultural heritage. The physical, mental, emotional, and spiritual health and overall well-being of Indigenous peoples rely on these vulnerable species and materials for their livelihoods, subsistence, cultural practices, ceremonies, and traditions;⁴⁰
- In parts of the region, hotter temperatures have already contributed to reductions of seasonal maximum snowpack and its water content over the past 30–65 years, partially attributed to human-caused climate change;⁴¹ and
- The increase in heat and reduction of snow under climate change have amplified recent hydrological droughts (severe shortages of water) in California, the Colorado River Basin, and the Rio Grande.⁴²

Both the IPCC and National Climate Assessment, respectively, acknowledge the role of fossil fuels in driving climate change:

“CO₂ emissions from fossil fuel combustion and industrial processes contributed about 78% to the total GHG emission increase between 1970 and 2010, with a contribution of similar percentage over the 2000–2010 period (high confidence).”⁴³

“Many lines of evidence demonstrate that human activities, especially emissions of greenhouse gases from fossil fuel combustion, deforestation, and land-use change, are primarily responsible for the climate changes observed in the industrial era, especially over the last six decades.”⁴⁴

³⁹ *Id.* at 1109.

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.*

⁴³ 2014 Intergovernmental Panel on Climate Change, *Climate Change 2014 Synthesis Report: Contribution of Working Groups I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* 46 (Rajendra K. Pachauri et al. eds. 2015), available at: https://archive.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf (emphasis omitted) [hereinafter, *AR5*].

⁴⁴ *NCA4* at 76.

Research shows that fossil fuels produced from U.S. federal lands are already a significant source of GHG emissions: “[t]ogether, coal, oil, and natural gas produced on federal lands account for approximately 25 percent of the total fossil fuels produced annually in the United States.”⁴⁵ Coal produced on federal lands accounted for about 40 percent of U.S. total coal production; crude oil and natural gas produced from federal lands account for about 25 percent of U.S. production.⁴⁶

A 2018 analysis from the U.S. Geological Survey (USGS) found that, “[n]ationwide emissions from [fossil] fuels extracted from Federal lands in 2014 were 1,279.0 MMT CO₂ Eq. [million metric tons of carbon dioxide equivalent] for CO₂ [carbon dioxide], 47.6 MMT CO₂ Eq. for CH₄ [methane], and 5.5 MMT CO₂ Eq. for N₂O [nitrous oxide]. . . . On average, Federal lands fuels emissions . . . accounted for 23.7 percent of national CO₂ emissions, 7.3 percent for CH₄, and 1.5 percent for N₂O” over the 10 years included in this estimate.⁴⁷

BLM acknowledges that the energy sector accounts for nearly 24 percent of national emissions for CO₂, 7.3 percent for CH₄, and 1.5 percent for N₂O over a ten year period, and that fossil fuel combustion is the largest source of energy-related GHG emissions. *See* EA at 36. Thus, BLM must analyze and disclose to the public the contribution of its fossil fuel leasing and development decisions to this increase in GHG emissions and the resulting climate change impacts.

Federal lands are also a critical carbon sink. The USGS found that in 2014, federal lands of the conterminous United States stored an estimated 83,600 MMT CO₂ Eq., in soils (63 percent), live vegetation (26 percent), and dead organic matter (10 percent).⁴⁸ In addition, the USGS estimated that Federal lands “sequestered an average of 195 MMT CO₂ Eq./yr between 2005 and 2014, offsetting approximately 15 percent of the CO₂ emissions resulting from the extraction of fossil fuels on Federal lands and their end-use combustion.”⁴⁹ Here, BLM’s only attempt to discuss sequestration is to use EPA’s Greenhouse Gas Equivalencies calculator to state that it would require approximately 648,804 acres of U.S. forests to sequester projected emissions (496,805 MT CO₂e/yr). *See* EA at 41. While this may be helpful for contextualizing emissions, it is completely insufficient to meet BLM’s obligations under NEPA to analyze and disclose the impacts of its leasing decisions. BLM must analyze and disclose how its leasing decision and resulting fossil fuel development could lead to the elimination or degradation of these crucial carbon sinks, resulting loss of carbon storage, and related climate change impacts, including a consideration of the time lag between leasing and any reclamation and the significance of the loss of carbon sinks on GHG emissions and climate change during that time period.

⁴⁵ Jayni Foley Hein, *Federal Lands and Fossil Fuels: Maximizing Social Welfare in Federal Energy Leasing*, 42 Harv. Envtl. L. Rev. 1, 9 (2018) (citing U.S. Energy Info. Admin., *Sales of Fossil Fuels Produced from Federal and Indian Lands, FY 2003 through FY 2014* 9 (2015), available at: <https://perma.cc/AG74-3H3U>).

⁴⁶ *Id.* n.26 (citing Office of Policy Analysis, U.S. Dep’t of the Interior, *U.S. Department of the Interior Economic Report FY 2015* 1 (2016), available at: <https://perma.cc/WD39-YYXR>).

⁴⁷ Matthew D. Merrill et al., *Federal Lands Greenhouse Gas Emissions and Sequestration in the United States: Estimates for 2005-14: U.S. Geological Survey Scientific Investigations Report 2018-5131* 6 (2018), available at: <https://pubs.usgs.gov/sir/2018/5131/sir20185131.pdf> [hereinafter, *USGS 2018 Report*].

⁴⁸ *USGS 2018 Report* at 12-13.

⁴⁹ *Id.* at 1.

Federal fossil fuels are large sources of GHG emissions and federal public lands contain important carbon sinks to help mitigate the adverse effects of climate change that could be disturbed by BLM's leasing decisions. BLM failed to analyze and disclose to the public the comprehensive impacts of its leasing decision on GHG emissions, carbon sinks, and climate change in violation of NEPA, as further described herein.

b. The Lease Sale EA Failed to Analyze Climate Impacts

As detailed above and previously explained by SUWA, a large and growing body of scientific research demonstrates, with ever increasing confidence, that climate change is occurring and is caused by emissions of GHG from human activities, primarily the use of fossil fuels. *See generally* SUWA et al., Comments re: March 2020 Competitive Oil and Gas Lease Sale, DOI-BLM-UT-0000-2020-0001-OTHER NEPA-EA at 10-36 (Dec. 28, 2019) (explaining that climate change impacts are already occurring and must be analyzed and disclosed) (SUWA Comments on March 2020 Lease Sale) (attached).

Here, as in the recent case, *WildEarth Guardians*, 368 F. Supp. 3d at 77, the discussion of climate change in the EA is conceptual: BLM merely summarizes Utah's current climate, the mechanics of climate change, acknowledges that emissions of GHGs—especially carbon dioxide and methane—from fossil fuel development contribute to climate change, and predicts the impacts of climate change on the state's climate. *See, e.g.*, EA at 35-47. However, BLM fails to connect the dots by meaningfully analyzing and disclosing to the public the significance of the impacts of its fossil fuel leasing decisions on GHG emissions and climate change, as further described herein.

First, BLM's cumulative impact analysis of GHG emissions and the climate lacks necessary information and data. In *WildEarth Guardians*, the court stated:

[NEPA] does . . . require that BLM quantify the emissions from each leasing decision—past, present, or reasonably foreseeable—and compare those emissions to regional and national emissions, setting forth with reasonable specificity the cumulative effect of the leasing decisions at issue. To the extent other BLM actions in the region—such as other lease sales—are reasonably foreseeable when an EA is issued, BLM must discuss them as well . . . Although BLM may determine that each lease sale individually has a de minimis impact on climate change, the agency must also consider the cumulative impact of GHG emissions generated by past, present, or reasonably foreseeable BLM lease sales in the region and nation.

368 F. Supp. 3d at 77 (internal citations omitted). The Lease Sale EA does not meet this standard.

Here, BLM's designated Cumulative Impacts Analysis Area (CIAA) for climate analysis in the Lease Sale EA is limited to "state and regional" impacts because, according to BLM, "the public tends to experience the impacts and adaptation at a local level." EA at 43. BLM provides no record evidence to support its conclusion. Moreover, BLM's CIAA is arbitrary. BLM knows that

climate impacts will result outside of Utah and the regional level⁵⁰ from the proposed sale alone, or when viewed together with other lease sales throughout the country. *See, e.g.*, EA at 43 (recognizing that impacts can occur “on various scales” including “local, state, national, and global”). For this reason, in past lease sale EAs BLM has properly established its CIAA for climate analysis as “the State of Utah, the United States, and the globe.” BLM, Environmental Assessment, December 2018 Competitive Oil and Gas Lease Sale, DOI-BLM-UT-G010-2018-0044-EA at 41 (Sept. 2018) (excerpts attached). Designation of a broad CIAA is consistent with BLM’s guidance which states that the CIAA “is generally based on the natural boundaries of the resource affected, rather than jurisdictional boundaries.” NEPA Handbook § 6.8.3.2, pg. 58.

Second, in the EA, it is unclear to what extent BLM has analyzed the 20-year global warming potential (GWP) for CO₂ and CH₄ in its consideration of cumulative impacts. *See* SUWA Comments on March 2020 Lease Sale at 15-17 (explaining that BLM must consider both the 20-year and 100-year GWP of 28 and 84, respectively, to account for the upper-end estimates of fossil methane). To begin with, BLM states that for the analysis in the EA the agency “uses [the] 100-year GWP . . . except where stated otherwise.” EA at 35. The public is left to guess when that is the case. For example, the EA—when discussing direct and indirect effects—states that BLM has relied on the 20-year GWP for CO₂e, *see* EA at 39, but then states: “The 20-year GWP overestimates emissions since the single well emissions inventories used in this analysis were developed before implementation of Utah Administrative Code R307-511: Associated Gas Flaring Requirements.” *Id.* (emphasis added). According to BLM, “[t]his rule requires that associated gas either be routed to a sales pipeline, combustor unit, or other VOC control device which results in a reduction of [CH₄] emissions and the 20-year GWP.” *Id.* BLM must clarify how the 20-year GWP “overestimates” GHG emissions and provide support for this proposition. BLM must also clarify whether (and how) that purported overestimation applies in the cumulative impacts analysis section.

It is unclear whether BLM analyzed the 20-year GWP for CO₂ and CH₄—as is required by law— or whether instead it limited its analysis to the 100-year GWP. *See, e.g., W. Org. of Res. Councils*, 2018 WL 1475470, at *18 (“BLM violated NEPA where it failed to justify its use of GWPs based on a 100-year time horizon rather than the 20-year time horizon”); *WildEarth Guardians*, 2020 WL 2104760, *9-10 (holding that the failure to fully analyze cumulative impacts is a NEPA violation). *See also* 40 C.F.R. § 1502.1 (requiring a “full and fair discussion of significant environmental impacts”); *id.* § 1500.1(b) (“Accurate scientific analysis” proves “essential to implementing NEPA”); *id.* § 1508.27(a) (NEPA finds relevant “both short- and long-term effects”).

As SUWA has previously explained, BLM must analyze and disclose the most recent 20- and 100-year GWPs. *See* SUWA Comments on March 2020 Lease Sale at 15-20. In addition, in the EA, BLM states that it relied on 20-year and 100-year GWP values of 28 and 84 for CH₄, respectively. *See* EA at 35, tbl 7. However, these GWP values fail to account for the upper-end

⁵⁰ The EA never defines “regional level” so it is unclear what BLM means with this term. At any extent, in *WildEarth Guardians*, the court held that BLM’s NEPA analysis had to “consider the cumulative impact of GHG emissions generated by past, present, or reasonably foreseeable BLM lease sales in the region and nation.” 368 F. Supp. 3d at 77 (emphasis added).

estimates of fossil CH₄. *See* SUWA Comments on March 2020 Lease Sale at 15-17 (explaining that BLM must consider upper-end estimates).

Third, BLM failed to analyze and disclose any end uses other than combustion. In the EA, BLM states that such analysis is unwarranted because the agency “has no authority to direct or regulate the end-use of the produced products and an actual end-use may differ from the assumption used for calculating downstream GHG emissions.” EA at 46. This rationale is unlawful. The conclusion that BLM’s end-use GHG emissions estimate is conservative because it assumes all oil and gas is combusted is completely unsupported. This assumes that all end uses result in combustion, which is false. Other end uses may result in oil or natural gas being used as a feedstock to create other products rather than being combusted. The creation and use of such products may also result in GHG emissions, and those emissions could be greater or lesser than the GHG emissions caused by combustion. As noted in SUWA’s recent September 2019 lease sale protest, BLM has not demonstrated that the other potential end-uses it recognizes result in lower GHG emissions than combustion. BLM should estimate GHG emissions based on anticipated end-use or at the very least provide a range of emissions estimates for various reasonable end-use scenarios.

Additionally, BLM must analyze and disclose to the public the potential GHG emissions from activities other than construction, operation, and combustion, such as: potential emissions from gathering, boosting, processing, transmission, storage, distribution, and refining. Other indirect emissions sources downstream of the wellpad and upstream of end use that BLM should have disclosed and analyzed include, but are not limited to, CH₄, CO₂, and N₂O emissions from:

- Gathering and boosting stations;
- Compressor stations;
- Pig launchers/receivers;
- Pipeline blowdowns;
- Pipeline leaks;
- Pneumatic devices;
- Malfunctions and upsets;
- Processing plants; and
- Distribution pipeline and M&R station leaks.

BLM provides a brief list of Best Management Practices (BMPs) it has identified that could potentially be used to, “reduce emissions from field production and operations.” EA at 42. However, BLM fails to require the use of any of these BMPs to mitigate the impacts of GHG emissions and instead simply defers mitigation to some future date stating, “[a]nalysis and

approval of future development on the lease parcels may include application of BMPs within BLM's authority, as Conditions of Approval, to reduce or mitigate GHG emissions. Additional measures developed at the project development stage also may be incorporated as applicant-committed measures by the project proponent or added to necessary air quality permits." *Id.* at 42-43. BLM must analyze the GHG emissions and include mandatory mitigation measures to address them.

Fourth, in the EA, BLM failed to analyze the cumulative impacts of all reasonably foreseeable wells anticipated in the RFDSs prepared for each field office at issue. "Cumulative" effects are "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, 1508.25(c). Analysis of cumulative impacts protects against "the tyranny of small decisions," *Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1078 (9th Cir. 2002), by confronting the possibility that agency action may contribute to cumulatively significant effects even where impacts appear insignificant in isolation, 40 C.F.R. §§ 1508.7, 1508.27(b)(2).⁵¹ The impact of "greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct." *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1217 (9th Cir. 2008). "Given the national, cumulative nature of climate change, considering each individual drilling project in a vacuum deprives the agency and the public of the context necessary to evaluate oil and gas drilling on federal land before irretrievably committing to that drilling." *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d at 83. Thus, an agency's failure to fully analyze and disclose GHG emissions renders its cumulative impact analyses inadequate. *Id.* at 76; *see also Wildearth Guardians*, 2020 WL 2104760, at *9-10.

As noted above, the EA analysis anticipates 41 wells on the lease parcels. *See* EA at 19, tbl. 4. As such, BLM failed to analyze all wells in the respective RFDS such as the 28,417 wells anticipated in the Greater Uinta Basin TSD. *See* Greater Uinta Basin TSD at 10, tbl. 3-2. And to a broader extent the EA fails to analyze the cumulative impacts of GHG emissions from the proposed lease parcels, when viewed with all past, present, and reasonably foreseeable oil and gas projects because BLM improperly narrowed its analysis to the "state and regional" scale. EA at 43.

Among other actions, BLM's cumulative impacts analysis must consider:

- Oil and gas leases offered and sold by SITLA;
- Utah BLM's leasing over the past years and decades, and its upcoming December 2020 lease sale (for which the agency has already received expressions of interest);
and

⁵¹ *See also* Council on Env'tl. Quality, Exec. Office of the President, *Considering Cumulative Effects Under the National Environmental Policy Act* (1997), available at: https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf; 40 C.F.R. § 1508.27(b)(7) ("Significance cannot be avoided by . . . breaking [an action] down into small component parts.").

- BLM’s leasing outside of Utah, on both regional and national scales, including past sales, other sales presently proposed, and upcoming 2020 leasing (and beyond).

BLM must analyze and disclose the impacts of these actions, including the incremental GHG emissions increases, added to other past, present, and reasonably foreseeable fossil fuel extraction emissions on a regional and national scale. *See* 40 C.F.R. §§ 1508.7, 1508.27(a). BLM must complete a comprehensive cumulative impacts analysis that compares GHG emissions from the lease parcels to emissions from other BLM-managed projects in this region and across the country. *WildEarth Guardians*, 368 F.Supp.3d at 76. “To the extent other BLM actions in the region—such as other lease sales—are reasonably foreseeable when an EA is issued, BLM must discuss them as well.” *Id.* at 77. The court reasoned that “[g]iven the national, cumulative nature of climate change, considering each individual drilling project in a vacuum deprives the agency and the public of the context necessary to evaluate oil and gas drilling on federal land before irretrievably committing to that drilling.” *Id.* at 83.

Similarly, here, BLM must analyze and disclose to the public the cumulative GHG emissions from similar, collectively significant oil and gas lease sales within Utah, as well as throughout the Rocky Mountain West, and nationally. *Id.* at 77. (“[NEPA] does, however, require that BLM quantify the emissions from each leasing decision—past, present, or reasonably foreseeable—and compare those emissions to regional and national emissions, setting forth with reasonable specificity the cumulative effect of the leasing decision at issue. To the extent other BLM actions in the region—such as other lease sales—are reasonably foreseeable when an EA is issued, BLM must discuss them as well.”).

As the court made clear in *WildEarth Guardians*, BLM cannot ignore the impacts from these similar, cumulative federal and state lease sales. Similarly, BLM must quantify the cumulative GHG emissions from these reasonably foreseeable lease sales and analyze and disclose to the public the significance of these emissions. *See* 368 F. Supp. 3d at 77. Further, as noted above, the Tenth Circuit recently held that if BLM has prepared a RFDS for a particular area then the agency must fully analyze the impacts of developing the full number of wells identified in that RFDS in its site-specific NEPA analysis, if that analysis has not previously been conducted. *Diné CARE*, 923 F.3d at 854. Thus, for purposes of NEPA analysis, those reasonably foreseeable wells must be considered in the agency’s cumulative impact analysis. *See id.* at 853 (“We conclude that the [RFDS] made it reasonably foreseeable that 3,960 horizontal Mancos Shale wells would be drilled, and NEPA therefore required the BLM to consider the cumulative impacts of those wells in the EAs.”). There, BLM was “foreclose[d]” from authorizing a proposed activity when the agency had failed to fully analyze all reasonably foreseeable cumulative impacts. *Id.* at 854.

BLM cannot only account for emissions from this proposed lease sale but must do so for all GHG emissions associated with BLM-approved oil and gas leasing in the region and nationwide. Here, BLM failed to analyze and disclose the emissions and climate impacts of these wells when added to the emissions resulting from other past, present, or reasonably foreseeable actions, in violation of NEPA. *See* 40 C.F.R. § 1508.27(b)(7) (requiring cumulative analysis even for impacts that are “individually insignificant but cumulatively significant”). Without considering “the combined effects” of such management, the agency cannot make an informed decision

“whether, or how, to alter” the plans “to lessen cumulative impacts.” *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 810 (9th Cir. 1999).

Importantly, BLM—at best—attempted to quantify some of the GHG emissions (*i.e.*, state and regional emissions) but entirely failed to analyze the climate effects of those emissions including, but not limited to, water resources, wildlife, and public health. NEPA requires a more searching analysis than merely disclosing the amount of pollution. BLM stated that annual GHG operation and combustion emissions would increase statewide emissions by 0.69% and national emissions by 0.0074%. EA at 47. An agency’s comparison of an action’s annual emissions to state, national, or global emissions misleadingly suggests that an action’s contribution to climate change is static and small, while in fact a continuing stream of emissions will add to the already too-high level of GHGs in the atmosphere and exacerbate the already excessive damage occurring each year. Comparing an agency action’s emissions to a state, national, or global inventory reveals nothing about the significance of the action’s contributions to actual environmental impacts. Merely quantifying GHG emissions and calculating what percentage they represent of U.S. GHG emissions is inadequate. *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1216-17 (9th Cir. 2008).

Further, in *WildEarth Guardians v. BLM*, the court noted that “if BLM ever hopes to determine the true impact of its projects on climate change, it can do so only by looking at projects in combination with each other, not simply in the context of state and nation-wide emissions.” 2020 WL 2104760, at *11. “Without doing so, the relevant ‘decisionmaker’ cannot determine ‘whether, or how, to alter the program to lessen cumulative impacts’ on climate change.” *Id.* (internal citations omitted).

Additionally, CEQ has explicitly addressed the inappropriateness of an agency’s assertion that the emissions resulting from its actions represent only a small fraction of global emissions in order to avoid analysis and disclosure of climate impacts, as follows:

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.⁵²

⁵² CEQ Final Guidance at 10-11 (emphasis added).

The withdrawal of the 2016 CEQ final guidance does not preclude agencies from utilizing the tools contained therein to consider the impacts of its actions on climate change when conducting environmental reviews in order to comply with NEPA and relevant case law.

Further, even in combination with a general, qualitative discussion of climate change, calculating only the tons of greenhouse gases emitted or a percent comparison to sectoral or national emissions fails to meaningfully assess the actual incremental impacts to property, human health, productivity, and so on. *See High Country Conserv. Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1147, 1190 (D. Colo. 2014) (“Beyond quantifying the amount of emissions relative to state and national emissions and giving general discussion to the impacts of global climate change, [the agencies] did not discuss the impacts caused by these emissions.”); *Mont. Env'tl. Info. Ctr. v. U.S. Office of Surface Mining*, 274 F. Supp. 3d 1074, 1096–99 (D. Mont. 2017) (rejecting the argument that the agency “reasonably considered the impact of greenhouse gas emissions by quantifying the emissions which would be released if the [coal] mine expansion is approved, and comparing that amount to the net emissions of the United States”). An agency would therefore fall short of its legal obligations and statutory objectives by focusing just on volume estimates.

Similarly, courts have held that just quantifying the acres of timber to be harvested or the miles of road to be constructed does not constitute a “description of *actual* environmental effects,” even when paired with a qualitative “list of environmental concerns such as air quality, water quality, and endangered species,” when the agency fails to assess “the degree that each factor will be impacted.” *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 995 (9th Cir. 2004) (“A calculation of the total number of acres to be harvested in the watershed is . . . not a sufficient description of the actual environmental effects that can be expected from logging those acres.”); *see also Oregon Natural Res. Council v. Bureau of Land Mgmt.*, 470 F.3d 818 (9th Cir. 2006). Therefore, a statement that emissions from a lease sale 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.

In addition to including quantitative estimates of the total GHG emissions resulting from its approvals, BLM must also assess the ecological, economic, and social impacts of those emissions, including assessing their significance. *See* 40 C.F.R. §§ 1508.8(b); 1502.16(a)-(b). The inclusion of this information in an agency’s NEPA analysis allows members of the public and interested parties to evaluate this information, submit written comments where appropriate, and spur further analysis as needed. *W. Org. of Res. Councils*, 2018 WL 1475470, at *16. Without all the relevant information, a NEPA analysis cannot “foster informed decision-making” and is unlikely to survive judicial scrutiny. *Id.* (citing *California v. Block*, 690 F.2d 753, 761 (9th Cir. 1982)). Agencies must analyze the significance and severity of emissions, so that decisionmakers and the public can determine whether and how those emissions should influence the choice among alternatives. *See Methow Valley Citizens Council*, 490 U.S. at 351-52 (recognizing that EIS must discuss “adverse environmental effects which cannot be avoided[,]” which is necessary to “properly evaluate the severity of the adverse effects”).

While agencies are not required to use any specific protocols to determine the significance of emissions under NEPA, BLM must undertake a more robust discussion of GHG emissions.

WildEarth Guardians, 368 F. Supp. 3d at 78. This is because an agency’s failure to provide a discussion of the significance of impacts resulting from its decisions and associated climate implications deprives the public of important information on the cumulative GHG emissions and true climate implications of agency actions. *See Or. Nat. Desert Ass’n v. U.S. Bureau of Land Mgmt.*, 625 F.3d 1092, 1099-1100 (9th Cir. 2010) (“[NEPA] require[es] agencies to take a ‘hard look’ at how the choices before them affect the environment, and then to place their data and conclusions before the public.”). Accepted methods exist to quantify and analyze the significance of GHG emissions (through monetization), which BLM could use to evaluate the significance of those emissions and to balance consequences of emissions against benefits of a specific approval.⁵³

Here, BLM’s only attempt to assess the significance of emissions is to use EPA’s Greenhouse Gas Equivalencies calculator to convert its estimate of emissions to the equivalent emissions from passenger vehicles. EA at 41. While this may be helpful for trying to contextualize emissions, it is insufficient to meet BLM’s obligations under NEPA to analyze and disclose significance, as it misleadingly trivializes the project’s contributions. The public does not necessarily have any frame of reference to assess whether the energy used by a certain number of cars driven for a year is significant or not. Such figures are still abstract, lack context, and on their own are misleading. Monetization is a much more relatable scale for the public to understand and it assesses the significance of a project’s contributions.

To that end, one tool available to analyze and disclose the significance of emissions and related climate change impacts is the Interagency Working Group’s Social Costs of Greenhouse Gases, including the social costs of carbon and methane, which are discussed in greater detail in SUWA’s June 2020 lease sale comments, attached hereto and incorporated herein. Here, BLM must consider the social cost of carbon and methane. In the EA, BLM states that this analysis is not warranted because the “EA provides no quantitative monetary estimates of any benefits or costs.” EA at 41. BLM further states that social cost of carbon tool prepared by federal agencies with help from many other private and public partners is not applicable here because that tool was meant for “rulemakings” and “[t]he action considered here is not a rulemaking and [thus] does not require a regulatory-impact analysis.” *Id.* These conclusions are arbitrary.

To begin with, BLM has previously conceded that the “only meant for rule-making” argument is not legally sound as it has been “invalidated by a court decision and can no longer be considered an adequate response.” E-mail from Julie A Suhr Pierce, Great Basin Socioeconomic Specialist, BLM, to Sheri Wysong, Utah-BLM Fluid Minerals Leasing Coordinator (Aug. 14, 2017) (e-mail exchange attached). BLM further conceded that its ‘only meant for rule-making response’ “would not hold up in court if the previous ruling [*i.e.*, *High Country Conserv. Advocates v. U.S. Forest Service*, 52 F. Supp. 3d. 1147 (D. Colo. 2014)] were to be cited.” *Id.* Nothing has changed that would alter this conclusion.

⁵³ See Jayni Hein et al., NYU School of Law Inst. for Policy Integrity, *Pipeline Approvals and Greenhouse Gas Emissions* 5 (2019), available at: <https://policyintegrity.org/publications/detail/pipeline-approvals-and-greenhouse-gas-emissions> [hereinafter, *Pipeline Approvals and GHG Emissions*]; see Erik Vernon, Bureau of Land Management, Utah Office, Specialist Report – Greenhouse Gas Analysis for BLM Utah Oil and Gas Leasing at 2 (2019) [hereinafter, Utah GHG Emissions Report], available at: [https://eplanning.blm.gov/epl-front-office/projects/nepa/121035/20000240/250000291/2019 BLM Utah OG Leasing Specialist Report on GHG revised.pdf](https://eplanning.blm.gov/epl-front-office/projects/nepa/121035/20000240/250000291/2019%20BLM%20Utah%20OG%20Leasing%20Specialist%20Report%20on%20GHG%20revised.pdf).

Next, in the EA, BLM does provide quantitative monetary estimates of purported benefits of oil and gas leasing and development. *See* EA at 47-54 (analyzing potential impacts to “social and economic conditions”). For example, the EA considers the “socioeconomics” of offering the leases for development and concludes there would be “generation of revenue from the lease sale.” EA at 49. This includes \$9.8 million in 2019 and \$156.9 million from 2003 to 2019. *Id.* The EA estimates that oil and gas crews will spend money in the local or regional communities. *Id.* BLM further recognizes the “[p]ositive indirect impacts” of leasing and development and explains that “bonus bids . . . annual rent fees . . . and royalties . . . may provide substantial income to county governments for schools and other expenditures.” *Id.* The EA also provides information regarding “oil and gas employment effects.” *Id.* at 50, tbl. 14.

Because BLM has analyzed these so-called “benefits” of oil and gas leasing and development it must also disclose the costs. *See, e.g., High Country Conservation Advocates*, 52 F. Supp. 3d at 1190-91. The Social Costs of Greenhouse Gases are tools that could be used to fulfill this required analysis. As SUWA has previously explained in a similar context, if an agency monetizes the economic benefits of fossil fuel extraction, it must then also monetize the costs of carbon pollution. *See* SUWA Comments on March 2020 Lease Sale at 21-29 (making this same point, with citations to numerous cases and regulations).

Further, the social cost of carbon and methane tools would help BLM—and the public—interpret and understand the significance of the data presented in the EA. For example, despite having touted the economic benefits of oil and gas leasing and development (*e.g.*, jobs, local spending), BLM entirely failed to disclose any adverse effects, including cumulative impacts. In the EA, BLM makes a brief reference to “concerns about effects on recreation and tourism activities due to oil and gas development.” EA at 51. However, the sum total of BLM’s analysis on this point is to state the obvious: recreation and tourism-related industries benefit from increased spending and suffer from reduced economic spending. *See id.* (stating that new spending of \$100,000 “support[s] an estimated average of 1.2 jobs” while “[a] reduction of spending within the same industrial sectors would have opposite effects”).

In support of this recreational and tourism spending analysis, BLM prepared Table 15, which—allegedly—provides “recreation and tourism employment effects.” *Id.* at 52, tbl. 15. Not so. That table provides data—based on an assumption of \$100,000 of new recreational and tourism spending—regarding “employment effects,” “labor income effects,” and “output effects.” *Id.* Notably, prior to providing this table of data in the EA BLM also cautioned: “it is understood that none of the figures shown below [*i.e.*, Table 15] will accurately reflect current economic conditions.” *Id.* at 49. The social cost of carbon and methane tools, had BLM used them, would have added necessary context, detail and relevance to BLM’s data—data which as currently presented is completely untethered from any actual impacts analysis.

Among other things, BLM never explains (1) why it chose \$100,000 as its baseline, (2) what the data in Table 15 actually represents (or is meant to represent, or how it is supposed to be interpreted), (3) how that data is relevant with regard to oil and gas leasing and development, and, importantly, (4) how the data is being used to inform BLM’s decision regarding potential impacts of leasing and development. Instead, BLM presents the data and concludes: “Where

recreation and tourism play a greater role in a county's economy, the economic effects from an increase or reduction in spending would be greater than in the study area on average. The opposite is also true." *Id.* at 52. This is merely a recognition of basic economic principles, it is not NEPA analysis.

Moreover, the entirety of BLM's cumulative impacts "analysis" consists of the following sentence: "To the extent that separate future activities within the study area affect the county economies included in this analysis, social and economic impacts could be compounded by those activities." EA at 54. In the Tenth Circuit a proper cumulative impacts analysis "must" address five points, at a minimum:

- (1) the area in which the effects of the proposed action will be felt;
- (2) the impacts that are expected in that area from the proposed project;
- (3) other actions—past, present, and proposed, and reasonably foreseeable—that have had or are expected to have impacts in the same area;
- (4) the impacts or expected impacts from these other actions;
- and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate.

Wilderness Workshop, 342 F. Supp. 3d. at 1157 (quoting *San Juan Citizens All. v. Stiles*, 654 F.3d 1038, 1056) (10th Cir. 2011)) (internal alterations omitted; emphases added). Here, BLM's one sentence of analysis does not meet this standard.

Another measuring standard available to agencies for analyzing the significance of GHG emissions is to apply those emissions to the remaining global carbon budget through carbon budgeting—which offers a cap on the remaining stock of greenhouse gases that can be emitted while keeping global average temperature rise below scientifically researched warming thresholds, beyond which climate change impacts may result in severe and irreparable harm.⁵⁴ Research shows that enormous and rapid cuts in GHG emissions are needed to meet climate goals. The IPCC's Special Report on 1.5°C estimated a remaining budget from the start of 2018 of approximately:

- 420 Gigatonnes of CO₂ (GtCO₂) for a two-thirds chance of limiting warming to 1.5°C;⁵⁵
- 580 GtCO₂ for a 50 percent chance of limiting warming to 1.5°C;⁵⁶

⁵⁴ The Paris Agreement states that global warming must be held "well below 2°C above pre-industrial levels" with a goal to "limit the temperature increase to 1.5°C." U.N. Framework Convention on Climate Change Conference of the Parties, Twenty-First Session, *Adoption of the Paris Agreement*, Art. 2, U.N. Doc. FCCC/CP/2015/L.9/Rev.I (Dec. 12, 2015), available at:

http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf [hereinafter, *Paris Agreement*] (attached).

⁵⁵ See Joeri Rogelj, et al., *Mitigation Pathways Compatible With 1.5°C in the Context of Sustainable Development* 108 (V. Masson-Delmotte et al. eds., 2018) (An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty) [hereinafter, *Chapter 2 of IPCC 1.5°C Report*], available at:

https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_Chapter2_Low_Res.pdf (attached).

⁵⁶ *Id.*

- 1170 GtCO₂ for a two-thirds chance of limiting warming to 2°C;⁵⁷ and
- 1500 GtCO₂ for a 50 percent chance of limiting warming to 2°C.⁵⁸

In order to meet these targets, global CO₂ emissions would need to reach net zero in about 30 years to stay within a 580 GtCO₂ budget, reduced to 20 years for a 420 GtCO₂ budget.⁵⁹

However, there are also significant uncertainties in these carbon budgets—uncertainties that in some cases are nearly as large as the entire budgets themselves. While the multiple sources of uncertainties cannot be formally combined, the IPCC concluded that, overall, “current understanding of the assessed geophysical uncertainties suggests at least a ±50% possible variation for remaining carbon budgets for 1.5°C-consistent pathways.”⁶⁰ In other words, the remaining global carbon budget may be significantly smaller than these estimated budgets. The potential carbon emissions from existing fossil fuel reserves—the known belowground stock of extractable fossil fuels—considerably exceed both 2°C and 1.5°C of warming. Globally, the IPCC found in AR5 that, “[e]stimated total fossil carbon reserves exceed [the 2°C budget] by a factor of 4 to 7.”⁶¹ Another study found that, to meet the target of 2°C, “a third of oil reserves, half of gas reserves and over 80 percent of current coal reserves should remain unused from 2010 to 2050.”⁶²

Research shows that potential emissions from just U.S. federal fossil fuels could take up all or a significant portion of the remaining global carbon budget. A 2015 analysis prepared by EcoShift Consulting estimated that the potential emissions from all U.S. fossil fuels is 697-1,070 GtCO₂eq.⁶³ Federal fossil fuels—including crude oil, gas, coal, oil shale, and tar sands—account for as much as 492 GtCO₂eq, or approximately 46 to 50 percent of total potential emissions.⁶⁴ Unleased federal fossil fuels comprise 91 percent of these potential emissions, with already leased federal fossil fuels accounting for as much as 43 GtCO₂eq.⁶⁵ Unleased federal gas has potential GHG emissions ranging from 37.86 to 47.26 GtCO₂eq, while leased federal gas represents 10.39 to 12.88 GtCO₂eq.⁶⁶ Unleased federal crude oil has potential GHG emissions ranging from 37.03 to 42.19 GtCO₂e, while potential emissions from leased federal crude oil represents from 6.95 to 7.92 GtCO₂e.⁶⁷

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.* at 96.

⁶⁰ *Id.* at 107.

⁶¹ AR5 at 63.

⁶² Christophe McGlade & Paul Ekins, *The Geographical Distribution of Fossil Fuels Unused When Limiting Global Warming to 2°C*, 517 *Nature* 187, 187 (2015), available at: <https://www.nature.com/articles/nature14016.pdf> (attached).

⁶³ Dustin Mulvaney et al., EcoShift Consulting, *The Potential Greenhouse Gas Emissions of U.S. Federal Fossil Fuels* 18 (2015), available at: <https://www.ourenergypolicy.org/wp-content/uploads/2015/08/Potential-Greenhouse-Gas-Emissions-U-S-Federal-Fossil-Fuels.pdf> (attached).

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

While global carbon budgets are imperfect, as BLM asserts, *see* EA at 41-42, they represent tools presently available to agencies to use in analyzing and disclosing to the public the significance of their decisions on GHG emissions and their implications for climate change. The global carbon budget is rapidly being spent, and every additional ton of emissions is a debit against the climate. Thus, BLM should analyze and disclose the cumulative emissions resulting from its actions against the remaining carbon budget, thereby providing decisionmakers and the public the necessary context for understanding the significance of their decisions. *See* 40 C.F.R. § 1508.27(a).

VII. Old Spanish National Historic Trail

Thirty-six of the proposed parcels are crossed by or lie in close proximity to the OSNHT. BLM has not adequately assessed the potential impact on the OSNHT as required pursuant to the NTSA and NEPA. Offering these leases additionally contradicts BLM's own internal guidelines for management of the OSNHT, as reflected in the 2017 OSNHT Comprehensive Administrative Strategy (CAS) and in BLM's policy manuals, particularly Manual 6280.

Therefore, lease parcels 37, 38, 51, 52, 53, 54, 55, 56, 57, 58, 59, 81, 82, 83, 84, 85, 88, 117, 118, 120, 122, 123, 124, 127, 132 and 136 within the Moab Field Office's purview should be excluded from the September sale, and lease parcels 18, 19, 20, 22, 23, 24, 26, 30, 31, and 33 within the Richfield Field Office's purview should be excluded from the September sale. These parcels should not be leased unless and until the BLM conducts an adequate analysis of the impacts oil and gas development would have on the OSNHT and its users, and then only if leasing will not "substantially interfere" with the nature and purposes of the Trail.⁶⁸

A. Violation of BLM's Statutory Duty to Manage the OSNHT

BLM and NPS never developed a Comprehensive Management Plan as required by the NTSA.

The OSNHT was statutorily designated a national historic trail in 2002, and joint administrative responsibility was delegated to the National Park Service and BLM in 2003. The NTSA requires that, within two fiscal years of the congressional designation of a national scenic, historic, or recreational trail, the administrating agency or agencies submit a comprehensive management plan (CMP) for the trail's use and maintenance to the Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate for approval.⁶⁹ The CMP for the OSNHT is now approximately fifteen years overdue.

In 2017, the agencies issued a "Comprehensive Administrative Strategy," evidently in lieu of a CMP.⁷⁰ (Of the nineteen statutorily designated national historic trails, the OSNHT is one of two without a CMP. None of the others has a CAS.⁷¹) The CAS is not a sufficient substitute for a CMP. Not only was the CAS not submitted to Congress for approval as required under NTSA,

⁶⁸ *See* 16 U.S.C. 1246(c).

⁶⁹ *See* 16 U.S.C § 1244(e)-(f).

⁷⁰ *See* "Old Spanish National Historic Trail Comprehensive Administrative Strategy" at 15, available at <https://parkplanning.nps.gov/Final-OLSP-CAS> [hereinafter, OSNHT Strategy].

⁷¹ *See, generally,* <https://www.nps.gov/subjects/nationaltrailssystem/national-historic-trails.htm>.

but BLM and NPS did not complete any concurrent environmental review under NEPA to assess the CAS' impacts. Other national historic trails' CMPs have typically been accompanied by an environmental impact statement or an environmental assessment.⁷² Because policies and procedures guiding the management of a federal trail and the lands around it have the potential to "significantly affect the quality of the human environment,"⁷³ they should, under NEPA, likewise undergo an EIS or an EA before implementation.

Because the CAS was not accompanied by an EIS or an EA, management decisions like the one to lease these 77 parcels are made piecemeal, without adequate consideration of the direct, indirect, short-term, long-term, and cumulative impacts on the Trail. Under NTSA and NEPA alike, this violates the statutory obligations of the Department of the Interior (DOI), and of the BLM and NPS as delegated OSNHT co-administrators.

B. Failure to Comply with BLM's Stated Policies in CAS and Policy Manuals

The lack of an established National Trail Management Corridor and of comprehensive inventories of Trail resources, qualities, and values goes against BLM policy.

Even without the statutorily required CMP in place, the proposed lease parcels still go against BLM's own policies. BLM Manual 6280, internal guidance for the BLM on National Scenic and Historic Trail management released in 2012, directs land managers to conduct an inventory of all Trail resources, qualities, and values as soon as possible after Trail designation by Congress, and in preparation for the CMP required within two years of such designation.⁷⁴ Manual 6280 additionally states that the BLM is required to amend land management plans that cover National Trails so as to account for Trail maintenance; when an action is proposed within the National Trail viewshed, BLM is expressly required to create an inventory of Trail resources and values.⁷⁵

There is no indication that BLM has conducted the comprehensive inventories of OSNHT resources, qualities, and values required by BLM Manual 6280. The Resource Management Plans for the Moab Field Office area, the Richfield Field Office area, and the Master Leasing Plan for the Canyon Country District Office make little mention of the existence, status, or management of the OSNHT, and do not refer to any inventories required by Manual 6280.

⁷² For instance, as one example, the BLM and NPS co-issued a CMP/EIS for El Camino Real de Tierra Adentro National Historic Trail in 2004, recognizing that different environmental impacts would result from different management strategies, and that direct, indirect, short-term, long-term, and cumulative impacts all had to be considered. *See generally*, <https://www.nps.gov/elca/learn/management/upload/Comprehensive-Management-Plan-Chapter-4-508.pdf>.

⁷³ 42 U.S.C § 4332(C).

⁷⁴ "6280 – Management of National Scenic and Historic Trails and Trails Under Study or Recommended as Suitable for Congressional Designation (Public)," Rel.6-139 at 3-1 (BLM Manual 6280). The Manual inventory requirements state that the BLM shall, in part: "Recommend to the National Trail administering agency for inclusion in the trailwide Comprehensive Plan, data regarding Federal Protection Components (land and water based components of a historic trail), including high potential historic sites and high potential route segments, identified or discovered through the inventory process."

⁷⁵ *Id.* at 1-19, 1.6(A)(3)(iii). ("Until such time as a National Trail Management Corridor is established through the Resource Management Plan in accordance with this policy, an inventory shall be conducted for proposed actions within the National Trail viewshed.")

Despite its federal designation, none of these plans even refer to the OSNHT as a “special designation”—although they do refer to certain other “special designations” such as monuments, wilderness study areas, and areas of critical environmental concern, established through presidential proclamations, temporary legislative authorities, or agency administrative action.

Going forward with the lease sale in the absence of an established resource inventory or management plans that account for Trail management is arbitrary and capricious.

In the absence of an established National Trail Management Corridor, BLM should adopt the NPS practice of an interim management corridor of five miles on either side of the OSNHT.

Manual 6280 also states that BLM will create an inventory of trail-related resources—including scenic resources, viewshed analyses, and scenic settings⁷⁶—in order to establish a National Trail Management Corridor through the land use planning process.⁷⁷ Overall, BLM will manage trails so as to protect the nature and purposes of the trail as much as possible, “recognizing the nationally significant scenic, historic, cultural, recreation, natural, and other landscape values ... of the public land areas through which such National Trails may pass.”⁷⁸

To date, there has been no comprehensive inventory of Trail resources, qualities, and values, and there is no established National Trail Management Corridor to provide clear guidance on how the trail is to be managed and maintained. BLM therefore does not adequately account for the impacts of its other actions on the resources and values of the Trail.

The CAS points out that BLM Manual 6280 defines a Trail corridor as “includ[ing] the area of land that is of sufficient width to encompass national trail resources, qualities, values, and associated settings.”⁷⁹ The OSNHT CAS also states that the

width of the corridor fluctuates as it incorporates variations in routes and alignments (the result of environmental factors) and is dependent on landforms. The resource corridor might include narrow canyons or extensive viewsheds; it traverses a variety of ecoregions that create a multitude of landscapes of varying lengths and widths.¹⁵

The need for intensive Trail inventories is thus clearly a fundamental part of the corridor identification process. An unresolved conflict between the federal Co-Administrators of the OSNHT further illustrates this need:

The trail corridor is informally considered by the NPS to lie five miles on either side of the centerline of the trail alignment to include the nearest elements of the view shed, parts of the cultural landscapes, landmarks, and traditional cultural

⁷⁶ *Id.* at 3-5(1)-(2).

⁷⁷ *Id.* at 1-2, 1-19.

⁷⁸ *Id.* at 1-17.

⁷⁹ *See* OSNHT Strategy at 22-29.

properties near the trail. The BLM follows direction from their trail administration manual to establish a trail corridor.⁸⁰

This conflict between Co-Administrators contradicts the NTSA’s intent to uniformly assess and establish Trail corridors that protect Trail resources, qualities, and values. Until the BLM fulfills its NTSA obligations and meets the requirements of internal policies such as those in Manual 6280, the long-established NPS practice of an interim management corridor of five miles on either side of a Trail centerline should be adopted.

Based on map information uploaded by the BLM to the ArcGIS site,⁸¹ as well as map data on the proposed leases available on the BLM NEPA Register Page,⁸² twelve parcels—all within the purview of the Moab Field Office—are crossed by the OSNHT: Nos. 52, 53, 55, 81, 82, 83, 84, 85, 88, 117, 120, and 136.

In addition, 24 of the proposed parcels on the September 2020 lease list appear to be within five miles of the trail:

Within the Moab Field Office purview:

Parcel No.	Approximate distance from OSNHT (mi.)
37	3.0
38	3.79
51	1.0
54	1.94
56	0.75
57	2.0
58	3.5
59	2.4
118	1.3
122	2.08
123	1.3
124	0.35
127	1.25
132	1.02

Within the Richfield Field Office purview:

Parcel No.	Approximate distance from OSNHT (mi.)
18	0.77
19	1.0
20	1.39
22	2.35

⁸⁰ *Id.* at 5.

⁸¹ ArcGIS Layers: “BLM Utah - National Scenic and Historic Trails,” created by bmuelle@blm.gov BLM EGIS, updated July 6, 2018; “BLM Utah - VRM Classes,” created by bmuelle@blm.gov BLM EGIS, updated July 18, 2018;

⁸² “Sept2020_revised_prelim.zip,” on <https://eplanning.blm.gov/eplanning-ui/project/2000028/590>, accessed June 25, 2020.

23	3.5
24	1.94
26	2.95
30	1.34
31	1.13
33	1.29

These parcels' proximity to the OSNHT means that any development could greatly disturb the viewshed from the trail. Viewshed analysis from the trail should be conducted under the procedures detailed in BLM Policy Manual 6280,⁸³ and these parcels should not be leased until it can be completed.

C. Failure of the EA to Adequately Consider Impacts to the Resources, Qualities and Values of the OSNHT

BLM misinterprets the NTSA to only afford "Federal protection" for "high-potential" sites and route segments.

The BLM routinely disregards the potential impacts of its actions across all stretches of the OSNHT on federally owned lands, finding that only "high potential sites" (HPS) and "high potential route segments" (HPRS) of the OSNHT warrant protection.⁸⁴ Rather, under a plain reading of the statutory text, all federal lands along the OSNHT and subject to the proposed lease sales at issue must be assessed.

The NTSA holds that

only those selected land and water based components of an historic trail which are on federally owned lands and which meet the national historic trail criteria established in this Act are included as Federal protection components of a national historic trail.⁸⁵

BLM's Manual 6280 at times conflates these categories, writing that Federal Protection Components are only those HPS and HPRS located on federally owned land.⁸⁶ However, this misreads the NTSA. The national historic trail criteria include (1) a trail's historic use; (2) its national significance; and (3) its potential for public recreational use.⁸⁷ By designating the Old Spanish Trail a National Historic Trail, Congress confirmed that the OSNHT routes met these

⁸³ See BLM Manual 6280 at 3-4(B).

⁸⁴ See Lease Sale EA at 13, 100, 101, 197, 322.

⁸⁵ 16 USC § 1242(a)(3) (emphasis added).

⁸⁶ BLM Manual 6280 at 1-7, 1-8. This definition is contradicted elsewhere in the manual, where the BLM defines "Federal protection components" of NTs to include "selected high potential historic sites and high potential route segments and other land- and waterbased components of a designated National Historic Trail located on federally owned land which meet the National Historic Trail criteria listed in the National Trails System Act and are identified in trailwide Comprehensive Plans, Resource Management Plans, and implementation plans." *Id.* at 5 (emphasis added).

⁸⁷ See 16 USC § 1244(b)(11).

three criteria.⁸⁸ Therefore, all OSNHT routes which are congressionally designated and are on federally owned lands are “Federal protection components” of the OSNHT.

Apart from defining HPS and HPRS, the NTSA only references these categorizations twice. First, when establishing the Secretarial power to acquire privately-owned “high potential sites” or “segments” of NHTs through the condemnation process⁸⁹—a reference which indicates Congress’ intent that federal land managers have an important role in identifying HPS and HPRS on all lands, including private lands, traversed by NHTs. Second, the NTSA calls to incorporate “a protection plan for any high potential historic sites or high potential route segments” in trails’ CMPs⁹⁰—underscoring the responsibility to protect such areas, regardless of their location on federal or other lands traversed by a Trail.

The NTSA recognizes that HPS and HPRS are important Trail components, and may require special attention. However, these additional provisions for HPS and HPRS do not limit federal land managers’ responsibility to also protect all other resources, qualities, and values of NHTs.⁹¹ All stretches of a statutorily designated NT like the OSNHT that cross federally owned lands are “Federal protection components,” and BLM must therefore consider impacts to all such portions in this EA, not just impacts to HPS and HPRS.

Although entitled to a specific protection plan, the extant list of HPS and HRPS is incomplete.

NTSA envisioned a specific protection plan for a Trail’s HPS and HPRS, to afford such areas an even greater degree of protection. Without a completed inventory of such areas, however, it is impossible to create an effective plan. Again, a CMP for the OSNHT has never been prepared, and, therefore, no “protection plan” for such HPS and HPRS along the OSNHT exists, much less a protection strategy for all “Federal protection components” of the OSNHT.

Some efforts have been made to identify HPS and HPRS along the Trail, but all are incomplete. The 2001 feasibility study for the OSNHT made preliminary recommendations for HPS and HPRS along the Trail. In developing the CAS, the BLM and NPS reviewed the previous recommendations and refined lists of “verifiable” HPS and HPRS. The Co-Administrators also added recommended lists of additional “tentative” HPS and HPRS.⁹²

⁸⁸ Routes were determined by the DOI and NPS in their “National Historic Trail Feasibility Study and Environmental Assessment – Old Spanish Trail” of July, 2001. The Study also confirmed that the route of the Trail met the historic criteria of the NTSA. The Study, and accompanying route maps, is cited as the basis for Congressional authorization of the OSNHT. *See* 16 USC §1244(a)(23)(A); Public Law 107-325 (2002).

⁸⁹ *See* 16 USC §1246(g).

⁹⁰ *See id.* §1244(f).

⁹¹ Although not made explicit, the BLM/NPS joint CRM for El Camino Real de Tierra Adentro National Historic Trail gestures at this broader understanding of federal protection, noting that a sign plan would be created for “certified sites, segments, and federal protection components.”

<https://www.nps.gov/elca/learn/management/upload/Comprehensive-Management-Plan-Chapter-2-508.pdf>, p. 19. Additionally, in the inventory and research process, “Priorities would be established for protecting additional sites, trail segments, scenic and natural values according to their significance, contribution to linking trail segments, and threats to integrity.” *Id.* at 44.

⁹² CAS at p.56.

The CAS additionally references one study and inventory conducted by the BLM via contract, the “National Historic Trails Inventory Project” (2012) (funded by the American Recovery and Reinvestment Act, and sometimes referred to as the “ARRA Study”). The ARRA Study was extremely limited in its geographic coverage, only examining selective portions of the OSNHT, and focusing on the presence of archeological resources, and some Visual Resource Management (VRM) analysis—it did not comprehensively inventory all OSNHT resources, qualities, and values as required by BLM Manual 6280.

The ARRA Study itself stated that:

the project was not able to inventory all of the high potential route segments and sites on BLM, and there are many more equally deserving segments and sites on public land managed by the US Forest Service, National Park Service, state, local government, as well as on private land managed by trail partners.⁹³

For example, within the Moab and Richfield lands covered by the proposed September lease sale, the ARRA Study only examined one of the Feasibility Study-recommended “high potential route segments”—the Blue Hills HPRS in the Moab Field Office. Although the study points out areas that may deserve additional attention and protection, it should not be treated as comprehensive.

Even the geographic limits of the HPS and HPRS identified so far by the BLM and NPS in the 2017 CAS are ill-defined and unavailable to the public. As a consequence, it is impossible for the public to properly assess the potential impact that oil and gas lease activities on proximate lease parcels would have on these OSNHT designations. Without such a comprehensive study, BLM cannot conclusively state that the portions of the OSNHT bordered by these lease parcels do not contain additional HPS and HPRS.

According to the NTSA, “high potential route segments” are

those segments of a trail which would afford high quality recreation experience in a portion of the route having greater than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route.⁹⁴

Without an inventory of viewshed analyses for the entirety of the OSNHT on the lands in question, there is no clear justification for finding that the segments potentially affected in this lease sale do not have “greater than average scenic values.”

More significantly, it is hard to see how oil and gas development on the lands adjoining or overlapping the Trail would not impair Trail users’ ability to “vicariously share the experience of the original users of a historic route”—here, the original users were commercial traders moving between New Mexico and California from 1829 to 1848. Oil was not discovered in the

⁹³ ARRA Study, p.3 (emphasis added).

⁹⁴ 16 USC § 1251(2).

continental U.S. until 1859, in Pennsylvania⁹⁵; historic travelers along the Utah segment of the trail certainly would not have encountered anything resembling modern drilling equipment. The joint BLM-NPS CAS, from 2017, notes that the areas along the trail include

few modern intrusions, offering exceptional opportunities for the public to enjoy and appreciate both the natural and cultural environment ... The Old Spanish Trail, even by today’s standards, remains an arduous route, one where public users can encounter the landscapes and experience the adventure of yesteryear.⁹⁶

Development alongside the trail therefore poses a serious threat to the preservation of the trail’s historic character, a top priority of the Trails Act.

The lease parcels cover land proximate to established HPS and HPRS along the OSNHT are not adequately protected by proposed lease stipulations.

Where BLM acknowledges potential impact to HPS and HPRS, the proposed remedies—lease stipulations to restrict development—are inadequate. For example, the EA proposes to apply lease stipulation UT-S-395 to certain parcels in proximity to HPS and HPRS. Not only is this stipulation insufficient to protect OSNHT resources, qualities, and values, it is unevenly applied—there is no clear explanation why it has been applied to some parcels and not others.

UT-S-395 requires a visual assessment of certain HPS and HPRS within two miles of certain lease parcels. As discussed above, because a CMP, an established Trail Corridor, and an inventory of resources, qualities, and values are all lacking, limiting the evaluation distance to two miles is unwarranted.

Further, UT-S-395 refers to three HPS: Kane Springs, Looking Glass Rock, and the Colorado River Crossing near Moab. It also refers to three HPRS: Moab Trail, Mule Shoe, and Blue Hills. However, the stipulation is attached to some parcels but not to other similarly situated parcels, without explanation or discernable reason.

The EA notes that the stipulation is applicable to thirteen lease parcels:

Parcel No.	Approximate distance (mi.)	HPS or HPRS
51	1.0	Blue Hills
53	<i>crossed by</i>	Blue Hills
54	1.94	Blue Hills
55	<i>crossed by</i>	Blue Hills
56	0.75	Blue Hills
82	<i>crossed by</i>	Blue Hills
83	<i>crossed by</i>	Blue Hills
84	<i>crossed by</i>	Blue Hills
85	<i>crossed by</i>	Blue Hills
117	0.18	Kane Springs

⁹⁵ “First American Oil Well,” American Oil & Gas Historical Society. <https://aoghs.org/petroleum-pioneers/american-oil-history>. Last Updated: December 21, 2019. Original Published Date: April 14, 2016.

⁹⁶ OSNHT Strategy at 5.

118	1.38	Kane Springs
123	1.49	Mule Shoe
127	1.93	Looking Glass Rock

Eleven other proposed lease parcels are crossed by or proximate to HPRSs or HPSs, but do not have proposed stipulation UT-S-395 attached:

Parcel No.	Approximate distance (mi.)	HPS or HPRS
37	3.0	Blue Hills
38	3.79	Blue Hills
57	2.0	Blue Hills
58	3.5	Blue Hills
81	0.05	Blue Hills
88	<i>crossed by</i>	Blue Hills
120	1.1	Kane Springs
<i>120 again</i>	0.32	Mule Shoe
122	2.34	Mule Shoe
124	0.48	Mule Shoe
132	0.97	Looking Glass Rock
136	0.07	Looking Glass Rock

An arbitrarily applied lease stipulation will not effectively protect these resources. BLM must explain this disparity in treatment between previously-identified HPS and HPRS, and should not move forward to sell any of the above-listed parcels until a comprehensive protection plan for each resource is established.

The lease parcels cover land managed under Visual Resource Management classes but lack adequate protection.

Based on map information uploaded by the BLM to the ArcGIS site,⁹⁷ as well as map data on the proposed leases available on the BLM NEPA Register Page,⁹⁸ twelve of the proximate parcels under the Moab Field Office purview contain land with a VRM Class II designation: Nos. 112, 113, 116, 117, 118, 119, 120, 121, 122, 123, 127, and 136. The objective for the managing agency for Class II is to

retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.⁹⁹

⁹⁷ ArcGIS Layers: “BLM Utah - National Scenic and Historic Trails,” created by bmueller@blm.gov BLM EGIS, updated July 6, 2018; “BLM Utah - VRM Classes,” created by bmueller@blm.gov BLM EGIS, updated July 18, 2018; accessed June 25, 2020.

⁹⁸ “Sept2020_revised_prelim.zip,” on <https://eplanning.blm.gov/eplanning-ui/project/2000028/590>, accessed through ArcGIS interface on June 25, 2020.

⁹⁹ BLM Manual H-8410-1(V)(B)(2) (“Visual Resource Inventory”).

VRM Class II designation is a strong indication that these areas contain important visual resources that, if altered, would diminish not only trail users' enjoyment, but also the trails' historic character.

However, because VRM designation does not evaluate all Trail qualities and values envisioned by the NTSA—it does not address matters such as recreational opportunities, including vicarious enjoyment of cultural landscapes—these lands, and lands with a VRM Class III or Class IV designation, may in fact require a higher level of protection. Only a viewshed analysis from the trail will adequately inform BLM, NPS, and the public about potential visual impacts. Until that analysis can be completed, these parcels should not be leased.

Direct, indirect, and cumulative impacts to the OSNHT are not adequately considered in this EA.

There is little to no analysis in the EA regarding the comprehensive slate of resources, qualities, and values of the Trail and how each might be affected by the proposed leases; BLM merely refers the public back to previous documents, each of which also lacked comprehensive analysis of effects to the Trail, thereby failing to satisfy NEPA's hard look requirement.¹⁰⁰ For example, the Lease Sale EA refers the public back to the September 2019 lease sale's final EA for discussion of the potential visual impacts to the parcels bordering on the OSNHT and incorporates that discussion.¹⁰¹ However, the September 2019 lease sale concerned a different set of lease parcels. BLM cannot adequately assess the direct, indirect, and cumulative effects of this current set of lease parcels on OSNHT or its viewshed without evaluating the new set of parcels. Likewise, references back to the Moab MLP or Richfield RMP¹⁰² are inadequate to assess the cumulative impact of these lease parcels to the Trail as a complete, statutorily designated unit.

To that end, during NEPA analysis for a proposed action or implementation-level activity affecting National Historic Trails, BLM must describe and analyze the potential impacts to the Trail's nature and purposes.¹⁰³ The EA does not adequately describe or analyze potential impacts to the trail. Because the leases themselves constitute an "irreversible and irretrievable commitment of resources,"¹⁰⁴ the BLM must undertake case-by-case analysis of all direct, indirect, and cumulative effects, rather than waiting until the development stage. The OSNHT must be included in consideration of the leases' effects before the parcels are sold.

Interested members of the public should be alerted if and when development is requested on any of these parcels.

¹⁰⁰ See *WildEarth Guardians*, 2020 WL 2104760 at *4.

¹⁰¹ See EA at 13 ("The analysis of impacts to the Muleshoe Loop of the Old Spanish Trail is incorporated by reference from the analysis of impacts to the Green River Gap in the September 2019 MbFO Oil and Gas Leasing EA DOI-BLM-UT-0000-2019-0003-OTHER_NEPA MbFO-EA pages 38-40").

¹⁰² See *id.* at 14, 322. Note that the quoted section of the Richfield RMP references an OSNHT comprehensive management plan—which never materialized.

¹⁰³ "6280 – Management of National Scenic and Historic Trails and Trails Under Study or Recommended as Suitable for Congressional Designation (Public)," Rel.6-139, 1-22.

¹⁰⁴ *WildEarth Guardians*, 2020 WL 2104760 at *4 (citing 43 C.F.R. § 3162.3-1(c)) (vacating 287 oil and gas leases and rejecting BLM's argument that parcel-specific analysis could be deferred until an application for permit to drill was submitted, holding instead that NEPA requires some site-specific analysis at the leasing stage, because a lease sale represents an "irretrievable commitment of resources").

One purpose of the Trails Act is “to encourage and assist volunteer citizen involvement in the planning, development, maintenance, and management, where appropriate, of trails.”¹⁰⁵ Reserving viewshed analysis or environmental impact statement until a lessee submits an APD or other development request hinders the public’s ability to effectively comment on the trail impacts from these leases. To that end, the below-signed commenters and any others members of the public commenting about the visual impacts to the OSNHT on this EA should be directly informed if and when subsequent Trail resource, qualities, and values inventories and viewshed analyses from the OSNHT occur, and/or when such development requests are submitted for all 36 proposed lease sale parcels previously listed.

The public-facing ArcGIS site should be updated to include map layers indicating the location of high potential sites and segments.

In the absence of a CMP, the ArcGIS mapping interface is the best resource available to members of the public to help them understand what resources along the route of the Trail have been inventoried for protection. In line with the Trails Act mandate to “encourage and assist volunteer citizen involvement,” as referenced above, BLM should create and make publicly available such layers. Doing so will allow members of the public to better understand the potential effects of development near the Trail, and tailor their input accordingly.

VIII. BLM Has Failed to Disclose, Analyze, or Mitigate Impacts to Listed, Sensitive and other Significant Wildlife Species and Habitats in Violation of NEPA and the Endangered Species Act

BLM’s EA dismisses from consideration impacts to threatened and endangered species, sensitive species, and migratory birds, and does not even mention foreseeable adverse impacts to high-priority deer, elk, and pronghorn within the lease area. EA at 11-12. For endangered species – Colorado River listed fish and Mexican spotted owl – BLM relies entirely on the application of BLM’s standard Threatened and Endangered Species Act Stipulation. EA at 11. This reliance on the potential future application of a general stipulation fails to meet either NEPA’s requirement for site-specific analysis or the Endangered Species Act’s requirement to insure that agency actions do not jeopardize the continued existence of listed species.

Congress enacted the Endangered Species Act (ESA) to provide “a program for the conservation of . . . endangered species and threatened species.” 16 U.S.C. § 1531(b). Section 2(c) of the ESA establishes that it is “the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act.” 16 U.S.C. § 1531(c)(1). The ESA defines “conservation” to mean “the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this [Act] are no longer necessary.” 16 U.S.C. § 1532(3). Section 7(a)(1) of the ESA explicitly directs that all federal agencies “utilize their authorities in furtherance of the [aforesaid] purposes” of the ESA. 16 U.S.C. § 1536(a)(1).

¹⁰⁵ 16 USC § 1241(c).

Section 7 of the ESA requires BLM, in consultation with FWS, to insure that any action authorized, funded, or carried out by the agency is not likely to (1) jeopardize the continued existence of any threatened or endangered species, or (2) result in the destruction or adverse modification of the critical habitat of such species. 16 U.S.C. § 1536(a)(2). For each proposed federal action, BLM request from FWS whether any listed or proposed species may be present in the area of the agency action. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12. If listed or proposed species may be present in such area, BLM must prepare a “biological assessment” to determine whether the listed species may be affected by the proposed action. *Id.* For candidate species, BLM must similarly “conference” with FWS to evaluate impacts to the potentially listable species and its potential critical habitat.

If BLM determines that its proposed action may affect any listed species or critical habitat, the agency must engage in formal consultation with FWS. 50 C.F.R. § 402.14. To complete formal consultation, FWS must provide BLM with a “biological opinion” explaining how the proposed action will affect the listed species or habitat. 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14. If FWS concludes that the proposed action will jeopardize the continued existence of a listed species, or result in the destruction or adverse modification of critical habitat, the biological opinion must outline “reasonable and prudent alternatives.” 16 U.S.C. § 1536(b)(3)(A).

BLM’s oil and gas leasing proposal for these parcels is an agency action under the ESA. Action is broadly defined under the ESA to include all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by federal agencies, including the granting of leases, and actions that will directly or indirectly cause modifications to the land, water, or air. 50 C.F.R. § 402.02. BLM, however, failed request from FWS whether any listed or proposed species may be present in the action area. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12.

Because there are listed and candidate species and designated and proposed critical habitat in the action area, the ESA requires preparation of a biological assessment. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12.

The EA reveals the presence of multiple listed and candidate and their critical habitat within the areas proposed for leasing, but fails to provide any meaningful information regarding potential effects. BLM must not only evaluate the indirect and cumulative effects on special status species under NEPA, it must also consult with the Fish and Wildlife Service under Section 7 regarding the effects of oil and gas development and water use on listed species and critical habitat.

The EA improperly defers consideration of impacts, and mitigation measures, to a subsequent stage, asserting, without analysis or support, that “attachments of stipulations and notices to leases will assure the opportunity to make adjustments, such as designed modifications, at the site specific level when an Application for Permit to Drill is received, to address specific wildlife and plant resources.” EA at 12.

This piecemeal approach to analysis and consultation is squarely foreclosed by *Conner v. Burford*, 848 F.2d 1441, 1454-57 (9th Cir. 1988), where the court found that it was improper to exclude the potential effects of future lessee activity when reviewing the leasing phase for oil and gas permits on public lands. Moreover, BLM cannot rely on “Incremental Step

Consultation” under BLM Manual 6840 to circumvent this requirement. That policy allows BLM to conduct consultation in “incremental steps,” but only if BLM undertakes an initial formal consultation on the entire action, and the resulting biological opinion must include the FWS’s views “on the entire action (50 CFR Part 402.14(k)).” This requires an analysis of not only the impacts of leasing these parcels, but the interrelated actions associated with exploiting the oil and gas on these parcels. Furthermore, BLM may only proceed with the incremental step analysis “provided that the FWS . . . finding for the incremental step is not a jeopardy opinion; the BLM continues consultation with respect to the entire action and obtains biological opinions, as required, for each incremental step; the BLM fulfills its obligation to obtain sufficient data upon which to base the final biological opinion on the entire action; the incremental step does not result in the irreversible or irretrievable commitment of resources; and there is reasonable likelihood that the entire action will not result in jeopardizing the continued existence of a listed species or destruction or adverse modification of designated critical habitat.” See Manual 6840 at .1F5i(1) (emphasis added). BLM has not adhered to these requirements, since they have not initiated formal consultation regarding this lease sale, and have failed to provide sufficient data, nor properly determined with a reasonable likelihood that the “entire action” would not jeopardize listed species or adversely modify critical habitat.

A. Listed Species: Colorado River Endangered Fish - Parcel UT-0620-001 and Mexican Spotted Owl Critical Habitat – Parcels UT-0920-111, -112, -113, -118, -120, -123

Parcel UT-0620 contains designated critical habitat and has the potential to impact two of four Colorado River endangered fish species (Colorado pikeminnow and razorback sucker) through water depletions, water contamination, sedimentation, and other water quality and quantity impacts resulting from oil and gas development and associated infrastructure. In particular, the following parcels also contain or immediately abut designated critical habitat for the Colorado pikeminnow and razorback sucker:

Oil and gas drilling and hydraulic fracturing, the reasonably certain indirect consequence of leasing the proposed parcels for oil and gas development, will result in additional withdrawals of water from the Green River Basin, with adverse effects on the listed fish and their critical habitat. BLM’s proposed lease stipulation requires consultation on and reporting of, but does not prohibit, such water depletions:

Water depletions from any portion of the Upper Colorado River drainage basin above Lake Powell are considered to adversely affect or adversely modify the critical habitat of the four resident endangered fish species, and must be evaluated with regard to the criteria described in the Upper Colorado River Endangered Fish Recovery Program. Formal consultation with USFWS is required for all depletions. All depletion amounts must be reported to BLM.

In its 2008 Biological Opinion for the Vernal Resource Management Plan, the Fish and Wildlife Service re-confirmed its long-standing opinion that all depletions from the Upper Colorado will jeopardize the continued existence of the four listed fish:

Water depletions from the Upper Colorado River Basin are a major factor in the decline of the threatened and endangered Colorado River fish. The USFWS determined that any depletion will jeopardize their continued existence and will likely contribute to the destruction or adverse modification of their critical habitat (USDI, Fish and Wildlife Service, Region 6 Memorandum, dated July 8, 1997). However, the Recovery Program was established specifically to offset the negative effects of water depletions to the endangered fish populations, and to act as the Reasonable and Prudent Alternative for these depletions. Actual water depletions will be determined, and Section 7 consultation reinitiated on a project-specific basis.¹⁰⁶

As specified in the Vernal RMP BiOp, BLM must initiate consultation on the proposed lease sale on a project-specific basis. Significant new information regarding progress under the Recovery Program and climate change effects on Green and Colorado River flows requires independent reevaluation of the effects of water depletions on the four endangered fish. The Recovery Program's 2015 Assessment of Sufficient Progress under the Upper Colorado River Endangered Fish Recovery Program indicates that Colorado pikeminnow are in decline and failing to meet recovery goals in the Green River Subbasin that will be affected by the proposed action:¹⁰⁷

Data from the third round (2011–2013) of population estimates for the Green River Subbasin are still being analyzed (thus no confidence intervals are shown for the 2011–2013 estimates in Figure 4). Preliminary results from this analysis indicate adults and sub-adults are in decline throughout the entire Green River Subbasin.¹⁰⁸

Another demographic requirement in the 2002 Recovery Goals is that recruitment of age-6, naturally-produced fish must equal or exceed mean annual adult mortality. Estimates of recruitment age fish have averaged 1,455 since 2001, but have varied widely (Figure 5). Recruitment exceeded annual adult mortality only during the 2006 – 2008 period.¹⁰⁹

Pikeminnow within the Green River subbasin are also being adversely affected by mercury concentrations, which are exacerbated by water withdrawals:

Although a good portion of the recovery factor criteria (USFWS 2002a) are being addressed, nonnative fish species continue to be problematic and researchers now speculate that mercury may pose a more significant threat to Colorado

¹⁰⁶ Biological Opinion for BLM Resource Management Plan (RMP), Vernal Field Office (VFO), 113 (Oct. 23, 2008), available at http://www.blm.gov/style/medialib/blm/ut/vernal_fo/planning/rod_approved_rmp.Par.4719.File.dat/VernalBiologicalOpinion.pdfhttp://www.blm.gov/style/medialib/blm/ut/vernal_fo/planning/rod_approved_rmp.Par.4719.File.dat/VernalBiologicalOpinion.pdf

¹⁰⁷ Fish and Wildlife Service, Final 2014--2015 Assessment of "Sufficient Progress" Under the Upper Colorado River Endangered Fish Recovery Program in the Upper Colorado River Basin 7-8 (Oct. 7, 2015) ("Sufficient Progress Assessment"), available at http://www.coloradoriverrecovery.org/documents-publications/section-7-consultation/sufficientprogress/2015_Suff_Progress_Memo.pdf.

¹⁰⁸ *Id.* at 7.

¹⁰⁹ *Id.* at 8.

pikeminnow populations of the upper Colorado River basin than previously recognized. Osmundson and Lusk (2012) recently reported elevated mercury concentrations in Colorado pikeminnow muscle tissue; the highest concentrations were from the largest adults collected from the Green and Colorado river subbasins. Mercury exposure has been reported to impair reproduction in fish (Batchelar et al. 2013; J. Lusk, U.S. Fish and Wildlife Service, personal communication). Laboratory experiments have shown diminished reproduction and endocrine impairment in fish exposed to dietary methyl mercury at environmentally relevant concentrations, with documented effects on production of sex hormones, gonadal development, egg production, spawning behavior, and spawning success.¹¹⁰

Adverse effects from oil and gas development are not limited to the Green River water depletions addressed by the Upper Colorado Endangered Fish Recovery Program. BLM must also consider, and consult on, foreseeable water quality impacts from oil and gas development and the resulting wells, pipelines, pits, and soil disturbance. The Fish and Wildlife Service's recent Biological Opinion for the GasCo Energy Inc. Field Development Project EIS found that, in addition to water depletions, oil and gas development in the Uinta Basin has a significant potential for impacts to Colorado River endangered fish resulting from the highly foreseeable probability of spills and contamination:

There is a greater potential for impacts from pollutants, if a pipeline, well pit, or other source were to inadvertently release contaminated fluids into waterways at points near the Green and White Rivers. Through direct or indirect discharge, these pollutants could reach the Green River and negatively impact water quality to the point of affecting native fish populations. Direct impacts will result from a discharge from a pipeline or well pit reaching the Green River in its original form or within a single-release event. Indirect effects occur when discharges are released to the ground and are later released to the river after being carried by an erosion event or carried by rain or snowmelt runoff. As more well and pipeline development occurs in the project area the chance of pollutants reaching the Green River increases, thus increasing the potential of harm to native fish populations.

Approximately 744 pipeline crossings (61.9 miles) of intermittent/ephemeral drainages that are tributary to the Green River will be required, though no wells, roads, or pipelines are proposed within the 100-year floodplain for the Green River. In addition, no wells or pipelines are proposed within 100-year floodplains of Green River tributaries within 5 miles of the river.

While applicant-committed measures will reduce the chance for spills or leaks of contaminants, accidental releases can and do still occur. According to the National Response Center, there have been at least 219 spills and releases within Carbon, Duchesne, and Uintah Counties from January 1991 through August, 2011 due to oil and gas development and related activities affecting water, land and air.

¹¹⁰ *Id.* at 10.

Spill incidences reviewed in Utah include corrosion and leakage of surface and buried pipelines, broken well rods, valve and gasket failures, wellhead pressure buildups, shutoff alarm malfunctions, leakage of trace systems, loss of formation water to the surface during drilling, and vehicular related traffic accidents. Releases have included crude oil, natural gas, hydrochloric acid, condensate, salt water, ethylene glycol, and produced water in various quantities.

Releases of harmful agents into floodplain habitats could result in significant adverse impacts to the endangered fish and their designated critical habitat. One of the constituent elements of the designated critical habitat for the four Colorado River fish is contaminant-free water. Any release of contaminants into the floodplain will result in degradation of critical habitat and could result in take of individual fish, including downstream impacts to larvae and juveniles.¹¹¹

In addition, neither the Vernal RMP nor the Lease Sale EA have considered the impacts of climate change on these water resources, such as the decline in stream flows. This is a significant omission, as numerous climate change models show anthropogenic climate change is profoundly impacting the Colorado River in ways that are altering temperature, streamflow, and the hydrologic cycle, which we discussed in our previous comment letter. Changes observed to date include rising temperatures, earlier snowmelt and streamflow, decreasing snowpack, and declining runoff and streamflow. Modeling studies project that these changes will only worsen, including continued declines in streamflow and intensification of drought. Climate change is likely to have significant effects on the endangered fish and the Colorado River ecosystem, and the effect of climate change on future flow regimes and water temperatures must be taken into account in the consultation process and considering the sufficiency of the existing Recovery Program.

B. Deer, Elk, and Pronghorn Crucial Habitats – Parcels UT-0620-001, -002, -013, -014, UT-0920-006, -007, -008, -009, -010, -011, -012, -018, -019, -020, -021, -022, -023, -026, -029, -030, -031, -034, -035, -037, -038, -039, -045, -051, -052, -053, -054, -055, -056, -057, -58, -083, -084, -085, -088, -113, -117, -118, -121, -122, -123, -124, -127, -132

The EA acknowledges only in passing that development of the proposed parcels would have significant adverse impacts on deer, elk, and pronghorn habitats, but fails entirely to disclose or analyze those impacts:

Specific parcels have been identified as having occurrence, or potential occurrence of several species of plants or animals that may require modification of surface use plans to avoid disruptive or harmful activities. In addition, multiple parcels contained sensitive habitat for game species such as elk, mule deer or pronghorn antelope.

¹¹¹ Biological Opinion for the GasCo Energy Inc. Field Development Project EIS 26 (2011).

EA at 12. The EA, however, fails to include any site- or population-specific analysis of these impacts, ignores available scientific information, improperly defers mitigation to uncertain and voluntary future mitigation actions and fails to acknowledge the demonstrated inadequacy of proposed mitigation stipulations.

The lease sale area is home to robust ungulate populations; the BLM must fully consider the project's impact on elk, mule deer, and pronghorn habitat, including crucial winter range and documented migration corridors, including cumulative impacts of other past, ongoing, and foreseeable leasing and development actions.

Winter range is where elk and deer survive the harshest winters—a place that assures survival of a population, not a place where the animals typically spend the most time.¹¹² Elk are highly susceptible to disturbance on winter ranges and production areas. This project could cause elk to abandon substantial portions of their traditional winter range. This could have serious, long-term consequences for big game health and use of the area. For example, scientists have determined that in areas with limited cover, elk habitat is completely lost at a road density of only 0.8 miles of road per square mile.¹¹³ A study on elk habitat effectiveness in north-central Wyoming found that few elk used areas with road densities higher than 0.5 miles per square mile.¹¹⁴ The impacts to elk and mule deer from a new, roaded landscape would likely be extreme. Mule deer numbers are declining across Colorado and the West.¹¹⁵ This pattern of decline is also being experienced by mule deer in the project area and surrounding lands. Oil and gas development within and adjacent to elk and mule deer habitat foreshadows serious impacts for these iconic and economically valuable species.

Residential and energy development has reduced all ungulates across the West. The low-elevation valleys and mountain foothills, once important habitat for ungulates, are filled with cities and towns.¹¹⁶ The same is true in other western landscapes particularly on winter ranges.¹¹⁷ Between 1980 and 2010, western Colorado saw a 37% increase in residential land-use in mule deer habitat, primarily on their winter range.¹¹⁸ The resulting lack of high-quality winter range is limiting robust mule deer population growth in western Colorado and Utah.¹¹⁹

¹¹² Theodore Roosevelt Conservation Partnership, *Mule Deer and Energy: Federal Policy and Planning in the Greater Green River Basin* (Apr. 2011) at 28.

¹¹³ Chris Weller *et al.*, *Fragmenting Our Lands: The Ecological Footprint From Oil And Gas Development* (Sept. 2002) at 28 (emphasis added).

¹¹⁴ *Id.* at 16.

¹¹⁵ See Scott Willoughby, *With Colorado's Mule Deer Population Declining, Wildlife Officials Seek Help*, THE DENVER POST, Aug. 13, 2014 available at http://www.denverpost.com/outdoors/ci_26326126/colorado-hunt-mule-deer-population-declining-wildlife-officials-dow; Bruce Finley, *Deer Declining Across Colorado and West*, THE DENVER POST, July 14, 2014 available at http://www.denverpost.com/environment/ci_26143275/deer-declining-across-colorado-and-west.

¹¹⁶ Jean Polfus, *Impacts of Residential Development on Ungulates in the Rocky Mountain West*, *Wildlife Society Bulletin* 36:647-657 (2012).

¹¹⁷ Heather E. Johnson, *et al.*, *Increases in Residential and Energy Development Are Associated with Reductions in Recruitment for a Large Ungulate*, *Global Change Biology*, doi: 10.1111/gcb.13385 (2016) (“Johnson *et al.* 2016”).

¹¹⁸ Johnson *et al.* 2016.

¹¹⁹ Eric J. Bergman, *et al.*, *Density Dependence in Mule Deer: a Review of Evidence*, *Wildlife Biology* 21:18-29 (2015); Johnson *et al.* 2016.

A dearth of high-quality, long-term, and controlled studies makes it difficult to evaluate with precision the role of oil and gas development in mule deer habitat and population decline.¹²⁰ Clearly, mule deer demonstrate avoidance of roads and oil and gas infrastructure, with as-yet inadequately-understood consequences for migration, energy budgets, adult and fawn survival, and population.¹²¹

Some of the best available long-term, controlled studies evaluate mule deer population density before and after oil and gas development in the Sublette mule deer herd near Pinedale, Wyoming.¹²² The Sublette mule deer study compared mule deer density in control and development zones, and found mule deer densities declined 30% in the development area, as opposed to 10% in the control area.¹²³ Sawyer and Strickland found that “the observed decline of mule deer in the treatment area was likely due to gas development, rather than drought or other environmental factors that have affected the entire Sublette Herd unit.”¹²⁴

The Sublette example is particularly important when considering energy development’s effects on mule deer populations, their winter range, and their migration patterns in western landscapes. Even in its relatively early stages compared to Wyoming, the most recent spatial analysis of already-occurring effects on mule deer in western Colorado finds energy development has the second-largest effect on deer recruitment, exceeded only by residential development.¹²⁵

Although the precise connections between energy development and population-level effects are still imperfectly understood, it is demonstrated that oil and gas development affects mule deer habitat use and migration patterns by causing site avoidance, particularly in daytime,¹²⁶ and creating “semi-permeable” barriers to migration routes.¹²⁷ CPW is currently engaged in multiple research efforts to evaluate energy development effects on migration, deer response to energy development, and fawn survival in developed and undeveloped areas.¹²⁸ Those studies have thus far documented how individual deer alter their migration speed and timing in response to

¹²⁰ Mark Hebblewhite, *Effects of Energy Development on Ungulates, in Energy Development and Wildlife Conservation in Western North America* 71-94 (2011).

¹²¹ Hebblewhite 2011; Hall Sawyer, et al., *A Framework for Understanding Semi-permeable Barrier Effects on Migratory Ungulates*, *Journal of Applied Ecology* 2013:50, doi:10.1111/1365-2664.12013 (2013) (“Sawyer 2013”); Patrick E. Lendrum, et al., *Habitat Selection by Mule Deer During Migration: Effects of Landscape Structure and Natural-Gas Development*, *Ecosphere* 3(9):82 (2012).

¹²² Hall Sawyer, et al., *Sublette Mule Deer Study (Phase II): Final Report 2007* (2009).

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ Johnson et al. 2016.

¹²⁶ Lendrum 2012.

¹²⁷ Sawyer 2013.

¹²⁸ Charles R. Anderson, *Population Performance of Piceance Basin Mule Deer in Response to Natural Gas Resource Extraction and Mitigation Efforts to Address Human Activity and Habitat Degradation* (2015) (“Anderson 2015”); Charles R. Anderson, *Piceance Mule Deer & Energy Development: Demographic Influences and Mitigation*, Colorado Parks and Wildlife Presentation to Garfield County, Colorado (2016), available at http://www.garfield-county.com/oil-gas/documents/energy-advisory-board/2016/F-D-EAB%20Chuck%20Anderson_Piceance%20deer-energy%20development_Oct%202016.pdf (“Anderson 2016”); Charles R. Anderson & Chad J. Bishop, *Migration Patterns of Adult Female Mule Deer in Response to Energy Development*, *Transactions of the 79th North American Wildlife and Natural Resources Conference* 47-50 (2014) (“Anderson & Bishop 2014”); Patrick E. Lendrum et al., *Migrating Mule Deer: Effects of Anthropogenically Altered Landscapes*, *PlosOne*, 8:5:e64548 (2013) (“Lendrum 2013”).

development.¹²⁹ A 2015 Wildlife Research Report published by CPW found that, during an active drilling phase in the Piceance Basin, deer behavior was compromised by 25% (at nighttime) and by 50% (during day time) in critical mule deer winter range.¹³⁰

CPW has also collected data, from 2012 through 2014, in order to evaluate mule deer fawn survival in developed and undeveloped landscapes.¹³¹ This data has not yet been published, but CPW has disclosed preliminary data to Garfield County, Colorado, a strong increase in fawn predation and mortality associated with oil and gas development.¹³² The preliminary data disclosed to Garfield County shows 39% predation mortality and 53% total mortality in the undeveloped study area, versus 49% predation mortality and 63% total mortality in the developed study area.

Roads, pads, and infrastructure within and surrounding elk and mule deer winter range all have the potential to severely impact the populations of deer, elk, and pronghorn. Roads are one of the most pervasive impacts of human development on natural landscapes. Their greatest impact, by far, lies in the indirect effects of habitat fragmentation and avoidance by wildlife. An extensive literature review was conducted by Rowland in 2005 concerning elk avoidance of roads.¹³³

Numerous studies document that elk avoid roads and do not use habitat adjacent to roads to its full potential. For example, when road densities are as low as one mile per square mile, elk habitat effectiveness is reduced by 25 percent.¹³⁴ In another literature review prepared in 2008, Hebblewhite referenced almost 200 resources relating to this topic. In eight studies that measured the distance of ungulate avoidance from roads, the average “zone” of influence extended approximately 1000 meters from roads and wells.¹³⁵ In another study, human access facilitated by road development indirectly resulted in a 43 to 50 percent loss of high-use elk habitat in Wyoming.¹³⁶ For example, in the sage-steppe ecosystem of Wyoming’s Jack Morrow Hills, elk avoided roads the most during summer months, strongly selecting habitats greater than 2,000 meters from these features. In addition, elk in the study continued to show avoidance of wellsites long after the construction phase had been completed.¹³⁷ In a major volume reviewing elk ecology and management, Lyon and Christensen state: “Access—mainly that facilitated by roads—is perhaps the single most significant modifier of elk habitat and a factor that will remain central to elk management on public and private lands. *It is possible that in areas with no cover, road densities less than one mile per square mile may eliminate effective habitat.*”¹³⁸

¹²⁹ Lendrum 2012; Lendrum 2013.

¹³⁰ Anderson 2015.

¹³¹ Anderson 2015.

¹³² Anderson 2016.

¹³³ Mary M. Rowland et al., *Effects of Roads on Elk: Implications for Management in Forested Ecosystems* (2005).

¹³⁴ Weller et al. at 16 (emphasis added).

¹³⁵ Mark Hebblewhite, *A Literature Review of the Effects of Energy Development on Ungulates: Implications for Central and Eastern Montana* (Prepared for Montana Fish, Wildlife and Parks) at 85 (2008).

¹³⁶ Clay B. Buchanan et al., *Seasonal Resource Selection and Distributional Response by Elk to Development of a Natural Gas Field*, 67 RANGELAND ECOLOGY AND MGMT. 369, 377 (2014).

¹³⁷ Hebblewhite at 23.

¹³⁸ Janice L. Thomson et al., *Wildlife at a Crossroads: Energy Development in Western Wyoming, Effects of Roads on Habitat in the Upper Green River Valley* (Feb. 2005) at 18 (emphasis added).

It is well-documented that human development causes direct habitat loss and fragmentation through the construction of infrastructure, and indirect habitat loss through deer avoidance of infrastructure and related activities; these consequences likely reduce the carrying capacity of the landscape.¹³⁹ A recent study shows that oil and gas development causes significant habitat loss in the neighboring Piceance Basin of Colorado:

Energy development drove considerable alterations to deer habitat selection patterns, with the most substantial impacts manifested as avoidance of well pads with active drilling to a distance of at least 800 m. Deer displayed more nuanced responses to other infrastructure, avoiding pads with active production and roads to a greater degree during the day than night. In aggregate, these responses equate to alteration of behavior by human development in over 50% of the critical winter range in our study area during the day and over 25% at night.¹⁴⁰

Additionally, mule deer may suffer higher mortality rates in developed landscapes because of increased vehicle collisions and accidents (i.e., entrapment in fences); moreover, increased road densities expose mule deer to more hunters, poachers and predatory domestic pets.¹⁴¹

For mule deer, there are additional two potential concerns. First, the avoidance or lower probability of use of areas near wells creates indirect habitat losses of winter range that are substantially larger in size than the direct habitat losses incurred when native vegetation is removed during construction of the well pad. Habitat losses, whether direct or indirect, have the potential to reduce carrying capacity of the range and result in population-level effects. Second, if deer do not respond by vacating winter ranges, distribution shifts will result in increased density in remaining portions of the winter range, exposing the population to greater risks of density-dependent effects.¹⁴² Lower predicted probabilities of use within 2.7 to 3.7 km of well pads suggested indirect habitat losses may be substantially larger than direct habitat losses.¹⁴³ Following three years of gas development in western Wyoming, 41 percent of areas classified as high deer use prior to development changed to medium-low or low-use areas. This change in distribution occurred with only two percent direct habitat loss. Relatively small amounts of direct habitat loss can affect winter distribution patterns of mule deer and the effects of direct habitat loss may be long term for species like mule deer that rely on native shrubs (i.e., sagebrush) because reclamation of native shrubs in arid environments is difficult.¹⁴⁴

The Sublette mule deer studies, discussed above show that drilling and production of natural gas on crucial winter range significantly affect mule deer, with dramatic decreases in wintering populations within the developed area. In 2007, Sawyer et al. published a report on 8 years of research that attributed 27 percent of the decline in mule deer on the Pinedale Anticline to energy

¹³⁹ Johnson et al. 2016.

¹⁴⁰ Northrup, J. M. et al. Quantifying spatial habitat loss from hydrocarbon development through assessing habitat selection patterns of mule deer, *Global Change Biology* (Aug. 2015), available at <http://onlinelibrary.wiley.com/doi/10.1111/gcb.13037/epdf>.

¹⁴¹ Johnson et al. 2016.

¹⁴² Hall Sawyer et al., *Winter Habitat Selection of Mule Deer Before and During Development of a Natural Gas Field* 70 *J. OF WILDLIFE MGMT.* 396, 402 (2006).

¹⁴³ *Id.* at 396.

¹⁴⁴ Hall Sawyer, *Final Report for the Atlantic Rim Mule Deer Study* (Apr. 2007) at 25.

development.¹⁴⁵ Over the course of the Pinedale study, areas that were classified as high-quality habitat before development changed to low quality, and vice-versa, showing that mule deer shifted habitats away from favored high-quality habitats because of energy development.¹⁴⁶ Based on the annual estimates, mule deer abundance was 56 percent lower in 2010 compared to 2001. The 12-year (2001-2012) trend in mule deer abundance on the Mesa was negative and indicates an overall decline of 42 percent. This decline was concurrent with documented behavioral changes of mule deer avoiding well pads.¹⁴⁷

Mule deer also need migration corridors that are protected from human development. An ongoing mule deer study by members of the Wyoming Migration Initiative has found that mule deer migration patterns are altered by human development – herds will move faster, stop less to feed, and detour around developed portions of their route.¹⁴⁸ Moreover, herds that can't migrate in search of the most nutritious grasses just end up smaller in number, plain and simple.¹⁴⁹ As a result, Wyoming Game and Fish Department is working to further protect migration routes in the state, for instance, no more than four oil and gas well pads allowed in a migration corridor and no development allowed in corridors narrower than a quarter mile. Although initial CPW research suggests that existing Piceance development levels are largely influencing the timing (not the fact) of deer migration,¹⁵⁰ CPW acknowledges that a “threshold in development intensity” may have greater effects on migration behavior.¹⁵¹

It is imperative that the BLM take a hard look at the direct, indirect, and cumulative impacts of the project to the local populations of elk, mule deer, and pronghorn

C. White-Tailed Prairie Dog – Parcels UT-0920-035, -050, -052, -081, -083, -084

BLM must analyze whether habitat loss within white-tailed prairie dog colonies could affect black-footed ferret recovery and/or reintroduction efforts.

The black-footed ferret, one of the most critically endangered mammals in North America, was reintroduced to the Coyote Basin in northeastern Utah following near-extirpation in the wild.¹⁵² The species was reintroduced to Utah as a nonessential, experimental population pursuant to a rule promulgated under Section 10(j) of the ESA.¹⁵³ Although nonessential experimental populations are not subject to the consultation requirement of ESA 7(a)(2), two provisions of ESA Section 7 still apply: (1) section 7(a)(1)—which requires all Federal agencies to use their

¹⁴⁵ Sawyer et al. 2006 at 396-403.

¹⁴⁶ Hebblewhite at 51-52.

¹⁴⁷ Hall Sawyer & Ryan Nielson, *Mule Deer Monitoring in the Pinedale Anticline Project Area, 2013 Annual Report Update* (Aug. 2013) at 9.

¹⁴⁸ Sawyer 2013.

¹⁴⁹ Edwards, M., *Mule Deer Struggling To “Surf The Green Wave” Of Migration* (Nov. 20, 2015) available at <http://wyomingpublicmedia.org/post/mule-deer-struggling-surf-green-wave-migration>.

¹⁵⁰ Anderson & Bishop 2014.

¹⁵¹ Anderson 2016; Sawyer 2013.

¹⁵² U.S. Fish and Wildlife Service, Revised Black-Footed Ferret Recovery Plan 20 (2013).

¹⁵³ U.S. Fish and Wildlife Service, Establishment of a Nonessential Experimental Population of Black-footed Ferrets in Northwestern Colorado and Northeastern Utah, 63 Fed. Reg. 52,824 (Oct. 1, 1998).

authority to conserve listed species; and (2) section 7(a)(4)—which requires Federal agencies to confer with the Service on actions that are likely to jeopardize the continued existence of a proposed species throughout its range.”¹⁵⁴ Under the requirements of Section 7(a)(1) and 7(a)(4), BLM must still ensure that it is using its authority to conserve the black-footed ferret, and must confer with FWS to determine whether its actions will jeopardize the continued existence of the species.¹⁵⁵

The black-footed ferret is dependent for both habitat and forage on white-tailed prairie dog colonies. Both BLM, FWS, and scientific research have all documented that oil and gas development can have serious adverse effects, including mortality, on both black-footed ferrets directly and the prairie dog colonies critical to their survival. The Vernal RMP EIS, which covers the Coyote Basin reintroduction area, found that:

The minerals development proposed in the Proposed RMP would have multiple short-term and long-term direct and indirect adverse impacts on white-tailed prairie dog and black-footed ferret populations in the VPA. For this analysis it was assumed that black-footed ferrets are completely dependent upon white-tailed prairie dog towns for survival in those areas where they have been reintroduced into the VPA. Therefore, the impacts of minerals development on white-tailed prairie dog populations would be similar to the impacts on black-footed ferret populations. Minerals development would likely lead to an increase in road densities, a reduction in habitat from the installation of mineral development infrastructure, and an increase in habitat fragmentation.¹⁵⁶

Although the BLM, in its most recent RMP FEIS for the Monticello planning area, was not aware of current ferret populations within the planning area, it states “[T]he 1988 Recovery Plan states, ‘direct reduction in the area occupied by prairie dogs has been shown to reduce the number of black-footed ferrets linearly’ (USFWS 1988). Therefore, it can be assumed that critical habitat for the black-footed ferret coincides with prairie dog habitat (including areas of short vegetation and bare ground), and that impacts described in this chapter for prairie dogs would be the same for the black-footed ferret.” Monticello RMP FEIS at 4-561. In discussing impacts to prairie dog and ferret habitat in the Vernal RMP EIS, BLM acknowledged that:

Although stipulations or conditions may be included in the terms of these mineral contracts, there are potential impacts associated with these various activities. . . . General direct and indirect impacts resulting from this program would include increased human presence and vehicle traffic in ferret habitat and surface disturbance. Specific negative impacts include decreased availability and use of suitable habitat; direct loss of habitat; and a decrease in prairie dog prey. As a result, black-footed ferret adults and offspring may experience a reduction in fitness. There is some potential for mortality if energy exploration or development

¹⁵⁴ 63 Fed. Reg. at 52,824.

¹⁵⁵ 63 Fed. Reg. at 58,835.

¹⁵⁶ Vernal RMP EIS at 4-459.

activities result in the crushing of burrows. Increased vehicle traffic could also result in mortality from vehicle collisions.¹⁵⁷

The best available scientific information regarding white-tailed prairie dogs (upon which black-footed ferrets in Coyote Basin rely exclusively for both burrows and prey base) demonstrates significant adverse impacts from oil and gas development:

Petroleum development and agriculture are the most frequently cited as being of immediate conservation concern, and there is ample evidence to support this assertion (Seglund et al. 2004). Oil and gas development is currently occurring at unprecedented levels, with substantial expansion expected in the future, making it an ever increasing threat. In Wyoming, 77% of the white-tailed prairie-dog predicted range is being developed at some level for oil and gas, Colorado has 4,953 wells and Utah has 8,835 wells in the predicted distribution of white-tailed prairie dogs (Seglund et al. 2004). Even when petroleum activity does not directly eliminate active burrows, it has been shown to be detrimental to prairie dog populations.¹⁵⁸

The 2004 Conservation Assessment for white-tailed prairie dogs similarly identified oil and gas development within prairie dog habitat as a limiting factor for the Coyote Basin population in Utah.¹⁵⁹ The EA does not provide sufficient site-specific development, colony and occurrence data to permit a reasoned evaluation of the extent and viability of remaining prairie dog and black-footed ferret habitat in coyote basin, or to evaluate the impact of proposed leases -026 and -027 on the remaining ferrets and white-tailed prairie dogs in the area and their prospects for recovery and/or reestablishment.

The Coyote Basin reintroduction was the first black-footed ferret reintroduction program in 1999, and was designed in part to determine whether black-footed ferrets could be reestablished within white-tailed prairie dog colonies that have been affected by plague. Between 1999 and 2012, 424 ferrets were released, but the 2008-2012 population was estimated at only 7 adults.¹⁶⁰ Yet the EA provides no analysis or disclosure whatsoever of the effects of leasing white-tailed and/or Gunnison prairie dog habitat, and how this might affect the possibility of future ferret reintroduction and recovery in the area.

Absent additional information regarding the location and condition of white-tailed prairie dog colonies, black-footed ferret recovery potential, and site-specific potential impacts of well pads, roads, and traffic on habitat, prey, and mortality, the inclusion of white-tailed prairie dog habitat lease sale is arbitrary and unjustified.

¹⁵⁷ Vernal RMP BiOp at 38.

¹⁵⁸ Douglas E. Kenaith, Species Assessment for White-Tailed Prairie Dog (*Cynomys leucurus*) in Wyoming 26 (2004) (citing A.E. Seglund *et al.*, White-Tailed Prairie Dog Conservation Assessment (2004)).

¹⁵⁹ Seglund *et al.* at 46-47.

¹⁶⁰ Recovery Plan at 22 Table 2.

IX. Cultural Resources

Failure to make a reasonable and good faith effort to identify historic properties

The National Historic Preservation Act regulations at 36 C.F.R. § 800.4(b) outline BLM's duty to identify cultural resources: "[T]he agency . . . shall take the steps necessary to identify historic properties within the area of potential effects. . . . The agency shall make a reasonable and good faith effort to carry out appropriate identification efforts."

It is insufficient and does not represent a "reasonable" and "good faith effort" for the BLM to rely solely on a literature search to identify cultural resources within the proposed parcels, as was done in this case. Publicly available geographic information shows that easily half of the parcels in the Moab Field Office overlap with polygons where cultural sites are known to exist. *See* NPCA Map – Known Cultural Sites (attached). With this level of density and the known breadth of cultural heritage sites in the area, it is evident that the cultural resource concentration encompassing the September 2020 lease sale parcels merits further Class III intensive cultural resource survey. As the preamble to the Section 106 regulations makes clear: It is simply impossible for an agency to take into account the effects of its undertaking on historic properties if it does not even know what those historic properties are in the first place." 65 Fed. Reg. 77,698, 77,715 (Dec. 12, 2000).

BLM acknowledges in the EA that a "[lease sale] is also considered to be an irretrievable commitment of resources because BLM generally cannot deny all surface use of a lease unless the lease is issued with a no surface occupancy (NSO) stipulation." Accordingly, BLM must undertake legally sufficient Section 106 identification efforts now instead of at the APD stage.

Cultural Resources within the Moab Field Office

From the OSNHT to cliff dwellings to archaic petroglyphs, the Moab Field Office is a unique cultural intersection of ancestral and traditional cultures that are related to modern day Tribes and other descendants across the Four Corners. The rock art, or rock stories, are very unique and show the areas, and sometimes overlap, of Fremont and Ancestral Puebloan cultures. Several of the proposed lease sale parcels contain one-of-a-kind Barrier Canyon style rock art, or rock stories. This style is known to extend all the way from the Grand Canyon to Canyonlands to White River, Colorado. Barrier Canyon style often follows water, which is true of the cultural sites in the leases. Barrier Canyon is hard to date but it was likely created by Indigenous peoples living in the area from 2,000 BC to 500 A.D. What is important is that these cultural sites contribute to the broader cultural landscape of the area. Additionally, there is much research potential at sites like the Barrier Canyon pictographs and there is a great need for ethnographic study, including in-person visits by consulting Tribes.

Stipulations and lease notices that allow for modifications and waivers cannot guarantee protection of cultural sites from direct and indirect effects from oil and gas leasing and development, like increased visitation from new roads or degradation by dust. What we have to learn from these cultural sites is great, as is the threat of energy development.

Failure to conduct meaningful tribal consultation

The BLM must meaningfully consult and collaborate with Tribes on federal decisions that have implications for Tribes. *See* Department of the Interior, Bureau of Land Management Manual 1780 "Subject: BLM Manual 1780 Tribal Relations (P)", at A2-1 through A2-2, *available at* <https://www.blm.gov/sites/blm.gov/files/uploads/MS%201780.pdf>. *See also* 36 CFR 800.4(b) (requiring agencies to “make a reasonable and good faith effort to identify historic properties in part through consultation with Tribes).

According to BLM Manual 1780, “agency efforts [at consultation with Tribes] were judged to be sufficient” when consultation showed a pattern of multiple efforts to engage, including through various types of communication like “face-to-face meetings, telephone conference calls, notices, shared documents, field trips, and site visits.” *See* Department of the Interior, Bureau of Land Management Manual 1780 "Subject: BLM Manual 1780 Tribal Relations (P)", at A2-1 through A2-2. Based on the BLM’s disclosures in the EA regarding consultation across the entire lease sale, the nature of consultation has not demonstrated repeated attempts to engage Tribes through various means of communication.

This is all the more exacerbated by the COVID-19 pandemic, when many Tribes and THPOs are closed or under limited hours because of Tribal capacity. For example, during this hectic time that has constrained Tribal capacity, did the BLM make it clear to potential consulting Tribes that the June and September lease sales were combined? A letter is insufficient during current times when these offices may be physically closed. *Id.* BLM Manual 1780 states that BLM has the responsibility to “[e]nsure minority, low-income, and tribal populations are provided with the opportunity to engage in meaningful involvement in the Department’s decision-making processes.” *Id.* at 3-3. The EA does not show how the BLM has ensured the accessibility of information during a time when such access depends on reliable and affordable internet, a privilege not equitably attainable by all Americans during the COVID-19 pandemic.

In short, the BLM has not tried to truly engage and improve access to lease sale information for prospective consulting Tribes. This shows an egregious failure to conduct meaningful tribal consultation for the September 2020 lease sale.

Failure to impose binding protective measures

Section 106 regulations allow agencies to use mitigation measures to justify a finding of no adverse effects but these measures must be “binding” and “reliable.” 36 C.F.R. § 800.5(b). *See Coliseum Square Ass’n v. Jackson*, 465 F.3d 215, 239 (5th Cir. 2006). The cultural resources are protected inconsistently throughout the lease sale with stipulations, lease notices, and in some cases, NSO. However, all these layers of protection have modifications and waivers, making them non-binding and susceptible to exception. *See* for example the Cultural Resource NSO stipulation that says the NSO requirement can be modified if the “proposed operations would not cause unacceptable impacts” or waived “if it is determined that the factors leading to its inclusion in the lease no longer exist.” The BLM cannot commit to a finding of no adverse effects to cultural resources, as it likely will, if such stipulations and lease notices cannot ultimately protect cultural resources.

X. BLM Failed to Make Publicly Available Information Related to Its Leasing Proposal.

As noted *supra*, a primary purpose of NEPA is to “guarantee[] 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.” *Methow Valley Citizens Council*, 490 U.S. at 349. BLM failed to do so here.

The ePlanning website for the proposed lease sale contains only two documents: the Lease Sale EA and a draft FONSI/DR.¹⁶¹ In addition, the EA contains several pages of referenced documents that BLM purports to have relied on for analysis in the present instance. *See* Lease Sale EA at 66-71. However, many of the hyperlinks for the referenced documents are broken, and many of the documents do not have hyperlinks for the public to access the documents. For example (non-exhaustive list):

- BLM. 2019. “2018 BLM Utah Air Monitoring Repot.” Hyperlink broken.
- BLM. 1989. “Fillmore House Range Resource Area Resource Management Plan.” Hyperlink broken.
- BLM. 1989. “Final Environmental Impact Statement and Proposed Resource Management Plan for the House Range Resource Area.” Hyperlink broken.
- BLM. 2007. *Final Vegetation Treatments Using Herbicides Programmatic Environmental Impact Statement and Record of Decision*. Washington D.C. September. Hyperlink broken.
- BLM. 1989. “House Range Resource Area RMP Oil and Gas Leasing Implementation EA.” Hyperlink broken.
- BLM. 2020. “June 2020 Lease Sale Cultural Resources Report (Utah SHPO Case No. 20-1060). Salt Lake City, Utah. No hyperlink provided.
- 2018. “Telephone Call Record. Hydraulic Fracking and Seismic Activity in Utah.” March. No hyperlink provided.
- Corner, A., S. Lewandowsky, M. Phillips, and O. Roberts. 2015. *The uncertainty handbook-A practical guide for climate change communicators*. Bristol: University of Bristol. No hyperlink provided.
- Etkin, D., and E. Ho. 2007. “Climate change: perceptions and discourses of risk.” *Journal of Risk Research* 623-641. No hyperlink provided.

¹⁶¹ See <https://eplanning.blm.gov/eplanning-ui/project/2000028/570> (last updated June 9, 2020).

SUWA repeatedly requested that BLM provide the referenced information for public review but BLM failed to do so. *See, e.g.*, E-mails from Landon Newell, SUWA, to Michael Gates, BLM Fillmore Field Office Manager (July 2, 2020; July 6, 2020) (explaining that certain hyperlinks were broken and requesting the documents) (attached). Thus, BLM has violated NEPA by failing to make available to the public key documents that the agency purportedly relied on in the Lease Sale EA. SUWA expressly reserves the right to supplement these comments after BLM makes all referenced documents in the EA available for public review.

XI. BLM Failed to Take a Hard Look at Impacts to Arches and Canyonlands National Parks

National Park Significance

Arches and Canyonlands National Parks protect and showcase some of southern Utah's most stunning red rock landscape including colorful canyons, mesas, buttes, fins, arches and spires. They also encompass expansive views from places like Grandview Point where one can see for a hundred miles on a clear day. And along with Deadhorse Point State Park, Arches and Canyonlands National Parks are designated International Dark Sky Parks, which means they have some of the darkest skies in the world, drawing visitors for the incredible stargazing and opportunities offered by park managers to reconnect with a dwindling resource not found in many places. These incredibly dark night skies are promoted and highlighted not only by the national and state parks but the Moab community, Grand County and the Utah Office of Tourism.

Because of the incredible resources of the parks and surrounding public lands and the high value experience they provide, Arches and Canyonlands national parks welcomed more than 2.4 million visitors in 2018 who spent \$246 million in nearby communities, supported 3,725 local jobs and produced \$317 million in cumulative benefit to the local economy. Oil and gas development on the landscape immediately adjacent to these national parks therefore poses a great risk to the very resources and experiences that draw those millions of visitors every year. Light and air pollution, industrial traffic and climate change resulting from oil and gas development all have the ability to permanently affect this one-of-a-kind landscape.

BLM is required to take a hard look at potential impacts to NPS units

NEPA requires that BLM must consider the “[u]nique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas [and] [t]he degree to which the proposed action affects public health or safety.” 40 C.F.R. § 1508.27(b)(3), (2). Where, as here, reasonably foreseeable development on leased parcels in close proximity to an NPS unit may impair the use and enjoyment of the park, heightened scrutiny of impacts of the development is warranted. Accordingly, BLM should conduct a comprehensive analysis of the potential cumulative impacts of development of all the parcels based on current technologies and the latest science that accounts for cumulative impacts to national park units, including Arches and Canyonlands National Parks. As stated previously in these comments, BLM has in appropriately postponed meaningful NEPA analysis to the APD stage.

In addition, BLM is required under NEPA to take a hard look at potential impacts to NPS units from the proposed action, including the effects on protected resources and on recreation and tourism. 40 C.F.R. § 1502.16. Concerning protected resources, BLM must at a minimum consider in its environmental analysis the potential adverse effects to the park visitor experience. Courts have readily overturned agency actions that ignore such effects, as well as those to the viewshed, noise impacts, impacts to dark skies, and so forth. *See, e.g., Grand Canyon Trust v. Fed. Aviation Admin.*, 290 F.3d 339 (D.C. Cir. 2002) (finding that the environmental assessment failed to adequately analyze noise impacts from agency action on Zion National Park).

Dark Sky Protection

Dark sky preservation is central to the national park experience. The NPS Lightscape program notes, “For thousands of years, observing the night sky has been fundamental to human life and survival. The sky was a major symbol in the natural world of order and cyclic repetition... Not only is light pollution an aesthetic problem but it also affects our sense of perspective. Most of the world’s population can no longer ponder Earth’s place in the universe because light pollution of the night sky shrinks the visible universe down from millions of light years to a few miles. One of our most ancient and universal cultural values is threatened and may become extinct.”

Arches National Park became the Region’s newest International Dark Sky Park in July 2019 making it a place recognized for its quality night skies and a commitment to protecting and sharing natural darkness. International dark sky park certification gives the park support to grow the night sky programs they have been offering since 2012 and creates economic opportunities for neighboring communities through astronomy-based tourism. To ensure that park visitors are able to continue to enjoy some the darkest skies in the lower 48 states, which under the right conditions, with common binoculars may even be able to view the rings of Saturn, BLM must analyze and disclose information related to this new designation, which occurred after the completion of the Moab MLP, in addition to the existing International Dark Sky Parks and ensure the highest standard of night sky compliance lighting for any oil and gas development in the area. At a minimum, BLM needs to apply UT-LN-125 LIGHT POLLUTION (NIGHT SKIES) lease notice to all parcels in the September 2020 lease sale. Page 298 of the EA indicates that UT-LN-125 will be applied to all parcels but it is not. It needs to be consistently applied, including to all the June 2020 parcels.

Coordination with NPS

The health of our national parks relies on agencies accurately assessing the risks of nearby development. This also requires close consultation and coordination among the agencies. It is not clear that meaningful consultation with the NPS has taken place for this lease sale. Sharing a memo with a preliminary list of parcels and associated GIS files does not equate to meaningful stakeholder engagement or coordination. BLM indicates that consultation with NPS led to the addition of two lease notices to parcel 136 addressing the NPS’s concerns about the OSNHT. However, there are many more parcels near Arches and Canyonlands National Parks that if developed could have significant direct, indirect and cumulative impacts to the parks and should be considered in close coordination with park managers prior to the lease sale. At a minimum, all

parcels in the lease sale should include UT-LN-163, to notify the NPS at the APD stage. Currently, only parcel 136 has that lease notice.

XII. BLM Should Not Move Forward with Leasing During the COVID-19 Pandemic

Many of the organizations co-signed to these lease sale comments have advocated nationally and locally with the Department of the Interior and BLM for the suspension of non-essential public comment periods as a response to the “national health emergency” declaration by the Trump Administration on March 13, 2020. Additionally, on March 20, 2020 the National Governors Association, of which Utah Governor Herbert is a member,¹⁶² called for the suspension of all federal rulemaking and non-rulemaking proceedings unrelated to COVID-19. The pandemic has limited the public in their ability to participate in comment processes and the BLM is required under the MLA to post oil and gas lease sale notices for public viewing at BLM offices before proceeding with a lease sale. The agency cannot continue to conduct oil and gas lease sales without the ability for meaningful public engagement and with the expectation that the public has a reasonable ability to participate. As a result, the BLM should postpone the September 2020 oil and gas lease sale.

SUWA appreciates BLM’s consideration of and prompt attention to these comments.

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¹⁶² NGA webpage, Governor Gary Herbert <https://www.nga.org/governor/gary-herbert/>

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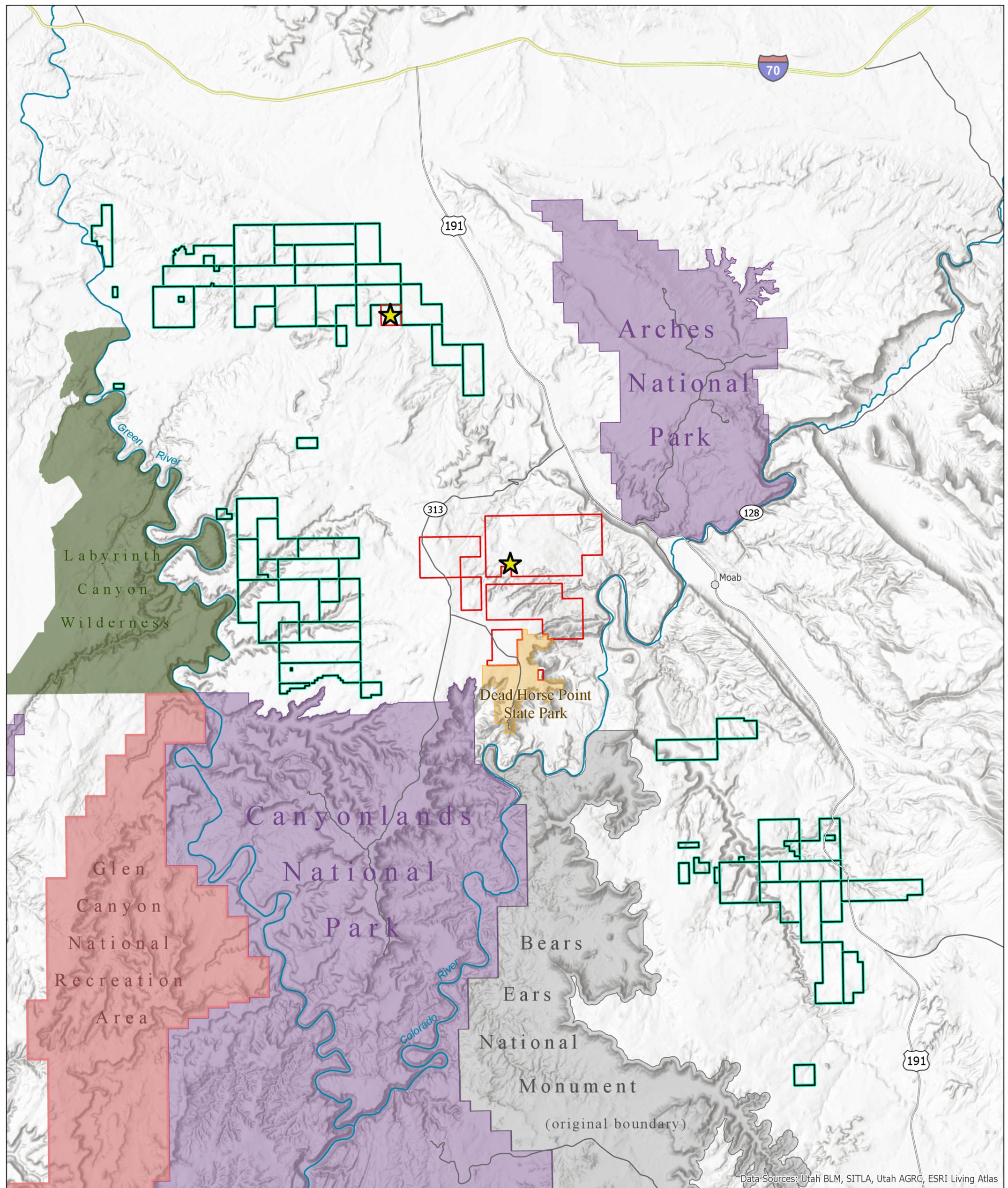
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Data Sources: Utah BLM, SITLA, Utah AGRC, ESRI Living Atlas



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|-----------------------------|--------------------------|
| September 2020 Leases | National Recreation Area |
| Lithium Mining Project Area | State Park |
| National Park | National Monument |
| Lithium Test Sites | |



Chandra Rosenthal: Oil and gas leases threaten the Old Spanish Historic Trail



Courtesy | Bureau of Land Management BLM and the National Park Service have released a long-awaited plan for administering the Old Spanish Trail, one of four national historic trails crossing Utah. Traces of the trail can be seen along Cottonwood Wash just west of U.S. Highway 6 in Emery County.

By Chandra Rosenthal | Special to The Tribune • Published: 3 days ago
Updated: 2 days ago

The Bureau of Land Management (BLM) is in the midst of a massive oil and gas lease sale in Utah. The September sale of 114,000 acres of wild lands in Utah will touch national parks, monuments, proposed wilderness and some of the prettiest red rock vistas in Utah.

One of the areas that will be impacted is the Old Spanish Historic Trail, an important and historically significant early North American trade route. Some 64 miles of the trail cross 36 of the 77 proposed lease parcels. Conservation groups have joined with history buffs to call for the removal of these 36 parcels from the sale.

The Old Spanish Historic Trail dates from the early Spanish period beginning around 1776 and was completed by Mexican traders in 1829. The route allowed Mexican, Indian and eventually traders from the United States to move goods on mule pack trains from New Mexico through Colorado and Utah to California.

The trail was particularly treacherous as it crossed canyons and deserts where temperatures vacillate wildly. Trips were carefully timed to avoid snow and vanishing water holes. The trail is a key example of the multicultural heritage of the U.S. Southwest.

Under President Bush, in 2002, Congress recognized the trail's significance and granted historic trail status. The Old Spanish Trail joined the ranks of the Mormon Trail, the Lewis and Clark Trail and the Trail of Tears and enjoys the protections of the National Trail System Act.

The trail has many fans — archaeologists, modern day explorers and organized groups such as the Partnership for the National Trails System and the Old Spanish Trail Association.

Trail association chapters are located in each of the states that the trail passes through. A virtual chapter, Descendants and Travelers of the Trail, reflects a genealogical interest in the trail and many in this chapter are descendants of those who traveled the trail from 1829 to the late 1840s.

There are eight certified sites to visit along the trail, including the John Wesley Powell River History Museum in Green River, Utah. Social media is scattered with images of recreational retracements and travelogues of the trail by mountain bike and horseback.

Yet to BLM, the Old Spanish Historic Trail does not seem to exist in many of the planning documents across the west. In the case of the upcoming September lease sale, the 64 miles of trail that would be impacted by leasing received little

consideration when BLM selected which parcels to lease

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But this is not the first time that the Trump administration has put oil and gas development ahead of other national priorities like wildlife, recreation, or wild spaces.

During an international oil glut, Trump continues to push his extraction at all cost's agenda, despite the fact that current wells cannot make a profit while oil is at record low prices.

Adding significant insult, in order to issue more loss-making oil leases, the Trump administration intends to decimate a historic cultural resource like the Old Historic Spanish Trail.

Chandra Rosenthal

Chandra Rosenthal *is the Rocky Mountain Field Office director for Public Employees for Environmental Responsibility.*

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