Southern Utah Wilderness Alliance – Center for Biological Diversity – Green River Action Network – Living Rives & Colorado Riverkeeper – Sierra Club – The Wilderness Society – Western Watersheds Project – Waterkeeper Alliance

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Comments submitted via the ePlanning portal and via electronic-mail (swysong@blm.gov; showard@blm.gov) – exhibits sent via USPS First Class Mail

December 17, 2018

Bureau of Land Management
Utah State Office
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RE: Comments – March 2019 Competitive Oil and Gas Lease Sale, DOI-BLM-UT-G010-2019-0006-EA

Greetings:

The Southern Utah Wilderness Alliance, Center for Biological Diversity, Green River Action Network, Living Rivers & Colorado Riverkeeper, Sierra Club, The Wilderness Society, Western Watersheds Project, and Waterkeeper Alliance (collectively, SUWA) appreciate the opportunity to provide comments on the March 2019 Competitive Oil and Gas Lease Sale, Environmental Assessment, DOI-BLM-UT-G010-2019-0006-EA (Nov. 2018) (March 2019 Lease Sale EA or EA).

In short, for the reasons discussed herein the March 2019 Lease Sale EA violates numerous federal environmental laws including, but not limited to, the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 *et seq.*, Administrative Procedures Act (APA), 5 U.S.C. §§ 701-706, Federal Land Policy and Management Act (FLPMA), 43 U.S.C. §§ 1701 *et seq.*, Endangered Species Act (ESA), 16 U.S.C. §§ 1531 *et seq.*, and National Historic Preservation Act (NHPA), 54 U.S.C. §§ 300101 *et seq.*, and the regulations and policies that implement these laws.

I. Air Quality Comments Prepared by Megan Williams.

Because of numerous similarities including timing, location, and geography, SUWA herein incorporates the comments (and exhibits thereto) prepared on SUWA's behalf by Ms. Megan Williams, an air quality expert, for the BLM's December 2017 and December 2018 lease sales. *See* Megan Williams, *Comments on the Air Quality Analysis for the December 2017 Competitive Oil and Gas Lease Sale Environmental Assessment (EA) in the Vernal Field Office, Dated June 2017, DOI-BLM-UT-G010-2017-0028-EA* (July 22, 2017) [herein after Williams December 2017 Comments] (comments and exhibits attached); Megan Williams, *Comments on the Air Quality Analysis for the December 2018 Competitive Oil and Gas Lease Sale Environmental Assessment (EA) in the Vernal Field Office, Dated September 2018, DOI-BLM-UT-G010-2018-*

00440-EA (Nov. 2, 2018) (comments and exhibits attached). The same air quality issues and concerns raised in those lease sales apply to the March 2019 lease sale air quality analysis and thus are reincorporated in their entirety.

A. Additional Air Quality Issues.

The March 2019 Lease Sale EA failed to take a hard look at impacts to air quality. In the EA, BLM provides the same air quality emissions estimates and analyses for all parcels, without taking into account the differences between how those parcels will be developed or for which resource (*e.g.*, oil or gas). For example, BLM recognizes that parcels, depending on their location, will most likely be produced for oil (*e.g.*, the Duchesne County parcels) or for gas (*e.g.*, the Uintah County parcels). *See, e.g.*, EA at 40 (recognizing that Duchesne County is "the highest oil produc[ing]" county in Utah, while Uintah County is "the highest gas produc[ing]" county). However, despite being aware of the many differences between the proposed parcels, BLM's air quality analysis is broad-brush and generic, and entirely failed to account for the wide range of emissions that will result from development of parcels based on those differences. *See id.* at 36, tbl. 4-1 (anticipated emissions per well – providing only a single emissions estimate for all potential wells). Here, there are numerous differences between the parcels offered for sale and thus these differences demand a more accurate accounting of emission estimates. For example:

- The parcels in the southern Uinta Basin, in the Bitter Creek and Sweetwater Canyon areas, encompass wilderness-caliber lands that have not been subject to past intrusive oil and gas exploration or development. In contrast, the parcels to the southwest of Vernal in Township 6 south, Range 19 east, are located near lands that have been subject to massive amounts of oil and gas leasing and development activities. *See, e.g.*, Utah Div. of Oil, Gas and Mining, Interactive Map, https://datamining.ogm.utah.gov/ (depicting past development activity in these areas) [hereinafter DOGM Interactive Map] (last visited Dec. 14, 2018). It will take more resources, resulting in more air quality emissions, to therefore develop the parcels in wilderness-caliber lands compared to the development of parcels near developed areas.

- The parcels located in or near greater sage-grouse and Graham's and White River beardtongue habitat are subject to additional development requirements that will result in air quality emissions different from those for parcels outside of those habitat areas. *See, e.g.*, SUWA MAP – Greater Sage-Grouse (depicting parcels in greater sage-grouse habitat) (attached); SUWA MAP – Beardtongue (attached). Like the parcels in wilderness-caliber areas, these parcels will take more resources, and those result in more air quality emissions, to develop than other parcels offered in the Uinta Basin.

- The parcels in Township 6 south, Range 19 east, will, based on past development, almost certainly be drilled for oil. *See* DOGM Interactive MAP (depicting only oil producing wells in this township and range). In contrast, the parcels in the southern Uinta Basin including near the White River, Sunday School Canyon, and Winter Ridge areas, will almost certainly be drilled for gas, but not oil. *See id.* (depicting the majority of wells as gas wells in these areas).

- Emissions are different depending on whether the parcels are drilled vertically, horizontally, or directionally, whether those wells are stimulated via hydraulic fracturing, and the targeted formation depth.

Despite these differences (and others), which are well known to BLM based on its extensive history of permitting oil and gas development in the Uinta Basin, the agency provides only a single, generic, air quality emissions estimate. BLM makes the same mistake for greenhouse gas (GHG) emissions. *See* March 2019 Lease Sale EA 39-40 (providing only generic GHG emissions analysis that is the same for all parcels). This broad-level approach to NEPA analysis is unlawful.

II. BLM Failed to Analyze a Reasonable Range of Alternatives.

NEPA requires agencies to study, develop, and describe appropriate alternatives and their comparative effects in every proposal involving unresolved resource conflicts, regardless of whether it prepares an EA or an EIS. 42 U.S.C. § 4332(2)(E); 40 C.F.R. § 1508.9(b). While an agency need not select a particular alternative, *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989), the alternatives requirement ensures that an agency fully consider—and show the public that it considered—less environmentally harmful means to its proposed action that would accomplish the same goal. 40 C.F.R. §§ 1500.1(b); 1500.2(d), (e); *see Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228 (9th Cir. 1988), *cert. denied sub nom.*, 489 U.S. 1066 (1989) ("NEPA's requirement that alternatives be studied, developed and described both guides the substance of environmental decisionmaking and provides evidence that the mandated decisionmaking process has actually taken place.").

In an EA, the agency must include a brief discussion of both alternatives and the environmental impacts of those alternatives. 40 C.F.R. § 1508.9(b). Though a "concise" document, *id.* § 1508.9(a), an EA's alternatives analysis must still present "information sufficient to permit a reasoned choice of alternatives as far as environmental aspects are concerned." *Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1277 (10th Cir. 2004). Moreover, agencies cannot dismiss alternatives "in a conclusory and perfunctory manner that do[es] not support a conclusion that it was unreasonable to consider them as viable alternatives in an EA." *Davis v. Mineta*, 302 F.3d 1104, 1122 (10th Cir. 2002).

The range of alternatives an agency must analyze is dictated by a "rule of reason and practicality" based on the agency's stated purpose and need for the project. *Davis*, 302 F.3d at 1120 (citation omitted). The reasonableness of an alternative is measured in two ways. First, it must accomplish the purpose and need of the proposed action. *N.M. ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 709 (10th Cir. 2009). Second, it must fall within the agency's statutory mandate. *Id.* An alternative that is reasonable on its face must also be practical—"non-speculative … and bounded by some notion of feasibility." *Utahns for Better Transp. v. U.S. Dept. of Transp.*, 305 F.3d 1152, 1172 (10th Cir. 2002).

An agency has broad discretion to define its objectives for a project proposal. However, after "defining the objectives of an action," the agency must "provide legitimate consideration to alternatives that fall between the obvious extremes." *Colo. Envtl. Coal. v. Dombeck*, 185 F.3d

1162, 1175 (10th Cir. 1999). Stated differently, a broadly defined objective demands that a broader range of alternatives be analyzed by the agency:

> It 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. . . .
> ….
> … *The broader the purpose and need statement, the broader the range of alternatives that must be analyzed*.

BLM, National Environmental Policy Act, Handbook H-1790-1 §§ 6.2, 6.2.1, pgs. 35-26 (Jan. 2008) (emphasis added) [hereinafter BLM NEPA Handbook] (attached).

At all times, the analyzed range of alternatives must be "sufficient to permit a reasoned choice of alternatives as far as environmental aspects are concerned." *N.M. ex rel. Richardson*, 565 F.3d at 708 (citation omitted). 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); *see also* 40 C.F.R. § 1508.9(a)(1). Courts will not defer to a void and thus the administrative record must contain evidence – not merely conclusory statements by the agency – that the agency did in fact take a hard look at a broad range of NEPA alternatives. *See High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1186 (D. Colo. 2014).

In the present case, BLM's NEPA alternatives "analysis" includes nothing more than copying and pasting its analysis taken from the EA prepared for the December 2018 lease sale. *Compare* March 2019 Lease Sale EA at 7-8 (scoping section), 9-11 (alternatives discussion), *with* December 2018 Lease Sale EA at 7-8 (scoping section), 9-11 (alternatives discussion). In fact, under the "no action" alternative for the March 2019 lease sale, BLM "would defer all nominated parcels from the *December 2018* lease sale" – an action BLM cannot take because it already sold those parcels at its December 11, 2018 lease sale. March 2019 Lease Sale EA at 9 (emphasis added).

Additionally, in its haste to sell-off more public lands for oil and gas leasing and development, BLM has *preemptively rejected* "recommended alternatives" that were never actually recommended as part of this proposed action. *See, e.g.*, EA at 10-11 (alternatives considered but not analyzed in detail). As BLM notes, those alternatives come from scoping comments submitted by the public, including SUWA. *See* March 2019 Lease Sale EA at 7 (referring to these scoping comments). However, those comments were submitted on July 31, 2018 *for the December 2018 lease sale* not the March 2019 lease sale. *See generally* SUWA et al – Scoping Comments on Utah BLM December 2018 Lease Sale (July 31, 2018) (recommending many of the alternatives rejected by BLM in the present case) [hereinafter SUWA Scoping Comments] (attached). This dismissive approach to NEPA alternatives analysis is the antithesis to the "hard look" mandate required by NEPA.

Furthermore, the stated purpose and need and "decision to be made" for the present matter are exceedingly broad and thus, pursuant to the rule of reason, could be satisfied by a broad range of alternatives including those proposed herein by SUWA. *See* March 2019 Lease Sale EA at 6 (describing the purpose and need and decision to be made). As such, SUWA recommends the following alternatives for BLM's actual consideration each of which unquestionably would satisfy BLM's broad objective:

- The "leasing outside of wilderness-caliber lands," "no-surface occupancy," "phased development-leasing," and "mitigation leasing" alternatives recommended by SUWA in its Scoping Comments for the December 2018 lease sale. *See* SUWA Scoping Comments at 20-21. Because BLM has preemptively rejected these alternatives in the March 2019 Lease Sale EA – without accompanying analysis – SUWA incorporates in its entirety its protest of BLM's December 2018 lease sale, which addressed BLM's unlawful rejection of these recommended alternatives. *See generally* SUWA et al – Protest of the Utah Bureau of Land Management's, Vernal Field Office, December 2018 Competitive Oil and Gas Lease Sale, Environmental Assessment, DOI-BLM-UT-G010-2018-044-EA (Nov. 5, 2018) (attached).

- An alternative in which BLM would defer from leasing or adjust lease parcel boundaries to avoid lands that any of the archaeological site type location models prepared for the *Class I and Site Location Model for the Bureau of Land Management Vernal Field Office Area* predict have high probability for the presence of cultural sites.

- An air quality alternative as proposed by Megan Williams in her comments prepared on behalf of SUWA for the December 2017 competitive lease sale which include parcels in the same areas offered now for leasing, including immediately adjacent to parcels now offered. *See* Williams December 2017 Comments at 35-36; *see also* SUWA et al – Comments December 2017 Competitive Oil and Gas Lease Sale, DOI-BLM-UT-G010-2017-0028-EA at 3-4 (July 23, 2017) (providing additional explanation regarding this air quality alternative and how it satisfies BLM's stated objective – which is the same objective here) (attached).

SUWA's recommended alternatives are technically and economically feasible, would have a lesser impact to the environment, and would accomplish the BLM's broad objectives. First, the alternatives are technically and economically feasible. SUWA's alternatives encompass federal public land already analyzed by BLM for oil and gas leasing in the EA and thus impose no new costs or burdens on the agency other than the short time necessary to redraw the lease parcel boundaries or remove parcels from the lease sale. Second, SUWA's alternatives will clearly have less or no impact on the environment. The adjusted parcels would open less land to oil and gas development particularly in areas with more sensitive resource values such as cultural and wilderness-caliber. Finally, SUWA's alternatives would satisfy BLM's broad objectives for the lease sale by allowing the agency to "respond" to the nominated parcels while adjusting the parcel boundaries to protect important resource values. BLM has broad discretion to lease – or not lease – federal public land for oil and gas development including making modifications to or electing not to lease nominated lease parcels. *See, e.g., Roy G. Barton,* 188 IBLA 331, 334 (2016) ("Under the MLA, BLM has discretion to issue, or not issue, a lease for any given parcel

of Federal land available for oil and gas leasing."); *Hawkwood Energy Agent Corp. Venture Energy, LLC*, 189 IBLA 164, 165 (2017) ("BLM's discretion allows it to choose not to lease lands for oil and gas purposes if other considerations, including aesthetic or scenic values, favor other uses.").

III. BLM Failed to Analyze Cumulative Impacts of Past, Present, and Reasonably Foreseeable Future Oil and Gas Lease Sales.

The BLM has failed to analyze cumulative impacts to a wide array of resource values from its piecemeal approach to oil and gas leasing in the Vernal field office. Cumulative impact "is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. "Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." *Id.* BLM's NEPA Handbook provides the following guidance for cumulative impact analysis:

> In some circumstances, past actions may need to be described in greater detail when they bear some relation to the proposed action. For example, past actions that are similar to the proposed action might have some bearing on what effects might be anticipated from the proposed action or alternatives. You should clearly distinguish analysis of direct and indirect effects based on information about past actions from a cumulative effects analysis of past actions.

BLM NEPA Handbook 1790-1 § 6.8.3.4, pgs 58-59. It further states:

> For each cumulative effect issue, analyze the direct and indirect effects of the proposed action and alternatives together with the effects of the other actions that have a cumulative effect. Cumulative effects analysis will usually need to be addressed separately for each alternative, because each alternative will have different direct and indirect effects.

Id. § 6.8.3.5, pg. 59. Further, BLM must define a cumulative effects boundary for *each* cumulative effect analyzed in its NEPA document. *Id.* § 6.8.3.1; *see also id.* § 6.8.3.2 ("We recommended that you establish and describe the geographic scope for each cumulative effects issue"). That cumulative effects boundary "is generally based on the natural boundaries of the resource affected, rather than jurisdictional boundaries." *Id.* § 6.8.3.2.

> The geographic scope will often be different for each cumulative effects issue. The geographic scope of cumulative effects will often extend beyond the scope of the direct effects, but *not* beyond the scope of the direct and indirect effects of the proposed action and alternatives.

Id. (emphasis added). BLM "must" consider past, present, and cumulative actions within the geographic scope to provide context for the cumulative effects analysis. *Id.* § 6.8.3.4

Notably, if the proposed action would impact the same resources impacted by past, present, or reasonably foreseeable future actions then BLM *must* analyze that cumulative effect in its NEPA analysis, as illustrated by the "examples" provided in the NEPA Handbook (italicized emphasis in original):

> For example, *the BLM proposes to build a campground near a private land where a private utility company proposes to build and operate a power generation structure. . . . If the campground construction would affect sage grouse habitat, but have no effect on air quality, and the power generation structure would affect sage grouse habitat and air quality, your NEPA document for the campground construction must describe the cumulative effects on sage grouse habitat, but not on air quality*.
>
> In another example, *the BLM is reviewing a proposal to develop a natural gas field that will affect air quality but not affect any sensitive plants. The State is proposing a large prescribed burn, which will affect air quality and a sensitive plant population. The NEPA document needs to discuss the cumulative effects on air quality, but not on sensitive plants.*

BLM NEPA Handbook § 6.8.3.1; *see also id.* § 6.8.3.5 ("For each cumulative effect issue, analyze the direct and indirect effects of the proposed action and alternatives together with the effects of the other actions that have a cumulative effect.").

In the present case, BLM has failed to analyze cumulative effects, as required by NEPA and the agency's NEPA Handbook. Over the past year, BLM has piecemealed its leasing decisions for public lands in the Vernal field office and done so without acknowledging that fact to the public or, more importantly, analyzing the cumulative effects of those decisions. For example, at the December 2017 lease sale, the BLM Vernal field office offered 64 parcels, the majority of which were located in the southern Uinta Basin. *See* SUWA MAP – BLM's Piecemeal Leasing in Vernal Field Office (attached). In similar fashion, BLM offered 67 parcels at the December 2018 lease sale, including many in the same area and *immediately adjacent* to those offered at the December 2017 sale. *Id.* Here, BLM is now proposing to offer 96 parcels in the same area including *immediately adjacent* to parcels offered at the two proceeding Vernal field office sales. *Id.* In total, over this short timeframe BLM has offered or is planning to offer approximately 227 parcels, consisting of nearly 303,000 acres of public lands – the majority of which is in the same region of the Uinta Basin, including immediately adjacent to each other – but the agency has done so without ever analyzing the cumulative effects of that piecemeal leasing decision to resource values including, but not limited to:

- Greater sage-grouse;
- Graham's and White River beardtongue;
- Air quality, including the recent nonattainment designation for ozone;
- Climate change and greenhouse gas emissions;
- Lands with wilderness characteristics;
- Cultural and archaeological resources;
- Areas of Critical Environmental Concern;

- Water quantity and quality, including impacts related to hydraulic fracturing;
- Recreation, including along the White River; and
- Visual resources.

See March 2019 Lease Sale EA at 51-58 (failing to consider these cumulative effects in light of past, present, and reasonably foreseeable lease sales). Moreover, BLM has already received expression of interests for lands in these same areas of the Uinta Basin, which pursuant to the agency's "leasing reforms" which replaced Instruction Memorandum No. 2010-117, will almost certainly be offered for sale without more than minor modifications. *See, e.g.*, U.S. Dep't of the Interior, Bureau of Land Mgmt., National Fluid Lease Sale System, Lands Nominated for Oil & Gas Leasing, https://nflss.blm.gov/eoi/list (select "Utah" under Geo. State, "Pending" under Select EOI Status, "2018" under Calendar Year, and "3 months" under Submitted in the Last) (showing numerous expressions of interest for lands in the Uinta Basin) (last visited Dec. 14, 2018); *see also* BLM, Instruction Memorandum No. 2018-34, Updating Oil and Gas Leasing Reform – Land Use Planning and Lease Parcel Reviews (Jan. 31, 2018) (stating that "[e]ach field office *will* review all lands that are identified in EOIs that were submitted before the EOI cutoff date for a particular quarterly lease sale and *will* offer all parcels determined to be eligible and available within the state office's jurisdiction") (emphases added) (attached).

Further, over that same timeframe the Utah School and Institutional Trust Lands Administration (SITLA) also has offered parcels in and near these same areas for oil and gas development. *See, e.g.*, SITLA, Competitive Mineral Lease Offerings & Results, https://trustlands.utah.gov/business-groups/oil-gas/competitive-mineral-lease-offerings/ (select "2018" and any of the "competitive mineral leasing offering list[s]" – each of which includes parcels in Uintah County) (last visited Dec. 14, 2018). However, at no time, has BLM recognized that fact, or more importantly, analyzed the cumulative effect of SITLA's leasing decisions when viewed with BLM's own leasing decisions which occurred over the same timeframe and for lands in the same areas. *See* March 2019 Lease Sale EA at 51-58 (failing to consider past, present, or future SITLA lease sales); *but see* 40 C.F.R. § 1508.7 (requiring BLM to analyze "other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) . . . undertakes such other actions").

BLM never determined whether the issues brought forward for analysis in the EA involved a cumulative effect with other past, present, or reasonably foreseeable future actions. BLM never determined the geographic scope or timing of the cumulative effects analysis nor did the agency consider the past present, and reasonably foreseeable future actions discussed *supra*. Therefore, BLM failed to analyze cumulative effects of its leasing decision.

IV. BLM's Leasing Decisions are Cumulative Actions and Similar Actions with Cumulatively Significant Impacts that Must be Analyzed in a Single NEPA Document.

The December 2017, December 2018, and March 2019 lease sales are "cumulative" and "similar" actions that pursuant to NEPA must be analyzed in a single environmental assessment or impact statement. "Cumulative actions" are those "which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same

impact statement." 40 C.F.R. § 1508.25(a)(2). "Similar actions" are those "which when viewed with other reasonably foreseeable or proposed actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography." *Id.* § 1508.25(a)(3).

For cumulative actions, BLM's NEPA Handbook explains:

> If you do not include the cumulative action with the proposed action as aspects of a broader proposal analyzed in a single NEPA document, you must, at a minimum, demonstrate that you have considered the cumulative action in the NEPA document for the proposed action.

BLM NEPA Handbook § 6.5.2.2. To demonstrate that it considered the cumulative action, even if the actions are not analyzed in a single NEPA document, BLM must still "describe the cumulative action," and "include analysis of the effects of the cumulative action in the cumulative effects analysis of the proposed action." *Id.* Additionally, "[n]on-Federal actions which potentially have a cumulatively significant impact together with the proposed action *must* be considered in the same NEPA document." *Id.* (emphasis added).

Similar actions are "those with commonalities 'that provide a basis for evaluating their environmental consequences together.'" *San Juan Citizens' Alliance v. Salazar*, 2009 WL 824410 at *11 (D. Colo. March 30, 2009) (citing 40 C.F.R. § 1508.25(a)(3)). The Tenth Circuit has held that similar actions "should be discussed in the same [environmental analysis] . . . to assess adequately the combined impacts of the similar actions or reasonable alternatives." *Utahns for Better Transp. v. U.S. Dept. of Transp.*, 305 F.3d 1152, 1182 (10th Cir. 2002). Determining whether projects qualify as similar actions requires the weighing of a number of relevant factors, "including the extent of the interrelationship among proposed actions and practical considerations of feasibility." *Id.* (citing *Kleppe v. Sierra Club*, 427 U.S. 390, 411 (1976)). The BLM NEPA Handbook explains further that "[s]imilarities are not limited to type of action; such similarities include, for instance, common timing or geography." *Id.* § 6.5.2.3.

In the present case, as discussed *supra*, BLM has piecemealed its leasing decisions in this area without analyzing the impacts of those decisions when properly viewed together. BLM has never demonstrated that it considered, let alone analyzed, these cumulative actions. These leasing decisions will have significant cumulative impacts to Graham's and White River beardtongue and greater sage-grouse, among other important resources. *See, e.g.*, SUWA MAP – Greater Sage-Grouse and Beardtongue. Further, these leasing decisions share common timing and geography including offering parcels immediately adjacent to those in other sales. *Id.* However, at no time has BLM recognized that fact, let alone analyzed the cumulative impacts of those leasing decisions nor has BLM analyzed the impacts of SITLA's leasing for lands in this same area. Therefore, BLM's leasing decision in the present case violates NEPA.

V. BLM Must Consider its Past Leasing Decision to Determine Whether an EIS Is Required.

BLM's determination of whether the proposed action will have a significant impact to the environment must be based on consideration of BLM's past leasing decisions in this area, including the December 2017 and December 2018 sales. Stated differently, to support its Finding of No Significant Impact and Decision Record for the March 2019 Lease Sale EA, BLM must account for these past (reasonably foreseeable future lease sales) to determine whether its leasing decision will have significant impact to the public or the environment. To do so, BLM must analyze "both [the] context and intensity" of the proposed action. 40 C.F.R. § 1508.27. "Context" means "the significance of an action must be analyzed in several contexts such as society as a whole . . . the affected region, the affected interests, and the locality." *Id.* § 1508.27(a). "Both short- and long-term effects are relevant." *Id.* "Intensity" refers to "the severity of impact . . . [and] [r]esponsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action." *Id.* § 1508.27(b). For intensity, BLM must analyze, among other things: "[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts." *Id.* § 1508.27(b)(7). This regulation provides further that "[s]ignificance exists if it is reasonable to anticipate a cumulatively significant impact on the environment" and cautions that "[s]ignificance cannot be avoided by . . . breaking [an action] down into small component parts." *Id.* If any of the intensity factors in 40 C.F.R. § 1508.27(b) are present then BLM must prepare an EIS. *See Grand Canyon Trust v. F.A.A.*, 290 F.3d 339, 340 (D.C. Cir. 2002) ("If *any* 'significant' environmental impacts might result from the proposed action then an EIS must be prepared *before* agency action is taken.") (emphasis in original).

In the present case, BLM has never analyzed the context and intensity of issuing the March 2019 lease sale parcels when viewed with BLM's other lease sales for this area, including the December 2017 and December 2018 lease sales (which it knew about prior to preparing the EA because EOIs for the March 2019 lease sale had already been submitted), or when viewed with past or future SITLA lease sales. BLM has never determined whether its piecemeal approach to oil and gas leasing, coupled with SITLA's leasing decisions, will significantly impact, among other things:

- Public health or safety;
- Unique characteristics of the geographic area;
- Objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources; or
- Endangered or threatened species or their habitats.

40 C.F.R. § 1508.27(b)(2), (3), (8), (9). And BLM has never determined whether "the action is related to other actions with individually insignificant but cumulatively significant impacts." *Id.* § 1508.27(b)(7). Instead, BLM has unlawfully broken its leasing decisions "down into small component parts." *Id.* It is precisely these types of cumulative impacts, from cumulative and

similar actions, for which NEPA requires analysis in a single EIS. *See, e.g.*, CEQ, *Considering Cumulative Effects Under The National Environmental Policy Act* (1997) ("the most devastating environmental effects may result not from the direct effects of a particular action, but from the combination of individual minor effects of multiple actions over time.") (attached). Without considering this information BLM cannot reach a defensible conclusion that its leasing decision will not have a significant impact to the environment.

VI. BLM Failed to Take a Hard Look at Greenhouse Gas Emissions and Climate Change.

BLM failed to take a hard look at the direct, indirect, and cumulative impacts of GHG emissions to climate change. Direct effects are those "which are caused by the action and occur at the same time and place." 40 C.F.R. § 1508.8(a). Indirect effects are those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." *Id.* § 1508.8(b). Cumulative impact "is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal or person undertakes such other actions." *Id.* 1508.7. In considering the significance of these impacts, "[b]oth short- and long-term effects are relevant." *Id.* 1508.27(a).

In the present case, BLM has provided an incomplete and distorted view of potential GHG emissions and impacts to climate change. First, BLM analyzed, at most, only the long-term impacts of GHG emissions but entirely ignored the short-term impacts. *See* March 2019 Lease Sale EA at 15, tbl. 3-2 (providing only the 100-year global warming potential of GHGs). BLM attempts to justify its consideration of only the 100-year global warming potential because, allegedly, "the [Environmental Protection Agency (EPA)] uses the 100 year time horizon in its GHG Reporting Rule requirements under 40 CFR Part 98 Subpart A" and thus "[i]n this EA, the BLM [will] use[] the 100-year GWP to be consistent with the EPA GHG Reporting Rule." *Id.* at 15. This approach to NEPA analysis is arbitrary. It is immaterial whether EPA uses the 100 year GWP (or any other time period) in its GHG Reporting Rule. BLM must still comply with NEPA which requires consideration of "[b]oth short- and long-term effects." 40 C.F.R. § 1508.27(a).

Further, *EPA* has highlighted the need to analyze the short-term impacts of GHG emissions because harmful GHGs such as methane and nitrous oxide have extremely high but short-term GWPs:

> Because all GWPs are calculated relative to CO_2, GWPs based on a shorter timeframe will be larger for gases with lifetimes shorter than that of CO_2, and smaller for gases with lifetimes longer than CO_2. For example, [methane], which has a short lifetime, *the 100-year GWP of 28-36 is much less than the 20-year GWP of 84-87*.

EPA, Greenhouse Gas Emissions, Understanding Global Warming Potentials, https://epa.gov/ghgemissions/understanding-global-warming-potentials (last updated Feb. 14, 2017) (emphasis added). It is all the more arbitrary for BLM to ignore the 20-year GWP of GHG emissions because, as explained by the EPA, methane "emitted today lasts about a decade on

average." *Id.* BLM provides no explanation for why it is appropriate not to analyze methane impacts over this shorter timeframe – an omission that is all the more arbitrary in light of the fact that it is the timeframe over which the impacts will undoubtedly be felt the most. It also is the timeframe projected by BLM in which the methane (and other GHG) emissions will be emitted. *See* EA at 36 (explaining that "the lessee has 10 years to establish production on the lease[s]"). The failure to take into account the 20-year GWP of these GHG emissions undermines the accuracy and integrity of the global warming potential analysis. 40 C.F.R. § 1500.1(b); *id.* § 1502.24.

Second, BLM acknowledges that GHG emissions are emitted from "fossil fuel combustion (CO_2) for construction and operation of oil and gas facilities; fugitive methane (CH_4) from facility leaks or well venting; and downstream public consumption of the product (CO_2)." EA at 39. But BLM then distorted its climate change impacts analysis by considering only downstream combustion emissions for CO_2 but not the emissions from other GHGs or from downstream activities other than combustion such as facility leaks or well venting. *See id.* at 40 (providing analysis only for "CO_2 emissions based on combustion of the product"). BLM provides no explanation for why this approach is not arbitrary.

Further, GHGs are emitted at all stages of oil and gas development, including drilling, production, transportation, storage, and combustion. This includes, at a minimum, methane emissions that leak from pipelines and compressor stations – emissions that BLM itself has recognized to be significant contributors to the ongoing climate crisis. *See, e.g.*, 81 Fed. Reg. 83008, Waste Prevention, Production Subject to Royalties and Resource Conservation (Nov. 18, 2016). Among other things, BLM has recognized that "leaks are the second largest source of vented gas from Federal . . . leases, accounting for about 4 Bcf of the natural gas lost in 2014." *Id.* at 83011. BLM has also recognized that "the waste of natural gas . . . imposes public health and environmental costs, in the form of air pollution . . . emissions of hazardous air pollutants, some of which are carcinogenic; and emissions of methane, a powerful contributor to global warming." *Id.* at 83014.

The EPA has estimated the current methane leak rate from oil and gas activities to be approximately 1.4 percent; however, a recent study concluded that the leak rate is closer to 2.3 percent. *See* Envtl. Defense Fund, *New Study Finds U.S. Oil and Gas Methane Emissions Are 60 Percent Than EPA Report* (June 21, 2018), https://www.edf.org/media/new-study-finds-us-oiland-gas-methane-emissions-are-60-percent-higher-epa-reports-0. Regardless of the actual leak rate, the percentage is more than zero, which is where BLM has placed it at in the present case by failing to even attempt to calculate it. BLM should, at a minimum, provide a full and fair disclosure of GHG emissions resulting from the development of the leases, including a calculation of leaked GHG emissions.

Moreover, BLM can utilize the emission information it already possesses (and update that information to include all GHG emissions) to calculate potential leaked GHG emissions based on either the 1.4 or 2.3 percent leak rate. *See, e.g.*, March 2019 Lease Sale EA at 36, tbl. 4-1 (anticipated emissions per well); *id.* at 40, tbl. 4-3 (providing basic, albeit incomplete, downstream GHG emissions estimates). Without conducting such analysis, BLM has failed to account for all reasonably foreseeable impacts and failed to provide a full and fair disclosure of

potential impacts, in violation of NEPA. Notably, no NEPA provision or caselaw supports BLM's decision to analyze only one of the many GHG emissions that will be released through combustion of the produced oil and gas. Likewise, there is no support for BLM's failure to account for GHG emitting activities that occur after drilling and production but before combustion. This scattershot and incomplete approach to NEPA analysis is unlawful.

Third, BLM failed to calculate additional direct GHG emissions or analyze the impacts thereof based on information already available in the EA. BLM provides the following comparison for GHG emissions: "For the average well in Uintah County the GHG emissions are equivalent to 511 passenger vehicles driven for one year, or energy use for 258 homes in a year." EA at 41. BLM does not provide a similar comparison for other counties affected by this lease sale. BLM also estimated that, for Uintah County, the lease sale would result in the drilling of 361 wells. *See id.* at 36. In other words, based on BLM's estimates, this lease sale will result in GHG emissions equal to 184,471 passenger vehicles driven for one year, and energy use for 93,138 homes in a year.

The GHG emissions compared to number of passenger vehicles driven and energy use for homes, regardless of whether those emissions are emitted all in the same year or spread out over a series of years, are significant when contrasted with the overall population of Uintah County, which is approximately 35,000. *See* U.S. Census, QuickFacts, Uintah County, Utah, https://www.census.gov/quickfacts/uintahcountyutah (showing a population of 35,150 for Uintah County) (last visited Dec. 14, 2018). BLM failed to make even these basic calculations and, more importantly, failed to analyze the significance of these GHG emission impacts – an omission made more arbitrary by the fact that the emissions are equal to the energy use of nearly three times the amount of *homes* as there are *people* in Uintah County. Moreover, as discussed *supra*, BLM over the past year has leased other parcels in and near the same areas proposed for leasing now but has failed to analyze the cumulative impacts of that piecemeal approach to leasing – another significant omission because the development of those leases will only add to and multiply total GHG emissions in the Uinta Basin.

Finally, BLM states – incorrectly – that "[a]ccurate assessments of GHG emissions are not possible at the leasing stage" due to numerous limiting factors. EA at 39-40. This is wrong. Utah BLM has admitted that the agency *can* produce even more detailed analyses at the lease sale stage related to air quality and GHG impacts *but has declined to do so to avoid setting "a precedent for lease sales." See* E-mail from Sheri Wysong, Utah BLM Fluid Minerals Leasing Coordinator, to Julie Suhr Pierce, BLM Great Basin Socioeconomic Specialist (Aug. 14, 2017) (attached) (emphasis added). NEPA requires BLM to utilize "the best available scientific information." *Methow Valley Citizens Council*, 490 U.S. at 350. BLM violates NEPA when it hides this information from the public to avoid setting a precedent for future lease sales.

Therefore, BLM has failed to take a hard look at impacts to climate change from increased GHG emissions.

VII. BLM Must Analyze Both Upstream and Downstream GHG Emissions Prior to Leasing the Proposed March 2019 Parcels.

In addition to the inadequacies addressed above regarding BLM's climate change and GHG emissions impacts for the March 2019 lease sale, SUWA provides the following comments. Oil and gas operations are a major cause of climate change; this is due to emissions from the operations themselves, and emissions from the combustion of the oil and gas produced. Under NEPA's requirement to analyze *indirect* as well as direct impacts, BLM's environmental review must therefore include not only emissions from drilling operations, but the full "lifecycle" emissions from the combustion (and leakage) of the oil and gas produced from the proposed parcels.[1]

Prior to leasing the proposed parcels BLM should calculate the amount of GHG that will result on an annual basis from (1) each of the fossil fuels that can be developed within the planning area, (2) each of the well stimulation or other extraction methods that can be used, including, but not limited to, fracking, acidization, acid fracking, and gravel packing, and (3) cumulative greenhouse gas emissions expected over the long term (expressed in global warming potential of each greenhouse pollutant as well as CO2 equivalent), including emissions throughout the entire fossil fuel lifecycle discussed above.

BLM must quantify greenhouse gas emissions that would result from new oil and gas development on the proposed March 2019 lease parcels. Specifically, BLM should account for the full life-cycle emissions of oil and gas extracted within the planning area, including emissions from transportation of extracted product to market or to refineries, refining and other processing, and combustion of the extracted end-use product.

Meaningful consideration of greenhouse gas emissions (GHGs) is clearly within the scope of required NEPA review. *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1217 (9th Cir. 2008). As the Ninth Circuit has held, in the context of fuel economy standard rules:

> The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct. Any given rule setting a CAFE standard might have an "individually minor" effect on the

[1] *See High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174 (D. Colo. 2014); *Diné Citizens Against Ruining Our Env't v. United States Office of Surface Mining Reclamation & Enf't*, 82 F. Supp. 3d 1201 (D. Colo. 2015); *WildEarth Guardians v. United States Office of Surface Mining, Reclamation & Enf't*, 104 F. Supp. 3d 1208, 1230 (D. Colo. 2015); *WildEarth Guardians v. U.S. Office of Surface Mining, Reclamation & Enf't*, No. CV 14-103-BLG-SPW, 2015 WL 6442724 (D. Mont. Oct. 23, 2015) report and recommendation adopted in part, rejected in part sub nom. *Guardians v. U.S. Office of Surface Mining, Reclamation & Enf't*, No. CV 14-103-BLG-SPW, 2016 WL 259285 (D. Mont. Jan. 21, 2016); *see also* Council on Environmental Quality, Revised Draft Guidance for Greenhouse Gas Emissions and Climate Change Impacts 11 (Dec. 18, 2014), *available at:* https://www.whitehouse.gov/administration/eop/ceq/initiatives/nepa/ghg-guidance ("emissions from activities that have a reasonably close causal relationship to the Federal action, such as those that may occur as a predicate for the agency action (often referred to as upstream emissions) and as a consequence of the agency action (often referred to as downstream emissions) should be accounted for in the NEPA analysis."

> environment, but these rules are "collectively significant actions taking place over a period of time."

Id. at 1216 (quoting 40 C.F.R. § 1508.7). The courts have ruled that federal agencies consider indirect GHG emissions resulting from agency policy, regulatory, and leasing decisions. For example, agencies cannot ignore the indirect air quality and climate change impact of decisions that would open up access to coal reserves. *See Mid States Coal. For Progress v. Surface Transp. Bd*., 345 F.3d 520, 532, 550 (8th Cir. 2003); *High Country Conservation Advocates v. U.S. Forest Serv*., 52 F. Supp. 3d 1174, 1197-98 (D. Colo. 2014).

On June 14, 2018, Judge M. Christina Armijo of the U.S. District Court of New Mexico issued a "Memorandum Opinion and Order" on the validity of the BLM's approval of thirteen oil and gas leases within the Santa Fe National Forest in northern New Mexico. *San Juan Citizens Alliance v. U.S. Bureau of Land Mgmt.*, 326 F. Supp. 3d. 1227 (D.N.M. 2018). In the decision, the court ruled for plaintiff environmental groups on a number of claims under NEPA. The court first found that the BLM violated NEPA when it failed to estimate the downstream (indirect) GHG from the combustion of oil and gas produced from the leases. *Id.* at 1240-44. Specifically, the court held that "BLM's failure to estimate the amount of greenhouse gas emissions which will result from consumption of the oil and gas produced as a result of development of wells *on the leased areas* was arbitrary." *Id.* at 1244 (emphasis added). The court reasoned that the indirect effects of leasing were reasonably foreseeable and that BLM's arguments otherwise were "contrary to the reasoning in several persuasive cases that combustion emissions are an indirect effect of an agency's decision to extract those natural resources." *Id.* at 1242. The court concluded "[t]his error require[d] BLM [to] reanalyze the potential impacts of such greenhouse gases on climate change in light of the recalculated amount of emissions in order to comply with NEPA." *Id.* at 1244.

NEPA requires "reasonable forecasting," which includes the consideration of "reasonably foreseeable future actions…even if they are not specific proposals" *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1079 (9th Cir. 2011) (citation omitted). That BLM cannot "accurately" calculate the total emissions expected from full development is not a rational basis for cutting off its analysis. "Because speculation is . . . implicit in NEPA," agencies may not "shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as crystal ball inquiry." *Id*. Indeed, the EA for a recent lease sale in Utah undercuts BLM's assertion here that GHGs cannot be quantified at the leasing stage[2]. *See High Country Conservation Advocates*, 52 F. Supp. 3d at 1196 (decision to forgo calculating mine's reasonably foreseeable GHG emissions was arbitrary "in light of the agencies' apparent ability to perform such calculations").

The final CEQ *Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA review* is dispositive on the issue of federal agency review of greenhouse gas emissions as foreseeable direct and indirect effects of the proposed action. 81

[2] U.S. Bureau of Land Management, Environmental Assessment for West Desert District, Fillmore Field Office, August 2015 Oil and Gas Lease Sale, pp. 57-58 (Dec. 2015); U.S. Bureau of Land Management, Greenhouse Gases Estimate (West Desert District Nov 2015 Lease Sale), *available at:* http://www.blm.gov/style/medialib/blm/ut/natural_resources/airQuality.Par.38

Fed. Reg. 51,866 (Aug. 5, 2016). The CEQ guidance provides clear direction for BLM to conduct a lifecycle greenhouse gas analysis because the modeling and tools to conduct this type of analysis are readily available to the agency:

> If the direct and indirect GHG emissions can be quantified based on available information, including reasonable projections and assumptions, agencies should consider and disclose the reasonably foreseeable direct and indirect emissions when analyzing the direct and indirect effects of the proposed action. Agencies should disclose the information and any assumptions used in the analysis and explain any uncertainties. To compare a project's estimated direct and indirect emissions with GHG emissions from the no-action alternative, agencies should draw on existing, timely, objective, and authoritative analyses, such as those by the Energy Information Administration, the Federal Energy Management Program, or Office of Fossil Energy of the Department of Energy. In the absence of such analyses, agencies should use other available information.

81 Fed. Reg. 51,866 at 16 (Aug. 5, 2016) (citations omitted). CEQ's guidance even provides an example of where a lifecycle analysis is appropriate in a leasing context at footnote 42:

> The indirect effects of such an action that are reasonably foreseeable at the time would vary with the circumstances of the proposed action. For actions such as a Federal lease sale of coal for energy production, the impacts associated with the end-use of the fossil fuel being extracted would be the reasonably foreseeable combustion of that coal.

Id. Although the 2016 CEQ guidance has been "withdrawn for further consideration," 82 Fed. Reg. 16,576 (April 5, 2017), the underlying requirement to consider climate change impacts under NEPA, including indirect and cumulative combustion impacts foreseeably resulting from fossil fuels leasing decisions, has not changed. *See Sierra Club v. FERC*, 867 F.3d 1357, 1375 (D.C. Cir. 2017); *WildEarth Guardians*, 870 F. 3d at 1236; *S. Fork Band*, 588 F.3d at 725; *Ctr. for Biological Diversity*, 538 F.3d at 1214-15; *Mid States Coalition for Progress*, 345 F.3d at 550; *WildEarth Guardians*, 104 F. Supp. 3d at 1230; *Diné Citizens Against Ruining Our Env't*, 82 F. Supp. 3d at 1201; *High Country Conservation Advocates*, 52 F. Supp. 3d at 1174; *San Juan Citizens Alliance*, 326 F. Supp. 3d at 1244.

The volume of potential oil and gas from these lease parcels is knowable and accurately calculating the direct emissions impact from development of these lease parcels is also quantifiable. Utilizing BLM's own potential volume data for the this lease sale, the estimated oil volume of 10.901685 mmbbl represents lifecycle greenhouse gas emissions of up to 3,853,426.43 metric tons of CO2e and the estimated gas volume of 301.559521 Bcf represents lifecycle greenhouse gas emissions of up to 22,501,464.25 metric tons of CO2e. Potential lifecycle greenhouse gas emissions for resultant oil and gas volumes were generated using a peer-reviewed carbon calculator and lifecycle greenhouse gas emissions model developed by

EcoShift consulting.[3] This model is not novel in its development or methodology. Numerous greenhouse gas calculation tools exist to develop lifecycle analyses, particularly for fossil fuel extraction, operations, transport and end-user emissions.[4] Indeed, the Department of Energy has historically utilized these types of lifecycle emissions analyses in NEPA review of oil and gas infrastructure projects.[5] Other federal agencies have begun to employ upstream, downstream and lifecycle greenhouse gas emissions analyses for NEPA review of energy-related projects.[6] Courts have upheld the viability and usefulness of lifecycle analyses, and adoption of this trend is

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[3] *See* Ecoshift Consulting, The potential Greenhouse Gas Emissions of U.S. Federal Fossil Fuels, Center for Biological Diversity and Friends of the Earth (2015), *available at:* http://www.ecoshiftconsulting.com/wp-content/uploads/Potential-Greenhouse-Gas-Emissions-U-S-Federal-Fossil-Fuels.pdf.

[4] *See* Council on Environmental Quality, Revised draft guidance for greenhouse gas emissions and climate change impacts (2014), *available at:* https://ceq.doe.gov/current_developments/GHG-accounting-tools.html.

[5] U.S. Department of Energy National Energy Technology Laboratory, Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States, DOE/NETL-2014/1649 (May 29, 2014) *available at:* http://energy.gov/sites/prod/files/2014/05/f16/Life%20Cycle%20GHG%20Perspective%20Report.pdf. *See also*, U.S. Department of Energy National Renewable Energy Laboratory, Life Cycle Greenhouse Gas Emissions from Electricity Generation Fact Sheet, Pub No. NREL/FS-6A20-57817 (2013) *available at:* http://www.nrel.gov/docs/fy13osti/57187.pdf; U.S. Department of Energy National Energy Technology Laboratory Role of Alternative Energy Sources: Natural Gas Technology Assessment, Pub No. DOE/NETL- 2012/1539 (NETL, 2012) *available at:* https://www.netl.doe.gov/File%20Library/Research/Energy%20Analysis/Life%20Cycle%20Analysis/LCA-2012-1539.pdf; U.S. Department of Energy National Energy Technology Laboratory, Life Cycle Greenhouse Gas Inventory of Natural Gas Extraction, Delivery and Electricity Production, Pub No. DOE/NETL-2011/1522 (NETL, 2011) *available at:* http://www.fossil.energy.gov/programs/gasregulation/authorizations/2013_applications/sierra_club_13-69_venture/exhibits_44_45.pdf; U.S. Department of Energy National Energy Technology Laboratory, Life Cycle Analysis: Natural Gas Combined Cycle (NGCC) Power Plant, Pub No DOE/NETL-403-110509 (Sep 10, 2012) (NETL, 2010) *available at*: https://www.netl.doe.gov/File%20Library/Research/Energy%20Analysis/Life%20Cycle%20Analysis/NGCC-LCA-Final-Report---Report---9-30-10---Final---Rev-2.pdf.

[6] U.S. Bureau of Land Management, Final Supplemental Environmental Impact Statement for the Leasing and Underground Mining of the Greens Hollow Federal Coal Leas Tract, UTU-84102, 287 (Feb 2015) (BLM expressly acknowledged that "the burning of the coal is an indirect impact that is a reasonable progression of the mining activity" and quantified emissions from combustion without any disclaimer about other sources of coal. *Id* at 286. In that same EIS, BLM also acknowledged that truck traffic to haul coal would be extended as a result of the proposed lease approval, and this would generate additional emissions.) *See also*, U.S. Forest Service, Record of Decision and Final Environmental Impact Statement, Oil and Gas Leasing Analysis, Fishlake National Forest, 169 (Aug 2013) (Table 3.12-7: shows GHG emissions from transportation, offsite refining and end use; and total direct and indirect emissions. *See also id*., Appendix E/SIR-2 (more detailed calculations of direct and indirect emissions.)) U.S. Army Corps of Engineers, Final Environmental Impact Statement: Alaska Stand Alone Gas Pipeline, Volume 2 Sec. 5.20-70–71 (Oct. 2012) The Corps, in a 2012 EIS for an intrastate natural gas pipeline in Alaska, estimated downstream emissions from combustion of the natural gas that would be transported, and also discussed the potential for natural gas to displace other, dirtier fuel sources such as coal and oil.) U.S. Department of State, Final Supplemental Environmental Impact Statement for the Keystone XL Project, § 4.14.3, Appendix U (Jan. 2014)(The Department of State, as lead agency on the Keystone XL Pipeline Review conducted a relatively comprehensive life-cycle greenhouse gas analysis for the proposed pipeline, alternatives, and baseline scenarios that could occur if the pipeline was not constructed.) U.S. Environmental Protection Agency Region X, Letter from Dennis McLerran, Regional Administrator, to Randel Perry, U.S. Army Corps of Engineers Seattle District, re Gateway Pacific Projects (Jan 22, 2013) *available at:* http://www.eisgatewaypacificwa.gov/sites/default/files/content/files/EPA_Reg10_McLerran.pdf#overlay-context=resources/project-library. (EPA submitted comments on the scope of impacts that should be evaluated in the coal terminal EIS that the Corps is preparing, in which it urged the Corps to conduct a lifecycle emissions analysis of GHG emissions from the coal that would be transported via the terminal.)

clearly reflected in the CEQ Guidance on Climate Change. 81 Fed. Reg. 51,866 at 11 (Aug. 5, 2016) ("This guidance recommends that agencies quantify a proposed agency action's projected direct and indirect GHG emissions. Agencies should be guided by the principle that the extent of the analysis should be commensurate with the quantity of projected GHG emissions and take into account available data and GHG quantification tools that are suitable for and commensurate with the proposed agency action").[7]

It is reasonably foreseeable, as opposed to speculative, that this lease sale will induce oil and natural gas production, transmission and ultimate end-user climate change impacts. The effects of this induced production must be considered in an EA, and in fact, necessitate a more robust review under an EIS. *See, e.g., N. Plains Res. Council, Inc.*, 668 F.3d at 1081-82 (finding that NEPA review must consider induced coal production at mines, which was a reasonably foreseeable effect of a project to expand a railway line that would carry coal, especially where company proposing the railway line anticipated induced coal production in justifying its proposal); *Mid States Coal. for Progress*, 345 F.3d at 549-50 (environmental effects of increased coal consumption due to construction of a new rail line to reach coal mines was reasonably foreseeable and required evaluation under NEPA). The development of an area for lease and subsequent oil and gas production would certainly result in combustion of the extracted product. As courts have held in similar contexts, combustion emissions resulting from opening up a new area to development are "reasonably foreseeable," and therefore a "proximate cause" of the leasing. *See Mid States Coal. for Progress*, 345 F.3d at 549 (holding that agency violated NEPA when it failed to disclose and analyze the future coal combustion impacts associated with the agency's approval of a railroad line that allowed access to coal deposits); *High Country Conserv'n Advocates*, 52 F. Supp. 3d at 1197 (same with respect to GHG emissions resulting from approval of coal mining exploration project); *San Juan Citizens Alliance*, 326 F. Supp. 3d at1244 (holding that BLM violated NEPA when it failed to estimate the downstream (indirect) greenhouse gas emissions from the combustion of oil and gas produced from the leases).

In both *Mid States Coalition* and *High Country*, the courts rejected the government's rationale that increased emissions from combustion of coal was not reasonably foreseeable because the same amount of coal would be burned without opening up the areas at issue to new coal mining. Both courts found this argument "illogical at best" and noted that "increased availability of inexpensive coal will at the very least make coal a more attractive option to future entrants into the utilities market when compared with other potential fuel sources, such as nuclear power, solar power, or natural gas." See *High Country*, 52 F. Supp. 3d at 1197 (quoting *Mid States Coalition*, 345 F.3d at 549). "On similar grounds, the development of new wells over the

[7] *High Country Conservation Advocates v. U.S. Forest Serv*., 52 F. Supp. 3d 1174 (D. Colo. 2014) (Court held that the agencies' failure to quantify the effect of greenhouse gas (GHG) emissions from the mining lease modifications was arbitrary in violation of NEPA because the social cost of carbon protocol tool existed for such analysis under 40 C.F.R. § 1502.23 but the agencies did not provide reasons in the final EIS for not using the tool; and that the agencies' decision to forgo calculating the foreseeable GHG emissions was arbitrary in light of their ability to perform such calculations and their decision to include a detailed economic analysis of the benefits.) *See also Diné Citizens Against Ruining Our Env't v. United States Office of Surface Mining Reclamation & Enf't*, 82 F. Supp. 3d 1201, 1213-1218 (D. Colo. 2015) (Court held that the agency failed to adequately consider the reasonably foreseeable combustion-related downstream effects of the proposed action. Also held that that combustion emissions associated with a mine that fed a single power plant were reasonably foreseeable because the agency knew where the coal would be consumed).

proposed areas for lease will increase the supply of [oil and natural gas]. At some point this additional supply will impact the demand for [oil and gas] relative to other fuel sources, and [these minerals] that otherwise would have been left in the ground will be burned. This reasonably foreseeable effect must be analyzed, even if the precise extent of the effect is less certain." *Id. See also WildEarth Guardians v. United States Office of Surface Mining, Reclamation & Enf't*, 104 F. Supp. 3d 1208, 1229-30 (D. Colo. 2015) (coal combustion was indirect effect of agency's approval of mining plan modifications that "increased the area of federal land on which mining has occurred" and "led to an increase in the amount of federal coal available for combustion.").[8]

In September 2017, the Tenth Circuit Court of Appeals for the Tenth Circuit similarly reaffirmed in strikingly clear language that NEPA does not allow the BLM to dismiss downstream combustion effects of fossil fuel leasing decisions based on the unsupported assumption that leasing actions will have no net effect on greenhouse gas emissions. In *Wildearth Guardians v. U.S. Bureau of Land Management*, the Court of Appeals ruled unanimously that BLM "failed to comply with NEPA when it concluded that issuing the leases would not result in higher national carbon dioxide emissions than would declining to issue them."[9] The BLM cannot ignore basic economic principles and assume that there will be no net effect on oil and gas production, markets, price, and ultimate consumption when it opens new federal minerals to oil and gas exploration and development. In a similar context, the D.C. Circuit Court of Appeals recently rejected a Federal Energy Regulatory Commission NEPA review where the agency refused to study the market effects of the Sabal Trail natural gas pipeline. *Sierra Club v. FERC*, 867 F.3d 1357, 1375 (D.C. Cir. 2017) ("An agency decisionmaker reviewing this EIS would thus have no way of knowing whether total emissions, on net, will be reduced or increased by this project, or what the degree of reduction or increase will be. In this respect, then, the EIS fails to fulfill its primary purpose. In this respect, then, the EIS fails to fulfill its primary purpose.").

Even if it were true that potential emissions cannot reasonably be estimated, or estimated with a high degree of accuracy, it is possible for BLM to identify significant sources of greenhouse gas emissions, which would enable the identification of specific measures to reduce emissions and an understanding of the extent to which certain emissions are avoidable. The extreme urgency of the climate crisis requires BLM to pursue all means available to limit the climate change effects of its actions. Any emissions source, no matter how small, is potentially significant, such that BLM should fully explore mitigation and avoidance options for all sources.

By delaying quantification until after a lease is issued, BLM may prejudice the consideration of alternatives or leasing stipulations that would avoid or reduce greenhouse gas emissions to an

[8] *See also* Council on Environmental Quality's Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews, 81 Fed. Reg. 51,866 at 14 (Aug. 5, 2016)(For example, NEPA reviews for proposed resource extraction and development projects typically include the reasonably foreseeable effects of various phases in the process, such as clearing land for the project, building access roads, extraction, transport, refining, processing, using the resource, disassembly, disposal, and reclamation. Depending on the relationship between any of the phases, as well as the authority under which they may be carried out, agencies should use the analytical scope that best informs their decision making.)

[9] *WildEarth Guardians v. Bureau of Land Mgmt.*, 870 F. 3d 1222, 1236 (10th Cir. 2017); s*ee also MEIC v. OSM*, 2017 WL 3480262, ---F.Supp.3d--- (D. Mont. 2017).

extent not otherwise available after leasing. BLM has long (but incorrectly) maintained that leasing stipulations can only be imposed with the issuance of the lease. Thereafter, purportedly, its authority to condition drilling is limited to "reasonable measures" or "conditions of approval" that may not be "[in]consistent with lease rights granted." 43 C.F.R. § 3101.1-2. Cost-prohibitive measures could therefore potentially be barred. Further, measures to "minimize" impacts may be imposed, but those may not necessarily avoid impacts altogether. *Id*. Waiting until the drilling stage could also be too little too late, as various other actions may occur between leasing and drilling, such as the execution of unit agreements, or construction of roads or pipelines, all of which may narrow mitigation options available at the drilling stage. *See William P. Maycock et al.*, 177 IBLA 1, 20-21 (Dec. Int. 2008) (holding that unit agreements limit drilling-stage alternatives).

The calculations of potential lifecycle greenhouse gas emissions detailed above for this lease sale yield an enormous and significant number totaling over 26 million $MTCO_2E$. This is equivalent to the emissions of almost seven coal-fired power plants operating for one year.[10] These emissions are clearly significant, as detailed above. BLM has failed to provide any analysis of the severity or significance past reported greenhouse gas emissions of leasing decisions. One widely used approach to evaluating the impact of GHG emissions is to estimate the costs of those emissions to society. The federal Interagency Working Group on the Social Cost of Carbon has developed estimates of the present value of the future costs of carbon dioxide, methane, and nitrous oxide emissions as a proxy for the magnitude and severity of those impacts.[11] These tools are easy to use by agencies, easy to understand by the public, and supported by years of peer-reviewed scientific and economic research. The EPA and other federal agencies have used these social cost protocols to estimate the effects of rulemakings on climate, and certain BLM field offices have used these tools in project level NEPA analysis. These protocols estimate the global financial cost of each additional ton of GHG pollution emitted to the atmosphere, taking into account factors such as diminished agricultural productivity, droughts, wildfires, increased intensity and duration of storms, ocean acidification, and sea-level rise.[12]

An agency must "consider every significant aspect of the environmental impact of a proposed action." *Baltimore Gas & Elec. Co. v. Natural Resources Defense Council*, 462 U.S. 87, 107 (1983) (quotations and citation omitted). This includes the disclosure of direct, indirect, and cumulative impacts of its actions, including climate change impacts and emissions. 40 C.F.R. § 1508.25(c). The need to evaluate such impacts is bolstered by the fact that "[t]he harms associated with climate change are serious and well recognized," and environmental changes caused by climate change "have already inflicted significant harms" to many resources around the globe. *Massachusetts v. EPA*, 549 U.S. 497, 521 (2007); *see also id*. at 525 (recognizing "the enormity of the potential consequences associated with manmade climate change."). Failing to

[10] U.S. Environmental Protection Agency, Greenhouse Gas Equivalencies Calculator (2017) *available at*: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.
[11] *See* Interagency Working Group on the Social Cost of Carbon, United States Government, Technical Support Document: Technical Update on the Social Cost of Carbon for Regulatory Impact Analysis – Under Executive Order 12866 (May 2013) at 2 (hereinafter 2013 TSD); Interagency Working Group on Social Cost of Greenhouse Gas, United States Government, Addendum to Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis under Executive Order 12866: Application of the Methodology to Estimate the Social Cost of Methane and the Social Cost of Nitrous Oxide (August 2016) (last visited October 30, 2016).
[12] U.S. Environmental Protection Agency, The Social Cost of Carbon (accessed May 18, 2016).

perform such analysis undermines the agency's decision-making process and the assumptions made.

Finally, and in addition to life-cycle emissions analysis, BLM must analyze the climate effect of methane leakage in Utah. Indeed, an assessment of methane emissions for the Uintah Basin, based on atmospheric measurements, revealed a disturbingly high methane leakage rate of between 6.2 percent and 11.7 percent of total gas production.[13] As noted by the authors, this leakage rate not only "negates any short-term (<70 years) climate benefit of natural gas from this basin for electricity generation compared to coal and oil," but also creates a safety and air pollution hazard as mentioned above. These impacts, combined with upstream and downstream fossil fuel combustion associated with oil and gas development must be analyzed prior to leasing the parcels.

VIII. BLM Must Analyze the Environmental Justice Impacts of Ozone Pollution in the Vernal Field Office that will result from the March 2019 Lease Sale.

Executive Order 12,898 requires that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." U.S. National Archives and Records Administration, Presidential Documents, Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, Exec. Order No 12898. The Vernal RMP-FEIS indicates that 3,725 members of the Ute Tribe reside in the Uintah and Ouray Reservation encompassing towns and municipalities in addition to the settlement of Ouray, which is located within the non-attainment area. *See* Vernal RMP FEIS at 3-20.[14] Previous NEPA documents prepared by BLM have failed to adequately address air quality impacts generally, and ozone impacts specifically, to environmental justice communities living near the proposed parcels. *See* Center for Biological Diversity *et al.* Supplemental Protest of BLM December 12th, 2017 Utah Vernal and Price Field Offices' Competitive Oil and Gas Lease Sale, Environmental Assessments (DOI-BLM-UT-G010-2017-0028-EA and DOI-BLM-UT-G020-2017-0030-EA at 5-7 (submitted to BLM on Dec. 4, 2017) (attached). Given the non-attainment designation for the area, as well as the various health impacts associated with degraded air quality resulting from oil and gas development, BLM must conduct environmental justice analysis required by Executive Order 12,898 prior to leasing the proposed parcels.

IX. BLM's Treatment of Cultural Resources Violated the NHPA and NEPA.

BLM has dual obligations when considering the impacts of its undertakings on cultural resources. Pursuant to Section 106 of the NHPA, BLM must "make a reasonable and food faith effort" to identify cultural resources that may be affected by an undertaking. 36 C.F.R. § 800.4(b)(1). Pursuant to NEPA, BLM "must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken," 40

[13] Karion, Anna et al., Methane Emissions Estimate From Airborne Measurements Over a Western United States Natural Gas Field, 40 Geophysical Research Letters 4393 (2013).
[14] *See also* Center December, 2018 Parcel Map *available at:* http://center.maps.arcgis.com/apps/View/index.html?appid=cb4041aec4a64ac4bcfcf8fdd765edad.

C.F.R. § 1500.1(b), and must take a "hard look" at the effects of the proposed action. *Silverton Snowmobile Club v. U.S. Forest Serv.*, 433 F.3d 772, 781 (10th Cir. 2006). BLM must comply with both statutes at the leasing stage.

A. National Historic Preservation Act.

Congress enacted the NHPA in 1966 to implement a broad national policy encouraging the preservation and protection of America's historic and cultural resources. *See* 54 U.S.C. § 300101. The heart of the NHPA is Section 106, which prohibits federal agencies from approving any federal "undertaking" unless the agency takes into account the effects of the undertaking on historic properties that are included in or eligible for inclusion in the National Register of Historic Places. 54 U.S.C. §§ 306108, 300320; *see also Pueblo of Sandia v. United States*, 50 F.3d 856, 859 (10th Cir. 1995). Section 106 is a "stop, look, and listen provision" that requires federal agencies to consider the effects of their actions and programs on historic properties and sacred sites before implementation. *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 805 (9th Cir. 1999); *see also Valley Cmty. Pres. Comm'n v. Mineta*, 373 F.3d 1078, 1085 (10th Cir. 2004). The procedural nature of Section 106 reinforces the importance of strict adherence to the binding process set out in the NHPA regulations: "While [the NHPA] may seem to be no more than a 'command to consider,' … the language is mandatory and the scope is broad." *United States v. 162.20 Acres of Land, More or Less*, 639 F.2d 299, 302 (5th Cir. 1981).

To adequately "take into account" the impacts on archeological resources, all federal agencies must comply with binding Section 106 regulations established by the Advisory Council on Historic Preservation ("Advisory Council").[15] Under these regulations, the first step in the Section 106 process is for an agency to determine whether the "proposed [f]ederal action is an undertaking as defined in [Section] 800.16(y)." 36 C.F.R. § 800.3(a). Undertakings include any permit or approval authorizing use of federal lands. *Id.* § 800.16(y). If the proposed action is an undertaking, the agency must determine "whether it is a type of activity that has the potential to cause effects on historic properties." *Id.* § 800.3(a). An effect is defined broadly to include direct, indirect and/or cumulative adverse effects that might alter the characteristics that make a cultural site eligible for listing in the National Register of Historic Places. *See id.* § 800.5(a)(1); *id.* § 800.16(i); 65 Fed. Reg. 77,698, 77,712 (Dec. 12, 2000).

The agency next "[d]etermine[s] and document[s] the area of potential effects" and then "[r]eview[s] existing information on historic properties within [that] area." 36 C.F.R. § 800.4(a)(1)-(2). "Based on the information gathered, . . . the agency . . . shall take the steps necessary to identify historic properties within the area of potential effects." *Id.* § 800.4(b). "The agency shall make a reasonable and good faith effort to carry out appropriate identification efforts." *Id.* § 800.4(b)(1).

[15] The Advisory Council, the independent federal agency created by Congress to implement and enforce the NHPA, has exclusive authority to determine the methods for compliance with the NHPA's requirements. *See Nat'l Ctr. for Pres. Law v. Landrieu*, 496 F. Supp. 716, 742 (D.S.C. 1980), *aff'd per curiam*, 635 F.2d 324 (4th Cir. 1980); *CTIA-Wireless Ass'n v. F.C.C.*, 466 F.3d 105, 115 (D.C. Cir. 2006) ("[T]he Advisory Council regulations command substantial judicial deference.") (quotations and citations omitted). The Advisory Council's regulations "govern the implementation of Section 106" for all federal agencies. *Nat'l Ctr. for Pres. Law*, 496 F. Supp. at 742; *see also Nat'l Trust for Historic Pres. v. U.S. Army Corps of Eng'rs*, 552 F. Supp. 784, 790-91 (S.D. Ohio 1982).

If the undertaking is a type of activity with the potential to affect historic properties then the agency must determine whether in fact those properties "may be affected" by the particular undertaking at hand. *Id.* § 800.4(d)(2).[16] Having identified the historic properties that may be affected, the agency considers whether the effect will be adverse, using the broad criteria and examples set forth in section 800.5(a)(1). Adverse effects include the "[p]hysical destruction of or damage to all or part of the property," as well as "[i]ntroduction of visual, atmospheric or audible elements that diminish the integrity of the property's historic significant historic features." *Id.* § 800.5(a)(2)(i) & (2)(v). If the agency concludes that the undertaking's effects do not meet the "adverse effects" criteria – that is, the agency concludes that there *may* not be an adverse effect from the undertaking – it is to document that conclusion and propose a finding of "no adverse effects." *Id.* § 800.5(b), 800.5(d)(1).

If the agency official concludes that there *may be* an adverse effect, it engages the public and consults further with the state historic preservation officer, Native American tribes, consulting parties, and the Advisory Council in an effort to resolve the adverse effects. *Id.* §§ 800.5(d)(2), 800.6.

On December 11, 2018, SUWA requested to be a consulting party for the March 2019 oil and gas lease sale. *See* Letter from Laura Peterson, Staff Attorney, SUWA to Kent Hoffman, Deputy State Director, Lands and Minerals, BLM (Dec. 11, 2018) (attached). **SUWA reserves the right to supplement these comments when it has received and reviewed the Cultural Resources Report documenting BLM's compliance with the NHPA's binding Section 106 regulations**.

B. BLM Failed to Take a Hard Look at Impacts to Cultural Resources Pursuant to NEPA

In addition to BLM's obligations under the NHPA, NEPA requires BLM to take a "hard look" at the environmental effects of a proposed action. *Silverton Snowmobile Club*, 433 F.3d at 781. An EA must demonstrate "the agency's thoughtful and probing reflection of the possible impacts associated with the proposed project." *Id.* (quoting *Comm. To Preserve Boomer Lake Park v. Dep't of Tramsp.*, 4 F.3d 1543, 1553 (10th Cir. 1993)). "General statements about 'possible' effects … do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided." *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998). BLM must analyze all potential direct, indirect, and cumulative impacts to cultural resources.

As discussed above, BLM must undertake legally sufficient comprehensive NEPA analysis before deciding to offer, sell and issue the leases because subsequent approvals by BLM will not be able to completely eliminate potential impacts to cultural resources. "If BLM has not retained the authority to preclude *all* surface disturbing activity, then the decision to lease is itself the point of 'irreversible, irretrievable commitment of resources.'" *Union of Oil Co. of Cal.*, 102 IBLA at 189. BLM – even with attached lease stipulations and notices – does not retain the

[16] The agency may also determine that there are no historic properties present or there are historic properties present but the undertaking will have no effect upon them, at which point it consults with the State Historic Preservation Officer and notifies relevant Native American tribes of its conclusion. *Id.* § 800.4(d)(1).

authority to preclude all surface disturbing activity on the lease parcels. Accordingly, it must take a hard look at impacts to cultural resources at the leasing stage. It has not done so here.

BLM's discussion of direct and indirect impacts to cultural resources is wholly insufficient. The EA contains only a cursory discussion of potential impacts to cultural resources, noting that there may be direct impacts from "ground disturbing activities within site boundaries, or indirect impacts to cultural resources sensitive to visual and other indirect effects." EA at 39. The EA does not provide any more detail on potential impacts, instead stating that future undertakings will be subject to project-specific NEPA. For instance, BLM does not discuss potential impacts from road construction or improvement affiliated with oil and gas development or increased visitation and attendant impacts resulting from those new or improved roads. BLM also does not discuss potential visual or audible impacts to cultural sites. The EA merely states that there may be direct and indirect impacts to cultural resources without specifying or quantifying what those impacts may be. These general statements hardly reflect BLM's "thoughtful and probing reflection of possible impacts" associated with oil and gas development.

Further, BLM cannot avoid its "hard look" obligation by referencing future NEPA and lease notices. First, BLM cannot preclude all surface disturbance on the leases, a lessee "has the right to use as much of the leased land as necessary to explore for, extract, remove, and dispose of oil and gas deposits located under the leased lands," subject to some restrictions. EA at 5. The EA references Utah Lease Notice 68 which is both not legally enforceable, *see* 43 C.F.R. § 3101.1-3, and permissive. It states that only that BLM "*may* require modifications to exploration and development proposals." EA App. B. Second, attaching lease stipulations does not supplant BLM's duty under NEPA to analyze potential impacts to cultural resources. *Cf. Mont. Wilderness Ass'n v. Fry*, 310 F. Supp. 2d 1127, 1152 (D. Mont. 2004) ("[L]ike NEPA, NHPA is a procedural statute. . . . Lease stipulations do not accomplish the same goal [as the NHPA], and cannot replace BLM's duties under NHPA."). Because BLM cannot preclude – and may allow – impacts to cultural resources, it must take a "hard look" at impacts to cultural resources *before* leasing. It has not done so here.

X. The Proposed Lease Sale Violates FLPMA's Requirement for Consistency with Approved Resource Management Plans.

Multiple parcels proposed for lease within the BLM Vernal field office fall within areas designated for greater sage-grouse habitat management under BLM's 2015 Utah Greater Sage-Grouse Approved Resource Management Plan Amendments ("ARMPA"). Although those management plans have recently been proposed for further amendment, until that process is complete, the 2015 remains in place and binding on BLM implementation actions such as fluid mineral leasing.

> Of the 96 proposed lease parcels, 94 were within designated greater sage-grouse (GRSG) habitat management areas. GRSG habitat is classified between Priority Habitat Management Areas (PHMA) and General Habitat Management Areas (GHMA). PHMA are BLM-administered lands that are identified as having the highest value for maintaining sustainable GRSG populations and include breeding, late brood-rearing, winter concentration areas, and migration or

> connectivity corridors, and GHMA are BLM-administered lands that include areas of occupied seasonal or year-round habitat outside of PHMA (ARMPA 5-7 and 5-15). Four parcels were encompassed by PHMA totaling 4,817.9 acres (Map 3-1), 90 parcels included portions of GHMA totaling 80,193.8 acres.

EA at 24.

Despite the presence of designated habitat across the vast majority of the proposed lease area, the March 2019 Lease Sale EA, neither provides meaningful analysis of the potential impacts to sage-grouse seasonal habitats, populations and metapopulations, nor does it comply with the BLM's mandatory requirement under the ARMPA to "prioritize leasing and development" outside of sage-grouse habitats. In particular, BLM's ostensible "prioritization process," in Appendix G of the EA, consists of a completely unexplained table of factors, without either any assessment or weighing of those factors nor consideration of any alternative other than leasing of all proposed parcels.

The land use planning mandate of FLPMA, 43 U.S.C. §§ 1732(a), (b), and the plan consistency regulation thereunder, 43 C.F.R. § 1610.5-3(a), render compliance with operational limits enshrined in an amended land use plan a specific nondiscretionary duty for purposes of the lease conditions rule. FLPMA provides that "[t]he Secretary shall manage the public lands under principles of multiple use and sustained yield, in accordance with the land use plans developed by him under section 1712 of this title." 43 U.S.C. § 1732(a). BLM regulations provide that all site-specific actions (including drilling permit issuance) correspond to those plans. 43 C.F.R. § 1610.5-3(a) ("All future resource management authorizations and actions, as well as budget or other action proposals to higher levels in the Bureau of Land Management and Department, and subsequent more detailed or specific planning shall conform to the approved plan."). Land use planning and plan consistency is specific and mandatory under FLPMA.

BLM's proposed decision to lease priority habitat management areas for greater sage-grouse habitat fails to conform to BLM's Utah Greater Sage-Grouse Resource Management Plan Amendments, specifically the mandate to "[p]rioritize the leasing and development of fluid mineral resources outside of GRSG habitat." Utah ARMPA at 1-11. The conservation measures in the Great Basin ROD and UT ARMPA are two key parts of the federal government's strategy to preserve the greater sage-grouse, which the BLM has stated "offers the highest level of protection for GRSG in the most important habitat areas." Great Basin ROD at S-1. Furthermore, "[t]he cumulative effect of these measures is to conserve, enhance, and restore GRSG [greater sage-grouse] habitat across the species' remaining range in the Great Basin Region and to provide greater certainty that BLM management plan decisions in GRSG habitat in the Great Basin Region can lead to conservation of the GRSG and other sagebrush-steppe associated species in the region." Great Basin ROD at S-2. Ultimately, "[t]he goal is to achieve the COT Report objective of 'conserv[ing] the sage-grouse so that it is no longer in danger of extinction or likely to become in danger of extinction in the forseeable future.'" *Id*.

> The Great Basin ROD explains why prioritization is necessary:
> In addition to allocations that limit disturbance in PHMAs and GHMAs, the ARMPAs prioritize oil and gas leasing and development outside of identified

> PHMAs and GHMAs to further limit future surface disturbance and to encourage new development in areas that would not conflict with GRSG. ***This objective is intended to guide development to lower conflict areas and, as such, protect important habitat and reduce the time and cost associated with oil and gas leasing development.*** It would do this by avoiding sensitive areas, reducing the complexity of environmental review and analysis of potential impacts on sensitive species, and decreasing the need for compensatory mitigation.

Great Basin ROD at 1-23 (emphasis added).

The Utah ARMPA contains "goals, objectives, land use allocations, and management actions established for protecting and preserving GRSG and its habitat on public lands managed by the BLM in Utah." Utah ARMPA at 2-2. Its Objective MR 1 states, "Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of PHMAs and GHMAs. When analyzing leasing and authorizing development of fluid mineral resources, including geothermal, in PHMAs and GHMAs, that are subject to applicable stipulations for the conservation of GRSG, priority will be given to development in non-habitat areas first and then in the least suitable habitat for GRSG." UT ARMPA at 2-25. Nothing in the EA nor in Appendix G satisfies this requirement – a bare listing of factors, without any analysis, nor consideration of factors such as the quality and importance of habitat for particular populations, fails to meet the ARMPA requirement to identify the most and least suitable habitat.

In the EA, BLM acknowledges that, based on ongoing interagency data collection, multiple proposed parcels may have particularly high importance for sustaining sage-grouse populations:

> Currently, BLM, UDWR, USFS, USU, and BYU are accumulating field observations and inventories, radio-telemetry and GPS data, and habitat assessments to refine habitat areas that are identified as having high value to maintaining sustainable GRSG populations (PHMA). These areas include breeding, late brood-rearing, winter concentration areas, and migration or connectivity corridors. In conversations with UDWR, there are telemetry and GPS data that show birds moving between Utah and Wyoming and also Utah and Colorado. The proposed lease sale parcels that have a higher likelihood of being influenced by seasonal or even inter-seasonal migrations of GRSG (across state boundaries) and are located within the PHMA may include 226, 227, 228, 229, 381, 382, 383, and 384. Other parcels that may be influenced by GRSG migration (across state boundaries) and are located in GHMA (only because they are near the state border- no telemetry data) include 170, 171, 172, 173, 175, 176, 177, 178, 179, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 211, 212, 213, 214, 305, 309, and 337.

EA at 31. Nevertheless, BLM not only fails to prioritize leasing outside of these high-value habitat areas, it unlawfully fails to even consider, EA at 9-10, any alternative that would withhold high-value and/or potentially high-value seasonal habitats from leasing and resulting disturbance. EA at 45-46.

XI. BLM Failed to Take a Hard Look at Impacts to Graham's and White River Penstemons.

The March 2019 Lease Sale EA fails to take a hard look at impacts to the candidate Graham's and White River penstemons. The EA, and proposed stipulations, fail to either adequately disclose or mitigate impacts to these species from oil and gas development. BLM must take a hard look at listed plant impacts in an EIS, and must consult with the Fish and Wildlife Service under ESA Section 7(a)(2) to ensure its action will not cause jeopardy to these species or adverse modification of their critical habitat. Lease Notices 90 and 134 provide notice to operators that they will be requested to comply with measures in the 2014 Conservation Agreement for Graham's Beardtongue and White River Beardtongue. They do not, however, retain BLM's authority to prohibit surface occupancy, nor do they address or acknowledge substantial new information regarding the status of those species and the inadequacy of the Conservation Agreement.

As of July 2014, 27% and 13% of all known Graham's and White River beardtongue habitat, respectively, occurred on lands that already had been leased by BLM or the States of Colorado and Utah for oil and gas development.[17] Given rapidly increasing oil and gas production in the region over the past two decades and current exploration occurring in beardtongue habitat, FWS expects oil and gas activity to pose an increasing threat.[18] Although the Fish and Wildlife Service withdrew these beardtongues from proposed ESA listing largely in reliance on a conservation agreement, the BLM still has the duty under its Manual and sensitive species policy to conserve the species.

The Fish and Wildlife Service previously proposed these two beardtongues for listing under the Endangered Species Act, then withdrew the proposed leasing largely in reliance on a conservation agreement among various state and federal entities. The U.S. District Court for the District of Colorado has since vacated the Service's decision to withdraw listing, based on improper reliance on uncertain and/or ineffective conservation measures. Therefore, the BLM should defer from all parcels overlapping Graham's beardtongue and/or White River beardtongue proposed critical habitat. The Conservation Agreement for those species relied on in the EA was invalidated by the United States District Court for the District of Colorado. *See Rocky Mountain Wild v. Walsh*, 216 F. Supp. 3d 1234 (D. Colo. 2016), which held that the United States Fish and Wildlife Service ("FWS") violated the Endangered Species Act by:

> 1) "[C]oncluding that yet-to-be-enacted regulatory and non-regulatory measures mandated by the Conservation Agreement were 'existing regulatory mechanisms';
>
> 2) "[F]ailing to account for the [Conservation] Agreement's expiration when determining whether the beardtongues face material threats in the 'foreseeable future'"; and

[17] 79 Fed. Reg. at 46,077.

[18] 79 Fed. Reg. at 46,077 ("substantial numbers of Graham's and White River beardtongue individuals (and their habitat) occur in areas that are leased for oil and gas development (Tables 5 and 6), and thus it is reasonable to conclude that the impacts of oil and gas activity will increase in the future as additional areas are developed.")

3) Failing to take "into account economic considerations when imposing a 300-foot buffer zone around each beardtongue."

Rocky Mountain Wild, 216 F. Supp. 3d at 1237. The March 2019 lease sale improperly continues to rely on the measures in the Conservation Agreement that the court found insufficient to justify a decision not to list the two species under the ESA. *See* EA at 48. Therefore, BLM should defer from leasing all parcels in Graham's and White River beardtongue habitat until either a modified Conservation Agreement is prepared or FWS reexamines whether the species should be listed as threatened or endangered under the ESA.

The existing Conservation Agreement seeks "to identify, avoid, minimize, and mitigate potential threats to Graham's and White River beardtongues and their habitats, and to promote the species' long-term persistence, thereby preventing the need for listing either species." Conservation Agreement at 1. To achieve this goal, the Conservation Agreement establishes the following objectives:

- Minimize and mitigate direct, indirect, and cumulative threats to both species.
- Establish conservation areas that protect occupied and unoccupied habitat.
- Promote stable or increasing populations within identified conservation areas and across the range of the two species.
- Investigate and demonstrate successful ecological restoration methods for transplanting and repopulating self-sustaining Graham's and White River beardtongue plant populations and community associates . . . and pollinators following surface disturbance.[19]

The EA fails to take a hard look at any of these four objectives. The management strategy for these conservation areas is set forth in twenty-nine "conservation actions" including the following:

- A maximum of 5% new surface disturbance for Graham's beardtongue and 2.5% new surface disturbance for White River beardtongue will be allowed per conservation unit from the date this Agreement is signed.
- Ground-disturbing activities will avoid Graham's and White River plants by 300 feet both inside and outside designated conservation areas.[20]

The EA makes cursory acknowledgment that parcels contain Graham's and White River beardtongues, March 2019 Lease Sale EA at 48, but does not meet the Agreement's management strategy. It does not minimize or mitigate the direct, indirect, and cumulative impacts to the species. Instead, it postpones any and all meaningful analysis to some unknown date and applies questionably-enforceable Lease Notices to lease parcels which are found to contain either

[19] U.S. Fish and Wildlife Service et al., Conservation agreement and strategy for Graham's beardtongue (*Penstemon grahamii*) and White River Beardtongue (*P. scariosus* var. *albifluvis*) 2 (July 2014) https://www.fws.gov/mountain-prairie/species/plants/2utahbeardtongues/Penstemon_Conservation_Agreement_2014Jul22_final_signed.pdf.
[20] Conservation Agreement at 18; *see also id.* at 19-25.

species' habitat.[21] Simply noting that BLM will comply with the Conservation Agreement does not constitute a "hard look" at impacts to these species.

BLM cannot assure that the leasing of additional land in beardtongue habitat will not violate the 5% or 2.5% maximum new surface disturbance threshold. Moreover, leasing these parcels is a direct violation of the Conservation Agreement's stated objective to "[p]romote stable or increasing populations within identified conservation areas and across the range of the two species." In proposing both species' for listing under the ESA, FWS stated that "Graham's and White River beardtongues are particularly vulnerable to the effects of energy development because their ranges overlap almost entirely with oil shale and tar sands development areas, as well as ongoing traditional oil and gas drilling."[22]

The Conservation Agreement also identified oil and gas exploration and development as a serious threat to Graham's and White River beardtongue habitat and long-term viability.[23] Moreover, road construction and maintenance, invasive weeds, off-road vehicles, habitat fragmentation, and climate change – all factors exacerbated by the leasing of parcels in these areas – also threaten both species' habitat and ability to survive in the long-term. *Id.* The EA does not discuss or analyze any of these issues, and thus fails either to take a hard look at impacts under NEPA or to meet BLM's conservation obligations under the Sensitive Species Policy and the Conservation Agreement.

SUWA appreciates BLM's consideration of these comments and prompt attention to the matters discussed herein.

Sincerely,

Landon Newell
Laura Peterson

[21] *See Sierra Club v. Peterson*, 717 F.2d 1409, 1413 (D.C. Cir. 1983) (federal agencies cannot "foreshorten[] [their] view of the impacts which could result from the act of *leasing*"); *N.M. ex rel. Richardson*, 565 F.3d at 717-19 (issuing leases without Non-Surface Occupancy stipulations constitutes an irretrievable commitment of resources).
[22] 78 Fed. Reg. at 47598; *see also id.* at 47600 ("The impacts of traditional oil and gas development on Graham's and White River beardtongues are expected to be high.").
[23] *See* Conservation Agreement at 19.