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April 19, 2012

Sent via Overnight Federal Express Delivery (comments and exhibits) and Electronic Mail (comments only)

August 2012 Oil & Gas Lease EA
Attn: Barb Sharrow, Field Office Manager
U.S. Bureau of Land Management
Uncompahgre Field Office
2465 South Townsend Avenue
Montrose, Colorado 81401

Helen Hankins, State Director
Bureau of Land Management
Colorado State Office
2850 Youngfield Street
Lakewood, CO 80215

Re: DOI-BLM-CO-S050-2012-0009 EA
Comments Regarding August 2012 Oil and Gas Lease Preliminary EA and Draft FONSI

Dear Ms. Sharrow and Ms. Hankins:

The following comments are submitted on behalf of Citizens for a Healthy Community in response to the Bureau of Land Management ("BLM") Uncompahgre Field Office ("UFO") Preliminary Environmental Assessment ("EA") and Draft Finding of No Significant Impact ("FONSI") prepared for the August 2012 Oil and Gas Lease Sale, identified as: DOI-BLM-CO-S050-2012-0009 EA.

Citizens for a Healthy Community ("CHC") is a grass-roots organization formed in 2010 for the purpose of protecting people and their environment from irresponsible oil and gas development in the Delta County region. CHC's members and supporters include organic farmers, ranchers, vineyard and winery owners, sportsmen, realtors, and other concerned citizens impacted by oil and gas development. CHC members have been actively involved in commenting on BLM's oil and gas activities.

First and foremost, CHC hereby incorporates by reference the scoping comments and exhibits (hereinafter Scoping Exhibits) that CHC submitted to BLM on February 8, 2012. These comments included 51 pages and 71 exhibits of analysis and supporting expert reports on topics and impacts that we believe are fundamental to BLM's review of the proposed August 2012 Lease Sale. Indeed, the proposed Lease Sale in the North Fork Valley – which includes the sale of 22 parcels and approximately 30,000 acres surrounding the communities of Crawford, Hotchkiss, and Paonia – received nearly 3,000 comment letters from individuals, organizations, and government agencies expressing concern with the proposal. *See* EA at 6. Of these comments, approximately 98% were opposed the proposed action, with BLM having identified only 43 comments as "pro" to oil and gas development. Nevertheless, BLM released its Preliminary EA and Draft FONSI on March 7, 2012 – less than one-month after the scoping comment deadline. CHC finds it hard to believe that BLM could have meaningfully reviewed and incorporated these 3,000 comments into its analysis in this timeframe, as is required under the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq*., and the recently reformed BLM oil and gas leasing policy. *See* U.S. Department of Interior, Bureau of Land Management Instruction Memorandum, No. 2010-117 (May 17, 2010) (attached as Exhibit 1); *see also* CEQ Regulations, 40 C.F.R. § 1503.4 (providing the framework for agency response to comments).

"NEPA's public comment procedures are at the heart of the NEPA review process" and reflect "the paramount Congressional desire to internalize opposing viewpoints into the decision making process to ensure that an agency is cognizant of all the environmental trade-offs that are implicit in a decision." *California v. Block,* 690 F.2d 753, 770-71 (9th Cir. 1982). Moreover, as the Tenth Circuit has provided: "The purpose behind NEPA is to ensure that the agency will only reach a decision on a proposed action after carefully considering the environmental impacts of several alternative courses of action and *after taking public comment into account*." *Forest Guardians v. U.S. Fish and Wildlife Service*, 611 F.3d 692, 717 (10th Cir. 2010) (emphasis added). If BLM fails to account for public comments and engage in meaningful public participation in the sale of our public lands, the agency will – as it has already – create mistrust regarding BLM's management of public lands and resources, as well as its responsibility to protect the lands and communities that surround public lands and resources, and act contrary to both the spirit and intent of NEPA. We therefore ask that BLM precisely explain how it reviewed and analyzed the 3,000 comments in that tight 30-day time period, how those comments were used to inform the agency's revisions to its EA and the agency's proposed action, and whether and how the agency took action to modify its analysis and proposed action in response to those comments. After review of the EA, and as detailed below, we conclude that BLM has taken a dismissive approach to public comments and not performed a good faith analysis but, rather, elevated form over function by using the NEPA process to rubber stamp a predetermined outcome.

Further, despite the fact that this proposal has generated tremendous public interest, BLM has failed to hold a single public meeting, either during the Scoping period or after the release of the Preliminary EA, to provide information and solicit public comment. CHC, and our conservation partners: High Country Citizens Alliance, NFRIA/WSERC Conservation Center, and Western Colorado Congress, have asked BLM to hold a public hearing during both of these periods. BLM denied our request during the Scoping period and has failed to respond to our request during the Preliminary EA comment period.

I. National Environmental Policy Act

A. The BLM is required to issue a moratorium on all oil and gas development in the Uncompahgre area for as long as the UFO RMP remains uncompleted.

Where, as here, there is a pending revision to the Resource Management Plan ("RMP") and environmental impact statement ("EIS") – updating the out-of-date and inoperable 1989 UFO RMP – NEPA establishes a duty "to stop actions that adversely impact the environment, that limit the choice of alternatives for the EIS, or that constitute an 'irreversible and irretrievable commitment of resources.'" *Conner v. Burford,* 848 F.2d 1441, 1446 (9th Cir. 1988). When an EIS is underway, as here, NEPA regulations established by the Council of Environmental Quality ("CEQ") prohibit an agency from taking any actions that would significantly impact the environment. 40 C.F.R. § 1506.1(c) (1997). As CHC provided in its Scoping Comments to BLM UFO, pursuant to these CEQ regulations:

> While work on a required program environmental impact statement is in progress and the action is not covered by an existing program statement, agencies shall not undertake in the interim any major Federal action covered by the program which may significantly affect the quality of the human environment unless such action:
>
> > (1) Is justified independently of the program;
> > (2) Is itself accompanied by an adequate environmental impact statement; and
> > (3) Will not prejudice the ultimate decision on the program. Interim action prejudices the ultimate decision on the program when it tends to determine subsequent development or limit alternatives.

40 C.F.R. §§ 1506.1(c)(1)-(3).

Proceeding with the August 2012 Lease Sale – or any other major Federal action covered by the stale 1989 RMP – is impermissible due to the inherent prejudice that this action will cause to the pending revision of the UFO RMP and EIS. Revision of the 1989 RMP is fundamental to the public land use decision-making process in the UFO – creating the foundation upon which all mineral resource management decisions are made – and in its current form is woefully incapable of performing this function. The 1989 RMP contains very little analysis of oil and gas drilling in the Uncompahgre area generally, much less any analysis of the impacts that could be caused by drilling in this particular area. *See* 1989 RMP at 28, 31. The 1989 RMP, accompanying EIS, and technical report for oil and gas simply did not analyze the site-specific impacts of gas development using today's modern extraction techniques – specifically the use of hydraulic fracturing, or fracking – much less any analysis of the parcels nominated in the August 2012 Lease Sale. *See* Scoping Comments at 10-14 (identifying the insufficiencies of the 1989 RMP); 15-22 (identifying myriad potential impacts from fracking). Moreover, there is no updated, current analysis that identifies what overall level of development – and the nature of that development (e.g., oil or natural gas, what technologies and drilling techniques, etc., would be used to extract resources) – is reasonably foreseeable. Without this analysis, it seems self evident that there is considerable uncertainty and controversy regarding the size, nature, and impacts of

further leasing, in particular relative to cumulative impacts.

BLM UFO itself recognizes these shortcomings, and has provided that "[p]reparation of the Uncompahgre RMP is necessary in order to respond to changing resource conditions, new issues, and federal policies, as well as to prepare a comprehensive framework for managing public lands administered by the UFO." BLM UFO, *Uncompahgre RMP Newsletter* (December 2009) (attached as Exhibit 2). "Management is becoming more complex due to the emergence of new issues of national significance, as well as heightened controversy surrounding certain existing issues. Increased oil, gas, and uranium activity, recreation demands, impacts from a growing population and urban interface, and pressures on wildlife and land health are among the many challenges to be addressed." BLM UFO, *Analysis of the Management Situation: for the BLM Uncompahgre Planning Area* (June 2010) (attached as Exhibit 3). The 30,000 acres included in the August 2012 Lease Sale represents almost five-percent (5%) of the total surface area that BLM manages in the Uncompahgre area, and almost eight-percent (8%) of the total North Fork Valley acreage. Given the significant challenges and management issues that must be addressed in the pending UFO RMP, it would be impossible for BLM to sell off such a significant portion our public lands – particularly in the area where these parcels are located – without prejudicing the ultimate mineral development decisions made in the revised RMP.

The whole point of NEPA is to study the impact of an action on the environment before the action is taken. *See Conner,* 848 F.2d at 1452 (NEPA requires that agencies prepare an EIS before there is "any irreversible and irretrievable commitment of resources"). Where "[i]nterim action prejudices the ultimate decision on the program," NEPA forbids it. 40 C.F.R. §§ 1506.1(c)(1)-(3). Action prejudices the outcome "when it tends to determine subsequent development or limit alternatives." *Id.* In this case, once oil and gas lease rights are conveyed, lessees have a right to drill, and the impact on the environment from the exercise of those rights cannot be undone, which is exactly the situation NEPA disallows – allowing new activity that limits alternatives in the future.

As provided, while CEQ regulations require a moratorium on any further leasing until the revised RMP and EIS are completed, such a decision is also well within the discretion of the UFO. As provided in BLM Instruction Memorandum No. 2010-117 (May 17, 2010):

> As outlined in the Land Use Planning Handbook (H-1601-1), the Resource Management Plan (RMP) underlies fluid minerals leasing decisions. Through RMP effectiveness monitoring and periodic RMP evaluations, state and field offices will examine resource management decisions to determine whether the RMPs adequately protect important resource values in light of changing circumstances, updated policies, and new information (H-1601-1, section V, A, B). The results of such reviews and evaluations *may require field office resource information updates* and land use plan maintenance, amendment, or revision. In some cases state and field office staff *may determine that the public interest would be better served by further analysis and planning prior to making any decision whether or not to lease*.

(emphasis added). There can be no better example than the present situation of where the public interest would be better served by completing the RMP and EIS *before* deciding whether it is appropriate to lease the public lands of the North Fork Valley. According to BLM oil and gas statistics, there are currently 4,380,275 acres of leased land that is "in effect" in Colorado. *See* BLM, Oil and Gas Statistics by Year for Fiscal Years 1988 – 2011 (attached as Exhibit 4). Given this vast quantity, as well as a current price of natural gas at 10-year lows of $2.27/MMBtu, it seems both ill advised and unnecessary to proceed with this Lease Sale given these conditions. *See* Steve Hargreaves, *Natural gas prices hit 10-year low*, CNN MONEY, March 9, 2012 (attached as Exhibit 5). We therefore strongly encourage you to not move forward with this Lease Sale pending completion of the UFO RMP and EIS.

Furthermore, and in concert with completing the revised RMP and EIS, BLM's UFO should develop a Master Leasing Plan ("MLP") for the entire Uncompahgre area. According to BLM IM 2010-117, the MLP process is to be conducted before lease issuance and will reconsider RMP decisions pertaining to leasing. The RMPs "identify oil and gas planning decisions, such as areas closed to leasing, open to leasing, or open to leasing with major or moderate constraints (lease stipulations) based on known resource values and reasonably foreseeable oil and gas development scenarios." IM 2010-117. The MLP is a mechanism for completing the additional planning, analysis, and decisionmaking, and is required for areas meeting the listed criteria:

> (1) a substantial portion of an area is not currently leased; (2) it has a majority federal mineral interest; (3) the oil and gas industry has expressed a specific interest in leasing; (4) a moderate to high potential exists for oil and gas developments; and (5) that development may harm important resource values, such as natural/cultural resource conflicts, air quality, wildlife and wilderness.

See IM 2010-117. The Uncompahgre area generally, and the North Fork Valley specifically, satisfy all such criteria. Accordingly, BLM should further engage in the MLP process through its revision of the UFO RMP and EIS.

B. In failing to perform a good faith NEPA analysis, BLM has impermissibly predetermined its outcome, violating NEPA and FLPMA.

NEPA "requires ... that an agency give a 'hard look' to the environmental impact of any project or action it authorizes." *Morris v. U.S. Nuclear Regulatory Commission,* 598 F.3d 677, 681 (10th Cir. 2010). This examination "must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made." *Forest Guardians,* 611 F.3d at 712 (quoting *Metcalf v. Daley,* 214 F.3d 1135, 1142 (9th Cir. 2000)); *see also* 40 C.F.R. § 1502.2(g) ("Environmental impact statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made."); *id.* § 1502.5 ("The statement shall be prepared early enough so that it can serve practically as an important contribution to the decision-making process and will not be used to rationalize or justify decisions already made."). Here, BLM has failed to meet even the most primary threshold for its NEPA process – taking an honest hard look.

BLM's failure is made evident by the UFO's consistent refusal in their EA to acknowledge and analyze *any* impacts that will result from the sale of approximately 30,000 acres of federal land for oil and gas development. BLM's constant refrain throughout the EA was some variation of: "the act of leasing the parcels would produce no impacts…." *See, e.g.,* EA at 26, 36, 37, 46, 51, 53, 57, 61, 63, 66, 69, 71, 75, 87, 90, 92, 94, 95, 97, 99, 101, 104, 107, and 110. Following nearly every instance of this obfuscation, BLM went on to perfunctorily describe the reasonably foreseeable impacts that may or would result from parcel development, but which would only undergo actual analysis at the application for permit to drill ("APD") stage. BLM's shell game – which inevitably results in decisions that blindly sell our public lands for oil and gas development – fails to meet its mandate as stewards of our public lands, and moreover is explicitly contrary to NEPA's requirement that the analysis of impacts take place *before* the federal action can proceed. If BLM cannot take a "hard look" at site-specific impacts at the lease stage, we fail to see how the agency can reasonably make a site-specific commitment of mineral resources. The agency, in effect, is presupposing that any site-specific impacts from oil and gas development can be mitigated without significant, unacceptable impacts at the APD stage before even knowing what those site-specific impacts are. The agency is also presupposing that oil and gas resources, if developed, outweigh non-oil and gas resources, like wildlife habitat, air quality, and water quality protection.

As soon as BLM sells an oil and gas parcel – particularly, as here, when the lease is sold without a no surface occupancy ("NSO") stipulation – that sale confers a guaranteed right to the leaseholder, which includes the right of occupancy. In other words, once a lease sale occurs, the train has already left the station. Without analyzing impacts from the lease sale itself, any subsequent analysis intrinsically shifts from *preventing* impacts (and managing lands for other resource values) to merely *mitigating* impacts (and allowing oil and gas lessees to exercise their surface use rights to the lease at the expense of other resource values). This approach is fundamentally incongruous with NEPA's mandate. In a recently released case from the Ninth Circuit, *Northern Plains Resource Council v. Surface Transportation Board,* 668 F.3d 1067, 1084-85 (9th Cir. 2011), the court provided: "In a way, reliance on mitigation measures presupposes approval. It assumes that – regardless of what effects construction may have on resources – there are mitigation measures that might counteract the effect without first understanding the extent of the problem. This is inconsistent with what NEPA requires." In the present case, this is precisely what BLM has done in determining that actual NEPA analysis can wait until some future date.

BLM, in making this predetermined conclusion, creates an unlevel playing field that benefits oil and gas leasing and drilling at the expense of other multiple use resources. There is a long line of cases that warn agencies against making a predetermined decision with respect to their NEPA analysis. The 10th Circuit Court of Appeals has cautioned: "[I]f an agency predetermines the NEPA analysis by committing itself to an outcome, the agency likely has failed to take a hard look at the environmental consequences of its actions due to its bias in favor of that outcome and, therefore, has acted arbitrarily and capriciously." *Forest Guardians,* 611 F.3d at 713 (citing *Davis v. Mineta,* 302 F.3d 1104 (10th Cir. 2002). The 10th Circuit further stated that "[w]e [have] held that ... predetermination [under NEPA] resulted in an environmental analysis that was tainted with bias" and was therefore not in compliance with the statute. *Id.* (citing *Davis,* 302 F.3d at 1112–13, 1118–26)).

While the threshold for finding agency predetermination is high – "occur[ing] only when an agency *irreversibly and irretrievably* commits itself to a plan of action that is dependent upon the NEPA environmental analysis producing a certain outcome, *before* the agency has completed that environmental analysis," *Forest Guardians*, 611 F.3d at 714 (emphasis in original) – here, BLM's misguided process has met that threshold. BLM made the express determination that an analysis of impacts is not necessary at the lease sale stage – a determination that is made evident within the four-corners of the EA. This conclusion guarantees that a FONSI will be issued during the lease sale stage NEPA process. That FONSI is based not on any actual analysis of impacts, but rather on the predetermined decision to perform the necessary NEPA analysis at a later stage. Indeed, by not performing any genuine analysis, it is impossible to reach any conclusion other than a FONSI. By playing this shell game, BLM, at a minimum, creates an improper "inertial presumption" in favor of committing resources to oil and gas development before knowing the site-specific impacts. *Natl. Wildlife Fed. v. Morton*, 393 F.Supp 1286, 1292 (D.D.C. 1975).

By reaching, in effect, a predetermined decision – or at least creating a presumption in favor of oil and gas leasing and development – BLM not only violates NEPA, but also, by elevating development of oil and gas over other multiple use resources, FLPMA. As the Tenth Circuit has explained:

> It is past doubt that the principle of multiple use does not require BLM to prioritize development over other uses… Development is a *possible* use, which BLM must weigh against other possible uses – including conservation to protect environmental values, which are best assessed through the NEPA process.

New Mexico ex rel. Richardson v. Bureau of Land Management, 565 F.3d 683, 710 (10th Cir. 2009). BLM's presupposition of outcome is a direct affront to both NEPA and FLPMA, and cannot be sustained.

C. The August 2012 Lease Sale represents an irretrievable commitment of resources that requires a thorough NEPA analysis.

BLM's decision to wait until the APD stage before proceeding with its NEPA analysis is impermissible, not only because it results in a predetermined outcome at the lease sale stage, but also because it is inconsistent with Tenth Circuit precedent. The most recent Tenth Circuit case addressing the issue of whether a federal agency, acting in compliance with NEPA, must analyze site-specific impacts at the leasing stage is *New Mexico ex rel. Richardson,* 565 F.3d 683. There, the court first analyzed the two prior Tenth Circuit precedents addressing the same issue: *Park County Resource Council, Inc. v. U.S. Department of Agriculture,* 817 F.2d 609 (10th Cir. 1987), and *Pennaco Energy, Inc. v. U.S. Department of the Interior,* 377 F.3d 1147 (10th Cir. 2004). Based on its analysis of those two cases, the court in *New Mexico ex rel. Richardson* gave the following guidance for courts to follow in future cases addressing this issue:

> Taken together, these cases establish that there is no bright line rule that site-specific analysis may wait until the ... [APD] stage. Instead, the inquiry is necessarily contextual. Looking to the standards set out by regulation and by statute, assessment of all "reasonably foreseeable" impacts must occur at the

> earliest practicable point, and must take place before an "irretrievable commitment of resources" is made. Each of these inquiries is tied to the existing environmental circumstances, not to the formalities of agency procedures. Thus, applying them necessarily requires a fact-specific inquiry.

565 F.3d at 717-18 (citations omitted). When analyzing those two factors, the Tenth Circuit held that (1) environmental impacts were reasonably foreseeable at the leasing stage, and (2) that leasing constituted an irretrievable commitment of resources because oil and gas regulations entitle the leaseholder to drill. *Id.* at 718-19 ("we conclude that issuing an oil and gas lease without an NSO stipulation constitutes such a commitment."). Thus, the Tenth Circuit held that the agency violated NEPA by failing to analyze site-specific impacts at the leasing stage. *Id.* at 718-19. *See also Pennaco Energy,* 377 F.3d at 1160 ("Because the issuance of leases gave lessees a right to surface use, the failure to analyze CBM development impacts before the leasing stage foreclosed NEPA analysis from affecting the agency's decision."); *Colorado Environmental Coalition v. Office of Legacy Management*, --- F.Supp.2d ---, 2011 WL 4940662, 10 (D.Colo. 2011) (holding that DOE acted arbitrarily and capriciously for failing to analyze site-specific impacts in its EA). Here, as in *New Mexico ex rel. Richardson* and *Pennaco*, actual drilling and site-specific impacts are reasonably foreseeable and must be analyzed.

While pursuant to the strict confines of the 1989 UFO RMP, site-specific impacts are admittedly speculative – further necessitating a revision process that is needed to illuminate what is, in fact, reasonably foreseeable – current oil and gas development in the North Fork area – which has proceeded without the guidance of a valid RMP – establishes a reference from which reasonably foreseeable site-specific impacts can be analyzed for the August 2012 Lease Sale. SG Interests and Gunnison Energy Corporation have begun to develop natural gas wells in the North Fork area, with such growth exceeding past average development. *See* Bull Mountain Unit Master Development Plan and Preliminary Environmental Assessment, DOI-CO-150-2009-0005 EA ("Bull Mountain Unit") at 152, 154. In the North Fork area, there have currently been 116 wells drilled on federally managed oil and gas leases, 15 of which are presently producing natural gas. *Id.* at 152. It is further estimated that there will be 20 new wells per year. *Id.* at 154. However, in the Bull Mountain Unit – which is a few miles north of parcels being offered in the August 2012 Lease Sale – BLM UFO is proposing the development of 146 natural gas wells on approximately 20,000 acres of land. *Id.* at 2-3. Corresponding to such region-wide development, in this case, reasonably foreseeable site-specific impacts can be analyzed at the lease sale stage. BLM's express refusal to perform any site-specific analysis is in direct conflict with what the Tenth Circuit has held NEPA requires.

Moreover, the Tenth Circuit further noted that its conclusion – requiring site-specific impacts analysis at the lease sale stage – is supported by internal BLM documents. BLM Handbook H-1624-1 provides: "By law, these impacts must be analyzed before the agency makes an irreversible commitment. In the fluid minerals program, this commitment occurs at the point of lease issuance." *New Mexico ex rel. Richardson*, 565 F.3d at 718, n. 44.

It is incredible – in the face of unambiguous Tenth Circuit precedent and even BLM's own Handbook – that BLM's UFO persists in its assertion that it can put off any analysis of impacts until the APD stage, *after* the agency has made an irretrievable commitment of resources

at the lease sale stage. Oil and gas leases confer "the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource in a leasehold." 40 C.F.R. § 3101.1-2; *Sierra Club v. Hodel*, 848 F.2d 1068, 1093 (10th Cir. 1988) (agencies are to perform hard look NEPA analysis "before committing themselves irretrievably to a given course of action so that the action can be shaped to account for environmental values"). BLM's failure to perform a hard look NEPA analysis, before the August 2012 Lease Sale, represents a fundamental error that cannot be overlooked.

Significant environmental impacts, based on those lease rights, may occur once a lease is issued. Following the August 2012 Lease Sale, BLM's authority will thereafter be limited to imposing mitigation measures consistent with the terms of the lease. In other words, BLM UFO will not be able to impose conditions inconsistent with the lease terms and cannot deny the developer the right to drill altogether. Although it is possible that "some or all of the environmental consequences of oil and gas development may be mitigated through lease stipulations, it is equally true that the purpose of NEPA is to examine the foreseeable environmental consequences of a range of alternatives *prior* to taking an action that cannot be undone." *Montana Wilderness Ass'n v. Fry*, 310 F.Sup.2d 1127, 1145 (D.Mont., 2004) (citation omitted) (emphasis added); 40 C.F.R. § 1501.2. "[M]itigation measures, while necessary, are not alone sufficient to meet the [Agency's] NEPA obligations to determine the projected extent of the environmental harm to enumerated resources *before* a project is approved." *Northern Plains Resource Council,* 668 F.3d at 1085 (emphasis in original). Consequently, if BLM discovers significant impacts at the APD stage, it may no longer be able to prevent them.

Furthermore, a Government Accountability Office report showed that the BLM has used categorical exclusions to approve 28 percent of APDs. *See* Scoping Exhibit 12. In fact, on February 1, 2012, BLM UFO issued a categorical exclusion ("CX") and determination of NEPA adequacy ("DNA") on two APDs submitted for federal lease parcel COC 65106, therefore avoiding APD stage NEPA analysis via an EA or EIS altogether. This parcel, just north of the Paonia Reservoir, is within a few miles of several parcels being considered in the August 2012 Lease Sale. Although BLM UFO has failed to directly respond to CHC's letter, written February 23, 2012, challenging the UFOs use of the CX and DNA for the two APDs, BLM apparently agreed that the CX was inappropriate, determining first on March 19, 2012 that an EA was required, and then ultimately cancelling that EA and March 29, 2012. However, BLM apparently approved the use of the DNA on parcel COC 65106 on April 10, 2012. It appears that Gunnison Energy is continuing to seek APD approval on this parcel, and BLM is accommodating through the CX and DNA process rather than through an EA or EIS. BLM should clarify whether, in fact, it intends to use a CX or DNA for and lease parcels sold in August 2012, or whether its EA presupposes that a CX or DNA will not be used. If BLM UFO determines that the CX and DNA process is appropriate in the approval of APDs, it is entirely possible that the detailed review BLM has promised will occur at the APD stage, may, in fact, never take place.

D. The BLM has failed to take a hard look at direct, indirect, and cumulative impacts, and must perform an EIS before the August 2012 Lease Sale can proceed.

The haste with which BLM has pushed forward with its NEPA process has resulted in BLM UFO's failure to take a "hard look" at impacts for the proposed August 2012 Lease Sale. NEPA instructs that an agency is required to "take a 'hard look' at the impacts of a proposed action." *Citizens' Committee to Save Our Canyons v. Krueger,* 513 F.3d 1169, 1179 (10th Cir. 2008) (quoting *Friends of the Bow v. Thompson,* 124 F.3d 1210, 1213 (10th Cir.1997)). This hard look promotes NEPA's "sweeping commitment to 'prevent or eliminate damage to the environment and biosphere' by focusing Government and public attention on the environmental effects of proposed agency action." *Marsh v. Or. Nat. Resources Council*, 490 U.S. 360, 371 (1989). NEPA achieves this focus through "action forcing procedures … requir[ing] that agencies take a hard look at environmental consequences." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (citations omitted). These "environmental consequences" include direct, indirect, and cumulative impacts. 40 C.F.R. §§ 1508.7, 1508.8; *Custer Co. Action Assn. v. Garvey*, 256 F.3d 1024, 1035 (10th Cir. 2001). NEPA's hard look should provide an analysis of impacts that is pragmatic and useful to the decisionmaker and the public. *Nat. Resources Def. Council v. Hodel*, 865 F.2d 288, 299 (D.C. Cir. 1988) (hard look premised on providing "analysis useful to a decisionmaker in deciding whether, or how, to alter [a project] to lessen cumulative environmental impacts"). BLM's EA falls woefully short of this bar. Indeed, BLM's express determination not to perform any actual analysis at the lease sale stage – but rather delay this analysis until some future time – fundamentally and almost by definition fails to take a hard look at impacts.

BLM is required to make its threshold determination with respect to the significance of impacts based on a hard look at two factors: "context" and "intensity." 40 C.F.R. § 1508.27. "Either of these factors may be sufficient to require preparation of an EIS in appropriate circumstances." *Natl. Parks & Conserv. Assn. v. Babbitt,* 241 F.3d 722, 731 (9th Cir. 2001). Context "means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality" and "varies with the setting of the proposed action." *Id.* § 1508.27(a). Intensity "refers to the severity of the impact" and is evaluated according to several additional elements, including:

> (1) Impacts that may be both beneficial and adverse;
>
> (2) The degree to which the proposed action affects public health or safety;
>
> (3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas;
>
> (4) The degree to which the effects on the quality of the human environment are likely to be highly controversial;
>
> (5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks;

> (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration;
>
> (7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts;
>
> (8) The degree to which the action may adversely affect districts, sites, highways, structures, or 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;
>
> (9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973; and
>
> (10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Id. §§ 1508.27(b). Most, if not all, of these elements are implicated in the August 2012 Lease Sale.

BLM's EA is devoid of any evaluation of impacts. Contrary to BLM UFO's running hypothesis, the sale of 30,000 acres of public land in the heart of the North Fork Valley to oil and gas development is far more than a mere paper transaction: it commits oil and gas resources to development and will forever impact the nature of the Valley and its residents. *See New Mexico ex rel. Richardson*, 565 F.3d at 718 (holding the agency violated NEPA by failing to analyze site-specific impacts at the leasing stage). While BLM is mandated to give these impacts a true "hard look" – the failure of which is further discussed below – the citizens of the North Fork Valley also deserve more than BLM UFO's flippant and disingenuous treatment of their role as stewards of our public lands. Based on the standards established by CEQ regulations, 40 C.F.R. § 1508.27, significant impacts must be analyzed in an EIS before the lease sale can proceed.

An EIS is required when a major federal action "significantly affects the quality of the human environment." 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.4. A federal action "affects" the environment when it "will or *may* have an effect" on the environment. 40 C.F.R. § 1508.3 (emphasis added); *Airport Neighbors Alliance v. U.S.,* 90 F.3d 426, 429 (10th Cir. 1996) ("If the agency determines that its proposed action *may* 'significantly affect' the environment, the agency must prepare a detailed statement on the environmental impact of the proposed action in the form of an EIS.") (emphasis added). Similarly, according to the Ninth Circuit:

> We have held that an EIS *must* be prepared if 'substantial questions are raised as to whether a project ... *may* cause significant degradation to some human environmental factor.' To trigger this requirement a 'plaintiff need not show that significant effects *will in fact occur*,' [but instead] raising 'substantial questions whether a project may have a significant effect' is sufficient.

Idaho Sporting Cong. v. Thomas, 137 F.3d 1146, 1149-50 (9th Cir. 1998) (citations omitted) (emphasis original). Given the magnitude of the proposed action and impacts to the communities of the North Fork Valley that this lease sale will create, BLM's FONSI is completely unsupportable.

Indeed, many courts have held that the issuance of a federal oil and gas lease may require an EIS simply because of the effects on surface lands. *See WildEarth Guardians v. U.S. Forest Service,* --- F.Supp.2d ---, 2011 WL 5172277, 15 (D.Colo. 2011) (citing *Sierra Club v. United States Dep't of Energy,* 255 F.Supp.2d 1177, 1186 (D.Colo. 2002) (the government's actions in granting access to a federally-owned surface estate for the purpose of exploiting the mineral estate is a federal action under NEPA); *see also Sierra Club v. Peterson,* 717 F.2d 1409, 1413-15 (D.C. Cir. 1983) (concluding that the agency was required to conduct a site-specific analysis through an EIS before it could authorize the issuance of oil and gas leases within two national forests).

While BLM failed to conduct any meaningful analysis of impacts, and thus failed to support its FONSI, the BLM did provide in its EA:

> Broader negative economic impacts could occur as a result of a loss of the region's reputation of environmental amenities and quality. Even if the environmental negatives from well development are short-term, they would likely affect consumer's perceptions about the area in the long-term, serving to negatively impact local agriculture, tourism, and the attraction to retirees. These impacts could result in significant economic costs to the North Fork Valley that may or may not outweigh the benefits derived from well development.

EA at 110. Although environmental impacts from well development are never "short-term" as BLM suggests, looking only at significant economic impacts – that may outweigh the benefits from oil and gas development – certainly warrants further analysis in an EIS. Given these economic impacts, as well as myriad impacts to the environment, as more fully described below, and including impacts to air quality, climate change, farmlands, and water resources – all of which imminently threaten the North Fork Valley – BLM must perform an EIS before these public lands can be sold.

Moreover, in the absence of an EIS, BLM UFO "must put forth a convincing statement of reasons' that explains why the project will impact the environment no more than insignificantly. This account proves crucial to evaluating whether the [agency] took the requisite 'hard look.' " *Ocean Advoc. v. U.S. Army Corps of Engrs*., 402 F.3d 846, 864 (9th Cir. 2005). Nowhere in BLM's scant EA/FONSI does there exist a convincing statement explaining the insignificance of impacts from this sale. To the contrary, BLM suggests that any real analysis of impacts can be pushed off until the APD stage – which, as described above, is wholly deficient. If BLM proceeds in its refusal to perform an EIS, it must provide a detailed accounting of each NEPA significance factor, as outlined above, explaining why the project will impact the environment no more than insignificantly.

E. The BLM has failed to analyze and take a hard look at the cumulative impacts of the August 2012 Lease Sale.

A 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. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7. While BLM includes a "*Past, Present, and Reasonably Foreseeable Future Actions*" section in their EA, *see* EA at 18-23, BLM fails to actually conduct any cumulative analysis of those impacts. *See Natural Resources Defense Council v. Hodel*, 865 F.2d 288, 298 (D.C. Cir. 1988) (providing that section headings without the "requisite analysis" are insufficient); *see also* 40 C.F.R. § 1508.27(b)(7) (BLM must consider whether the proposed action is related to other actions that together may have cumulatively significant *impacts*. "Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.").

Within BLM's cumulative effects section, the UFO outlines mineral resource development in the area, but fails to analyze how such development will cumulatively impact the environment. In other words, BLM provides a list of impacts that is in no way related to information that would help inform the decision reached. "Conclusory remarks," as are consistently provided throughout BLM's EA, "do not equip a decisionmaker to make an informed decision about alternative courses of action." *NRDC*, 865 F.2d at 298. For example, when BLM discusses the "cumulative effects" of various resources, the UFO characteristically states: "There will be no cumulative effects to [the resource] from the proposed action of leasing the parcels under consideration." EA at 36. "Perfunctory references do not constitute analysis useful to a decisionmaker in deciding whether, or how, to alter the program to lessen cumulative environmental impacts." *NRDC,* 865 F.2d at 275. BLM's conclusory treatment of their cumulative impacts analysis fails to meet their hard look requirement under NEPA.

Similarly, although BLM's EA identifies coal mining and development in the area, there is likewise no analysis of the cumulative affect that coal mining and oil and gas development will have on the environment. BLM's approach, which is to inventory impacts without conducting any analysis of those impacts, is simply inexcusable and represents a blatant affront of the agency's duties under both NEPA and as trustee of our public lands. A true NEPA hard look analysis is required before BLM can proceed with the August 2012 Lease Sale, and must include the preparation of a comprehensive EIS incorporating all past, present and reasonably foreseeable future impacts from mineral development projects in the North Fork Valley area.

F. BLM must complete a single EIS for all proposed oil and gas actions within the UFO.

Furthermore, under NEPA, BLM "must analyze not only the direct impacts of the proposed action, but also the indirect and cumulative impacts of 'past, present, and reasonably foreseeable future *actions* regardless of what agency (Federal or non-Federal) or person undertakes such actions.'" *Wyoming v. U.S. Dept. of Agriculture*, 661 F.3d 1209, 1251 (10th Cir. 2011) (citing *Colorado Environmental Coalition v. Dombeck*, 185 F.3d 1162, 1176 (10th Cir.

1999) (quoting 40 C.F.R. § 1508.7)); *see also* 40 C.F.R. § 1508.25 (c) (stating that the "scope" of an EIS includes consideration of "cumulative" impacts). Where "several actions have a cumulative ... environmental effect, this consequence must be considered in an EIS." *Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372, 1378 (9th Cir. 1998) (citing *City of Tenakee Springs v. Clough,* 915 F.2d 1308, 1312 (9th Cir. 1990)); *see also* 40 C.F.R. § 1508.25(a) (stating that the "scope" of an EIS includes consideration of "connected actions"). The purpose of this requirement is to prevent agencies from dividing one project into multiple individual actions "each of which individually has an insignificant environmental impact, but which collectively have a substantial impact." *Thomas v. Peterson,* 753 F.2d 754, 758 (9th Cir.1985). As provided above, an EIS is not only warranted but also required under these circumstances – particularly because the UFO is operating from a stale 1989 RMP that fails to address oil and gas development in the present context, and thus puts into serious question the accuracy of the agency's reasonably foreseeable development assumptions. This EIS is required not only for the August 2012 Lease Sale, but must also consider the other oil and gas projects in the area – and specifically must include analysis of the 146-well Master Development Plan ("MPD") in the Bull Mountain Unit. *See* DOI-CO-150-2009-0005 EA. Failure to include cumulative impacts of *all* the leasing and permitting decisions "impermissibly subjects the decisionmaking process contemplated by NEPA to 'the tyranny of small decisions.'" *Kern v. BLM*, 284 F.3d 1062, 1078 (9th Cir. 2002); *see also NRDC*, 865 F.2d at 297-298. Indeed, the Supreme Court has held that, under NEPA, an agency not only has a duty to consider cumulative impacts, but also a separate duty, applicable here, to consider those impacts in a single NEPA process:

> proposals for ... related actions that will have cumulative or synergistic environmental impact upon a region concurrently pending before an agency must be considered together. Only through comprehensive consideration of pending proposals can the agency evaluate the different courses of action.

Kleppe v. Sierra Club, 427 U.S. 390, 410, 96 S.Ct. 2718, 2730, 49 L.Ed.2d 576 (1976); *see also* 40 C.F.R. §§ 1508.25(a)(1)-(3). In the present case, the proposed August 2012 Lease Sale comes within the context of broader oil and gas development in the area of the North Fork Valley. According to the EA, there are currently 17 total APD permits pending, and the "area is seeing an increase in development which exceeds the past average." EA at 22-23. This growth includes, among others, the industry development plan to "drill and produce 150 wells from approximately 60 individual well pads and associated infrastructure" within the Bull Mountain Unit, EA at 23, as well as a 16-well development in the North Fork/Muddy Creek Planning Unit, CO-150-2008-35-EA (2008) ("16-well EA") (Scoping Exhibit 57). Moreover, all of these projects will likely tie together and use the same infrastructure to deliver natural gas to local and national markets, including use of the Bull Mountain Pipeline and the Ragged Mountain Pipeline. *See* Bull Mountain MDP/EA at 9. Moreover, given the proximity of the leases offered for the August 2012 lease sale, it is also likely that other extraction infrastructure, such as roads, powerlines, etc. may also be shared. If so, these are connected, as well as cumulative, actions – that are currently segmented, improperly, into separate EAs – and must be considered under a single comprehensive EIS. 40 C.F.R. §§ 1508.25(a)(1), (2). BLM must therefore evaluate what level of infrastructure may be required and whether that infrastructure will, in fact, be tied together.

G. By failing to analyze impacts in its EA, BLM has also failed to establish baseline data from which future impacts can be measured.

The evasive approach BLM has taken in its EA not only delays or averts any actual NEPA analysis – instead relying on future mitigation – but it further fails to establish any baseline information from which a future impacts analysis can be measured. NEPA requires that the agency provide data on which it bases its environmental analysis. *See The Lands Council v. McNair*, 537 F.3d 981, 994 (9th Cir. 2008) (holding that an agency must support its conclusions with studies that the agency deems reliable). Such analysis must occur before the proposed action is approved, not afterward. *See LaFlamme v. F.E.R.C.*, 852 F.2d 389, 400 (9th Cir. 1988) ("[T]he very purpose of NEPA's requirement that an EIS be prepared for all actions that may significantly affect the environment is to obviate the need for speculation by insuring that available data is gathered and analyzed prior to the implementation of the proposed action.") (citation omitted). "[O]nce a project begins, the 'pre-project environment' becomes something of the past" and evaluation of the project's effect becomes "simply impossible." *Id. See also Sierra Club,* 848 F.2d at 1093 (holding that analysis must occur before the point of commitment) (overturned on other grounds).

Moreover, baseline data and analysis is fundamental to public involvement and participation in the study process. NEPA § 102(2)(C) provides for broad-based participation. *See* 42 U.S.C. § 4332(2)(C). CEQ regulations implement this mandate by requiring that agencies "shall involve environmental agencies, applicants, and the public, to the extent practicable, in preparing [environmental] assessments [required by NEPA]." 40 C.F.R. § 1501.4(b). *See City of Aurora v. Hunt,* 749 F.2d 1457, 1465 (10th Cir. 1984). Public participation and involvement is also a central theme in BLM's recently established leasing reform policy. *See* BLM Instruction Memorandum, No. 2010-117. The Court in *Northern Plains Resource Council* further provided:

> NEPA aims (1) to ensure that agencies carefully consider information about significant environmental impacts and (2) to guarantee relevant information is available to the public. The use of mitigation measures as a proxy for baseline data does not further either purpose. First, without this data, an agency cannot carefully consider information about significant environmental impacts. Thus, the agency "fail[s] to consider an important aspect of the problem," resulting in an arbitrary and capricious decision. Second, even if the mitigation measures may guarantee that the data will be collected some time in the future, the data is not available during the [NEPA] process and is not available for public comment…. The [NEPA] process cannot serve its larger informational role, and the public is deprived of their opportunity to play a role in the decision-making process.

Northern Plains Resource Council, 668 F.3d at 1085 (citations omitted). "Without establishing baseline conditions … there is simply no way to determine what effect [an action] will have on the environment, and consequently, no way to comply with NEPA." *Half Moon Bay Fisherman's Marketing Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988). As federal courts have recognized, this requirement is "critical to" developing a reasonable range of alternatives. *American Rivers v. F.E.R.C.*, 201 F.3d 1186, 1195 n.15 (9th Cir. 1999) (internal quotations and citation omitted).

"The purpose of NEPA is to ensure that federal agencies are fully aware of the impact of their decisions on the environment." *Oregon Environmental Council v. Kunzman,* 817 F.2d 484, 492 (9th Cir. 1987). In the case at bar, BLM must establish baseline information including, but not necessarily limited to: greenhouse gas emissions, air quality, water resources (encompassing both quality and quantity, and the use and need for that quality and quantity), wildlife and endangered species (including those species' habitat, and that habitat's connectivity and health), farmland productivity, and North Fork Valley economic production. Due to an apparent aversion to analysis, BLM's EA fails to collect or study any baseline information, which is fundamental to reaching a reasoned decision under NEPA. This baseline data, even in the absence of a specific proposal to drill, may compel BLM to rethink its decision to offer the proposed leases for sale in August 2012, in particular relative to the pending revision of the UFO RMP. Failing to conduct an honest NEPA analysis at the lease sale stage also circumvents any opportunity for the public to meaningfully participate – which makes the need for baseline data even more important. *See* 40 C.F.R. § 1501.4(b). In other words, while BLM identifies several resource values at stake in this action, it fails to identify what the impacts to those resources will be. NEPA's informational purpose requires the agency to identify impacts to resource values so that BLM and the public can make an informed decision about executing leases which commit oil and gas resources to development.

a. The BLM has failed to sufficiently analyze impacts related to air quality.

In the EA, BLM provides: "Leasing the subject tracts would have no direct impacts to air quality. Any potential effects to air quality from the sale of lease parcels would occur at such time that the leases were developed." EA at 26. Once again, by relying on this shell game approach where actual analysis is put off until some future date, BLM fails to analyze impacts at the earliest possible time, as mandated by NEPA. *See New Mexico ex rel. Richardson*, 565 F.3d at 718 (assessment of all "reasonably foreseeable" impacts must occur at the earliest practicable point). This problem is, as noted above, compounded by the agency's failure to take a hard look at baseline air quality to determine whether the oil and gas leases offered for sale are reasonable and whether enhanced air quality protections need to be imposed at the lease stage to constrain air quality emissions and impacts within acceptable levels.

Indeed, many impacts to air quality are not only reasonably foreseeable, but also dismissively outlined in BLM's EA. For example, BLM identifies impacts from fugitive dust and inhalable particulates, increases in criteria pollutants, as well as increases in non-criteria pollutants from exploration and development activities, all of which would arise prior to the point where "future analysis" would occur. *See* EA at 26. Of course, none of these recognized impacts are actually analyzed to determine what affect they might have on the human environment. Further, these effects do not account for or consider the other reasonably foreseeable impacts that would occur once the leases were developed. This wanton absence of actual analysis fails to meet the requirements of NEPA.

In addition, BLM wholly fails to discuss the reasonably foreseeable impacts to visibility and air quality degradation that will result from oil and gas activities. Section 169A of the Clean Air Act ("CAA"), 42, U.S.C. § 7401 *et seq.* (1970), sets forth a national goal for visibility, which is the "prevention of any future, and the remedying of any existing, impairment of visibility in

Class I areas which impairment results from manmade air pollution." As provided in CHC's Scoping Comments, Congress adopted the visibility provisions in the CAA to protect visibility in these "areas of great scenic importance." H.R. Rep. No. 294, 95th Cong. 1st Sess. at 205 (1977). *See e.g., State of Maine v. Thomas*, 874 F.2d 883, 885 (1st Cir. 1989) ("EPA's mandate to control the vexing problem of regional haze emanates directly from the CAA, which 'declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in Class I areas which impairment results from manmade air pollution.' ") (citation omitted).

In the instant case, there are a substantial number of Class I air quality areas that may be directly impacted by any development in the North Fork Valley – a fact which has been recognized by BLM in past EA's. *See* Elk Creek Coal EA, DOI-BLM-CO-150-2008-53 EA; Elk Creek Coal Modification, DOI-BLM-CO-150-2012-18 EA. These areas include, but are not necessarily limited to the following: the Black Canyon of the Gunnison National Park ("Black Canyon"), the West Elk Wilderness ("West Elk"), and the Maroon Bells-Snowmass Wilderness ("Maroon Bells"). *See* Colorado State Implementation Plan for Regional Haze, Technical Support Document, Black Canyon of the Gunnison National Park (Oct. 2007) (attached as Exhibit 6); Colorado State Implementation Plan for Regional Haze, Technical Support Document, West Elk Wilderness Area (Oct. 2007) (attached as Exhibit 7); and Colorado State Implementation Plan for Regional Haze, Technical Support Document, Maroon Bells-Snowmass Wilderness Area (Oct. 2007) (attached as Exhibit 8). All of these areas are designated as having Class I air quality. Moreover, research indicates a strong correlation between oil and gas development and increased ozone concentrations – particularly in the summer when warm, stagnant conditions yield an increase in O_3 from oil and gas emissions. Marco A Rodriguez, et al., *Regional Impacts of Oil and Gas Development on Ozone Formation in the Western United States,* JOURNAL OF AIR & WASTE MANAGEMENT ASSOCIATION (Sept. 2009) (attached as Exhibit 9). Particularly in areas of significant existing oil and gas development, such as the San Juan Basin in the Four Corners region, "peak incremental O_3 concentration of 10 ppb" have been simulated. *Id.* at 1118. This study indicates a "clear potential for oil and gas development to negatively affect regional O_3 concentrations in the western United States, including several treasured national parks and wilderness areas in the Four Corners region. It is likely that accelerated energy development in this part of the country will worsen the existing problem." *Id.*

Increases in ground-level ozone not only impact regional haze and visibility, but can also result in dramatic impacts to human health. According to the EPA:

> Breathing ground-level ozone can result in a number of health effects that are observed in broad segments of the population. Some of these effects include:
>
> - Induction of respiratory symptoms
> - Decrements in lung function
> - Inflammation of airways
>
> Respiratory symptoms can include:
>
> - Coughing
> - Throat irritation

- Pain, burning, or discomfort in the chest when taking a deep breath
- Chest tightness, wheezing, or shortness of breath

> In addition to these effects, evidence from observational studies strongly indicates that higher daily ozone concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that ozone can make asthma symptoms worse and can increase sensitivity to asthma triggers.

EPA, *Health Effects of Ozone in the General Population,* available at: http://www.epa.gov/apti/ozonehealth/population.html (attached as Exhibit 10). By opening up 30,000 acres of this Valley to the oil and gas industry – which is one of the largest sources of VOCs, ozone, and sulfur dioxide emissions in the United States – air quality, human health, and compliance or interference with the EPA's Regional Haze rules must be analyzed before the August 2012 Lease Sale can proceed.

b. The BLM has failed to sufficiently analyze impacts related to climate change.

In the EA, BLM provides: "It is currently not feasible to know with certainty the net impacts from the proposed action on climate – that is, while BLM actions may contribute to the climate change phenomenon, the specific effects of those actions on global climate are speculative given the current state of the science." EA at 30. Framing their climate change discussion as a "phenomenon" – rather than the very real and occurring threat it represents – is indicative of the lack of seriousness with which BLM approaches their analysis with regard to climate impacts. Atmospheric GHG concentrations are already far too high. These concentrations are no longer speculative, but are causing observed climate change. As Dr. James Hansen has explained:

> Paleoclimate evidence and ongoing global changes imply that today's CO2, about 385 ppm, is already too high to maintain the climate to which humanity, wildlife, and the rest of the biosphere are adapted. Realization that we must reduce the current CO2 amount has a bright side: effects that had begun to seem inevitable, including impacts of ocean acidification, loss of fresh water supplies, and shifting of climatic zones, may be averted by the necessity of finding an energy course beyond fossil fuels sooner than would otherwise have occurred.
>
> We suggest an initial objective of reducing atmospheric CO2 to 350 ppm, with the target to be adjusted as scientific understanding and empirical evidence of climate effects accumulate.

James Hansen, *et al*., *Target Atmospheric CO2: Where Should Humanity Aim?* at 13 (attached as Exhibit 11). In fact, existing atmospheric GHG concentrations are approaching – if they have not already crossed – tipping points beyond which further global warming and subsequent climate change – and climate change impacts to the environment – are inevitable and unstoppable. As

Dr. Hansen has explained, "Realization that today's climate is far out of equilibrium with current climate forcings raises the specter of 'tipping points', the concept that climate can reach a point such that, without additional forcing, rapid changes proceed practically out of our control." *Id.* at 10. Dr. James Hansen has warned, in an separate article in State of the Wild 2008-2009 entitled *Tipping Point: Perspective of a Climatologist* (attached as Exhibit 12), that:

> Our home planet is dangerously near a tipping point at which human-made greenhouse gases reach a level where major climate changes can proceed mostly under their own momentum … The implications are profound and the only resolution is for humans to move to a fundamentally different energy pathway within a decade. Otherwise, it will be too late for one-third of the world's animal and plant species and millions of the most vulnerable members of our own species.

Id. at 7.

Although BLM seems to suggest that it can avoid performing any actual analysis by referring to climate change as a "phenomenon," and to its effects as "speculative," this is not consistent with what NEPA requires. "Reasonable forecasting and speculation is … implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labelling any and all discussion of future environmental effects as 'crystal ball inquiry.'" *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1246 n.9 (9th Cir. 1984 (quoting *Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm.*, 481 F.2d 1079, 1092 (D.C. Cir. 1973)). NEPA merely requires "a reasonably thorough discussion of the significant aspects of the probable environmental consequences" to "foster both informed decision-making and informed public participation." *Ctr. for Biological Diversity v. Natl. Hwy. Traffic Safety Admin.*, 538 F.3d 1172, 1194 (9th Cir. 2008) (quotations and citations omitted). Failing to perform this analysis is a fatal omission in BLM's EA, denying both the agency and the public necessary information.

Not departing from their dismissive approach to analysis, BLM further continued: "Leasing the subject tracts would have no direct impacts to climate change as a result of GHG emissions. Any potential effects to air quality from sale of the lease parcel would occur at such time that the lease was developed." EA at 30. BLM's contention is a red herring; while the act of leasing may not have direct impacts on climate change, oil and gas drilling will impact resources that are impacted by climate change. Thus, it's not only the impact to climate change, but also the combined impact of oil and gas drilling and climate change to specific resources; e.g., water resources, vegetation, farmlands, wildlife and endangered species, etc. Here, as before, BLM's approach falls short of NEPA's mandate to examine these impacts at the earliest possible time – which in the oil and gas development context is at the lease sale stage. As the Ninth Circuit has explained, "[t]he impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct." *Ctr. for Biological Diversity*, 538 F.3d 1172, 1217. A 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." *Ocean Advoc. v. U.S. Army Corps of Engrs.*, 402 F.3d 846, 868 (9th Cir. 2005); 40 C.F.R. § 1508.7. BLM's cumulative impacts analysis "must be more than perfunctory; it must provide a 'useful analysis of the cumulative impacts of past, present,

and future projects.'" *Ocean Advoc.*, 402 F.3d at 868. BLM must, therefore, "give a realistic evaluation of the total impacts [of the action] and cannot isolate the proposed project, viewing it in a vacuum." *Grand Canyon Trust v. FAA*, 290 F.3d 339, 342 (D.C. Cir. 2002). Even "a slight increase in adverse conditions...may sometimes threaten harm that is significant. One more factory...may represent the straw that breaks the back of the environmental camel." *Id*. at 343. As noted above the failure to assess cumulative impacts "impermissibly subject[s] the decisionmaking process contemplated by NEPA to 'the tyranny of small decisions.' " *Kern,* 284 F.3d at 1078 (citation omitted).

While BLM's EA catalogues some of potential impacts from climate change – identifying impacts such as drought, thinner snowpack, wildfires, insect infestations, and species migration, *see* EA at 31-32 – it fails to actually apply and analyze those impacts respective the North Fork Valley or the decision made. In other words, and as provided above, BLM must analyze these climate impacts relative to the specific resources at stake in the North Fork Valley. For example, how will drought conditions impact vegetation and wildlife resources, as well as farming and ranching in the North Fork Valley? How will insect infestations impact farmlands? How will species migration impact recreation and socio-economic conditions, as well as biological diversity and resilience? Given potential impacts, should BLM forego oil and gas leasing and instead manage these areas to best protect water resources for farmlands and to best protect wildlife that may otherwise struggle in the face of climate change? How will oil and gas extraction – and the industrial-scale infrastructure it necessitates – further intensify and exacerbate these climate change impacts? "To 'consider' cumulative effects, some quantified or detailed information is required. Without such information, neither the courts nor the public, in reviewing the [agency's] decisions, can be assured that the [agency] provided the hard look that it is required to provide." *Cuddy Mountain,*137 F.3d at 1379. Here, BLM fails to quantify any of these listed impacts, providing instead a "general discussion of potential impacts to climate." EA at 30. Such generalities do not amount to the hard look that NEPA requires.

Furthermore, and perhaps unexpectedly to BLM's UFO, the agency is required, by law, to not only consider the cumulative impacts of oil and gas development and climate change, but to consider and reduce GHG pollution contemplated by extraction of oil and gas from the leases. Secretarial Order 3226 (January 19, 2001) ("Order") commits the Department of the Interior to address climate change through its planning and decision-making processes. The Order provides that "climate change is impacting natural resources that the Department of the Interior ("Department") has the responsibility to manage and protect." Sec. Or. 3226, § 1. The Order also "ensures that climate change impacts are taken into account in connection with Department planning and decision making." *Id*. The Order obligates BLM to "consider and analyze potential climate change impacts" in four situations: (1) "when undertaking long-range planning exercises"; (2) "when setting priorities for scientific research and investigations"; (3) "when developing multi-year management plans, and/or" (4) "when making major decisions regarding the potential utilization of resources under the Department's purview." *Id*. § 3. The Order specifically provides that "Departmental activities covered by this Order" include "management plans and activities developed for public lands" and "*planning and management activities associated with oil, gas and mineral development on public lands*." *Id*. (emphasis added). BLM's oil and gas leasing decisions are thus contemplated by and subject to section 3 of the Order, and accordingly must be considered in BLM's NEPA analysis.

i. Greenhouse Gas Emissions

Aside from a general recognition of some broad greenhouse gas ("GHG") statistics and projections within BLM's overall climate discussion, the EA provides no analysis of GHG emissions. To this end, BLM certainly does not provide any consideration of the relationship between GHG emissions and the decision made, and fails to address or identify any alternatives or mitigation of GHG emissions from development of the 30,000 acres of public land BLM proposes to sell to the oil and gas industry. This failure is in direct conflict with Secretarial Order 3226 and BLM's NEPA mandate.

Moreover, BLM is empowered and obligated pursuant to the Federal Land Policy and Management Act ("FLPMA") and the Mineral Leasing Act ("MLA") to ensure that oil and gas lease decisions conserve natural resources and do not degrade public lands. Pursuant to FLPMA, BLM must "take any action necessary to prevent unnecessary or undue degradation of the [public] lands." 43 U.S.C. § 1732(b). This protective mandate applies to BLM's planning and management decisions. *See Utah Shared Access Alliance v. Carpenter*, 463 F.3d 1125, 1136 (10th Cir. 2006) (finding that BLM's authority to prevent degradation is not limited to the RMP planning process). GHG pollution may cause "undue" degradation, even if the activity causing the degradation is "necessary." Where GHG pollution is avoidable, it is "unnecessary" degradation. 43 U.S.C. § 1732(b). BLM can also help prevent climate change degradation to public lands by promoting ecological resiliency and adaptability and reducing external anthropogenic environmental stresses.

We reject any notion that the specific emissions from specific activities in the UFO are so small as to warrant a dismissive analysis. The reality of climate change is that it is caused by myriad, specific sources of GHG pollution. For BLM, here, to disavow itself of responsibility for these specific emissions is to condemn us to unabated GHG emissions. BLM is, at the end of the day, responsible for the management of 700 million acres of federal onshore subsurface minerals. *See* DOI-BLM, *Mineral and Surface Acreage Managed By BLM,* available at: http://www.blm.gov/wo/st/en/info/About_BLM/subsurface.html. Indeed, "the ultimate downstream GHG emissions from fossil fuel extraction from federal lands and waters by private leaseholders could have accounted for approximately 23% of total U.S. GHG emissions and 27% of all energy-related GHG emissions." Stratus Consulting, prepared for: The Wilderness Society, *Greenhouse Gas Emissions from Fossil Energy Extracted from Federal Lands and Waters*, Feb. 1, 2012 (attached as Exhibit 13). This suggests that "ultimate GHG emissions from fossil fuels extracted from federal lands and waters by private leaseholders in 2010 could be more than 20-times larger than the estimate reported in the CEQ inventory, [which estimates total federal emissions from agencies' operations to be 66.4 million metric tons]. Overall, ultimate downstream GHG emissions resulting from fossil fuel extraction from federal lands and waters by private leaseholders in 2010 are estimated to total 1,551 MMTCO2e." *Id.* To suggest that the agency does not, here, have to account for GHG pollution from these leases, at the very point the agency commits those resources to development, is to suggest that the collective 700 million acres of subsurface mineral estate is not relevant to protecting against climate change. This sort of flawed, reductive thinking is problematic, and contradicted by the agency's very management framework that provides a place-based lens to account for specific pollution sources to ensure that the broader public interest is protected.

Even putting aside climate change, every ton of methane emitted to the atmosphere from oil and gas development is a ton of natural gas *lost*. Every ton of methane lost to the atmosphere is therefore a ton of natural gas that cannot be used by consumers. Methane lost from federal leases may also not pay royalties otherwise shared between federal, state, and local governments. This lost gas reflects serious inefficiencies in how BLM oil and gas leases are developed. Energy lost from oil and gas production – whether avoidable or unavoidable – reduces the ability of a lease to supply energy, increasing the pressure to drill other lands to supply energy to satisfy demand. 40 C.F.R. §§ 1502.16(e)-(f). In so doing, inefficiencies create indirect and cumulative environmental impacts by increasing the pressure to satisfy demand with new drilling. 40 C.F.R. §§ 1508.7, 1508.8(b).

The MLA, as amended, obligates BLM to prevent waste in oil and gas operations, functioning as a corollary to FLPMA's unnecessary or undue degradation duties. *See infra* (discussing FLPMA's mandate to prevent unnecessary or undue degradation). The MLA requires that "[a]ll leases of lands containing oil or gas ... shall be subject to the condition that the lessee will, in conducting his explorations and mining operations, use all reasonable precautions to prevent waste of oil or gas developed in the land...." 30 U.S.C. § 225; *see also* 30 U.S.C. § 187 ("Each lease shall contain...a provision...for the prevention of undue waste...."). The MLA's legislative history notably provides that "conservation through control was the dominant theme of the debates." *Boesche v. Udall*, 373 U.S. 472, 481 (1963) (citing H.R.Rep. No. 398, 66th Cong., 1st Sess. 12-13; H.R.Rep. No. 1138, 65th Cong., 3d Sess. 19 ("The legislation provided for herein...will [help] prevent waste and other lax methods....").

BLM regulations further illuminate these requirements. The authorized officer must "*require* that all operations be conducted in a manner which protects other natural resources and the environmental quality, protects life and property and results in the maximum ultimate recovery of oil and gas *with minimum waste and with minimum adverse effect on the ultimate recovery of other mineral resources*." 43 C.F.R. § 3161.2 (emphasis added). Waste is defined as any act or failure to act, not sanctioned by the authorized officer, which results in: "(1) A reduction in the quantity or quality of oil and gas ultimately producible from a reservoir under prudent and proper operations; or (2) avoidable surface loss of oil or gas." 43 C.F.R. § 3160.0-5. Avoidable losses of oil or gas include venting or flaring without authorization, operator negligence, failure of the operator to take "all reasonable measures to prevent and/or control the loss," and an operator's failure to comply with lease terms and regulations, order, notices, and the like. *Id.*

Critically, whether to guard against climate change or conserve the mineral resource, it may be necessary to require emissions reductions beyond what is economically viable or, even, where inefficiencies are too great, to not lease lands, period. BLM cannot make an informed decision on this front, however, if it does not take a hard look at methane emissions – and other emissions from oil and gas development – as not only a climate problem, but, separately, as a waste problem and, even, as an unfixable inefficiency problem that may warrant keeping the mineral resource in the ground, unleased.

Ensuring compliance with these obligations through proper analysis and documentation in the NEPA process is important: technologies and practices change, and BLM's duty to prevent

degradation and waste cannot be excused just because the agency apparently lags behind the technological curve. NEPA provides an opportunity for BLM to account for technological progress and thereby satisfy its legal duties. In prior leasing processes and litigation with BLM, BLM has argued that it identifies, reports, and prevents GHG pollution and waste through existing policies. For example, BLM relies on guidance that apparently sets limits on the venting and flaring of natural gas. *See* Notice to Lessees and Operators ("NTL") 4a. However, this guidance was developed in 1980 – well before GHG reduction technologies and practices were developed – and does not, as found by the Government Accountability Office ("GAO"), "enumerate the sources that should be reported or specify how they should be estimated." S*ee* Scoping Exhibit 41 at 11, 27. BLM also explained to GAO "that [BLM] thought the industry would use venting and flaring technologies if they made economic sense," a naïve perspective belied by the lack of information about the magnitude of methane waste and the documented barriers to the deployment of GHG reduction technologies and practices. *Id*. at 20-33. Indeed, a recent Report released by the Natural Resources Defense Council identified that "[c]apturing currently wasted methane for sale could reduce pollution, enhance air quality, improve human health, conserve energy resources, and bring in more than $2 billion of additional revenue each year." Susan Harvey, et al., *Leaking Profits: The U.S. Oil and Gas Industry Can Reduce Pollution, Conserve Resources, and Make Money by Preventing Methane Waste* (March 2012) (attached as Exhibit 14). Moreover, the Report further identified ten technically proven, commercially available, and profitable methane emission control technologies together can capture more than 80 percent of the methane currently going to waste. *Id.* Such technologies must also be considered in BLM's alternatives analysis, discussed *infra.*

BLM cannot presume, as it appears to have done here, that whatever it does somehow automatically complies with FLPMA and the MLA. BLM has basic obligation under law to provide a reasoned and informed basis demonstrating that its decisions comply with federal law that can be tested through judicial review. 5 U.S.C. §§ 706(2)(A), (C), (D). As GAO has found, BLM's current waste prevention policies, originally created in 1980, are outdated. That BLM intends to revise its policies does not excuse its failures relative to the specific actions proposed by BLM in this EA. This is a fatal deficiency.

As provided in detail in CHC's Scoping Comments, preventing GHG pollution and waste is particularly important in the natural gas context, where there is an absence of meaningful lifecycle analysis of the GHG pollution emitted by the production, processing, transmission, distribution, and combustion of natural gas. In a Technical Support Document ("TSD") prepared for EPA's mandatory GHG reporting rule for the oil and gas sector, EPA determined that several emissions sources were projected to be "significantly underestimated" based on existing emissions factors. Scoping Exhibit 48. EPA thus provided revised emissions factors for four of the most significant underestimated sources that ranged from ten times higher (for well venting from liquids unloading) to as many as 3,500 and 8,800 times higher (for gas well venting from completions and well workovers of unconventional wells). Scoping Exhibit 48 at 9, table 1; *see also* Scoping Exhibit 49. When EPA accounted for just these four revisions, it more than doubled the estimated GHG emissions from oil and gas production, from 90.2 million metric tons of CO2 equivalent (MMTCO2e) to 198.0 MMTCO2e. *Id.*, at 10, table 2. To provide a specific example, EPA has used an emissions factor of 3 thousand standard cubic feet ("Mcf") of gas emitted to the atmosphere per well completion in calculating its GHG inventory. EPA has, however, conceded

that a far more accurate emissions factor is 9,175 Mcf per well. *Id.*, at Appendix B; *see also* Robert Howarth, Drew Shindell, et al., *Methane Emissions from Natural Gas Systems* (Feb. 25, 2012) (attached as Exhibit 15) (identifying methane emissions losses from natural gas systems and methane's global warming potential relative to coal, as well as calculating that "methane contributes 44% of the entire GHG inventory of the U.S., including carbon dioxide and all other gases from all human activities.").

Even without accounting for these revised emissions factors, oil and natural gas systems are the biggest contributor to methane emissions in the United States, "representing almost 40% of the total flux according to the most recent estimates from the U.S. Environmental Protection Agency (EPA)." Howarth and Shindell, et al., at 2. Moreover, recent peer-reviewed science demonstrates that methane is actually 33 times as potent as carbon dioxide over a 100-year time period, and 105 times as potent over a 20-year time period. *See* Scoping Exhibit 47. This information suggests that the near-term impacts of methane emissions have been underestimated by several orders of magnitude. *See* 40 C.F.R. § 1508.27(a) (requiring consideration of short and long term effects). In evaluating GHG emissions, BLM must account for methane's warming potency over both 100 and 20-year time horizons, on the basis of the most recent global warming potentials for methane provided by peer-reviewed science. In short, BLM must analyze both the short and long-term impact of methane pollution to the climate. *Id*. This is precisely the kind of analysis that must be considered and accounted for before BLM proceeds with the sale of 30,000 acres of the North Fork Valley. *See Ctr. for Biological Diversity*, 538 F.3d at 1217.

ii. Resiliency

Re·sil·ience is "an ability to recover from or adjust easily to misfortune or change." MERRIAM-WEBSTER COLLEGIATE DICTIONARY (11th ed. 2008). As provided by BLM's EA, "[t]he impact of climate change on BLM resources depends upon the location of the affected resource, its vulnerability and resiliency to change, and its relationship to the human environment." EA at 31. BLM continued, noting that, "[i]n general, the larger and faster the changes in climate are, the more difficult it will be for human and natural systems to adapt." *Id.* Despite this recognition, BLM is doing nothing to address the resiliency of the North Fork Valley to climate change and, in fact, is proceeding in a manner that is actively undermining human and natural systems ability to adapt. For example, BLM has specifically chosen not to consider impacts to the abundant farmlands of the North Fork Valley in its EA. *See* EA at 24; *see also infra.* The viability and success of these farmlands are among the most fundamental of resources from a resiliency standpoint.

Congress has specifically recognized the value that farmlands play in the welfare of people and our communities. *See* 7 U.S.C.A. §§ 4201(a)(1) ("the Nation's farmland is a unique natural resource and provides food and fiber necessary for the continued welfare of the people of the United States"); (a)(3) ("continued decrease in the Nation's farmland base may threaten the ability of the United States to produce food and fiber in sufficient quantities to meet domestic needs"); and (a)(5) ("Federal actions, in many cases, result in the conversion of farmland to nonagricultural uses where alternative actions would be preferred"). Any action taken that undermines a community's welfare and capacity to provide for itself in the face of recognized changes to climate – such as recklessly allowing for oil and gas development without even

analyzing impacts to farmland – is not only impermissible under NEPA, but also indefensible pursuant to BLM's mandate to act as stewards of our public lands.

c. The BLM has violated NEPA by specifically refusing to include any analysis of impacts to farmland.

The North Fork Valley is one of the foremost agricultural regions of Colorado, if not the interior west. The Valley is home to farms and ranches, vineyards and orchards. It has "the largest concentration of organic, sustainable growers in the state," and has a thriving agro-tourism industry – all of which are fundamental to the local economy. *See* Scoping Exhibit 67. Remarkably, BLM states its EA: "There are no Farmlands (Prime or Unique) within the proposed action area." EA at 24. This determination is patently incorrect and represents a fatal error in BLM's NEPA process.

As noted above, to make its threshold determination with respect to the significance of impacts, BLM must evaluate two factors: "context" and "intensity." 40 C.F.R. § 1508.27. Intensity refers to the severity of the impact, and requires the agency to, among other things, consider the "unique characteristics of the geographic area such as proximity to … prime farmlands." *Id.* at § 1508.27(b)(3). The requirement for BLM to consider prime and unique farmlands in their NEPA analysis is further emphasized in a U.S. Department of the Interior ("DOI") Environmental Statement Memorandum, which provides: "Bureaus and offices will analyze impacts on prime or unique farmlands as an integral part of the NEPA process." DOI Memorandum No. ESM94-7 (August 17, 1994) (attached as Exhibit 16). As further guidance on this process, DOI attached an earlier CEQ Memorandum that specifically addressed the analysis of impacts on prime or unique agricultural lands in implementing NEPA, and directed agencies to a set of regulations developed in cooperation with the U.S. Department of Agriculture ("USDA"), codified at 7 C.F.R. § 657. *See* CEQ Memorandum For Heads Of Agencies (August 11, 1980) (attached as Exhibit 17). Among other things, these USDA regulations establish an "Important Farmlands Inventory," which defines specific criteria to meet the definition of a "prime" or "unique" farmland. *See id.* at § 657.5(a), (b); *See also* 7 U.S.C § 4201(c)(1)(A), (B) (defining "prime farmland" and "unique farmland"). The purpose of this inventory is provided in 7 C.F.R. § 657.1, which states:

> [Natural Resources Conservation Service ("NRCS")] is concerned about any action that tends to impair the productive capacity of American agriculture. The Nation needs to know the extent and location of the best land for producing food, feed, fiber, forage, and oilseed crops. In addition to prime and unique farmlands, farmlands that are of statewide and local importance for producing these crops also need to be identified.

Moreover, "[i]t is NRCS policy to make and keep current an inventory of the prime farmland and unique farmland of the Nation." *Id.* at § 657.2. As part of this inventory process, the USDA prepared a map titled: Important Farmlands of Delta County Colorado, attached as Exhibit 18, which identifies prime and unique farmlands throughout the North Fork Valley. This is further supported by a NRCS Rapid Watershed Assessment for the North Fork Gunnison Watershed

(December 2009) (attached as Exhibit 19), providing maps and analysis specific to the North Fork Valley.

Given the abundance of proof that there is, in fact, a wealth of "prime and unique farmlands" throughout the North Fork Valley, it is stupefying that BLM UFO somehow concluded that "[t]here are no Farmlands (Prime or Unique) within the proposed action area." EA at 24. To reach such a conclusion, BLM has either rejected DOI policy to include farmlands as an integral part of their NEPA process, or BLM has defined the "action area" so narrowly that it only includes the actual parcels that are for sale. Given the direct, indirect, and cumulative impacts of oil and gas extraction – which are not limited to the confines of the lease parcel but, rather, ripple out across the landscape, through the air, and down watersheds, rivers, streams, and drainages – such a contracted scope of analysis is fundamentally contrary to both NEPA's mandate and DOI policy.

NEPA, for example, requires BLM to take a hard look at the cumulative impacts on the *affected geographic area*. *See Grand Canyon Trust v. Federal Aviation Administration*, 290 F.3d 339, 342 (D.C. Cir. 2002) (emphasis added). The term "cumulative impact" means "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." 40 C.F.R. § 1508.7; *see also supra*. Indeed, NEPA requires that an agency "fully assess … the possible environmental consequences" of activities "which have the potential for disturbing the environment." *Peterson,* 717 F.2d at 1415. *See also NRDC v. Hodel*, 865 F.2d 288, 297-99 (D.C. Cir. 1988) (holding that agency violated NEPA when it considered only the effects within the planning area, rather than the interregional effects). Accordingly, BLM UFO produced a fundamentally flawed EA when it explicitly declined to include any analysis of the prime and unique farmlands of the North Fork Valley.

Moreover, the Farmland Protection Policy Act ("FPPA"), 7 U.S.C. §§ 4201-09, instructs all agencies to "minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses." 7 U.S.C. §4201(b). The FPPA, much like NEPA, requires agencies to evaluate their programs and consider alternatives, but with a specific focus on preventing adverse effects on farmland. *Id.* § 4202; 7 C.F.R. § 658. Indeed, regulations provide that "each Federal agency shall use the criteria provided in § 658.5 to identify and take into account the adverse effects of Federal programs on the protection of farmland." 7 C.F.R. § 658.4. While the FPPA does not create a private cause of action, agencies still have the duty under NEPA to evaluate the environmental impact of actions on agricultural lands. *See Town of Norfolk v. U.S. EPA*, 761 F.Supp. 867, 890 (D.Mass. 1991). Notably, this duty extends to all farmlands. Thus, even if BLM somehow finds that all of this area's farmlands are not prime or unique, a criterion of significance, this does not absolve the agency of its duty to evaluate impacts to non-prime or unique farmlands, or, even, to prepare an EIS if the impacts to these non-prime or unique farmlands are, in context or because of cumulative impacts, significant. BLM's express refusal to conduct an analysis of farmlands violates both the intent and spirit of NEPA, as well as the FPPA.

d. The BLM has failed to sufficiently analyze impacts with regard to soil, slopes, vegetation, and seismicity.

In the EA, BLM provides: "While the act of leasing parcels would produce no impacts, subsequent development of the lease would lead to surface disturbance from the construction of well pads, access roads, and pipelines. The scope and extent of the impacts would be analyzed in accordance with NEPA at the time of exploration and development and would be proposed in an Application for Permit to Drill (APD)." What BLM apparently fails to recognize is that, by refusing to perform any analysis of impacts to soil and slopes at the lease stage, it is essentially foregoing any NEPA analysis until impacts have already occurred. As provided above, the lease itself is the point of irretrievable commitment of resources, conferring to the leaseholder a right of occupancy. *See* 40 C.F.R. § 3101.1-2 (oil and gas leases confer "the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource in a leasehold."). Thus, in waiting to perform analysis until the ADP stage, impacts to the land will already be realized. This, of course, circumvents the entire meaning and purpose of NEPA, which is to "ensure that federal agencies are fully aware of the impact of their decisions on the environment" before an irretrievable commitment of resources is made. *Oregon Environmental Council,* 817 F.2d at 492.

While remaining consistent in their decision to provide no analysis – claiming that "the act of leasing the parcels would produce no impacts" – BLM does identify numerous, potentially significant impacts that may result from development of these lands. *See* EA at 46. Some of these potential impacts include:

- Disturbance of the soil profile, resulting in the mixing of soil horizons and compaction.
- Removal of vegetation, exposing soil to wind and water erosion.
- Increased sediment transport, through erosion processes such as sheet, gully, rill erosion, and mass movement.
- Development of steep slopes, requiring cut and fill.
- Soil contamination with drilling and production fluids.
- Difficulty in reclamation associated with loss of soil productivity.

Id. BLM also notes that Mancos Shale – which predominates this landscape – is "highly erodible" and prone to "natural rilling, gullying, and mass wasting," EA at 41, and that "[d]evelopment of Mancos Shale could increase the intensity of many of the impacts above due to the erosive nature of soils." *Id.* Among these intensified impacts from development would be the "increase selenium levels in nearby streams and rivers," as well as "increase in selenium concentrations" to downstream resources including endangered fish. EA at 46. When saturated, selenium "is leached into nearby waterways," leading to "bioaccumula[tion] in fish tissue" which "adversely affect[s] reproduction and recruitment of fish." EA at 43.

BLM also expressed significant concern with regard to reclamation and the ability of this landscape to recover, providing that "reclamation on this soil formation is likely to be very difficult due to lack of moisture, steep slopes and disturbance of the biological crust," EA at 46, and that "[s]lopes of greater than *30 percent* pose concerns of reclamation and long-term soil health and productivity." EA at 45 (emphasis added). To BLM's credit, they attempt to address some of these concerns through their "Preferred Alternative." The Preferred Alternative accounts for "steep slopes" that are "40% or greater on the landscape," and recommends offering only 21

of 22 parcels for a total of 24,324.050 acres. EA at 11. Nevertheless, and as has become expected, BLM provides no analysis for this alternative whatsoever, and simply recommends that slopes greater than 40% be removed. Indeed, even under the "Preferred Alternative" section for BLM's evaluation of soil, the EA provides only that "[i]t is assumed that development under the Preferred Alternative would be less than under the Proposed Action and therefore impacts would be proportionately reduced." EA at 48. As noted above, "[p]erfunctory references do not constitute analysis useful to a decisionmaker in deciding whether, or how, to alter the program to lessen cumulative environmental impacts." *NRDC,* 865 F.2d at 275. It is hard to imagine how BLM would provide any less analysis or evaluation of their "Preferred Alternative" than they have done here.

Furthermore, existing vegetation conditions across the lease parcel area pose substantial concerns, compounding the problems with erosion and soil integrity identified above. "33% of the total lease parcel area has vegetation issues that are sufficient to cause concern that problems could spread and become more serious. An additional 33% of the area has problems so serious that the function, production, and habitat quality of the vegetation is very compromised." EA at 50. Accordingly, *two-thirds* of the total lease parcel area has some degree of existing vegetative concern. Nevertheless, BLM concludes: "While the act of leasing would produce no impacts, subsequent development of the lease would lead to surface disturbance and vegetation removal from the construction of well pads, access roads, and pipelines." EA at 51. Characteristically, BLM offers no analysis of these impacts. This is simply unacceptable.

In addition, although the EA provides that the potential for geologic hazards exist in this area, specifically noting that "[o]ver the last century subsistence has been noted at the surface directly above some of the historic mines in the area," EA at 106, BLM failed to incorporate or reference any potential impacts from seismic activity. CHC's Scoping Comments expressly address the relationship between seismicity and oil and gas activity, identifying several recent and historic examples of where oil and gas activity have induced earthquakes. *See* Scoping Comments at 22-24. The potential for such impacts – particularly due to underground coal mining in the area – must be analyzed before BLM moves forward with the August 2012 Lease Sale.

e. The BLM has failed to sufficiently analyze and protect North Fork Valley water resources.

i. Groundwater

According to the EA, the North Fork Valley is served by a "shallow alluvial aquifer" and that "[g]roundwater quality is excellent." EA at 73. There are "approximately 124 domestic wells located on private property within 1000' of the Lease Parcels," with well depths of "between 30' and 500' deep." *Id.* "Many of the wells are located down gradient of the Lease Parcels." *Id.*

BLM identifies a number of known impacts to groundwater associated with oil and gas activities, including:

- Loss of drilling fluids to groundwater during drilling operations.

- Cross contamination of aquifers across geologic formations from poorly sealed well bores.
- Contamination of unintended aquifers from hydraulic fracturing.
- Deep aquifer contamination from injection wells.
- Contamination of the shallow alluvial aquifer from spills of chemicals collected or stored on the well pad or in transit to the well pad.
- Seepage of produced water, stimulation fluids or cutting stored in reserve pits into shallow aquifers.

EA at 75. Despite these identified impacts, BLM continues to rely on the premise that the "act of leasing would produce no impacts," *id.,* and thus conveniently avoids performing any analysis disclosing the specific impacts of oil and gas development – and those impacts' magnitude (i.e., significance) to groundwater that may affect the citizens and environment of the North Fork Valley. BLM concedes that "[i]f contamination of aquifers from oil and gas development occurs, changes in groundwater quality could impact downstream users diverting water from groundwater sources such as municipal and public wells, domestic wells, springs, and surface water diversions that communicate with groundwater." *Id.* The EA further provides that "[t]his lease sale … will elevate the potential for deterioration of groundwater quality." *Id.* Unfortunately, and as expected, this concern is not followed by any analysis of impacts to groundwater quality in general, or from fracking specifically, that would aid the public or BLM in making an informed decision.

Moreover, while the EA gives some focus to groundwater *quality* (without actually performing any analysis), there is no mention whatsoever of groundwater *quantity*. While the amount of water used during oil and gas activity can vary, analysis provided in the Bull Mountain EA provides that for 146 wells, "[t]otal annual water us for construction and drilling operations is estimated to be 675 ac-ft," which is approximately 1.3 billon-gallons of water. Bull Mountain EA at 126. Again, BLM entirely fails to quantify the effect that groundwater depletions could have on the North Fork Valley and the foreseeable impacts that could result.

ii. Surface Water

According to the EA, "[i]t is BLM policy that agency projects should meet or exceed water quality standards established by the State of Colorado for all water bodies located on or influenced by BLM administered lands." EA at 78. Pursuant to the Clean Water Act ("CWA") section 303(d) – as implemented by the State of Colorado – each water body on the 303(d) list must have a Total Maximum Daily Load Assessment ("TMDL") prepared. In 2009, the Colorado Water Quality Control Division released a "TMDL for the Gunnison River and tributaries and the Uncompahgre River and tributaries," EA at 81, both of which are 303(d) listed for selenium. Moreover, and as noted in CHC's Scoping Comments, several segments of the North Fork are impaired under 303(d) due to major pollution from selenium. Scoping Exhibit 34. These segments include the North Fork mainstem and all tributaries below Paonia. Scoping Exhibit 35. "Selenium can be easily mobilized … from surface disturbing activities on Mancos Shale, and delivered to nearby waterways by irrigation return flow, groundwater, or overland flow. Once in waterways, selenium can move through the aquatic environment, bio-accumulate in organisms and potentially reach toxic levels." EA at 80. As a signatory to the Memorandum of

Understanding ("MOU") with the Bureau of Reclamation ("USBR") for the implementation of a Selenium Management Program, BLM has agreed to, "[e]valuate options to conform to a goal of no net new selenium loading from land exchanges, sales, and other actions involving public lands." EA at 81.

BLM goes on to identify that "subsequent development of the lease would lead to surface and subsurface disturbance from the construction of well pads, reserve pits, access roads, pipelines, and the drilling of exploration and development well," EA at 87, which include the following impacts:

- Surface compaction leading to increases in runoff and peak flows.
- Increased sediment transport, through erosion processes such as sheet, gully, rill erosion, and mass movement.
- Changes to downstream channel morphology with increased flow and sediment.
- Alteration of floodplains at road and pipeline crossings.
- Changes in surface water/groundwater recharge from artificial interception of storm waters in ditches and berms associated with roads and well pads.
- Surface water contamination from spills or leaks from the well pad or reserve pits.
- Water depletions from hydraulic fracturing or wells, road dust abatement, and hydrostatic pipeline testing.
- Increases in selenium and salinity concentrations in water features due to surface disturbance and reduced flows resulting from oil and gas depletions.

EA at 87. Moreover, the EA states that "[t]his lease sale … will elevate the potential for deterioration of surface water quality. Oil and gas activities could magnify other impacts in the watershed on private and federal lands due to the increased surface disturbance and use of hazardous chemicals and potential for leaks or spills in the watershed." *Id.* Of specific concern, a recent Report has identified that there were 516 spills related to oil and gas development in 2011 in Colorado, and of those, the Colorado Oil and Gas Conservation Commission ("COGCC") only assessed 5 fines. Earthworks, *Enforcement Report, COGCC: Inadequate enforcement means current Colorado oil and gas development is irresponsible* (March 2012) (attached as Exhibit 20). This Report was part of a national assessment of state oil and gas regulatory enforcement, highlighting the Colorado-specific findings, which include:

- As the number of wells drilled increases in Colorado, the number of inspections is decreasing.
- It is physically impossible for existing COGCC inspection staff to inspect every well once per year.
- Many rule violations are not recorded, and very few violators are penalized.
- For those who are penalized, $1000/day maximum fines are inadequate to deter irresponsible operations.

In addition to these concerns related to leaks and spills into the North Fork watershed – which received no analysis – the EA further provides that "[c]urrent levels of Selenium within

the rare fish habitats in this region are already considered to be impacting rare fish populations." EA at 57. Despite these myriad impacts and the potential for their intensification from the Lease Sale – as well as BLM's commitment pursuant to the MOU with USBR establishing "a goal of no net new selenium loading" – BLM provides in its EA that "the act of leasing the parcels would produce no impacts." EA at 87. Thus, once again, BLM abdicates its duty under NEPA by continuing its refusal to analyze impacts fundamental to its decision-making, and similarly ignores its commitment to the USBR. This analysis must include a hard look at impacts relative to specific water quality standards for specific waters.

In addition, BLM fails to address the CWA's antidegradation rules – a component of water quality standards for each waters – altogether. As CHC provided in Scoping Comments, the EPA's regulations implementing the CWA require that state water quality standards include "a statewide antidegradation policy" to ensure that "[e]xisting instream water uses and the level of water quality necessary to protect [those] uses [are] maintained and protected." 40 C.F.R. § 131.12(a)(1). Colorado's antidegradation rules provide that either of two water quality-based designations may be adopted in appropriate circumstances: (1) an "outstanding waters" designation may be applied to certain high quality waters that constitute an outstanding natural resource, and (2) a "use-protected waters" designation. *See* 5 C.C.R. 1002-31.8. Colorado's antidegradation rule further states that an "outstanding waters" designation requires the "highest level of water quality protection" and that these waters "shall be maintained and protected at their existing quality." *Id.* at 31.8(1)(a). In other words, no degradation of these waters by regulated activities is allowed. As applied to the subject August 2012 Lease Sale, segment (COGUNF01) in the North Fork watershed has been given an "outstanding waters" designation, and includes all tributaries to North Fork of the Gunnison River, including all lakes, reservoirs, and wetlands within the West Elk and Raggeds Wilderness Areas. Scoping Exhibit 34. Accordingly, any activity undertaken by BLM UFO in this area – including the lease of public lands for oil and gas development – may degrade these "outstanding waters." Not only is BLM UFO mandated to follow this antidegradation standard under the CWA and Colorado law, but it must also take a NEPA "hard look" at any impacts that may be related to these water quality standards as well. BLM's failure to do so in its EA is arbitrary and capricious.

The EA also identifies that "[t]here are approximately 66 water structures located on lease parcels," which are comprised of "headgates, ditches, ponds, and pipelines" – including many "irrigation ditches" and "stock watering ponds." EA at 84. As provided in CHC's Scoping Comments, these irrigation ditches and stock ponds are the lifeblood of farmers and ranchers in the North Fork Valley, and access to reliable and clean water sources are fundamental to this Valley's agrarian way-of-life. While BLM provides that "[w]ater use by oil and gas activities can result in water depletions to the basin," *id.* BLM fails to provide any analysis of agricultural water supplies relative to both quality and quantity.

Furthermore, BLM identifies that several public water supplies and source water areas will be implicated in this Lease Sale, noting that the Colorado Department of Public Health and the Environment ("CDPHE") has prepared three "source water assessment reports … for the communities of Paonia, Crawford, and Hotchkiss … within the lease parcel area." EA at 83. "In addition to the Municipalities with completed source water assessments, there are numerous small water providers in the area." *Id.* BLM notes that none of the municipal or public water

systems have a developed "protection plan" for preventing contamination of their untreated drinking water supplies (although this claim is contested by those municipalities). *Id.* Rather than performing any analysis or developing a protection plan at this stage, BLM simply provides that "it is anticipated that agreements will be prepared between BLM and water providers to ensure that BLM management activities provide adequate protection of public water supplies." *Id.* These "anticipated agreements" come as little assurance to the citizens of the North Fork Valley who rely on public water supplies for their potable water needs. These resources must be protected at all costs, and certainly warrant a thorough review and analysis before these public lands are sold in the August 2012 Lease Sale.

iii. Wild and Scenic Rivers

The Wild and Scenic Rivers Act ("WSRA"), 16 U.S.C. § 1271 *et seq*., provides a national system of river protection, specifying that the free-flowing, water quality, and outstandingly remarkable values ("ORVs") of selected waterways should be preserved and protected. As part of a required WSRA inventory, BLM has identified Deep Creek, which is "free-flowing as defined by the act, and possesses a fish ORV due to the presence of what is thought to be a genetically pure strain of greenback cutthroat trout." EA at 33. "This is one of 37 known greenback populations on the west slope of Colorado," EA at 34, and is a listed species under the Endangered Species Act. *See infra* (providing comments related to the ESA). Though determined to be eligible for inclusion in the National Wild and Scenic River System ("NWSRS"), Deep Creek crosses lease parcel 6215, and is directly adjacent to parcels 6216 and 6206. EA at 33, 35. Although the WSRA requires some interim protection for Agency-Identified WSR Eligible Streams, BLM nevertheless maintains that "[t]he lease sale itself creates no on-the-ground changes, and therefore would have no effect on the free-flow of the segment, its water quality, or its ORV." EA at 36. Of course, BLM provides no actual analysis of impacts, and fails to recognize that the August Lease Sale itself will confer a right of occupancy to the leaseholder, therefore threatening Deep Creek water quality and interim WSR status. This course of action is incongruent with BLM's mandate under NEPA.

f. The BLM has failed to sufficiently analyze and protect wildlife species.

Comments regarding Endangered Species Act listed species and habitat are provided *infra*.

i. Migratory Birds

"Various migratory bird habitats exist on the proposed parcels," with parcels providing "potential habitat for several species on the USFWS's Birds of Conservation Concern List." EA at 60; *see also, id.* (providing a list of bird species that may be impacted). These parcels also contain "known breeding territories for golden eagle (parcel 6189, 6190 and 6103) and peregrine falcon (parcel 6200). The golden eagle is protected under the Bald and Golden Eagle Protection Act." EA at 60. Despite these known bird species and habitats of concern, BLM provides that "[t]he proposed action of leasing would not impact any migratory bird species or their habitat." EA at 61. BLM reached this conclusion despite also recognizing that "[t]here is an established body of evidence that human activities and habitat alternation in close proximity to raptor nest

sites, including golden eagle nest sites, may adversely impact nest success." *Id.* Yet again, BLM has decided to defer performing any site-specific analysis until the APD stage, where it will then "determine and mitigate potential impacts." *Id.* As note above, once a lease is issued, it guarantees the leaseholder a right of occupancy, thus creating "human activities" that may result in the precise type of adverse impacts raised in the EA. Further, reliance on mitigation measures to address these impacts, as BLM suggests, is inconsistent with what NEPA requires. *See Northern Plains Resource Council,* 668 F.3d at 1085. Accordingly, BLM's approach violates NEPA, the Migratory Bird Treaty Act and Executive Order 13186, as well as the Bald and Golden Eagle Protection Act, and must be rejected.

ii. Terrestrial and Aquatic Wildlife

The EA identifies both elk and mule deer crucial winter habitat within the project area, as well as a variety of other wildlife habitats and their associated species. EA at 63. The EA further states that "[s]everal parcels are adjacent to or contain perennial streams which would provide potential habitat for aquatic life," and that these habitats "provide food, cover and shelter for a variety of mammal, bird, amphibian and reptile species common to southwest Colorado." EA at 65, 66. BLM concludes – for both terrestrial and aquatic species – that "[a]lthough all of the species are important members of native communities and ecosystems, most are common and have wide distributions within the state, region and field office." EA at 63, 66. To suggest that impacts to "common species" are somehow not relevant according to NEPA is simply incorrect. NEPA does not limit or quantify the scope of its impacts analysis based on the type of species present; rather, NEPA simply asks BLM to analyze all impacts associated with agency action. In other words, NEPA does not permit BLM to refuse to perform analysis based on their contrived and unscientific valuation of wildlife resources.

Here, BLM states that impacts to species may result from the lease sale. Thus, NEPA requires BLM to analyze those impacts before action is taken. Despite this recognition, BLM again provides that "the proposed action of leasing itself has no direct effects on wildlife," and that "[a]ny impacts to specific species would be addressed at the APD stage and appropriate mitigation would be developed." *Id.* As provided above, this is not congruent with what NEPA requires.

g. The BLM has failed to sufficiently analyze impacts to visual, recreation, and socio-economic resources.

BLM recognizes in its EA that "[t]he impression, whether deserved or not, of the North Fork Valley as a source of healthful, natural agricultural products has helped the area to develop specialized, often organic, small farms. These farms are heavily dependent on the positive impression that many consumers possess of the valley as a natural, relatively undisturbed area." EA at 109. For the North Fork Valley, this perception is reality. "Much of the tourists to the area are drawn by the natural amenities, participating in dispersed camping, hunting, and other outdoor activities." EA at 109. "The natural night skies throughout the proposed lease parcels are notably dark due to the absence of development." EA at 102. This is the reality that CHC and the citizens of the North Fork are determined to protect. Indeed, both the Delta County Master Plan and Town of Paonia have enumerated the goal to preserve and protect the open and scenic

viewsheds that characterize the North Fork Valley. *See* EA at 104. These vital resources are now threatened through BLM's proposal to open up 30,000 acres of the Valley to oil and gas development.

BLM itself has acknowledged the threat that oil and gas development poses to the North Fork Valley. "In areas being developed for oil and gas, tourism would probably decrease due to likely degradation of the natural settings which in turn would affect visitor expectations for high quality recreational opportunities." EA at 101. Further, "cumulative impacts to recreation could be the loss of desired natural settings, the displacement of wildlife, temporary noise and lighting at night, and traffic or hazards on existing and/or designated routes." EA at 101. Indeed, BLM has recognized that these visual, recreational and agricultural resources are the lifeblood of the North Fork Valley.

> Broader negative economic impacts could occur as a result of a loss of the region's reputation of environmental amenities and quality. Even if the environmental negatives from well development are short-term, they would likely affect consumer's perceptions about the area in the long-term, serving to negatively impact local agriculture, tourism, and the attraction to retirees. These impacts could result in significant economic costs to the North Fork Valley that may or may not outweigh the benefits derived from well development.

EA at 110. Despite this recognition, BLM is bullishly moving forward with the August 2012 Lease Sale without truly engaging in a NEPA process that analyzes these impacts. Rather, BLM is deferring this analysis until its too late – both for the environment and the North Fork economy. Characteristically, BLM provides that "[a]s part of reviewing and approving APDs … impacts would be mitigated by applying COAs," *see* EA at 101, 105. As BLM has conceded, their lease first, (maybe) analyze later strategy, will do nothing to assuage the long-term consumer perception and economic costs to the North Fork Valley – to say nothing of the impermissibility of this scheme pursuant to NEPA's mandate. In an attempt to appease these concerns, BLM states: "the local community could use part or all of its share of leasing royalty payments to alleviate negative economic costs to the community." EA at 111. Indeed, with the economic benefits of this development being used to pay for the economic costs – not to mention the environmental costs left unaddressed in BLM's statement – it would be far more rational to leave these resources in the ground and allow the North Fork Valley to be cultivated according to the sovereign resolve of its citizens.

As provided in Scoping Comments, oil and gas development would have a dramatic impact on the communities of the North Fork Valley. *See* Scoping Comments, at 42-47. These impacts are many, and include the myriad effects from typical activities during drilling and development such as "ground clearing and removal of vegetative cover, grading, drilling, waste management, vehicular and pedestrian traffic, and construction and installation of facilities." Tribal Energy and Environmental Clearinghouse, *Oil and Gas Drilling/Development Impacts* (attached as Exhibit 21). The impacts from these activities are many, and include impacts to the community such as: noise, air quality, cultural resources, ecological resources, environmental justice, hazardous materials and waste management, health and safety, land use, paleontological resources, socioeconomics, soil and geological resources, transportation, visual resources, and

water resources. *See id.* Likewise, indirect impacts to communities from oil and gas development are also substantial. For example, in Sublette County, Wyoming, a self-described oil and gas "boomtown," natural gas development has dramatically impacted community resources such as: housing, cost of living, small businesses, infrastructure (roads, sewer, water), schools, emergency services, health clinics, and community amenities (parks, recreation centers, library). *See* Sublette County, *Social & Economic Impacts to Sublette County, WY from Natural Gas Development* (attached as Exhibit 22). None of these impacts are addressed or analyzed in BLM's EA, leading to considerable uncertainty with regard to BLM's decisionmaking, as well as public understanding, of impacts to the North Fork Valley.

H. The BLM has failed to sufficiently analyze and promote a range of reasonable alternatives in its EA.

A properly drafted EA must include a discussion of appropriate alternatives to the proposed project. *Davis v. Mineta,* 302 F.3d 1104, 1120 (10th Cir. 2002) (citing 42 U.S.C. § 4332(2)(E); 40 C.F.R. § 1508.9(b)). Even where impacts are "insignificant," BLM must still consider alternatives. *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1229 (9th Cir. 1988) (agency's duty to consider alternatives "is both independent of, and broader than," its duty to complete an environmental analysis); *Greater Yellowstone Coalition v. Flowers*, 359 F.3d 1257, 1277 (10th Cir. 2004) (duty to consider alternatives "is operative even if the agency finds no significant environmental impact"). Moreover, the treatment of alternatives must be measured against the standards in 42 U.S.C. § 4332(2)(E) and 40 C.F.R. § 1508.9(b) (requiring the agency to study, develop and discuss appropriate alternatives and to briefly describe those alternatives). *Davis*, 302 F.3d at 1120. Consideration of reasonable alternatives is necessary to ensure that the agency has before it and takes into account all possible approaches to, and potential environmental impacts of, a particular project. NEPA's alternatives requirement, therefore, ensures that the "most intelligent, optimally beneficial decision will ultimately be made." *Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n,* 449 F.2d 1109, 1114 (D.C. Cir. 1971). This reflects the agency's multiple use and environmental protection responsibilities imposed by FLPMA.

"Clearly, it is pointless to 'consider' environmental costs without also seriously considering action to avoid them." *Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Commn.*, 449 F.2d 1109, 1128 (D.C. Cir. 1971). "[T]he heart" of an environmental analysis under NEPA is the analysis of alternatives to the proposed project, and agencies must evaluate all reasonable alternatives to a proposed action. *Colorado Environmental Coalition*, 185 F.3d at 1174 (quoting 40 C.F.R. § 1502.14). An agency must gather "information sufficient to permit a reasoned choice of alternatives as far as environmental aspects are concerned." *Greater Yellowstone*, 359 F.3d at 1277 (citing *Colorado Environmental Coalition*, 185 F.3d at 1174); *see also Holy Cross Wilderness Fund v. Madigan*, 960 F.2d 1515, 1528 (10th Cir. 1992). Thus, agencies must "ensure that the statement contains sufficient discussion of the relevant issues and opposing viewpoints to enable the decisionmaker to take a 'hard look' at environmental factors, and to make a reasoned decision." *Izaak Walton League of America v. Marsh,* 655 F.2d 346, 371 (D.C. Cir.1981) (citing *Kleppe v. Sierra Club,* 427 U.S. 390, 410 n. 21 (1976)).

BLM's EA considers three alternatives: (1) the Proposed Action, (2) the Preferred Alternative, and (3) the No Action Alternative. EA at 9-13. The Proposed Action consists of offering 22 parcels and approximately 30,000 acres of federal and split estate lands for oil and gas development. EA at 9. The Preferred Alternative proposes the removal of lands with steep slopes of 40% or greater from consideration, and consists of 21 parcels and 24,324 acres of federal and split estate lands. EA at 11. The No Action Alternative would deny or reject the expression of interest to lease these parcels, but the "parcels would remain available for inclusion in future lease sales." EA at 13.

As frequently identified above, BLM's EA expressly rejects the notion that they are required to perform any analysis of impacts or alternatives at the lease sale stage and, instead, chooses to defer such analysis until the APD stage – a decision, parenthetically, which is in direct conflict with settled Tenth Circuit precedent. *See New Mexico ex rel. Richardson*, 565 F.3d at 717-19; *Pennaco*, 377 F.3d at 1160. Based on this decision, and essentially by admission and definition, BLM has failed to take a "hard look" at the environmental impacts associated with the August 2012 Lease Sale. *See Sierra Club*, 848 F.2d at 1093 (agencies are to perform hard look NEPA analysis "before committing themselves irretrievably to a given course of action so that the action can be shaped to account for environmental values"). Arising from BLM's void of analysis, the EA's discussion of the three alternatives is similarly perfunctory. For example, BLM's description of the Preferred Alternative (i.e., the alternative that BLM suggests should be adopted here) amounts to all of four sentences. When applying this alternative to BLM's consideration of a given resource, the EA routinely offers that "[i]t is assumed that development under the Preferred Alternative would be less than under the Proposed Action and therefore impacts would be proportionately reduced." *See, e.g.,* EA at 28, 32, 48. In the absence of any true analysis of alternatives, it is impossible for the BLM to make the type of reasoned decision on this proposal that is required under NEPA – even under the minimal requirements for an EA. Operating in concert with NEPA's mandate to address environmental impacts, BLM's fidelity to alternatives analysis helps "sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decision maker and the public." 40 C.F.R. § 1502.14. For each of the alternatives, the agency must "[d]evote substantial treatment to each alternative ... including the proposed action so that reviewers may evaluate their comparative merits." 40 C.F.R. § 1502.14(b).

Moreover, NEPA does not exempt an agency from its duty to consider alternatives simply because impacts are cumulative. *See NRDC*, 865 F.2d at 299 (a "hard look" is premised on providing "analysis useful to a decisionmaker in deciding whether, or how, to alter [a project] to lessen cumulative environmental impacts"). Indeed, NEPA, by mandating consideration of cumulative impacts, rejects that very notion, acknowledging the complexity of the environment, and humanity's interactions with that environment; alternatives are expressly designed to help address "unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(E), and, thus, as noted above, to "sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decision maker and the public," 40 C.F.R. § 1502.14.

In addition, CEQ regulations require agencies to "[r]igorously explore and objectively evaluate all reasonable alternatives" to a proposed action in comparative form, so as to provide a "clear basis for choice among the options." 40 C.F.R. § 1502.14. Accordingly, and in addition to

alternatives already identified, BLM must consider and compare the following additional reasonable alternatives in its NEPA analysis prior to the August 2012 Lease Sale:

(1) An alternative that affirmatively removes these parcels from further consideration, pursuant to FLPMA.

As provided in the EA, under the No Action Alternative, "parcels would remain available for inclusion in future lease sales." EA at 13. Differing from the No Action Alternative, this alternative would require the affirmative removal of the subject lease parcels from further consideration, pursuant to BLM's authority under FLPMA, which delegates authority to permanently withdraw lands. 43 U.S.C. § 1714. This authority is independent of BLM's land use planning process, as provided through a RMP, and authorizes the Secretary to "make, modify, extend, or revoke withdrawals." *Id.* Therefore, BLM must consider as a reasonable alternative to the proposed action an alternative that affirmatively withdraws all 22 parcels and 30,000 acres in the North Fork Valley from present and future oil and gas development.

Furthermore, and to the degree that BLM thinks or finds that this alternative can only be considered at the RMP stage, rather than through 43 U.S.C. § 1714, this alternative underscores the need for BLM to defer the August 2012 Lease Sale pending revision of the UFO RMP/EIS. Pursuant to FLPMA, BLM is required to develop and revise land use plans so as to "observe the principles of multiple use." 43 U.S.C. § 1712(c)(1). "Multiple use" means "a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values." *Id.* at § 1702(c).

FLPMA does not mandate that every use be accommodated on every piece of land; rather, delicate balancing is required. *See Norton v. S. Utah Wilderness Alliance*, 542 U.S. 55, 58 (2004). "'Multiple use' requires management of the public lands and their numerous natural resources so that they can be used for economic, recreational, and scientific purposes without the infliction of permanent damage." *Public Lands Council v. Babbitt*, 167 F.3d 1287, 1290 (10th Cir. 1999) (citing 43 U.S.C. § 1702 (c)). As held by the Tenth Circuit, "[i]f all the competing demands reflected in FLPMA were focused on one particular piece of public land, in many instances only one set of demands could be satisfied. A parcel of land cannot both be preserved in its natural character and mined." *Rocky Mtn. Oil & Gas Ass'n v. Watt,* 696 F.2d 734, 738 n. 4 (10th Cir.1982) (quoting *Utah v. Andrus,* 486 F.Supp. 995, 1003 (D.Utah 1979)); *see also* 43 U.S.C. § 1701(a)(8) (stating, as a goal of FLPMA, the necessity to "preserve and protect certain public lands in their natural condition"); *Pub. Lands Council,* 167 F.3d at 1299 (citing § 1701(a)(8)). As further provided by the Tenth Circuit:

> BLM's obligation to manage for multiple use does not mean that development *must* be allowed on [a particular piece of public lands]. Development is a *possible* use, which BLM must weigh against other possible uses – including conservation to protect environmental values, which are best assessed through the NEPA process. Thus, an alternative that closes the [proposed public lands] to development does not necessarily violate the principle of multiple use, and the

multiple use provision of FLPMA is not a sufficient reason to exclude more protective alternatives from consideration.

New Mexico ex rel. Richardson, 565 F.3d at 710.

Accordingly, BLM has authority to both permanently withdraw these lands pursuant to 43 U.S.C. § 1714, as well as to defer this Lease Sale pending revision of the UFO RMP/EIS and "preserve and protect [these] public lands in their natural condition" for the benefit of "future generations" under BLM's multiple use mandate, 43 U.S.C. § 1701(a)(8). Pursuant to either option afforded to BLM under FLPMA, BLM UFO must consider and analyze the permanent withdrawal and preservation of lands in the North Fork Valley as a reasonable alternative.

(2) An alternative that includes a NSO stipulation as a condition that attaches to all lease parcels.

BLM's analysis should include an alternative that applies a "no surface occupancy" ("NSO") stipulation to all 22 parcels and 30,000 acres of the proposed action. As noted above, and as identified by the Tenth Circuit, without a NSO stipulation that attaches to each lease parcel, BLM will no longer be able to "prevent the impacts resulting from surface use after the lease is issued." *New Mexico ex rel. Richardson*, 565 F.3d at 718. Accordingly, BLM should preserve its ability to prevent impacts, apply a NSO stipulation to all lease parcels, and include this reasonable alternative in the UFO's alternative analysis.

(3) An alternative that applies best management practices for oil and gas development as stipulations that attach to all lease parcels.

BLM's NEPA process should include analysis of an alternative that applies best management practices ("BMP") for oil and gas development as stipulations that attach to all the parcels offered in the August 2012 Lease Sale. BMPs are mitigation measures applied to areas being developed for oil and gas to promote energy development in an environmentally sensitive manner. Such measures are both reasonable and immediately deployable and should be mandated, via stipulation, at the least stage.

The Intermountain Oil and Gas BMP Project, which is maintained by the Natural Resources Law Center at the University of Colorado Law School, provides supplemental information, including construction specifications, illustrations, pictures, maps, monitoring reports, and evaluations of the potential of the practice for mitigating impacts of development. *See* Intermountain Oil and Gas BMP Project, available at: http://www.oilandgasbmps.org/ (last visited March 27, 2012). Among other resources, the Intermountain Oil and Gas BMP Project maintains a database that addresses a variety of resources and issues, including:

- Air Quality and Emissions
- Aquatic and Riparian Values
- Community
- Cultural/Historic
- Grazing and Agriculture

- Human Health and Safety
- Land Surface Disturbance
- Noise
- Soils (Conservation, Pollution, Reclamation)
- Vegetation
- Visual Aesthetics
- Water Quality and Pollution
- Water Quality and Rights
- Wildlife

Each individual resource contains hundreds of additional BMPs aimed at developing oil and gas reserves in a manner that protects the many human and environmental resources at stake. BLM should evaluate these BMPs thoroughly, including their efficacy, in light of a hard look at impacts and include stipulations mandating use of these BMPs in its alternatives analysis keyed to a baseline analysis of the resources and values of the proposed lease parcels and the broader North Fork Valley.

Moreover, and as identified above, this alternative should further consider as a stipulation the ten technical proven and commercially available methane emissions reduction technologies identified in the Harvey Report at 18, Table 4, attached as Exhibit 14, which together can capture more than 80 percent of the methane currently going to waste.

I. The stipulations contained in Appendix F are insufficient in their ability to protect the resource values of the North Fork Valley from oil and gas development.

The stipulations contained in Appendix F are wholly insufficient in their ability to protect both the resources values and citizens of the North Fork Valley from oil and gas development and, therefore, must be amended and revised accordingly. Generally, the following deficiencies must be addressed throughout Appendix F, including:

1. The use of the word "may" implies that the lessee also "may not" be held accountable with regard to implementing the steps outlined in the stipulation/lease notice. Past experience informs that such discretionary protective measures – where the Agency can determine whether or not to require implementation – are not to be trusted or relied upon in meeting the stipulations resource aim. To ensure that necessary protection is achieved, we strongly urge changing the discretionary use of "may," to the mandatory use of "shall" or "will" in appropriate stipulations and lease notices; and

2. Based on the current approach, BLM can grant a waiver, variance, or exception to an applicable stipulation, thus rendering the protective measure inoperable. Use of such waivers has occurred in other areas – including in the gas fields south of Jackson, Wyoming – where, for example, timing stipulations were attached to leases to restrict surface disturbing activities aimed to protect pronghorn winter range, and those stipulations were rendered useless when the lessee applied for a

variance, which was granted by BLM. Accordingly, we request that option for waiver, variance, or exception is removed from stipulations to ensure that resource values are protected.

In addition to these general comments, BLM should also make the following specific change to Appendix F:

EXHIBIT CO-34: ENDANGERED SPECIES ACT SECTION 7 CONSULTATION STIPULATION

Delete the word "may" in line 5 and insert the word "shall."

Add the following language at the end of this Notice that says, "No waiver, variance, or exception may be granted to this Stipulation."

EXHIBIT CO-39: CONTROLLED SURFACE USE

Delete the word "may" in line 6 and insert the word "shall."

Delete the first sentence in the second paragraph that says, "Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes." Insert in its place, "No waiver, variance, or exception may be granted to this stipulation."

EXHIBIT UB-01/UB-1: TIMING LIMITATION STIPULATION

Delete the sentence that says, "Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes." Insert in its place, "No waiver, variance, or exception may be granted to this stipulation."

EXHIBIT UB-03/UB-3: TIMING LIMITATION STIPULATION

Delete the sentence that says, "Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes." Insert in its place, "No waiver, variance, or exception may be granted to this stipulation."

EXHIBIT UB-04/GGNCA-4: TIMING LIMITATION STIPULATION

Delete the sentence that says, "Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes." Insert in its place, "No waiver, variance, or exception may be granted to this stipulation."

EXHIBIT UFO-LN-04: LEASE NOTICE

Delete the word "may" in line 2 and insert the word "shall."

Add a second paragraph that says, "No waiver, variance, or exception may be granted to this Lease Notice."

EXHIBIT UFO-LN-06: SCENIC AND NATURAL VALUES NOTICE

Delete the word "may" in line 1 and insert the word "shall."

Revise paragraph 4 as follows: Reduce noise pollution by using best available technology such as installation of multicylinder pumps, hospital sound reducing mufflers, and placement of exhaust systems to ~~direct~~ PREVENT noise ~~away from~~ NEAR THE communities of Crawford, Hotchkiss, and Paonia or West Elk Byway.

Revise paragraph 5 as follows: Reduce light pollution by, AT A MINIMUM, using methods such as limiting height of light poles, timing of lighting operations (meaning ~~limiting lighting to times of darkness associated with drilling and work over or maintenance operations~~ ALL LIGHTS ARE TURNED OFF BETWEEN THE HOURS OF 10 P.M. AND 6 A.M.), limiting wattage intensity, and ~~constructing~~ INSTALLING DARK SKY LIGHTING WITH ALL LIGHTS POINTING DOWN AND light shields INSTALLED ON EVERY LIGHT.

Revise paragraph 6 as follows: Protect outstanding scenic and natural landscape values with special design and reclamation measures incorporated into the Surface Use Plan of Operations of a development proposal which ~~may~~ SHALL include transplanting trees and shrubs, fertilization, mulching, special erosion control structures, irrigation, site re-contouring to match the original contour, buried tanks and low profile equipment, and painting to minimize visual contrasts. The proposed location of the activity ~~may~~ SHALL be moved up to 200 meters in sensitive areas, such as unique geologic features and rock formations, visually prominent areas, and high recreation use areas.

Add the following language at the end of this Notice that says, "No waiver, variance, or exception may be granted to this Values Notice."

EXHIBIT UFO-LN-07: LEASE NOTICE

Revise paragraph 1 as follows: The lessee is hereby notified that, the operator drilling on Federal mineral estate shall consider the impact of operations on nearby communities and residences. Operators ~~can~~ SHALL expect that adjustments to operating procedures to accommodate local community and residential concerns ~~may~~ WILL be necessary. For example, the operator will ~~be expected to try to~~ work out ~~reasonable compromises~~ SOLUTIONS on issues such as noise, dust, and traffic THAT ARE AMENABLE TO THE TOWN COUNCIL OF THE NEAREST TOWN. Noise pollution ~~could~~ SHALL be further reduced by using best available technology such as installation of multicylinder pumps, hospital sound reducing mufflers, and placement of exhaust systems to ~~direct~~ PREVENT noise ~~away from~~ NEAR communities of Crawford, Hotchkiss, and Paonia or West Elk Byway.

Revise paragraph 2 as follows: The lessee shall apply mitigation to reduce light pollution by, AT A MINIMUM, using methods such as limiting height of light poles, timing of lighting operations (meaning ~~limiting lighting to times of darkness associated with drilling and work over or maintenance operations~~ ALL LIGHTS ARE TURNED OFF BETWEEN THE HOURS OF 10 P.M. AND 6 A.M.), limiting wattage intensity, and ~~constructing~~ INSTALLING DARK SKY LIGHTING WITH ALL LIGHTS POINTING DOWN AND light shields INSTALLED ON EVERY LIGHT.

Add the following language at the end of this Notice that says, "No waiver, variance, or exception may be granted to this Values Notice."

EXHIBIT UFO-LN-11: LEASE NOTICE

Delete "may" in line 3 of paragraph 3 and insert "shall."

Add the following language at the end of this Notice that says, "No waiver, variance, or exception may be granted to this Lease Notice."

EXHIBIT UFO-LN-12: LEASE NOTICE

Revise paragraph 1 as follows: The lessee/operator is given notice that if the lease were to be developed, all development and related activities ~~should~~ SHALL take place A MINIMUM OF ¼ mile from the river segment. Measures must be taken to ensure that the free-flow of the stream and its water quality are not negatively affected. Measures must also be taken to ensure that the fish Outstandingly Remarkable Value is protected.

Add the following language at the end of this Notice that says, "No waiver, variance, or exception may be granted to this Lease Notice."

EXHIBIT UFO-LN-13: LEASE NOTICE

Revise the Lease Notice as follows:

For the purposes of protecting: Saline / Selenium Soils

The lessee/operator is given notice that development proposals within soils of this type ~~may~~ SHALL:

1) Need to conduct site-specific soil sampling and analysis prior to approval of the surface use plan to minimize disturbance on those soil types defined by the Natural Resources Conservation Service with the highest selenium concentrations. This may require relocation to soils with lower selenium concentrations.

2) Evaluate the proximity to water features to minimize the potential of selenium transport.

3) ~~May~~ SHALL require approval of a surface use plan by the Authorized Officer. Protective measures ~~may~~ SHALL include how the following will be accomplished:

- Adequate control of surface runoff.
- Protection of off-site areas from accelerated erosion such as rilling, gullying, piping, and mass wasting.
- During extended wet periods, surface-disturbing activities ~~may~~ WILL not be conducted.

4) Storm Water Management Plans required by the state ~~should~~ SHALL include additional protective measures to limit runoff or mobilization on saline/selenium soils.

5) Be required to prevent the deep percolation of groundwater within saline/selenium soils. Engineered leak prevention of drilling system pits containing fluids such as flowback and stimulation fluids, produced water, and cuttings. Surface discharge of produced water and mechanical evaporation ~~may~~ SHALL be prohibited.

NO WAIVER, VARIANCE, OR EXCEPTION MAY BE GRANTED TO THIS LEASE NOTICE.

On the lands described below:

EXHIBIT UFO-LN-14: LEASE NOTICE

Delete the word “may” in line 2 and insert the word “shall.”

Add the following language at the end of this Notice that says, “No waiver, variance, or exception may be granted to this Lease Notice.”

EXHIBIT UFO-LN-15: LEASE NOTICE

Delete the word “may” in the last line and insert the word “shall.”

Add the following language at the end of this Notice that says, “No waiver, variance, or exception may be granted to this Lease Notice.”

EXHIBIT UFO-LN-16: LEASE NOTICE

Delete the word “may” in lines 1 and 3 and insert the word “shall.”

Add the following language at the end of this Notice that says, “No waiver, variance, or exception may be granted to this Lease Notice.”

EXHIBIT UFO-LN-17: LEASE NOTICE

Delete the word “may” in lines 1 and insert the word “shall.”

Add the following language at the end of this Notice that says, “No waiver, variance, or exception may be granted to this Lease Notice.”

EXHIBIT UFO-LN-18: LEASE NOTICE

Delete the word “may” and insert the word “shall” in the sentence that says, “The lessee/operator may be required [to] ensure protection…”

Add the following language at the end of this Notice that says, “No waiver, variance, or exception may be granted to this Lease Notice.”

EXHIBIT UFO-LN-19: LEASE NOTICE

Delete the word “may” and insert the word “shall” in the sentence that says, “The lessee/operator may be required [to] ensure protection…”

Add the following language at the end of this Notice that says, “No waiver, variance, or exception may be granted to this Lease Notice.”

EXHIBIT UFO-LN-20: LEASE NOTICE

Delete the word “may” and insert the word “shall” in the sentence that says, “The lessee/operator may be required [to] modify or adjust…”

Delete the word “may and insert the word “shall” in the sentence after “Additional Mitigation Measures.”

Add the following language at the end of this Notice that says, “No waiver, variance, or exception may be granted to this Lease Notice.”

EXHIBIT UFO-LN-22: LEASE NOTICE

Revise this sentence as follows: “To mitigate any potential impact that oil and gas development emissions may have on regional air quality, Best Management Practice (BMPs) ~~may~~ SHALL be required through for any development project. Examples of BMPs include the following:”

Add the following language at the end of this Notice that says, “No waiver, variance, or exception may be granted to this Lease Notice.”

At a minimum, the foregoing amendments to stipulations and lease sale notices must be made to ensure that necessary resource values are protected. Such changes must occur prior to the sale of 22 parcels and 30,000 acres of the North Fork Valley to oil and gas development.

II. FLPMA: Unnecessary and Undue Degradation

Pursuant to the Federal Land Policy and Management Act ("FLPMA"), 43 U.S.C. § 1701 *et seq.*, BLM must "take any action necessary to prevent 'unnecessary or undue degradation' ("UUD") of the [public] lands." 43 U.S.C. § 1732(b). Written in the disjunctive, BLM must prevent degradation that is "unnecessary" and degradation that is "undue." *Mineral Policy Ctr. v. Norton*, 292 F.Supp.2d 30, 41-43 (D. D.C. 2003). FLPMA's UUD standard should be considered in light of its overarching mandate that the Bureau employ "principles of multiple use and sustained yield." 43 U.S.C. § 1732(a). While these obligations are distinct, they are interrelated and highly correlated. The Bureau must balance multiple uses in its management of public lands, including "recreation, range, timber, minerals, watershed, wildlife and fish, and [uses serving] natural scenic, scientific and historical values." 43 U.S.C. § 1702(c). It must also plan for sustained yield – "control [of] depleting uses over time, so as to ensure a high level of valuable uses in the future." *Norton v. S. Utah Wilderness Alliance,* 542 U.S. 55, 58, 124 S.Ct. 2373, 159 L.Ed.2d 137 (2004).

"Application of this standard is necessarily context-specific; the words 'unnecessary' and 'undue' are modifiers requiring nouns to give them meaning, and by the plain terms of the statute, that noun in each case must be whatever actions are causing 'degradation.' " *Theodore Roosevelt Conservation Partnership v. Salazar*, 661 F.3d 66, 76 (D.C. Cir. 2011) (citing *Utah v. Andrus,* 486 F.Supp. 995, 1005 n. 13 (D. Utah 1979) (defining "unnecessary" in the mining context as "that which is not necessary for mining" – or, in this context, "for oil and gas development" – and "undue" as "that which is excessive, improper, immoderate or unwarranted.")); *see also Colorado Env't Coalition,* 165 IBLA 221, 229 (2005) (concluding that in the oil and gas context, a finding of "unnecessary or undue degradation" requires a showing "that a lessee's operations are or were conducted in a manner that does not comply with applicable law or regulations, prudent management and practice, or reasonably available technology, such that the lessee could not undertake the action pursuant to a valid existing right."). This protective UUD mandate applies to BLM's planning and management decisions. *See Utah Shared Access Alliance v. Carpenter*, 463 F.3d 1125, 1136 (10th Cir. 2006) (finding that BLM's authority to prevent degradation is not limited to the RMP planning process). Here, that action is the development required to extract oil and gas resources from the North Fork Valley. The inquiry, then, is whether BLM has taken sufficient measures to prevent degradation unnecessary to, or undue in proportion to, the development the EA/FONSI permits. *See Theodore Roosevelt Conservation Partnership*, 661 F.3d at 76. Accordingly, resource impacts may cause "undue" degradation, even if the activity causing the degradation is "necessary." Where those impacts are avoidable, it is "unnecessary" degradation. 43 U.S.C. § 1732(b).

Therefore, although leaseholders have a statutory right to develop oil and gas resources, drilling activities may only go forward as long as unnecessary and undue environmental degradation does not occur. This is a *substantive* requirement, and one that BLM must define and apply in the context of oil and gas development in the North Fork Valley. In other words, BLM must define and apply the substantive UUD requirements in the context of the specific resource values at stake – an application that can be found nowhere in the EA, but which is required before the August 2012 Lease Sale can proceed.

Further, these UUD requirements are distinct from requirements under NEPA. "A finding that there will not be significant impact [under NEPA] does not mean either that the project has been reviewed for unnecessary and undue degradation or that unnecessary or undue degradation will not occur." *Ctr. for Biological Diversity,* 623 F.3d at 645 (quoting *Kendall's Concerned Area Residents,* 129 I.B.L.A. 130, 140 (1994)). In the instant case, BLM's failure to specifically account for UUD in its EA – which is distinct from its compliance under NEPA – is also actionable on procedural grounds and must occur before the August 2012 Lease Sale can proceed.

III. Endangered Species Act

As provided in CHC's Scoping Comments, the Endangered Species Act ("ESA"), 16 U.S.C. § 1531 *et seq*., imposes two obligations upon BLM: the first is *procedural* and requires that agencies consult with the FWS to determine the effects of their actions on endangered or threatened species and their critical habitat, s*ee id.* § 1536(b); the second is *substantive* and requires that agencies insure that their actions not jeopardize endangered or threatened species or their critical habitat, *see id.* § 1536(a)(2). These requirements of the ESA are triggered by "any 'agency action' which may be likely to jeopardize the continued existence of the species or its habitat." 16 U.S.C. § 1536(a). In other words, an agency proposing to take an action must inquire whether any endangered or threatened species "may be present" in the area of the action. When there exists a chance that such species *may be present*, the agency must conduct a biological assessment ("BA") to determine whether or not the species *may be affected* by the action. *See* 16 U.S.C. § 1536(c) (emphasis added). Moreover, section 1536(a)(2) requires federal agencies, when considering the effect of their actions on a species' critical habitat, to consider the effect of those actions on the species' recovery. *See Center for Native Ecosystems v. Cables,* 509 F.3d 1310, 1322 (10th Cir. 2007).

The EA identifies several listed and candidate species that potentially occur or have habitat in the vicinity of lease parcels, including Canada lynx, greenback cutthroat trout, Colorado hookless cactus, and Gunnison sage grouse. EA at 54. Notably, the EA fails to identify the presence of four additional Colorado River fish species that are both state and federally listed, which include Colorado pikeminnow (*Ptychocheilus lucius*), Humpback chub (*Gila cypha*), Bonytail chub (*Gila Elegans*), and Razorback sucker (*Xyrauchen texanus*). *See* Scoping Exhibit 57 (the 16-Well EA completed for an area just north of Paonia Reservoir identified these species and their critical habitat). Occupied habitat for these endangered species includes the lower Gunnison River, where previous BLM NEPA analysis has identified razorback suckers and Colorado pikeminnows as present. *See* Scoping Exhibit 57, at 28 (citing USFWS 1994). This stretch of river is also identified as "critical habitat" for these two fish species. *Id*. In addition to these endangered fish species, additional species identified by the U.S. FWS as threatened, endangered, or candidate species – but not identified by BLM – "could be impacted by the proposed project," and include: Mexican spotted owl, Yellow-billed cuckoo, Black-footed ferret, Gunnison's prairie dog, North American wolverine, and Clay-loving wild buckwheat. *See* Memorandum from U.S. FWS, Comments on August 2012 Lease Sale (Feb. 8, 2012) ("FWS Comments") (attached as Exhibit 23). BLM's failure to identify such a significant number of listed and candidate species is deeply troubling, and utterly fails to meet the requirements of the ESA.

As noted above, when listed species may be present – as are expressly identified in the EA and by the FWS – the ESA requires BLM to minimally conduct a BA to determine impacts. Nevertheless, BLM asserts in the EA that "[t]he proposed action of leasing the proposed parcels would not impact any Federally listed, BLM sensitive or migratory bird species." EA at 57. Accordingly, BLM fails to engage in any analysis of impacts to species, fails to conduct a BA to determine the effects of the Lease Sale on listed species and habitat, and relies on general stipulations to ensure the protection of listed species and habitats. We agree with the conclusions drawn by FWS, who stated: "If new stipulations cannot be added, or existing stipulations be modified, sufficient to protect federally listed species, we recommend deferring those parcels where listed species or suitable habitats occur until adequate stipulations are established." FWS Comments at 6 (providing, also, that a "parcel may be deferred pending completion of a RMP revision due to a potential change in resource condition objectives or a potential change in lease stipulations that were identified in the draft preferred alternative."). Neither NEPA nor the ESA can sustain BLM's unsupported approach.

By their terms, an EA and FONSI are actions that have legal consequences. The regulations interpreting the ESA define an "action" as "all activities or programs or any kind ... carried out, in whole or in part, by Federal agencies ... Examples include, but are not limited to ... (b) the promulgation of regulations; [and] (c) the granting of licenses, contracts, leases, [etc.]." 50 C.F.R. § 402.02. A "final agency action" occurs when two conditions are satisfied: (i) the action in question must mark the "consummation" of the agency's decisionmaking process – that is, it is neither tentative nor interlocutory in nature; and (ii) the action must be one by which rights or obligations have been determined, or from which legal consequences will flow. *Bennett v. Spear,* 520 U.S. 154, 177-78, 117 S.Ct. 1154, 137 L.Ed.2d 281 (1997). According to ESA implementing regulations, "[e]ach federal agency shall review its actions at the *earliest possible time*" to determine whether an action may affect protected species, and, if so, to engage in the appropriate level of conferral. 50 C.F.R. § 402.14 (emphasis added). Regulations further provide that "[f]ormal consultation shall not be initiated by the Federal agency until any required biological assessment has been completed and submitted to the Director in accordance with § 402.12." Because the EA explicitly defers any NEPA analysis until some later stage, and fails to even mention conducting a BA, it thus cannot engage FWS in consultation until that analysis is performed. This choice is at odds with FWS recommendations, which provide: "Based on the information above, we would like to point out that Section 7 consultation would be appropriate for the proposed action." FWS Comments at 8. There is no indication that BLM intends to engage in such consultation at the lease sale stage and, accordingly, such conferral is not taking place at the earliest possible time as required under the ESA. "BLM's duty to confer with the FWS arises as of the time that it was possible for the two agencies to engage in meaningful conference regarding the decision to be made," which in the instant case is when BLM issues the EA and FONSI for the Lease Sale – the final agency action. *The Wilderness Society v. Wisely,* 524 F.Supp.2d 1285, 1301 (D. Colo. 2007) (holding that BLM had violated ESA by failing to engage in formal consultation with FWS regarding oil and gas leasing's effects on listed species prior to its decision in the EA to resume oil and gas leasing); *see also Colorado Environmental Coalition v. Office of Legacy Management,* --- F.Supp.2d ---, 2011 WL 4940662, at 21-22 (D. Colo. 2011) (holding the agency "acted arbitrarily and capriciously by failing to consult with FWS prior to or immediately following the issuance of the EA, in violation of the ESA."). It

cannot be overstated enough that BLM's shell game approach is irreconcilable with its mandate under the ESA. BLM is required to conduct a BA and engage in consultation before the August 2012 Lease Sale can proceed.

CHC also agrees with FWS that the endangered species stipulation (CO-34) – relied on by BLM to protect listed species – "essentially notifies lessees of the potential for federally listed and other sensitive species to occur in the subject parcels … [and] does not identify the means to avoid or minimize effects on listed species or habitat and, therefore, provides no assurances that those resources will be protected." FWS Comments at 5. "If new stipulations cannot be added, or existing stipulations be modified, sufficient to protect federally listed species, we recommend deferring those parcels where listed species or suitable habitats occur until adequate stipulations are established." *Id.* at 6.

IV. Conclusion

Given the aforementioned issues associated this Preliminary EA and Draft FONSI – not least of which is BLM's explicit refusal to perform any analysis of the myriad impacts until the APD stage – CHC requests that BLM cancel the August 2012 Lease Sale pending the completion of both an EIS and the revised RMP for the UFO. The approach that the UFO has adopted cannot be sustained by either law or good-conscience, and must be abandoned.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

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