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April 23, 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-150-2009-0005 EA
Comments Regarding Bull Mountain Unit Master Development Plan,
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”) for the Bull Mountain Unit Master Development Plan (“MDP”), DOI-CO-150-2009-0005 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.

CHC hereby incorporates by reference our supplemental information letter, submitted June 3, 2011, and attached as Exhibit 1, providing BLM with new information and circumstances affecting the Bull Mountain Unit (“Unit”). CHC further incorporates by reference the scoping comments and exhibits (identified herein as “Scoping Exhibits”) and comments for the preliminary EA/FONSI (identified herein as “Lease Sale Exhibits”) regarding the August 2012 Oil and Gas Lease Sale, DOI-BLM-CO-S050-2012-0009 EA, submitted February 8, 2012 and April 19, 2012, respectively. Due to the connected nature of oil and gas activities in the North Fork Valley generally, and the August 2012 Lease Sale specifically, much of the information provided in CHC’s earlier correspondence remains and is applicable to BLM’s analysis of the Bull Mountain Unit MDP and EA/FONSI and should accordingly be considered along with CHC’s comments as provided herein.

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.

As identified in CHC’s earlier comments to BLM, a moratorium on all oil and gas development within the UFO is required, pending revision to the Resource Management Plan (“RMP”) and environmental impact statement (“EIS”). The existing UFO RMP, completed in 1989, is completely out-of-date and can no longer serve its land use planning function. The National Environmental Policy Act (“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). 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 oil and gas development – such as is contemplated in the Bull Mountain MDP and August 2012 Lease Sale – is impermissible due to the inherent prejudice that this

action will create on 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. *See* Scoping Comments at 11-14. As CHC has routinely stated, 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 within the Bull Mountain Unit. *See, e.g.,* 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 – it failed to anticipate the pace of development now facing the Uncompahgre area and, thus, was incapable of incorporating land use designations that encompass BLM’s multiple use mandate. *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 – 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 oil and gas development, in particular relative to cumulative impacts.

BLM UFO itself recognizes the shortcomings of the existing RMP and EIS, 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*, Lease Sale 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*, Lease Sale Exhibit 3. The Bull Mountain MDP – proposed by industry speculator SG Interests – encompasses a total mineral estate of nearly 20,000 acres and intends to develop an additional 146 natural gas wells, 4 water disposal wells, and associated infrastructure such as well pads, roads, pipelines and power lines. Given the significant challenges and management issues that must be addressed in the pending UFO RMP, it would be impossible for BLM to proceed in allowing such a major oil and gas development without prejudicing the ultimate mineral management decisions to be 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.* Proceeding with the proposed MDP will result in tangible impacts that cannot be undone, which is exactly the situation NEPA disallows – allowing new activity that limits alternatives in the future. In the face of significant uncertainty regarding resource management planning in the UFO, there also seems little need to hastily open these areas to oil and gas development. According to BLM oil and gas statistics, there are currently

4,380,275 acres of leased lands that are “in effect” in Colorado. *See* Lease Sale Exhibit 4. Given this vast quantity of available federal lands, 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 developing the Bull Mountain Unit given these conditions. *See* Lease Sale Exhibit 5. At a minimum, proceeding with the approval of the subject MDP can wait until the UFOs foundational management documents are completed, thus allowing the necessary level of NEPA analysis to take place. We therefore strongly encourage you to not move forward with the Bull Mountain MDP pending completion of the UFO RMP and EIS.

B. The Bull Mountain MDP and EA is not a NEPA document to which BLM can “tier” their future analysis.

As another preliminary matter, and contrary to assertions that BLM made in the Bull Mountain EA, the UFO cannot “tier” future NEPA decisions to the discussion provided in this EA. The EA states: “An approved MDP would provide a guiding ‘umbrella’ environmental analysis to which subsequent Applications for Permit to Drill (APDs) and NEPA efforts would be tiered.” EA at 3. The EA continued, “most federal APDs submitted during the five years following the approval of this MDP would benefit from streamlined NEPA analysis based on the programmatic impact evaluation contained in this MDP.” *Id.* While agencies are encouraged to tier to an earlier prepared *EIS*, “to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review,” *an EA cannot perform this function.* 40 C.F.R. § 1502.20. As further described in CEQ regulations, at 40 C.F.R. § 1508.28:

“Tiering” refers to the coverage of general matters in broader environmental impact statements ... with subsequent narrower statements or environmental analyses ... incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared.

(emphasis added). CEQ regulations further provide that “Tiering is appropriate when the sequence of statements or analyses is:”

- (a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.
- (b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.

40 C.F.R. § 1508.28 (emphasis added). BLM’s contention that it is appropriate to tier to this MDP and EA represents a fundamental misunderstanding of NEPA, and is further indicative of a larger shell game strategy that seeks to blindly approve oil and gas development on public lands

without conducting *any* actual NEPA analysis of impacts, at any stage – and often to the detriment of other resource values.

In an apparent attempt to assuage any fears the public might have, BLM further offers: “BLM would apply appropriate mitigation and best management practices to all permitted actions in accordance with federal and state oil and gas regulations and the Uncompahgre Basin Resource Management Plan.” EA at 3. First, relying on mitigation to address impacts – as discussed in greater detail below – is not consistent with what NEPA requires. Second, and as noted above, the Uncompahgre Basin RMP was completed in 1989 and is no longer able to serve its function in guiding management decisions in the UFO. In-depth review of the 1989 RMP reveals that no analysis of the direct or cumulative impacts of oil and gas development was ever conducted. *See* Scoping Comments at 10-14. It is also clear that BLM did not anticipate the pace or scale of oil and gas leasing and development that is now taking place, and therefore, did not analyze the impacts from development which are now facing the communities of the North Fork Valley – and specifically excludes any analysis of negative impacts from the fracking process. Additionally, and as unambiguously provided in the 1987 Technical Report, any analysis contained therein was inherently limited in its temporal scope – providing that its evaluation of projected development was limited to “the next ten to fifteen years.” 1987 Technical Report, at 10-11. Indeed, it has now been 25 years since the reports release, well beyond the period where its findings are of any utility. Put simply, BLM’s analysis is stale, outdated, and too general and conclusory to justify its use to guide mitigation and best management practices (“BMPs”), as the UFO, here, suggests. BLM’s contention that the Bull Mountain EA will be used to facilitate future development is in fact indicative of the agency’s responsibility to delay this EA pending revision of the Uncompahgre Basin RMP.

BLM UFO’s recommended approach to NEPA compliance is deeply troubling, and illustrative of either a fundamental misunderstanding of the important role NEPA plays in minerals management, or a blatant attempt to misappropriate our shared public resources for the sole benefit of industry. In either event, it is appropriate for BLM UFO to now take a step back and get their house in order by prohibiting all oil and gas leasing and development pending the completion of a revised RMP, EIS, and master leasing plan.

C. BLM impermissibly relies on mitigation measures to avoid a finding of significance relative to resource impacts of the Bull Mountain MDP.

Throughout BLM’s discussion of the various resource values – as discussed in specific detail below – the UFO consistently relies on mitigation measures to avoid a finding of significance relative to resource impacts. Characteristically, BLM states: “Adherence to applicable BMPs listed in Appendix C would minimize the potential for impacts to [the resource]. In addition, BLM may attach site-specific COAs to the APDs.” *See, e.g.*, EA at 42, 45, 55, 58, 66, 75, 82, 89, 109, 113, 118, 121, 122, 129, 132, 133, and 145. Appendix C, in turn, provides a “master list of BMPs and COAs that *may be used* in the UFO when considering APDs for the Proposed Action.” Appendix C, at C-2 (emphasis added). According to BLM, “[m]any of the items listed will not be used on a specific APD if not warranted.” *Id.* Thus, the conclusory list of mitigation measures are merely possibilities, where the “operator will select items from the list to be attached to the APD as BMPs.” *Id.* In other words, BLM is relying on a generic list of

measures, the applicability of which is chosen by industry, as the exclusive means for mitigating impacts to a level that is below the threshold of significance. Not only does this approach inspire absolutely no confidence but, in fact, it is also in direct opposition to BLM's hard look mandate under NEPA, and doesn't provide a basis for BLM's FONSI.

The mitigation measures proposed by the agency must be reasonably developed. "A 'perfunctory description,' or 'mere listing of mitigation measures, without supporting analytical data,' is insufficient to support a finding of no significant impact." *National Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 735 (9th Cir. 2001). The court, when determining the sufficiency of the mitigation measures, considers "whether they constitute an adequate buffer against the negative impacts that may result from the authorized activity. Specifically, [the court] examine[s] whether the mitigation measures will render such impacts so minor as to not warrant an EIS." *Id.*; see also, *Hill v. Boy*, 144 F.3d 1446, 1451 (11th Cir.1998) (explaining that where an agency relies on an assumption to reach a FONSI, the assumption must be supported by substantial evidence). Moreover, the proposed mitigation underlying the FONSI "must be more than a possibility" in that it is "imposed by statute or regulation or have been so integrated into the initial proposal that it is impossible to define the proposal without mitigation." *Wyoming Outdoor Council v. U.S. Army Corps of Eng'rs*, 351 F.Supp.2d 1232, 1250 (D.Wyo. 2005). Similarly, with regard to cumulative impacts, the agency must provide *some* explanation of how or why compensatory mitigation will reduce the cumulative adverse impacts on the resources in question to insignificance. Bare assertions of mitigation are insufficient. *O'Reilly v. U.S. Army Corps of Eng'rs*, 477 F.3d 225, 235 (5th Cir.2007) ("[A] bare assertion is simply insufficient to explain *why* the mitigation requirements render the cumulative effects of this project less-than-significant, when considered with the past, present, and foreseeable future development in the project area." (emphasis in the original)). As explained above, Appendix C is no more than a generic list of BMPs from which industry can pick and choose. The EA provides no analysis – much less specificity with regard to particular resources – concerning how this BMP list will create a sufficient buffer against impacts, nor is the suggested mitigation anything more than a list of possible measures to be chosen from at the APD stage.

Not only is BLM's reliance on Appendix C completely misguided and ineffective given its industry-driven approach to mitigation, but also, is further symptomatic of a broader BLM presumption toward approval of oil and gas development – regardless of what impacts or resources may get in the way. As provided 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): "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 other words, NEPA requires the *analysis* to dictate whether mitigation is appropriate not, as here, an assumption that mitigation can satisfy the effects of development and, without any analysis, support a FONSI. NEPA requires more; and the public deserves more. The UFO's EA/FONSI cannot be sustained in the face of such blatant disregard for NEPA. An EIS, analyzing actual impacts and specific mitigation measures, must be performed before the Bull Mountain MDP can be approved.

D. The BLM has failed to take a hard look at impacts under NEPA, and must perform an EIS before development pursuant to the Bull Mountain MDP can commence.

By extension of BLM's shell game approach to analysis, the subject EA fails to take a "hard look" at the direct impacts of the Bull Mountain MDP. 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. While BLM's discussion of resources generally lists impacts that can be expected to result from development of the Bull Mountain Unit, those impacts are not tied to any corresponding analysis of site-specific effects, and inevitably result in a conclusion that "[a]dherence to applicable BMPs ... would minimize the potential for impacts." Such "analysis" is of no use to the decisionmaker or the public.

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, *inter alia*: the degree to which the proposed action affects public health or safety; the unique characteristics of the geographic area; the degree to which the effects on the quality of the human environment are likely to be highly controversial; the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks; the degree to which the action may establish a precedent for future actions; whether the action is related to other actions with individually insignificant but cumulatively significant impacts; the degree to which the action may adversely affect an endangered or threatened species or its habitat; and 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). Any honest and unbiased view of the resources impacted in the Bull Mountain MDP and EA would conclude that these significance factors have been implicated and, thus, an EIS is required.

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). SG Interests’ MDP proposes the construction and operation of “146 natural gas wells and 4 water disposal wells on 36 new well pads and 5 existing well pads,” as well as supporting infrastructure including the construction of access roads, natural gas pipelines, water pipelines, electrical lines and compressor stations. EA at 13. Construction of these facilities will take place over 6 years and, once completed, “the productive life of CBNG, shale gas, and water disposal wells is estimated to be 40 years.” EA at 14. “Total annual water use for construction and drilling operations is estimated to be 675 ac-ft,” or over 1.3 billion gallons annually. EA at 126. For BLM UFO to claim that these activities – and myriad additional impacts, such as: air quality, endangered and threatened species, climate change, farmlands, socioeconomics, etc. – don’t raise “substantial questions whether [this project] *may* have a significant effect” is both illogical and completely unsupported.

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 EA/FONSI for the Bull Mountain MDP does there exist a convincing statement explaining the insignificance of impacts from this development. Any reference to significance factors is conclusory and devoid of any actual reasoning. Simply relying on future mitigation and analysis won’t cut it. If BLM proceeds in their 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.

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

As recognized by BLM in their EA, “BLM cannot conduct or authorize any activity which does not conform to all applicable ... air quality laws.” EA at 36. Accordingly, significant impacts to air quality would result if National Ambient Air Quality Standards (“NAAQS”) or Colorado Ambient Air Quality Standards (“CAAQS”) were violated, Class I or Class II Prevention of Significant Deterioration (“PSD”) Increments were exceeded, concentrations of

hazardous air pollutants or other toxic air pollutants are predicted, or Air Quality-Related Values (“AQRVs”) would be impacted. *Id.* A substantial number of PSD Class I air quality areas are located in the defined area of influence for air quality, including the Maroon Bells-Snowmass Wilderness, the West Elk Wilderness, the Black Canyon of the Gunnison National Park, the Flat Tops Wilderness Area, and the Eagle’s Nest Wilderness. EA at 37-38. Even incremental increases in monitored air pollutants in Class I areas are strictly limited. EA at 37.

According to the EA, “air-pollutant emissions as well as greenhouse gas (“GHG”) emissions would occur during construction and operations” of the proposed action. EA at 38. BLM determined that emissions of these pollutants (including PM₁₀, PM_{2.5}, NO_x, CO, VOCs, and SO₂) and GHG emissions (including CO₂, CH₄, and N₂O) would occur during “well development and over the life of the project.” *Id.* BLM further identified and listed emissions sources, which include: “vehicle traffic, well pad, road and pipeline construction, and drilling and completion activities” during well development, “three 1,200-horsepower diesel-fired drilling rigs” during drilling activities, “separator and tank heaters . . . workover rig engines and associated activities from operating in the field” during field production, as well as “vehicle-traffic and well-maintenance activities during production would also result in emissions of fugitive dust and vehicle exhaust.” *Id.* While BLM does provide a table of background ambient air concentrations for criteria pollutants, they offer no projection of the level of emissions that would result from the proposed action in general, or these emission sources specifically. Despite recognition of these emissions and their sources, BLM nevertheless concludes that “[e]missions associated with construction and operation of the Proposed Action would not be expected to cause or contribute to any adverse air quality conditions nor cause a violation of any applicable ambient air quality.” *Id.*

Not only is this conclusion contradictory to BLM’s earlier admission that air-pollutant and GHG emissions would occur from the proposed action, but BLM also offers no analysis of the effects that these listed impacts would produce. For example, there is no mention – let alone analysis – of the human health impacts associated with these criteria pollutants or GHG emissions. Exposure to these pollutants is associated with numerous effects on human health, including increased respiratory symptoms, hospitalization for heart or lung diseases, and even premature death. *See EPA, Particle Pollution and Your Health* (Sept. 2003) (attached as Exhibit 2). 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 O₃ from oil and gas emissions. *See EPA, Ozone and Your Health* (Feb. 2009) (attached as Exhibit 3); *see also* 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) (Lease Sale 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 O₃ concentration of 10 ppb” have been simulated. Rodriguez, et al., at 1118. This study indicates a “clear potential for oil and gas development to negatively affect regional O₃ 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.* As CHC provided in our Lease Sale Comments, ground-level ozone can also result in dramatic impacts to human health and respiratory function, as well as increased asthma attacks, increased hospital

admissions, increased daily mortality, and other markers of morbidity. *See* EPA, *Health Effects of Ozone in the General Population*, (Lease Sale Exhibit 10).

Simply listing emissions and their sources, without providing any analysis or quantification of the effect that those impacts will have on the human environment, fails to realize the purpose and intent of NEPA. *See NRDC*, 865 F.2d at 298 (“conclusory remarks ... do not equip a decisionmaker to make an informed decision about alternative courses of action.”). In addition, and as more fully described below, BLM’s EA also failed to analyze the cumulative impacts to air quality and the contribution that project source emissions would have and ambient air pollution in the geographic area – including major direct emissions of criteria pollutants and methane from coalmining. BLM must conduct an EIS that sufficiently analyzes direct, indirect and cumulative impacts to air quality resources before the Bull Mountain MDP can be approved.

b. The BLM has failed to identify climate change as an issue necessary for analysis, in violation of NEPA and Secretarial Order 3226.

Remarkably, BLM’s discussion related to climate change is limited to a few dispersed sentences that mentioned GHG emissions within the context of air quality. BLM fails to devote a resource section, much less provide any analysis relative to the direct, indirect, and cumulative impacts of climate change associated with this major oil and gas development proposal. Such an omission is incurable under NEPA, and directly violates Secretarial Order 3226.

The EA recognizes that the proposed action would result in GHG emissions – including carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). EA at 38. This recognition, however, is offered with no corresponding analysis and entirely fails to mention the direct relationship between GHG emissions and climate change. The U.S. emissions inventory provides that natural gas systems are a major contributor of carbon dioxide emissions and the biggest contributor to methane emissions in the United States, accounting for almost one-third of all methane emissions. *See* U.S. EPA, 430-R-11-005, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2009* at ES-4, 5 (April 15, 2011) (attached as Exhibit 4). Overall, emissions of CO₂ and CH₄ from natural gas systems have increased 17 percent from 1990 emissions levels, with methane emissions increasing at an even greater rate since 2008 due to an increase in production and production wells. *Id.* at 3-43, 44. BLM’s failure to account for these emissions in their EA is a fundamental error, which cannot go uncorrected. 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 (Lease Sale 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 MMTCO_{2e}." *Id.* To suggest that the agency does not, here, have to account for GHG pollution from the development of federal leases, 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.

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). BLM suggests that it can avoid performing this analysis because "potential greenhouse gas emissions expected for the project ... would be minimal in comparison to a typical 500 MW coal-fired power plant." EA at 41. However, 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." *Grand Canyon Trust*, 290 F.3d at 343. As the Ninth Circuit has cautioned, the failure to assess cumulative impacts "impermissibly subject[s] the decisionmaking process contemplated by NEPA to 'the tyranny of small decisions.'" *Kern v. Bureau of Land Management*, 284 F.3d 1062, 1078 (9th Cir. 2002) (citation omitted).

Moreover, BLM is required to reduce GHG pollution by law. 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 management decisions – such as the Bull Mountain MDP – are thus contemplated by and subject to section 3 of the Order, and accordingly must be considered in BLM's NEPA analysis. BLM's

failure to do so here directly violates both the spirit and intent of this Order, and must be corrected.

As CHC has consistently provided, the effects of these GHG 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 (Lease Sale 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* (Lease Sale 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.

Marginalizing the effects of climate change by suggesting they are speculative and theoretical – as BLM has consistently offered in past NEPA processes – or worse, as here, failing to even identify climate change as an issue worthy of mention, is not consistent with either prevailing science nor the requirements of NEPA. “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). BLM’s failure to raise climate change as a resource issue indispensable to their NEPA processes is a fatal omission, and it denies both the agency and the public information necessary for informed decisionmaking.

i. Greenhouse Gas Emissions

As noted above, BLM raises GHG emissions in the context of their general discussion of air quality, but offer no projection of what emissions might result from an approved Bull Mountain MDP, much less any analysis of the effect that those direct, indirect and cumulative emissions may have on the human environment. 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 approval of the Bull Mountain MDP. In fact, BLM expressly concludes that “[n]o mitigation measures specific to air quality would be required.” EA at 41. 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 development 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.

Even putting aside the impacts to 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 the development of 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 given lease development 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 and develop 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, undeveloped.

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 NEPA 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.” *See* 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) (Lease Sale Exhibit 14). Moreover, the Report further identified ten technically proven, commercially available, and profitable methane emission control technologies that together can capture more than 80 percent of the methane currently going to waste. *Id.* Such technologies must also be considered as mitigation measures to be included in BLM’s BMPs, as well as 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 earlier correspondence with BLM, 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) (Lease Sale 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. This is precisely the kind of analysis that must be considered and accounted for before BLM approves the Bull Mountain MDP. *See Ctr. for Biological Diversity*, 538 F.3d at 1217. BLM's failure to evaluate and quantify the GHG emissions from this project, and failure to analyze the relationship between those emissions and the impacts of climate change, is an approach to NEPA that cannot but sustained.

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 noted, the Bull Mountain MDP and EA/FONSI fails to mention climate change, let alone provide any analysis of its effects. However, BLM's EA for the August 2012 Lease Sale provided: “The 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.” Lease Sale EA at 31. BLM continued in that EA, 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 BLM's previous recognition of climate change impacts, and that there is, in fact, a relationship between these impacts and resource resiliency, BLM fails to identify this as an issue here and, to the contrary, is proceeding in a manner that actively undermines human and natural systems ability to adapt. For example, BLM has not only failed to raise the issue of climate change but, also, has specifically chosen to ignore any potential impacts that the Bull Mountain MDP may have on the abundant farmlands of the North Fork Valley. *See* EA at 34; *see also infra*. This omission is particularly egregious given BLM's repeated reference to the connectivity between the water sources of the Bull Mountain Unit and irrigation diversions for agriculture in the lower North Fork and Uncompahgre watersheds. *See e.g.*, EA at 67, 71, 104 and 124. The viability and preservation of these farmlands are among the most fundamental of resources that demand protection from a resiliency standpoint. BLM's refusal to even acknowledge this threat as worthy for discussion is deeply concerning, indeed.

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 rejects prime and unique farmlands as a resource worthy of consideration. *See* EA at 34. 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) (Lease Sale 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) (Lease Sale 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, Lease Sale 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) (Lease Sale 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 inconceivable that BLM UFO explicitly refused to acknowledge farmlands as a resource worthy of analysis. EA at 34, 43 (“No prime or unique farmlands as identified by the Natural Resources Conservation Service (NRCS) have been identified in the vicinity of the Unit.”). 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 ignored its own acknowledgment of the connectivity between waters in the Bull Mountain Unit and the irrigated farmlands in the North Fork Valley. EA at 67, 71, 104 and 124. Such an illogical and contracted scope of analysis is fundamentally in opposition to both NEPA’s mandate and DOI policy. To the contrary, NEPA 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 effects that the Bull Mountain MDP will have on 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 the direct impacts to water quality.

i. Surface Water

The Bull Mountain Unit falls within the North Fork Gunnison River drainage basin, and includes a drainage area of approximately 969 square miles. EA at 94. The Unit includes 12

perennial streams, numerous intermittent streams, manmade reservoirs, and at least 19 springs – with the two principal drainages, East and West Muddy Creeks, reaching their confluence just south of the Unit where they join to form Muddy Creek. *Id.* Muddy Creek, in turn, is a tributary to the North Fork Gunnison River, which flows into the Gunnison River and which ultimately flows into the Colorado River. EA at 95. BLM’s EA further notes that all tributaries to the North Fork Gunnison River (including all lakes, reservoirs, and wetlands) are subject to the basic standards and antidegradation rules for surface waters adopted in Colorado. *Id.*

As CHC provided in Scoping Comments, at 27, Clean Water Act (“CWA”) section 303(d) – implemented in Colorado by Regulation No. 93 – establishes the “list of water quality limited segments requiring total maximum daily loads (TMDLs).” EA at 100. As it pertains to the Bull Mountain MDP, “the 2010 303(d) list of segments needing the TMDLs includes one segment within the North Fork Gunnison River (from Black Bridge above Paonia to the confluence with the Gunnison River), which is listed as impaired due to selenium.” *Id.* The EA notes, “[p]otential impacts to surface water resources include increased turbidity and sedimentation in watercourses, increased short-term runoff, increased salt-loading, contamination of surface water courses and ponds by produced water and petroleum, and depletion of surface water flows in East and West Muddy creeks and possibly the North Fork.” EA at 104.

The USGS has several water quality sampling stations within and around the Unit, the data of which shows that “water quality generally decreases in the downstream direction.” EA at 100. For example, the total dissolved solids (“TDS”) concentration increases by approximately 50 percent from the upper stream station to the lower stream station. *Id.* BLM has further identified that it is possible that existing oil and gas activities in the general area – which currently includes only *one* producing well within the Unit – “have contributed, and will continue to contribute, to both sedimentation and salinity levels presently being experienced in the Colorado River,” and that “[a]ll of the soils within the Unit have the potential to create water quality-related sediment and salinity problems when distributed.” *Id.* If these impacts are already a problem from *one* producing well, there is no telling the toll that *146* wells would create – an analysis that is indispensable, but currently unaddressed in BLM’s EA. Moreover, “the North Fork is recognized as a major contributor of salt to the Colorado River System,” EA at 102, and BLM further acknowledges that “[i]ncreased salt loading could potentially occur where saline soils would be disturbed and eroded by runoff into streams,” EA at 104. The EA did not, however, address the potential impact from selenium loading, its contribution to the 303(d) listed downstream waters, the effect that selenium has on aquatic species (including ESA listed species and their habitat), or the Memorandum of Understanding (“MOU”) that BLM has with the Bureau of Reclamation (“USBR”) for the implementation of a Selenium Management Program, in which 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.” Lease Sale EA at 81.

BLM’s EA also expressed concern regarding the contamination of water resources due to oil and gas development from the Proposed Action. For example, BLM provides:

Contamination of surface water near oil and gas facilities can occur in oil and gas fields. Sources of potential contamination include leaks from wellheads, conveyance pipelines, compressor stations, produced water sumps (flowback pits), and condensate storage tanks. Leaks from tanker trucks and leaching of contaminants from impacted soils near these facilities are also sources of potential contamination.

EA at 104. Surface water uses within the Unit and, thus, potential depositories of this contamination include: “storage, irrigation, industrial, recreation, fishery, fire, domestic, stock, augmentation, federal reserve, other uses, and wildlife.” *Id.* The EA, however, fails to identify surface waters outside the Unit that may be contaminated; of principal concern being the North Fork and irrigation canals serving agricultural uses of the North Fork Valley. Among the many known chemicals found in fracking fluid, the EA specifically identifies benzene, the ingestion of which can result in health effects including: “anemia; decrease in blood platelets; increased risk of cancer.” EA at 104. However, BLM failed to note the other 980 products and 649 chemicals that energy companies inject into the ground – and can therefore be spilled and released into surface waters – in the process of extracting natural gas; many of which are harmful to human health. *See* The Endocrine Disruption Exchange. Undated. *Chemicals In Natural Gas Operations: Health Effects Spreadsheet and Summary* (Scoping Exhibit 18); *see also* U.S. CONGRESS, HOUSE OF REPRESENTATIVES, COMMITTEE ON ENERGY AND COMMERCE, *Chemicals Used in Hydraulic Fracturing* (April 2011), at 10 (noting the use of diesel fuel) (Scoping Exhibit 19).

Furthermore, and as provided by CHC in Lease Sale Comments, 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) (Lease Sale Exhibit 20). Relatedly, BLM’s EA provides that “[i]mpacts to surface water may also occur due to unintentional produced-water spills from produced water pipelines and storage tanks. The risk of spillage increases somewhat over time as facilities age and with a higher density of pipelines over the life of the field.” EA at 127. Both the COGCC report, and BLM’s own admission regarding the risk of spills, raises significant concerns about COGCC’s enforcement capabilities and the likelihood that any subsequent spill in the Bull Mountain Unit would be sufficiently addressed.

BLM also fails to address Colorado’s antidegradation rules, despite a lone reference to its applicability. EA at 94. 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 Bull Mountain MDP, 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 development of oil and gas resources within the Unit – 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.

While BLM’s EA identifies numerous potential impacts to surface water quality – including impacts from sedimentation and salinity, and chemical contamination – the EA is devoid of any analysis or quantification of the effect that these impacts may pose to the human environment in general, or citizens of the North Fork area specifically. Simply listing or cataloguing impacts without any corresponding analysis, as BLM has done here, does not amount to the “hard look” that NEPA demands. *See NRDC*, 865 F.2d at 299. Typically, BLM attempts to avoid a finding of significance through its reliance on the mitigation measures and generic BMPs listed in Appendix C. EA at 109. As CHC specified above, the mere listing of mitigation measures, as BLM has done here, is insufficient under NEPA. *See National Parks*, 241 F.3d at 735.

ii. Groundwater

BLM’s EA provides that “[p]otential impacts to groundwater resources from the Proposed Action include contamination of groundwater with produced water, drilling mud, hydraulic fracturing fluids, or petroleum. Withdrawal of produced water during production activities could impact target aquifers as could reinjection of the produced water.” EA at 106. With specific regard to groundwater contamination, BLM recognized:

Alluvial aquifers along East and West Muddy creeks and their tributaries could potentially be contaminated by fluids from the various project components. Soil contamination near these sites, if not remedied quickly, could migrate into the underlying alluvial groundwater and release benzene and other constituents into the groundwater.... There is the potential for accumulation of organic compounds in the sediments and shallow ground water (perched aquifers) adjacent to the flowback pits. Over the life of the project concentration of these compounds could build to levels significantly higher than state standard MCLs for ground water. Migration of contaminants through soils and perched aquifers to more mobile colluvial/alluvial ground water may occur resulting in contamination of domestic water supplies.

EA at 106.

The EA additionally provides that fracking will be used to “stimulate production,” and specifies that *over* 1.26 million gallons of hydraulic fracturing fluid will be used per treatment;

and with up to six treatments required per well, this results in the use of *over* 7.5 million gallons of fracking fluid per well. EA at 106-7. When considered over the 146 proposed new wells, this amounts to about 1.1 billion gallons of fracking fluid alone; not to mention the many additional required uses of water, as discussed *infra*. Although there is great secrecy around what actually exists in fracking fluid, the EA noted that, in samples taken from the one existing natural gas well within the Unit, the presence of “organic pollutants (BTEX) from produced water” were found. EA at 102. The occurrence of these pollutants comes as no surprise. As further identified above, and in Scoping Comments, a study performed by TEDX revealed that “in the 980 products identified...[for use during natural gas operations], there were a total of 649 chemicals” harmful to human health, including “*the ability of the chemical to cause death.*” See Scoping Exhibit 18. The EA also provides:

The potential hazardous contaminant, benzene, in produced water could occur in amounts higher than the statewide interim organic pollutant standards for ground water. When released directly to soils, the contaminants could leach into ground waters.... Because the present uses for the alluvial groundwater in the Unit includes domestic uses, potential exists for contamination of potable water. Potential health effects resulting from the ingestion (municipal water uses) of benzene ... range from temporary nervous system disorders, immunity system depression, and anemia for short term exposures. Long-term exposures ... could result in chromosome aberration and cancer.

Toluene, ethylbenzene, and xylenes also occur in SG’s production water.

EA at 108. The EA further recognizes that the “potential for commingling of waters from the aquifers encountered during well construction [exists] if proper well drilling procedures and completion techniques are not employed.” *Id.*

Despite these significant, and indeed potentially life-threatening impacts, BLM, yet again, evades a finding of significance by claiming that “[a]dherence to Best Management Practices listed in Appendix C would minimize the potential for impacts.” EA at 109. Such indifference to human health and the environment is staggering. These mitigation measures, as repeatedly stated, amount to nothing more than a conclusory list of BMPs from which industry can pick and choose. Not only are these measures voluntary and unspecified, but BLM also offers no analysis regarding their effectiveness in reducing the potential momentous impacts to groundwater listed above. There is no way, given BLM’s adopted approach, that the Bull Mountain MDP can be allowed to proceed.

e. The BLM has failed to sufficiently analyze the direct impacts to water quantity.

Vast quantities of water are also needed for a variety of activities associated with development of the Unit, including “dust abatement on roads, moistening of soils and gravels for compactions of well pad surfaces, production of drilling muds, cementing the casing, and hydraulic fracturing and well stimulation.” EA at 105. These uses combine to result in a huge level of water consumption. Total *annual* water use for construction and drilling operations –

which is anticipated to take 6 years – is estimated to be 675 ac-ft per year. EA at 105, 126. This amounts to more than 220 million gallons of water a year, or 1.3 billion gallons of water over the construction phase of the project. Such water use will have a significant impact on both surface and groundwater.

Regarding surface water, the EA states that “[p]otential impacts to surface water resources from the Proposed Action include increased short-term runoff and depletion of surface water flows in East and West Muddy creeks, Muddy Creek, and possibly the North Fork of the Gunnison River. . . . Surface water quantity could also be affected by the water use requirements of the project.” EA at 126. In regard to groundwater, “SG estimates that at full project build-out between 2,500 and 15,000 bbls per day (118 and 706 ac-ft/year) of produced water would be removed from . . . aquifers to facilitate the natural gas recovery process.” EA at 107, 128. That is a drawdown on aquifers of over 230 million gallons per year.

BLM recognizes that the significant drawdown of surface and groundwater quantities, necessary to “facilitate the natural gas recovery process,” may also have a deeper impact on the area’s hydrology, stating: “Construction activities may also disrupt natural surface and groundwater flow patterns. Altered flow patterns could disrupt natural surface and groundwater recharge/discharge patterns.” EA at 128. In turn, these changes could have “adverse impacts on stream channel morphology, productivity of springs, riparian areas, and aquatic life.” *Id.*

Yet again, BLM fails to analyze these impacts and, rather, relies on the mitigation measures of Appendix C to “minimize the potential for impacts to hydrology and water rights for both surface and groundwater.” EA at 129. As CHC has exhaustively stated throughout these comments, a generic list of BMPs is insufficient. Proposed mitigation underlying the FONSI “must be more than a possibility,” *Wyo. Outdoor Council*, 351 F.Supp.2d at 1250, and must include an “adequate buffer against the negative impacts that may result,” *National Parks*, 241 F.3d at 735. Impermissibly, neither Appendix C nor the EA offer any analysis to support BLM’s conclusion, or to inform the decisionmaker and public on the effects of the proposed action.

f. The BLM has failed to sufficiently analyze the direct impacts that the Bull Mountain MDP will have on soil, vegetation, and geologic resources.

BLM’s EA identifies a number of impacts to soil that the proposed action would generate, including a loss of soil productivity from the mixing of soil horizons, compaction of soil during construction and production activities, spilled frack fluids, drilling fluids, and produced water, as well as susceptibility to erosion. *See* EA at 44. Moreover, “all of the existing and proposed access roads. . . are susceptible to dust formation and subsequent wind erosion.” *Id.* Similarly, the proposed action would impact vegetation communities, including construction impacts that would comprise approximately 286 acres, and dust deposits from roads that would result in reduced photosynthesis, plant pests and disease, reduced efficacy of herbicides, and contamination of native wildflowers and their blossoms. EA at 54-55. As has become BLM’s adopted approach, there is no analysis of the effect that these impacts would have and, once more, BLM relies on “adherence to applicable BMPs listed in Appendix C [to] minimize the potential for impacts to [soil and vegetation] resources,” EA at 45, 55, to avoid a finding of significance. As provided above, BLM’s mitigation plan in Appendix C amounts to nothing

more than a list of measures, the applicability of which is chosen by industry. This approach has been unequivocally rejected in the past, and merits similar treatment here. *See National Parks*, 241 F.3d at 735 (“A ‘perfunctory description,’ or ‘mere listing of mitigation measures, without supporting analytical data,’ is insufficient to support a finding of no significant impact.”).

Moreover, BLM’s discussion of the geologic hazards associated with the Bull Mountain MDP is sorely lacking. This project proposes the construction to 4 new deep injection water disposal wells, in addition to an existing well, to reinject produced and flowback water within the Unit. EA at 13. These 5 water disposal wells “would result in the injection of an estimated 5,000-25,000 bbls [per day] of treated produced water from CBNG wells...at depths of approximately 8,600 to 9,500 feet.” EA at 145 (equivalent to 210,000 to 1,050,000 gallons per day). As CHC cautioned in earlier submitted Scoping Comments at 22-24, there is irrefutable evidence that produced water injection wells have induced seismic activity. For example, as early as 1967, operations at a waste injection well at the Rocky Mountain Arsenal near Denver, Colorado, resulted in an earthquake of magnitude 5.5, which was then followed by a series of smaller earthquakes. A 1990 USGS report confirmed: “the link between fracking fluid injection and the earlier series of earthquakes was established.” Craig Nicholson and Robert Wesson, *Earthquake Hazard Associated with Deep Well Injection – A report to the U.S. Environmental Protection Agency*, U.S. Geological Survey Bulletin 1951 (1990), at 74 (Scoping Exhibit 27). As explained in CHC’s Scoping Comments, this is not an isolated incident, with similar induced seismicity from waste injection wells having occurred in Ohio, Arkansas, Oklahoma, Texas, British Columbia, Trinidad, CO, among others. *See* Scoping comments at 22-24. New research, to be presented by USGS Scientist William L. Ellsworth at the April, 2012 Annual Meeting of the Seismological Society of America (“SSA”), confirms: midcontinent “seismicity rate changes ... are almost certainly manmade.” *See* Ellsworth, W.L., et al., *Are Seismicity Rate Changes in the Midcontinent Natural or Manmade?*, abstract for SSA 2012 (attached as Exhibit 5). Indeed, this data reveals:

From 1970 through 2000, the rate of $M \geq 3$ events averaged 21 +/- 7.6/year in the entire [midcontinent] region. This rate increased to 29 +/- 3.5 from 2001 through 2008. In 2009, 2010 and 2011, 50, 87 and 134 events occurred, respectively.

The modest increase that began in 2001 is due to increased seismicity in the coal bed methane field of the Raton Basin along the Colorado-New Mexico border west of Trinidad, CO. The acceleration in activity that began in 2009 appears to involve a combination of source regions of oil and gas production, including the Guy, Arkansas region, and in central and southern Oklahoma.

Id. Such data cannot be ignored. For example, state regulators in Ohio, after finding that “[a] dozen earthquakes in northeastern Ohio were almost certainly induced by injection of gas-drilling wastewater into the earth,” announced a series of tough new rules for drillers. Julie Carr Smyth, *After quakes, Ohio plans tough gas-drilling rules*, ASSOCIATED PRESS, THE DENVER POST, March 9, 2012 (attached as Exhibit 6).

Here, however, the EA fails to directly identify the relationship between waste injection wells and seismicity altogether. BLM notes in identifying geologic hazards that a USGS database

“shows one minor earthquake recorded in the area of the Bull Mountain Unit in 1988.” EA at 142. While BLM’s tenor regarding past seismic activity is intended to be dismissive of the hazard, it nevertheless establishes that a fault line exists in the area and, therefore, that the area could be prone to induced seismicity from the significant expansion of waste water injection under the proposed project. BLM later offers: “[c]urrently 579 water-disposal wells are operating in Colorado, and there have been no reported problems or impacts to the underlying geology.” EA at 145. This conclusory statement – while apparently ignoring the increased seismicity in Trinidad, CO – fails to acknowledge, let alone analyze, even the possibility that the deep well injection could result in negative impacts from seismicity. Injecting up to a million gallons of produced water a day, as the Bull Mountain MDP proposes, is not something that BLM can dismiss out of hand – particularly in light of both historic and current reports establishing the relationship between deep well injection and seismicity. The potentially significant effects that such seismicity could have in the greater North Fork Valley area must be understood and analyzed.

g. The BLM has failed to sufficiently analyze the direct impacts to wildlife species.

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

i. Migratory Birds

BLM’s Instruction Memorandum No. 2008-050, provides guidance toward meeting the agency’s responsibilities under the Migratory Bird Treaty Act (“MBTA”), 16 U.S.C. §§ 703-712. *See also* Executive Order 13186 (setting forth the responsibilities of federal agencies to implement further the provisions of the MTBA and integrating bird conservation principles and practices into agency activities). IM 2008-050 “directs Field Offices to promote the maintenance and improvement of habitat quantity and quality for migratory birds of conservation concern to avoid, reduce or mitigate adverse impacts on their habitats to the extent feasible and in a manner consistent with regional or statewide bird conservation priorities.” EA at 72.

Under the proposed action, BLM identified that almost 250 acres of sagebrush, woodlands and meadow would be removed, which could, in turn, impact several migratory bird species. EA at 74. The impact to these habitats “would take approximately 20 to 30 years to return to preconstruction condition. This could displace higher conservation species over the life of the project,” making these habitats “unavailable for nesting by bird species ... [and] effectively displacing these birds during this time.” *Id.* “In addition to direct and indirect habitat loss is the effect of habitat fragmentation on nesting bird species.” *Id.* Identification of these direct and indirect impacts are followed by scant analysis regarding the effect that the Bull Mountain MDP would have on migratory bird species. Yet again, BLM relies on the generic BMPs listed in Appendix C to support its conclusion that the proposed action: “may adversely impact individuals, but is not likely to result in a loss of viability on the planning area, nor cause a trend to federal listing or a loss of species viability range-wide.” EA at 75. As stated before, reliance on a list of mitigation measures is insufficient to support a finding of insignificance.

ii. Wildlife Species

The BLM identifies a large number of terrestrial and aquatic species that may be impacted by the proposed action. Among wildlife species, the EA identifies mule deer, elk, black bear, and moose; and further identifies aquatic species such as the greenback cutthroat trout (discussed *infra* in ESA section). EA at 76, 88. The construction of facilities under to the Proposed Action would disturb a total of 286.9 acres. EA at 78. This direct loss of habitat would “reduce foraging, reproduction, and sheltering habitat for a number of wildlife species.” *Id.* Indirect impacts, however, are of greater concern. As recognized in the EA, “it is well-documented that [mule] deer stress levels, and thus overall fitness, are compromised when mule deer utilize habitats near and within areas of major natural gas development.” EA at 79. “Indirect impacts, as modeled, would result in a total impact to all winter ranges of 1,264.9 acres,” EA at 80, and, “the area would see long-term increased human activity levels which would diminish the effectiveness of the area for mule deer,” *id.* With regard to Elk, however, their greater sensitivity to disturbances would result in an even greater impact. BLM UFO uses a rather small – and unsupported – ¼ mile buffer around direct features to account for this sensitivity, which nevertheless results in impacts to “approximately 10,639.5 acres, or 54% of the Unit.” EA at 81. However, a recent BLM study, conducted in Wyoming, found that elk avoid wells within at least 1.7 miles, and roads within 0.5 miles. BLM, *Environmental Report: Coalbed Natural Gas Effects on the Fortification Creek Area Elk Herd*, Sept. 2007 at 7 (attached as Exhibit 7). Of course, using these studied and scientific figures for elk avoidance, a much greater impacted area for elk would result from the Proposed Action. Nevertheless, even using BLM’s apparently arbitrary ¼ mile buffer, significant impacts would occur, resulting in “significant redistribution” that “may place elk in suboptimal habitats.” EA at 82. Nevertheless, and as to be expected, BLM concludes: “Adherence to applicable BMPs listed in Appendix C would minimize the potential for impacts to wildlife.” *Id.* Relying on an insufficient and conclusory list of mitigation measures is not enough to avoid a finding of significance, and cannot support BLM’s FONSI.

iii. BLM Sensitive Species

When a particular animal species becomes in danger of rapidly dwindling to extinction, the BLM lists that animal on a BLM Sensitive Species list. Of the 31 listed sensitive species occurring in the UFO, BLM has identified eight of these species as occurring in the Bull Mountain Unit. EA at 61. BLM sensitive species include: northern goshawk, bald eagle, brewer’s sparrow, Townsend’s big-eared bat, spotted bat, fringed myotis, and the leopard frog. EA at 61-62 (it is unclear from BLM’s EA what the eighth sensitive species is). The BLM describes several impacts to these species that may result from development of the Proposed Action. Direct impacts include lost habitat from development, as well as indirect impacts due to noise, human activity and construction activities. EA at 64-65. For each of these species (with the exception of the bat species, which BLM determines would have “no adverse impacts”), however, BLM concludes: “The proposed action ‘may adversely impact individuals, but is not likely to result in a loss of viability on the planning area, nor cause a trend to federal listing or a loss of species viability range-wide.’” EA at 65-66. Once again, BLM supports their finding of insignificance by relying on the generic BMPs listed in Appendix C. Once again, this approach is inconsistent with the requirements of NEPA.

h. The BLM has failed to sufficiently analyze the direct impacts to visual resources, noise, and socioeconomics.

According to the EA, the BLM utilizes “the Visual Resource Management (VRM) system to manage and protect visual/scenic resources.” EA at 134. All BLM land within the project area was given a VRM Class II rating, which is the second highest value and “allows for some management activities, but should not attract the attention of a casual observer.” *Id.* Moreover, both the Town of Paonia and Delta County make provision for the preservation and protection of scenic viewsheds in their local planning efforts. *See* EA at 135. According to the EA, visible disturbance within the state highway (“SH”) 133 viewshed would include: “four well pad sites would have visible surface disturbance and above-ground facilities, and five additional well pad sites with visible above-ground facilities,” in addition to “several proposed pipelines and roads ... [which] could have a significant impact on the scenic quality of the area and may not meet the criteria of Class II,” as well as “impacts from overhead lines.” EA at 138. Moreover, “visual impacts from construction, drilling, and completion activities would occur with the proposed new well pad sites, access roads, and pipelines,” all of which would “increase the presence of drilling rigs, heavy equipment, and vehicular traffic, with an associated increase in dust, light pollution from safety lighting on drilling rigs, and potential well flaring.” EA at 139. Given these myriad impacts, BLM further provides: “In this environment, trees and shrubs may not regenerate quickly, therefore leaving a long-term impact with a visible clearing of vegetation that contrasts with the surrounding landscape and would likely not meet VRM Class II objectives.” *Id.* BLM, however, fails to draw a conclusion, or provide any indication, regarding how these impacts are insignificant.

With regard to noise related impacts from the Bull Mountain development, the EA provides: “Noise from natural gas development within the Unit comes from a number of sources: truck traffic, drilling and completion activities, and well pumps,” and further notes “[n]o compressor stations are currently present in the Unit, and none are proposed.” EA at 131. However, this assertion conflicts with a statement earlier in the EA, indicating that the proposed action would involve installation of 2 compressor stations. EA at 13. Accordingly, the ambient noise levels provided in the EA – which would “continue for 24 hours a day” and “could exceed 70 dB(A)” – are more than likely underestimated. EA at 131. While the EA lists impacts to noise, there is no analysis regarding the effect, and no conclusions regarding the significance.

Despite identified and listed impacts for both the visual and noise related resources, BLM, yet again, relies on adherence to applicable BMPs in their continued effort to avoid a finding of significance. *See* EA at 132, 139. As noted above, the discussion of these resources includes no analysis of the effect that these impacts will have, let alone any data to suggest that these impacts can be avoided through the proposed BMPs. Relying on industry chosen mitigation is plainly insufficient.

Concerning the socio-economic effects of the action, BLM identifies both Gunnison and Delta Counties to be included in their geographic analysis. EA at 146. BLM consistently defends oil and gas development on public lands, as here, by touting gas royalties and job creation. *See* EA at 149 (“The Proposed Action would change the character of the Bull Mountain by directly increasing local jobs to boost the local economy.”). The EA, however, does provide:

The Proposed Action may also have short-term and long-term impacts on the Bull Mountain area. Continued natural gas development would increase traffic, dust, and noise in a traditionally quiet rural area. Access roads and wellheads would also change the landscape views during the life of the project [which is estimated to be 46 years, EA at 14].

EA at 149. Nevertheless, BLM concludes, “implementation of the Proposed Action is not anticipated to measurably impact the tourism industry.” *Id.* Such a conclusion, however, directly conflicts with the determination made in the Lease Sale EA, where BLM acknowledged:

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.

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.

Lease Sale EA at 101, 110. Given a geographic analysis area that includes both Gunnison and Delta Counties, these apparently contradictory conclusions regarding the regional socioeconomic impacts from oil and gas development are deeply troubling. Additionally, BLM has determined that “no mitigation measures specific to socio-economics would be required.” EA at 150.

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* (Lease Sale Exhibit 21). The effects from these activities are numerous, 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* (Lease Sale Exhibit 22). None of these impacts are addressed or analyzed in

BLM's Bull Mountain MDP EA, leading to considerable uncertainty with regard to BLM's decisionmaking, as well as public understanding, of impacts to the North Fork Valley.

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

In addition to BLM's failed analysis in the EA respective to direct impacts to resource values from the Bull Mountain MDP, the EA also fails to take a hard look at cumulative impacts. 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. "Notably, an agency must take a hard look at cumulative impacts whether an EIS or EA is involved." *Environmental Protection Information Center v. Blackwell*, 389 F.Supp.2d 1174, 1185 (N.D.Cal. 2004) (citing *Churchill County v. Norton*, 276 F.3d 1060, 1081 (9th Cir. 2001) (interpreting the regulations implementing NEPA as requiring that an EIS consider the cumulative impacts of the proposed agency action); *Kern v. United States Bureau of Land Mgmt.*, 284 F.3d 1062, 1076 (9th Cir. 2002) (stating that an EA "may be deficient if it fails to include a cumulative impact analysis"). "Because cumulative impacts analysis is important to both an EIS as well as an EA ... it is appropriate to look to case law on cumulative impacts analyses in EISs for guidance even though this case involves an EA rather than an EIS." *EPIC*, 389 F.Supp.2d at 1185.

Consideration of cumulative impacts requires "some quantified or detailed information; ... general statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided. The cumulative impact analysis must be more than perfunctory; it must provide a 'useful analysis of the cumulative impacts of past, present, and future projects.'" *Kern*, 284 F.3d at 1075. *See also*, *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 810 (9th Cir. 1999) (stating that an environmental analysis "must analyze the combined effects of the actions in sufficient detail to be 'useful to the decisionmaker in deciding whether, or how, to alter the program to lessen cumulative impacts.'"); *Natural Resources Defense Council v. Hodel*, 865 F.2d 288, 298 (D.C. Cir. 1988) ("Conclusory remarks [on cumulative impacts] ... do not equip a decisionmaker to make an informed decision about alternative courses of action or a court to review the [agency's] reasoning.").

Here, BLM includes a "cumulative impacts summary" as the last section of the EA. In that section, BLM lists past, present, and future actions – including other oil and gas development, coal mining, and grazing allotments in the area – and points the reader to the respective resource sections for further discussion of those cumulative impacts. EA at 151-57. Those resources sections, however, are similarly short on detail. As discussed in further detail below, the cumulative impacts analysis regarding specific resources generally amounts to a list of impacts, which is devoid of any detail or helpful information. *See NRDC*, 865 F.2d at 298 (providing that section headings without the "requisite analysis" are insufficient). Moreover, and as noted above, BLM fails to provide any discussion related to climate change or farmlands. These are fatal omissions related to BLM's resource analysis in general, and are equally

incurable with respect to the UFO's cumulative impacts analysis. A true NEPA hard look analysis is required before BLM can proceed in adopting the Bull Mountain MDP, and must include the preparation of a comprehensive EIS incorporating all past, present, and reasonably foreseeable future resource impacts from this and other area actions. With little more than words on a page, it is hard to see how BLM's discussion of cumulative impacts would be of any benefit to the decisionmaker or the public.

a. Cumulative impacts to air quality

As noted above, the cumulative impacts summary directs the reader to resource sections for analysis. In the air quality resource section, however, BLM provides a list of cumulative emission sources – including coal mining, oil and gas exploration and development, livestock grazing, and regional vehicle traffic – but then references the “cumulative impacts summary” for a fuller description. EA at 41. In other words, both the summary and the air quality section point to each other for detailed analysis. Thus, with only self-referential lists found in different sections of the EA, actual analysis of those cumulative impacts to air quality is nowhere to be found.

Nevertheless, BLM concludes that the “contribution from project source emissions ... would be negligible.” *Id.* This conclusion further identifies a fundamental error with the BLM's approach: a cumulative impacts analysis should not only be concerned with this projects “contribution” to emissions but, also, with the impacts that the *combined emissions* from this and other sources will have on the human environment. Accordingly, the EA offers absolutely no discussion of what emission levels are from listed sources, or how those emissions will impact air quality – which is given a geographic area of 100 kilometers. The consequence of this omission can be made evident by looking, for example, at emissions from coal mining – for which there are three active coalmines within the geographic area contributing harmful emissions; the Elk Creek, Bowie, and West Elk mines. Considering only Elk Creek, this mine contributes direct emissions (i.e., has no pollution controls) of both criteria pollutants and greenhouse gas (“GHG”) emissions from the direct ventilation of methane. *See* Elk Creek Coal Modification, DOI-BLM-CO-150-2012-18 EA at 21. Estimated total methane emissions from Elk Creek Mine are 1.2 million tons of CO₂ equivalent annually. *Id.* at 32. Yet, BLM's EA offers no discussion or analysis of these direct emissions from Elk Creek, the other two coalmines, or how the Bull Mountain MDP will contribute cumulatively to these air quality impacts. Unfortunately, this failure in cumulative analysis is not unique to just BLM's treatment of air quality, but is prevalent throughout BLM's discussion of resources.

b. Cumulative impacts to water resources

The EA's discussion of water resources is similarly devoid of cumulative analysis. Respective to surface water, the EA provides: “Potential cumulative impacts to surface water resources from the Proposed Action ... would include increased turbidity and sedimentation in water courses, short-term runoff, and salt-loading, contamination of surface water courses and ponds by produced water and petroleum, and depletion of surface water flows in nearby streams.” EA at 109. With regard to groundwater, the EA states: “Potential cumulative impacts include contamination of groundwater aquifers with hydraulic fracturing fluids, produces water,

drilling mud, or petroleum and include impacts to shallow groundwater aquifers due to changes to the hydrologic function of impacted drainages. Cumulative impacts could also result when drilling/completion operations and infrastructure construction inhibit infiltration of surface water into shallow groundwater aquifers and when produced water is removed from target formations to facilitate the natural gas recovery process.” EA at 110. Despite these many impacts to water resources, BLM concludes: “Cumulative impacts to surface and groundwater would be minimized with implementation of applicable BMPs.” *Id.* BLM’s adopted approach to its analysis falls strikingly short of the cumulative impact mandate provided by NEPA’s implementing regulations. *See* 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.”).

c. Cumulative impacts to soil and vegetation

Analysis of the cumulative impacts to soil and vegetation is similarly missing from BLM’s EA. Regarding soils, the EA states that “[c]umulative impacts to soils would occur across the Unit from the reasonably foreseeable combined implementation of the No Action with the Proposed Action.” EA at 45. Considering vegetation, the EA provides: “Since 2002, redevelopment of historical well pads and construction of new well pads, roads, and pipelines by GS and Gunnison Energy Corporation have resulted in the direct loss of vegetation communities...[and] cumulative impacts would occur across the Unit from the reasonably foreseeable combined implementation of the No Action Alternative and the Proposed Action...[including] other cumulative impacts to vegetation communities...[from the] continuation of livestock grazing...[and the] widespread irrigation of meadows for grass hay production.” EA at 55. Characteristically, the list of cumulative impacts is accompanied by no analysis, nor any explanation of why these impacts are insignificant. As CHC has repetitiously reminded BLM, “general statements about ‘possible’ effects and ‘some risk’ do not constitute a ‘hard look’. The cumulative impact analysis must be more than perfunctory; it must provide a ‘useful analysis of the cumulative impacts of past, present, and future projects.’ ” *Kern*, 284 F.3d at 1075; *see also NRDC*, 865 F.2d at 275 (“[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.”). Quite simply, BLM’s approach does not comport with what NEPA demands.

d. Cumulative impacts to wildlife

In the EA’s discussion of wildlife species, the EA states: “Cumulative impacts to special status species would result from SG’s continued operation.... Other cumulative impacts to wildlife species would result from development of other leases within the greater Muddy Creek basin.” EA at 66. BLM further acknowledges that while “SG and Gunnison Energy are pursuing the development of other leases within the area,” *id.*, cumulative impacts to wildlife may also occur from agricultural uses such as sheep and livestock grazing, inundation of noxious weeds, and the widespread application of herbicides by local ranches. EA at 67-68. These cumulative impacts would result in “additional direct surface impacts as well as increased indirect impacts to

wildlife, wildlife habitats, and species ability to utilize otherwise available habitats which are adjacent to roads, pad sites, flowback pits, and to a lesser extent pipeline construction corridors,” EA at 67. Despite this generic list of harmful cumulative impacts – from many different sources in the area – the EA offers no analysis of the effect that these impacts will have on wildlife, and ultimately fails to draw any conclusion about the significance of these impacts. In other words, the EA lists generic cumulative impacts to wildlife, but does not provide an actual analysis with quantified and detailed information, and makes no determination relating to why such impacts are insignificant. This approach cannot support a FONSI related to the cumulative effect that the Bull Mountain MDP will have on wildlife.

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

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 in CHC’s earlier comments, an EIS incorporating all oil and gas development in the greater North Fork Valley area is required – 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 should encompass the Bull Mountain MDP, the August 2012 Oil and Gas Lease Sale (DOI-BLM-CO-S050-2012-0009 EA), the 16-well development in the North Fork/Muddy Creek Planning Unit (CO-150-2008-35-EA), as well as all other past, present, and foreseeable oil and gas development in the area. 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). In the present case, the proposed Bull Mountain MDP comes within the context of broader oil and gas development in the area of the North Fork Valley. This growth comes almost exclusively at the hands of industry cohorts SG Interests – the developer proposing the subject MDP and currently operating 13 CBNG wells in the area – and Gunnison Energy Corporation – developer of the 16-well project 2-4 miles from the Bull Mountain Unit boundary. EA at 152-53. SG Interests and Gunnison Energy are also currently embroiled in antitrust settlement negotiations with the U.S. Department of Justice for having conspired to orchestrate the bidding at oil and gas lease auctions in Western Colorado. *See* Department of Justice, *Justice Department Settlement Requires Gunnison Energy and SG Interests to Pay the United States a Total of \$550,000 for Antitrust and False Claims Act Violations*, Feb. 15, 2012 (attached as Exhibit 8). In addition to working together to control the oil and gas bidding process, 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* EA at 9, 152-53. 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. 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).

“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) Alternative 1, and (3) the No Action Alternative. EA at 9-13. The Proposed Action consists of a proposal to “drill up to 146 natural gas wells and 4 water disposal well on 36 new well pads and 5 existing well pads.” EA at 13. Alternative 1 was developed by “modifying the GIS model to minimize surface disturbance ... [which would] reduce the miles of road[s] and pipeline[s],” however, under this alternative, “[t]he number of well pads, number and types of wells, and the types of supporting infrastructure would be the same as for the Proposed Action.” EA at 19. The No Action Alternative, in turn, “includes continuation of existing federal authorizations on 13 existing well pads, continued operation of existing fee wells targeting fee minerals, and development of 11 new well pads and 55 new wells.” EA at 23.

Fist and foremost, BLM impermissibly fails to actually identify which of the three alternatives is *preferred*, thus introducing a level of confusion from the very beginning of its NEPA process by failing to “sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public.” 40 C.F.R. § 1502.14. Agencies are required to “[i]dentify the agency’s preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.” *Id.* at § 1502.14(e). This regulation has been interpreted to mean “an agency can formulate a proposal or even identify a preferred course of action before completing [the agency’s NEPA analysis.]” *Ass’n of Pub. Agency Customers v. Bonneville Power Admin.*, 126 F.3d 1158, 1185 (9th Cir. 1997). BLM’s failure to do so here violates CEQ Regulations.

Additionally, BLM’s Bull Mountain EA consistently fails to take a hard look at the direct, indirect and cumulative impacts that development under these alternatives will have on the human environment. BLM’s discussion of resource values most often lists the possible, generic impacts, and then relies on mitigation measures to avoid a finding of significance. As tirelessly stated above, these mitigations measures themselves are nothing more than a list of BMPs – the applicability of which can be chosen by industry – and is an approach that fails to support BLM’s FONSI. See *National Parks*, 241 F.3d at 735 (“A ‘perfunctory description,’ or ‘mere listing of mitigation measures, without supporting analytical data,’ is insufficient to support a finding of no significant impact.”). Based on this general approach, and essentially by admission and definition, BLM also has failed to take a “hard look” at the environmental impacts associated with the Bull Mountain MDP. 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”). Here, any analysis that BLM offers with regard to resource impacts is cursory and, more often than not, fails to draw any relationship between the listed impacts and the effect on the resource. Arising from BLM’s void of analysis, the EA’s discussion of the three alternatives is similarly perfunctory. For example, BLM’s description of Alternative 1 relative to the various resources discussed, although at times offering mildly different data or on-the-ground circumstances, consistently concludes: “The types of [resource] impacts from Alternative 1 would be similar to those from the Proposed Action.” *See, e.g.*, EA at 41, 68, 76, 90, 114, and 140. Such a conclusory discussion related to an alternative “brought forward for analysis” is not useful to the decisionmaker or the public.

Additionally, 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).

In the absence of any true analysis of alternatives, or defining the agency’s preference, 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). BLM’s approach to alternatives makes this choice oblique, if not impossible.

Moreover, 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 approval of the Bull Mountain MDP:

- (1) An alternative that analyzes and applies the best available information and science through stipulations aimed to protect federally listed species and their habitats.**

According to the EA, stipulations aimed to protect Endangered Species Act (“ESA”) listed species are provided for through the mitigation measures listed in Appendix C. *See infra* (discussing the ESA). Indeed, BLM suggests that “[a]dherence to applicable BMPs listed in Appendix C would minimize the potential for impacts to Threatened, Endangered, and Candidate species.” EA at 66. These BMPs, however, only amount to a general requirement that the

“operator will comply with all applicable Federal and State laws and regulations including ... the Endangered Species Act,” Appendix C-2, as well as a requirement specifying that the “operator will consult with the USFWS and BLM if any Threatened and Endangered species are discovered,” *id.* at C-9. Such general and perfunctory measures are incapable of protecting ESA listed species. “Mitigation measures must be reasonably specific, certain to occur, and capable of implementation; they must be subject to deadlines or otherwise-enforceable obligations; and most important, they must address the threats to the species in a way that satisfies the jeopardy and adverse modification standards.” *Center for Biological Diversity v. Rumsfeld*, 198 F.Supp.2d 1139, 1152 (D.Ariz. 2002); *see also Natural Resources Defense Council v. Kempthorne*, 506 F. Supp.2d, 322, 355 (E.D.Cal, 2007) (providing that a laundry list of possible mitigation measures, without specificity, are merely suggestions).

We concur with earlier comments submitted by U.S. FWS to BLM regarding the August 2012 Lease Sale – which is analogous and directly related to this action – where FWS concluded that “the proposed stipulations do not provide specific or adequate protection ... [and do] 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.” Memorandum from U.S. FWS, Comments on August 2012 Lease Sale (Feb. 8, 2012), at 5 (“FWS Comments”) (Lease Sale Exhibit 23). Accordingly, BLM must rigorously explore and objectively evaluate an alternative that applies best available information and science through stipulations aimed at protecting federally listed species and their habitats.

(2) An alternative that analyzes and applies best available methane reduction technologies as a stipulation attached to all development within the Bull Mountain Unit.

BLM should include in its analysis an alternative that applies a stipulation which mandates the use of best available methane reduction technologies to all development within the Bull Mountain Unit. Recent research has demonstrated that the use of ten technically proven and commercially available methane emissions reduction technologies can together capture more than 80 percent of the methane currently going to waste in the oil and gas sector’s operations. *See Harvey Report* (Lease Sale Exhibit 14). These technologies include:

1. **Green Completions** to capture oil and gas well emissions;
2. **Plunger Lift Systems** or other well deliquification methods to mitigate gas well emissions;
3. **Tri-Ethylene Glycol (TEG) Dehydrator Emission Controls** to capture emissions from dehydrators;
4. **Desiccant Dehydrators** to capture emissions from dehydrators;
5. **Dry Seal Systems** to reduce emissions from centrifugal compressor seals;
6. **Improved Compressor Maintenance** to reduce emissions from reciprocating compressors;
7. **Low-Bleed or No-Bleed Pneumatic Controllers** used to reduce emissions from control devices;
8. **Pipeline Maintenance and Repair** to reduce emissions from pipelines;
9. **Vapor Recovery Units** used to reduce emissions from storage tanks; and

10. Leak Monitoring and Repair to control fugitive emissions from valves, flanges, seals, connections and other equipment.

Id. at 5. In addition to reducing emissions, these “[m]ethane control technologies provide economic, health, safety, and environmental benefits for both operators and the public. These control technologies reduce not only greenhouse gas emissions, but also potentially explosive vapors, hazardous air pollutants, and volatile organic compounds (VOC), improving worker safety and limiting corporate liability.” *Id.* Accordingly, BLM must rigorously explore and objectively evaluate an alternative that requires the implementation of these 10 technologies through stipulations that attach to all APDs within the Bull Mountain Unit.

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

The list of BMPs in Appendix C, while claimed to be “state-of-the-art” mitigation measures, are not inclusive many techniques and procedures advanced by independent science and best available information. BLM’s NEPA process should further include analysis of an alternative that applies existing and new BMPs as mandatory stipulations applied to all oil and gas development proposed within the Bull Mountain Unit. For example, 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.

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 authorized by the Bull Mountain MDP. 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, 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 generally, and within the Bull Mountain Unit specifically. 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 development pursuant to the Bull Mountain MDP 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 Bull Mountain MPD can be approved.

III. Endangered Species Act

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, *see 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).

According to the EA, the listed species considered for this assessment are those “potentially occurring in Gunnison County.” EA at 59. BLM, thus, defines a very large action area. However, “[w]hile all species were considered, only species which occur in the area, have suitable habitat, or for which the Bull Mountain Unit is within the range of the species were selected for additional evaluation.” *Id.* Based on these barriers to evaluation, BLM’s EA discusses the following listed species: Canada Lynx, Colorado River endangered fish (humpback chub, bonytail chub, Colorado pikeminnow, and razorback sucker), and the Greenback cutthroat trout. EA at 60-61. Notably, the EA fails to identify other area species, namely those considered by BLM in the Lease Sale EA, at 54 (Colorado hookless cactus, and the Gunnison sage grouse), as well as species identified by the U.S. FWS in prior comments to BLM (Mexican spotted owl, Yellow-billed cuckoo, Black-footed ferret, Gunnison’s prairie dog, North American wolverine, and Clay-loving wild buckwheat), *see* FWS Comments (Lease Sale Exhibit 23). BLM’s failure to identify, let alone analyze, such a significant number of listed and candidate species is deeply troubling, and utterly fails to meet the requirements of the ESA.

Regarding species that BLM did identify, the EA lists a variety of impacts that may result from development of the Bull Mountain MDP.

Canada lynx: In terms of lynx, the EA recognizes “[a] major transportation route to the Bull Mountain Unit is SH 133, which passes through the Ragged Mountain LAU (RMLAU) and McClure Pass Lynx Linkage Area (MPLLA),” EA at 60, and that “the Proposed Action would result in increased traffic over McClure Pass through a Lynx Linkage Area,” EA at 62. Despite this increase, BLM relies on a 2,000-vehicle-per-day threshold – at which point lynx are believed to be impeded from moving across the highway – to conclude that the Proposed Action “**may affect, and is not likely to adversely affect**” lynx. EA at 62. This determination was made after looking only at impacts from traffic, and not at any other factor. The relatively low threshold for triggering the ESA is whether a listed species “may be present” in the area of action. *See* 50 C.F.R. § 402.01. By looking only at traffic impacts on SH 133, and not at *any* other possible impacts, the EA fails to sufficiently analyze the effect that the proposed development may have on lynx, and thus fails to meet the requirements of both the ESA and NEPA.

Endangered Colorado & Gunnison River Fish: The EA provides: “The Bull Mountain Unit is approximately 60 river miles upstream of the nearest designated critical habitat for the Colorado pikeminnow and razorback sucker and even further away for designated critical habitats for the humpback chub and bonytail in the mainstem of the Colorado River.” EA at 61. BLM relies on these distances to discount any impacts that may occur to these fish species. Elsewhere in the EA, however, BLM places greater import on impacts such as sedimentation, contamination, and water depletion that may result from the proposed action. For example, BLM recognizes that *existing* oil and gas activity – not considering additional impacts from the proposed action – have already “contributed, and will continue to contribute, to both sedimentation and salinity levels presently being experienced in the Colorado River,” and that “[a]ll of the soils within the Unit have the potential to create water quality-related sediment and salinity problems when distributed.” EA at 100. Moreover, “the North Fork is recognized as a major contributor of salt to the Colorado River System,” EA at 102, and BLM further recognizes that “[i]ncreased salt loading could potentially occur where saline soils would be disturbed and eroded by runoff into streams,” EA at 104. Thus, BLM recognizes the hydrologic connectivity and, therefore, the connectivity of impacts, between waters in the Bull Mountain Unit and resources found in the Gunnison and Colorado Rivers. Nevertheless, and without analysis or explanation, BLM concludes that there will be “no impact to these species from sediments or reasonably foreseeable contaminant spills.” EA at 63. This incongruence is left unexplained and unanalyzed.

While largely ignoring potential impacts from sedimentation and contamination, the EA devotes at least cursory attention to water depletions. Elsewhere in the EA BLM identifies that total *annual* water use for construction and drilling operations – which is anticipated to take 6 years – is estimated to be 675 ac-ft per year. EA at 105, 126. This amounts to more than 220 million gallons of water a year, or 1.3 billion gallons of water over the construction phase of the project. This water use, apparently, results in “annual consumptive depletions of 177.6 ac-ft for the Proposed Action,” or 56 million gallons per year. EA at 63. Although BLM tries to dismiss the impact of this depletion by stating that “SG has secured previously appropriated water for this project; as such, no ‘new’ water would be depleted,” the U.S. FWS, however, “considers any net water depletion which could decrease instream flows to have direct and/or indirect impact to the four Colorado River endangered fish species.” *Id.* (emphasis original). Accordingly, BLM (begrudgingly) determined that the “Proposed Action ‘**may affect, and is likely to adversely**

affect’ the Colorado pikeminnow, razorback sucker, humpback chub, and bonytail chub.” *Id.* (emphasis original). Nevertheless, and despite a determination that triggers ESA requirements to prepare a biological opinion and formally consult with FWS, BLM concludes: “the impacts of additional water depletions *could* be mitigated by SG and the BLM, which would therefore make their activities compliant with the 1999 Programmatic BO and Recovery Agreement and ensure continued recovery of these listed species.” EA at 64 (emphasis added). It is remarkable that BLM, in their EA, is explicitly ignoring the requirements of the ESA by relying on unspecified mitigation that *could* protect these species, without so much as even informal consultation with FWS. BLM does so in the face of a FWS determination that considers *any* water depletion to be significant to these species and, thus, signaling the need to perform a biological opinion. BLM’s unrepentant disregard for these endangered fish species is plainly in direct violation of ESA section 7, and cannot be sustained. *See* 50 C.F.R. § 402.14(a) (requiring formal consultation when an agency determines that any action it takes “may affect listed species or critical habitat.”).

Greenback Cutthroat Trout: The EA recognizes that genetically pure populations of Greenback cutthroat trout exist in many of the waters within the Bull Mountain Unit, including in both Roberts Creek and Dyke Creek – with genetic purity of 96% and 98% respectively – both of which are tributaries in the Muddy Creek basin. EA at 61. In addition, cutthroat populations in Henderson Creek – although not having undergone the genetic testing process – have been shown to be of greenback cutthroat trout lineage. *Id.* The EA admits that Greenback cutthroat trout are “extremely vulnerable to competition,” and are also “vulnerable to water depletions.” *Id.* Despite recognizing the immediate presence of this species, as well as their vulnerability to impacts, the EA concludes that “construction and operation of the features in the Proposed Action, including new roads, pipelines, pads, and associated water depletions would have ‘**no effect**’ to greenback cutthroat trout given the use of Best Management Practices and applicant-committed mitigation.” EA at 64. There is, of course, no analysis or explanation of how those BMPs and industry mitigation would protect species impacts or, in fact, any description of what those measures actually are. “Mitigation measures must be reasonably specific, certain to occur, and capable of implementation; they must be subject to deadlines or otherwise-enforceable obligations; and most important, they must address the threats to the species in a way that satisfies the jeopardy and adverse modification standards.” *Center for Biological Diversity v. Rumsfeld*, 198 F.Supp.2d 1139, 1152 (D.Ariz. 2002); *see also* *Natural Resources Defense Council v. Kempthorne*, 506 F. Supp.2d, 322, 355 (E.D.Cal, 2007) (providing that a laundry list of possible mitigation measures, without specificity, are merely suggestions); *Northern Plains*, 668 F.3d at 1083 (holding post-approval mitigation measures as failing to fulfill NEPA hard look requirements). Quite clearly, this standard has not been met through BLM’s approach.

When listed species *may be present*, as here, the ESA requires BLM to minimally conduct a biological assessment (“BA”) to determine impacts. 16 U.S.C. § 1536(c); *see also* 50 C.F.R. §402.12(f) (providing elements to be included for review in a BA). BLM’s cursory approach fails to satisfy even this initial threshold requirement of the ESA. Moreover, formal consultation and a biological opinion (“BiOp”) are required where, as here, an acting agency determines that any action it takes “*may affect* listed species or critical habitat.” 50 C.F.R. § 402.14(a); *see also*, *Colorado Environmental Coalition v. Office of Legacy Management*, 819 F.Supp.2d 1193, 1222 (D. Colo. 2011) (holding the agency “acted arbitrarily and capriciously by

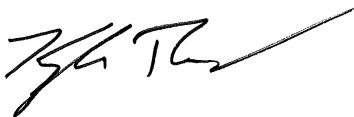
failing to consult with FWS prior to or immediately following the issuance of the EA, in violation of the ESA.”). BLM has chosen to ignore these compulsory ESA requirements and, instead, has chosen to rely on “[a]dherence to applicable BMPs listed in Appendix C [which] would minimize the potential for impacts to Threatened, Endangered, and Candidate species.” EA at 66. Not only are these mitigation measures insufficient under NEPA – as tirelessly stated throughout these comments – but also, as explained above, fail to meet the standards of the ESA. *See CBD*, 198 F.Supp.2d at 1152; *NRDC*, 506 F.Supp. 2d at 355. Indeed, these mitigation measures – aimed to protect listed species and habitat – amount to nothing more than a general requirement for ESA compliance, as well as a requirement that the operator notify FWS and BLM if ESA listed species are discovered. Appendix C-2, C-9. Such measures are horrifyingly insufficient in meeting the requirements of section 7 of the ESA, and do 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. BLM must conduct a BiOp and engage in formal consultation with FWS before the Bull Mountain MDP can proceed.

IV. Conclusion

Given the aforementioned issues associated this Preliminary EA and Draft FONSI – not least of which is BLM’s continued reliance on mitigation measures and generic BMPs to avoid a finding of significance – CHC requests that BLM reject the Bull Mountain MDP, at least so long as the completion of both an EIS and the revised RMP for the UFO are pending. 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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