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Via e-mail (BLM_CO_NW_sagegrouse_EIS@blm.gov) and U.S. Mail (with attachments)

Jim Cagney, District Manager
BLM Northwest District Office
2815 H Road
Grand Junction, CO 81506

Re: Comments on the Northwest Colorado Greater Sage Grouse Plan and DEIS

Dear Mr. Cagney,

Please accept and fully consider these comments on the Draft Grand Junction Resource Management Plan (RMP)/EIS on behalf of Conservation Colorado, The Wilderness Society, Rocky Mountain Wild, The Audubon Society, Wilderness Workshop, Rocky Mountain Recreation Initiative, San Luis Valley Ecosystem Council, Western Colorado Congress and Great Old Broads for Wilderenss and our members and supporters in Colorado and around the country who care deeply about the management of our public lands and the future of the Greater sage grouse. Our groups have been engaging in BLM planning processes and Greater sage grouse conservation efforts for many years and we are glad to finally see a comprehensive BLM effort to conserve the sagebrush seas of northwest Colorado. The sagebrush habitat that is so critical to grouse is also crucial for the future of over 350 other sagebrush obligates, including economically important species like mule deer, pronghorn and elk. We hope to see continued improvements in the planning documents that commit the agency to meaningful, science-based conservation measures and provide a balance with oil and gas development and other threats to sage grouse. In these comments, we have proposed specific changes and provided reasoned analysis to support them in these comments.

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I. General Management Framework

Per the Federal Register notice issued to formally commence this planning effort (76 Fed.Reg. 77008, December 9, 2011):

In view of the identified threats to the greater sage-grouse, and the FWS timeline for making a listing decision on this species, the BLM and FS propose to incorporate consistent objectives and conservation measures for the protection of greater sage-grouse and its habitat into relevant RMPs and LMPs by September 2014 in order to avoid a potential listing under the Endangered Species Act. These conservation measures would be incorporated into RMPs and LMPs through the plan amendment and revision processes of the respective agencies.

The range of issues, which encompasses resources or uses that may affect sage-grouse conservation on BLM and Forest Service lands, is wide-ranging:

At present, the BLM has identified the following preliminary issues:

- Greater Sage-grouse Habitat Management
- Fluid Minerals
- Coal Mining
- Hard Rock Mining
- Mineral Materials
- Rights-of-Way (including transmission)
- Renewable Energy Development
- Fire
- Invasive Species
- Grazing
- Off Highway Vehicle Management and Recreation

BLM has a duty to identify, protect, and monitor natural resources under the Federal Land Policy and Management Act (FLPMA) 43 U.S.C. § 1701 et seq., which imposes a duty on BLM to identify and protect the many natural resources found on public lands governed by RMPs. FLPMA requires BLM to inventory its lands and their resource and values, "including outdoor recreation and scenic values." 43 U.S.C. § 1711(a). FLPMA also obligates BLM to take this inventory into account when preparing land use plans, using and observing the principles of multiple use and sustained yield. 43 U.S.C. § 1712(c)(4); 43 U.S.C. § 1712(c)(1).

Through management plans, BLM can and should protect wildlife, scenic values, recreation opportunities and wilderness character present in the public lands through various management decisions, including by excluding or limiting certain uses of the public lands. See 43 U.S.C. § 1712(e). This is necessary and consistent with the definition of "multiple use," which identifies the importance of various aspects of wilderness characteristics (such as recreation, wildlife, natural scenic values) and requires BLM to consider the relative values of these resources but "not necessarily to the combination of uses that will give the greatest economic return." 43 U.S.C. § 1702(c).

The Forest Service has similar obligations and authority under the National Forest Management Act (NFMA). *See*, 16 U.S.C. §§ 1603-1604. The amendments and revisions to land use plans crafted as part of this planning effort will affect numerous resources and uses, and, therefore, should be based on a current inventory of resources, take into account potential effects on other resources, and make the most of opportunities to consider how conservation of one resource can benefit others.

The National Environmental Policy Act (NEPA) NEPA, U.S.C. § 4321 et seq., dictates that federal agencies take a “hard look” at the environmental consequences of a proposed action and the requisite environmental analysis “must be appropriate to the action in question.” *Metcalf v. Daley*, 214 F.3d 1135, 1151 (9th Cir. 2000); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989). In order to take the “hard look” required by NEPA, agencies are required to assess impacts and effects that include: “ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.” 40 C.F.R. § 1508.8.

The effects to be evaluated under NEPA include both costs (or damages) and benefits. 40 C.F.R. § 1508.8. Accordingly, BLM should explicitly identify and consider benefits from sage-grouse conservation actions that also serve to conserve other resources.

Further, NEPA requires that agencies consider a range of management alternatives, which is “the heart of the environmental impact statement.” 40 C.F.R. § 1502.14. NEPA requires agencies to “rigorously explore and objectively evaluate” a range of alternatives to proposed federal actions. *See* 40 C.F.R. §§ 1502.14(a) and 1508.25(c). An agency violates NEPA by failing to “rigorously explore and objectively evaluate all reasonable alternatives” to the proposed action. *City of Tenakee Springs v. Clough*, 915 F.2d 1308, 1310 (9th Cir. 1990) (quoting 40 C.F.R. § 1502.14).

In addition, when evaluating a range of alternatives, the BLM is required to consider more environmentally protective alternatives and mitigation measures. *See, e.g., Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1122–23 (9th Cir. 2002) (and cases cited therein). The consideration of more environmentally protective alternatives is also consistent with FLPMA’s requirement that BLM “minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved.” 43 U.S.C. § 1732(d)(2)(a).

Therefore, when evaluating the impacts of various alternatives in this planning effort, the BLM should explicitly discuss the benefits of protecting land (such as scenic values, clean air and water), as part of considering various approaches to conserving sage-grouse habitat.

In addition, the manner in which the BLM has developed the various alternatives in the Draft EIS does not set out a workable alternative that incorporates meaningful conservation opportunities. The range includes a no action alternative (A), a National Technical Team alternative (B), a “conservation” alternative (C) and a “sub-regional” alternative (D). However, only Alternative C incorporates any areas that are explicitly managed for sage-grouse habitat conservation, via one, 926,800 acre area of critical environmental concern (ACEC), Alternative B does not meaningfully address renewable energy development, and Alternative D (the preferred alternative) does not incorporate explicit closures to activities. This approach to developing alternatives has provided a wide range within which BLM can develop a workable alternative that can meet its obligations, but has not provided a useful set of alternatives that could be adopted, which undermines the ability of interested parties to review and comment. BLM should develop more balanced alternatives and provide them to the public, along with an opportunity for review and comment.

Recommendations: The Draft EIS is addressing a range of issues, as part of developing a meaningful approach to sage-grouse conservation, that can and should take into account the many resources of the

affected lands, acknowledge the benefits of conserving other resources (such as big game habitat, vegetation, lands with wilderness characteristics, backcountry recreation) and explicitly incorporate these considerations into a revised preferred alternative. Due to the polarized set of alternatives currently set out in the Draft EIS, BLM should develop blended, more balanced alternatives that do not set conservation against other resource uses, and instead capitalize on opportunities to adopt conservation measures that will conserve a broad range of resources and uses. This approach is most consistent with FLPMA, NFMA, NEPA, as well as with responsible management of sage-grouse habitat and the many conservation values of these public lands. Below, we have provided an approach to developing additional alternatives, which should also be made available to the public for comment.

II. USFWS PECE Criteria

The U.S Fish and Wildlife Service will consider the Policy for Evaluating Conservation Efforts (“PECE Policy”) to determine the adequacy of existing regulatory mechanisms when considering whether Endangered Species Act listing is warranted. Implementation must be certain and the proposed plan in question must be known to be effective. According to the PECE policy, “We will make this evaluation based on the certainty of implementing the conservation effort and the certainty that the effort will be effective.” 68 Fed. Reg 15113. The requirements to qualify for consideration under the PECE policy are as follows:

The certainty that the conservation effort will be implemented:

- The conservation effort; the parties to the agreement or plan that will implement the effort; and the staffing, funding level, funding source, and other resources necessary to implement the effort are identified.
- The legal authority of the parties to the agreement or plan to implement the formalized conservation effort, and the commitment to proceed with the conservation effort are described.
- The legal procedural requirements necessary to implement the effort are described, and information is provided indicating that fulfillment of these requirements does not preclude commitment to the effort.
- Authorizations (e.g. permits, landowner permission) necessary to implement the conservation effort are identified, and a high level of certainty is provided that the parties to the agreement or plan that will implement the effort will obtain these authorizations.
- The type and level of voluntary participation (e.g. by private landowners) necessary to implement the conservation effort is identified, and a high level of certainty is provided that the parties to the agreement or plan that will implement the conservation effort will obtain that level of voluntary participation.
- Regulatory mechanisms (e.g. laws, regulations, ordinances) necessary to implement the conservation effort are in place.
- A high level of certainty is provided that the parties to the agreement or plan that will implement the conservation effort will obtain necessary funding.
- An implementation schedule (including completion dates) for the conservation effort is provided.
- The conservation agreement or plan that includes the conservation effort is approved by all parties to the agreement or plan.

The certainty of effectiveness

- The nature and extent of threats being addressed by the conservation effort are described, and how the conservation effort reduces the threats is described.
- Explicit incremental objectives for the conservation effort and dates for achieving them are stated.
- The steps necessary to implement the conservation effort are identified in detail.
- Quantifiable, scientifically valid parameters that will demonstrate achievement of objectives, and standards for these parameters by which progress will be measured are identified.
- Provisions for monitoring and reporting progress on implementation (based on compliance with the implementation schedule) and effectiveness (based on evaluation of quantifiable parameters) of the conservation effort are provided.
- Principles of adaptive management are incorporated.

68 Fed. Reg. 15115.

The lack of sufficient regulatory mechanisms to conserve sage-grouse and their habitats was the primary threat leading to the U.S. Fish and Wildlife Service's decision to make the greater sage-grouse a candidate for Endangered Species Act listing in 2010. As currently written, the plan does not provide adequate regulatory mechanisms to conserve greater sage-grouse in northwest Colorado. Alternative D relies heavily on discretionary conservation measures that will not satisfy the PECE criteria outlined above, and allows for broad exceptions to key conservation measures (e.g. surface disturbance caps). Further, in many instances BLM proposes to adopt conservation measures in alternative D deviate substantially from the National Technical Team recommendations, without providing any rationale regarding the likely effectiveness of these conservation measures. Many of these measures may be inadequate based on the available science regarding thresholds at which significant impacts can be expected.

Recommendations: The preferred alternative needs to be strengthened to address both the aforementioned issues as well as other shortcomings detailed throughout these comments. The BLM plan must be strengthened in order to ensure that the conservation measures in the final plan are adequate to prevent the need for listing the species under the Endangered Species Act.

III. Failure to Adequately Incorporate Greater Sage-Grouse Conservation Objectives Final Report into Analyses

The Conservation Objective Team (COT), while created by the U.S. Fish and Wildlife Service (USFWS), was a collaborative team of federal and state representatives. The outcome, the Final COT Report¹, was "designed to provide a clearer picture of the objectives that, if met, will ensure the long-term, robust persistence of this iconic western species." The report further states, "the effectiveness of regulatory mechanisms and incentive-based conservation activities will be assessed on whether such efforts will successfully ameliorate the specific threats associate with each population and its' associate PACs ... Regulatory mechanisms and incentive-based actions should address all threats to PACs to the maximum extent practical." (Final COT Report, p. 34). This report clearly outlines the degree to which threats need

¹ U.S. Fish and Wildlife Service. 2013. Greater Sage-grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report. U.S. Fish and Wildlife Service, Denver, CO. February 2013.

to be reduced or ameliorated, and thus is an important benchmark for the BLM to evaluate its proposed management actions by.

The RMP references inclusion of components of the COT report in Chapter I (Partner Agency Involvement, page 5):

The priority areas for conservation and the conservation objectives are incorporated into the planning strategy as appropriate for assessment and evaluation in the EIS. The alternatives included in this EIS were developed directly in response to the specific threats and conservation objectives identified in the COT Report for GRSG populations in Northwest Colorado.

However, reference to the COT is limited within the remainder of the Draft EIS². The EIS should have included a thorough discussion on specific localized and widespread threats and Priority Areas for Conservation (PACs). Discussion of these threats, recommended conservation objectives for addressing them, and PACs per the Final COT Report should be included in Chapter 3 as these are relevant to Chapter 4 effects and analyses. To better understand the effects of each alternative, and thus improve comparison, Chapter 4 effects analysis should include:

- clear metrics/effects indications for each action;
- clear analysis framework that is applied across all alternatives to base effects comparisons;
- consistent effects determination (adverse, beneficial, neutral) for each proposed alternative; and
- supporting rationale for each effect determination.

The effects analysis, for each specific threat and proposed actions in each alternative, should tie directly back to the Final COT Report. Discussion should include consistency with the COT's conservation objectives and the extent to which identified threats would be ameliorated.

Failure to compare the actions proposed in the draft EIS alternatives to the Final COT Report limits the ability to evaluate how the actions achieve conservation of Greater Sage-grouse in northwestern Colorado. Furthermore, clarity is needed as to how various Best Management Practices, mitigation, and proposed conservation measures would interact with each other and the actions outlined in the alternatives.

Recommendations: The Northwest Colorado Greater Sage-grouse EIS should include a thorough discussion on specific localized and widespread threats and Priority Areas for Conservation (PACs), including discussion of these threats, recommended conservation objectives for addressing them, and PACs per the Final COT Report. The effects analysis, for each specific threat and proposed actions in each alternative, should tie directly back to the Final COT Report and should be consistent with the COT's conservation objectives and the extent to which identified threats would be ameliorated.

² Table 4.2 (page 529) limitedly references the threats in the COT Report

IV. Garfield County Alternative

BLM was correct to place the Garfield County Plan as an appendix and outside the range of alternatives. The plan is not based upon accepted science and is contrary to nearly all accepted standards put forth in the National Technical Team report. This plan focuses solely on limiting the impacts of sage grouse conservation on the oil and gas industry, which is completely backwards.

Recommendations: The Garfield County Plan falls outside the range of alternative in many cases and should not be considered as a viable alternative.

V. Inadequacy of Lek Buffers

The use of 0.6 mile buffer around leks in core habitat or PPH and 0.25 mile NSO for leks in occupied habitat or PGH is inadequate to maintain lek activity, as has been repeatedly shown by science (Holloran 2005³, Walker et al. 2007)⁴. The Lander RMP DEIS and FEIS both recognized this, as did the Miles City RMP.

Miles City Draft RMP (4-135): “Lek losses would be expected to be 2 to 5 times greater in areas with development above the less than or equal to 1 well per development per square mile threshold, and abundance (males per lek) at the remaining leks would be expected to decline by approximately 30 to 80 percent. In some areas, such as in the Cedar Creek Anticline, decreased male attendance at leks has exceeded 80 percent, which is largely attributed to oil and gas development. The efficacy of BLM NSO stipulations for leasing and development within 0.25 miles of a lek would result in an estimated lek persistence (the ability of leks to remain on the landscape) of approximately 5 percent, while lek persistence in areas without oil and gas development would be expected to average approximately 85 percent. Impacts from energy development occur at distances between 3 and 4 miles.” [...]

“Impacts to leks caused by energy development would be most severe near the lek. Although most of the impacts from energy development are indirect, some direct effects, such as flying into overhead power lines would also result from energy development and ROWs. Lek extirpation in areas with 8 wells per section (40 to 100 wells) within 2 miles of the lek would be 5 times more likely to occur than in areas with no wells within 2 miles, and male attendance at the remaining leks in these areas would be expected

³ Holloran, M.J. 2005. Greater sage-grouse (*Centrocercus urophasianus*) population response to natural gas field development in western Wyoming. Dissertation. University of Wyoming, Laramie, WY.

⁴ Walker, B. L., D. E. Naugle, and K. E. Doherty. 2007. Greater sage-grouse population response to energy development and habitat loss. *Journal of Wildlife Management* 71(8):2644-2654.

to decline by approximately 20 to 60 percent (Doherty 2008)⁵ [...] “The oil and gas restriction from March 1 to June 15 would be insufficient to protect breeding populations of sage-grouse. Although timing would provide limited protection for sage-grouse, it would only offer this protection during the initial nesting year. Sage-grouse, which exhibit high nest-site fidelity (they come back to the same area every year), would experience less nest success and brood survival in nesting habitat. As described above, development would potentially lead to abandonment and population loss.”

Recommendation: BLM must follow the best available science and limit the placement and extent of surface disturbance and permanent structures. Pump stations and other permanent structures should be placed a minimum of 2 miles (3.2 km) from the nearest lek, with a preferred distance of greater than 4 miles (6.4 km) from active leks, based upon the best-available data from Naugle et al. (2011)⁶.

VI. Lease Stipulations

Appendix E to the Draft EIS addresses stipulations applicable to fluid mineral leasing and land use authorizations, including waivers, exceptions and modifications to oil and gas stipulations.

The Draft EIS provides for waiver, exception and modification of virtually all stipulations in the preferred alternative. As a result, these stipulations do not provide reliable protection and cannot be cited as meaningful mitigation. In order for the agencies to rely on mitigation to reduce potentially significant impacts, NEPA requires that the agencies make a firm commitment to the mitigation and discuss the mitigation measures “in sufficient detail to ensure that environmental consequences have been fairly evaluated...” *Communities, Inc. v. Busey*, 956 F.2d 619, 626 (6th Cir. 1992). NEPA also directs that the “possibility of mitigation” should not be relied upon as a means to avoid further environmental analysis. *Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations. See also Davis v. Mineta*, 302 F.3d 1104, 1125 (10th Cir. 2002). The final plan should not permit waiver, exception or modification of key stipulations, such as no surface occupancy stipulations and surface disturbance limitations, which are vital for achieving the management and conservation goals of this planning effort. Further, incorporating actual closures to oil and gas leasing will provide the most reliable protections. While the preferred alternative incorporates no surface occupancy stipulations for significant acreage, it does not incorporate any new closures to leasing. A combination of closing areas to leasing with protective stipulations in other areas will be more effective.

We also draw your attention to Alternative F in the Nevada draft EIS⁷ for sage-grouse issued November 1, 2013, which has set out detailed oil and gas management measures. We recommend that BLM incorporate the provision that prohibits use of the categorical exclusions from NEPA (developed in Section 390 of the Energy Policy Act) to approve drilling activities.

The Draft EIS provides that “30-day public notice and comment period may be required” prior to approval of a waiver, exception or modification, but does not provide further detail. Given the importance

⁵ Doherty, K. E. 2008 Sage-grouse and Energy Development: Integrating Science with Conservation Planning to Reduce Impacts. (Doctoral dissertation, the University of Montana). Missoula. Available at: <http://etd.lib.umt.edu/theses/available/etd-03262009-132629/unrestricted/doherty.pdf>.

⁶ Naugle, D.E., Doherty, K.E., Walker, B.L., Holloran, M.J., Copeland, H.E. 2011. Energy development and greater sage-grouse. In: Greater sage-grouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology. University of California Press.

⁷ Available at: <https://www.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage¤tPageId=31103>

of these stipulations for mitigating impacts to sage-grouse habitat, public notice and comment should be required.

We appreciate that Appendix E to the Draft EIS also includes conditions of approval for permits on existing leases. In *Yates Petroleum Corporation*, 174 IBLA 155 (2008), the Interior Board of Land Appeals (IBLA) affirmed the BLM's authority to revise conditions of approval (COAs) for applications for permit to drill (APDs) to increase the stipulated seasonal buffers around sage-grouse leks from 2 to 3 miles, based on updated scientific information demonstrating previously conditioned smaller buffers as inadequate (looking at Western Association of Fish and Wildlife Agency studies). The IBLA based its conclusions in Section 6 of the standard oil and gas lease terms, which provides that leases are subject to "reasonable measures" as needed to "minimize adverse impacts" to other resource values not otherwise addressed at the time of leasing. According to the IBLA, "reasonable measures" could also include siting and timing of operations. BLM should continue to exercise this authority by prescribing strong conditions of approval in sage-grouse habitat.

Recommendations: NSO stipulations and surface disturbance caps should not be subject to waivers, exceptions and modifications. Further, actual closures to leasing should be incorporated into the final plan to provide reliable protections and mitigation. Public comment should be required prior to any waiver, exception or modification. We support the incorporation of conditions of approval to apply to existing leases, supplementing the conservation that can be achieved by stipulations.

VII. Transmission Lines

Anti-perching devices should be required for on all new overhead transmission lines in Greater Sage-grouse habitats to reduce predation from raptors. In addition, the BLM should work with ROW holders to identify conflict areas and get anti-perching devices installed on existing overhead powerlines in these same habitats. These two minimizing techniques are noted in the Lander RMP (DEIS at 882). Because approximately 74-80% of sage-grouse females nest within 4 miles of leks (Moynahan 2004⁸, Holloran and Anderson 2005⁹), this measure will help to reduce predatory pressures on nesting and foraging grouse. We recommend deterrent devices on H-frame structures because recent research indicates they are effective tools in reducing perch use of such structures (Lammers and Collopy 2007¹⁰, Slater and Smith 2010¹¹).

High voltage transmission lines should be avoided within Priority Habitat. While they are allowed within General Habitat, they should be prohibited within 1 mile of a lek) to minimize grouse avoidance behavior and increased predation pressure. Burying transmission lines, while eliminating perching opportunities for avian predators, may well be more detrimental in regards to volume of surface disturbance occurring in such proximity to leks. Our organizations request additional analyses compare the impacts to sage-grouse from burying versus vertical structures. We remain concerned at the amount of habitat lost or

⁸ Moynahan, B. 2004. Landscape-scale factors affecting population dynamics of greater sage-grouse (*Centrocercus urophasianus*) in north-central Montana, 2001-2004. Ph. D. Dissertation. University of Montana. Missoula, MT.

⁹ Holloran, M. J. and S. H. Anderson. 2005. Spatial distribution of greater sage-grouse nests in relatively contiguous sagebrush habitats. *Condor* 107:742-752.

¹⁰ Lammers, W. M., and M. W. Collopy. 2007. Effectiveness of avian predator perch deterrents on electric transmission lines. *Journal of Wildlife Management* 71:2752-2758.

¹¹ Slater, S. J., and J.P. Smith. 2010. Effectiveness of raptor perch deterrents on an electrical transmission line in southwestern Wyoming. *Journal of Wildlife Management* 74:1080-1088.

fragmented, resulting in direct and indirect impacts, resulting from a uniform stipulation of burying transmission lines within 1 mile of leks.

The Lander and Miles City RMPs provide instructive examples for managing transmission lines in sage-grouse habitat. The Lander RMP FEIS Record #4102 (Alternative B): Prohibit new, permanent, high-profile structures (higher than 12 feet) within 1 mile of occupied greater sage-grouse nesting habitat (Map 64). FEIS at 130. Similarly in the Miles City Draft RMP, while high voltage transmission lines are allowed within General Habitat, they should avoid areas within 1 mile of a lek to minimize grouse avoidance behavior and increased predation pressure. Research indicates approximately one-third of juvenile sage-grouse mortality is directly attributed to collisions with power lines (Beck, Reese, Connelly, and Lucia 2006¹²; Flake, Connelly, Kirschenmann, and Lindbloom 2010¹³). Miles City DEIS at 4-133. In addition, a study in Idaho found that transmission line collisions resulted in 33 percent of juvenile sage-grouse deaths in the study area (Beck et al. 2006; Flake et al. 2010). Miles City DEIS at 4-158. We support these transmission line provisions as a means to prevent area avoidance by sage-grouse, and encourage BLM to incorporate similar provisions in the Northwest Colorado Sage-grouse EIS.

Furthermore, the Northwest Colorado Draft EIS fails to reference the Avian Power Line Interaction Committee. A new APLIC guideline manual was released in 2012 and should be referenced.

Recommendations: High voltage transmission lines should be prohibited within 1 mile of a lek to minimize grouse avoidance behavior and increased predation pressure. Anti-perching devices should be required for on all new overhead transmission lines in Greater Sage-grouse habitats, and BLM should work with ROW holders to identify conflict areas and get anti-perching devices installed on existing overhead transmission lines in these same habitats. BLM should incorporate relevant information from the updated APLIC guideline manual.

VIII. Fencing

Existing fencing can be an obstacle or potential hazard to special status wildlife species by concentrating livestock, adversely impacting vegetation and fragmenting habitat. New fences should be avoided because they further fragment the landscape, raise risks of mortality from potential collision points, and provide perching opportunities for raptors – all detrimental to sage-grouse. Overall, sage-grouse mortality is increased due to greater perching opportunities for avian predators and collision risk during flight.

Protective measures should include provisions which avoid construction of new infrastructure (such as fencing) and instead focuses on livestock grazing management throughout seasons of use and lower forage utilization. Lander RMP FEIS at 43. Conservation is best served by protecting and enhancing habitat. The Draft RMP should provide for removing or modifying identified wildlife hazard fences that are adversely affecting wildlife where opportunities exist, as was proposed in the Lander RMP FEIS (at

¹² Beck, J.L., K.P. Reese, J.W. Connelly, and M.B. Lucia. 2006 Movements and survival of juvenile greater sage-grouse in southeastern Idaho. *Wildlife Society Bulletin*, 34(4): 1070–1078.

¹³ Flake, L. D., J. W. Connelly, T. R. Kirschenmann, and A. J. Lindbloom. 2010 Grouse of the plains and mountains-the South Dakota story. South Dakota Department of Game, Fish, and Parks. Pierre.

114). In that FEIS, Record #4083, applicable to all alternatives, provides that BLM will “Increase the visibility of existing fences to reduce hazards to flying greater sage-grouse. Require the installation of fence markers on new wire fences constructed in greater sage-grouse habitat to increase fence visibility and reduce collision potential.” Lander RMP FEIS at 124.

We also recommend Lander FEIS Record #4101 “When fences are authorized, require a design that has the fewest adverse impacts to greater sage-grouse including features to reduce greater sage-grouse strikes and mortality. Remove, modify, or mark fences in high-risk areas.” *Id.* at 129.

Avoidance and mitigation techniques should analyze and reference scientific research, including:

- 2009 WGFD report examined sage-grouse mortalities near Farson and found that sage-grouse fence diverters reduced sage-grouse fatalities by 61 percent. (Christiansen 2009)¹⁴.
- Fence surveys in the Lander and Rock Springs Field Office areas have shown that sage-grouse can be injured or killed as a result of flying into fence wires. Lander FEIS at 969.

Recommendation: BLM’s preferred alternative needs to require that priority stretches of existing fences, especially those in proximity to leks, will be identified for use of sage-grouse fence diverters/markers to prevent collisions and prioritize the removal of fencing in close proximity to leks. Additionally, BLM should apply fence design standards to any and all fencing proposals that will minimize sage grouse impacts.

IX. Failure to Adequately Address Climate Change Impacts

The Northwest Colorado Greater Sage-grouse Draft EIS recognizes the potentially significant impacts of climate change on Greater Sage-grouse populations within the planning area. Specifically in the following sections:

A loss of sagebrush communities due to climate change would directly impact GRSG. Compounding this issue is that the planning area is at the southern edge of the range for GRSG, since species at the edge of their range are typically at a higher risk. If plant communities shift north in latitude it is possible that local populations of GRSH could be extirpated by the end of the century due to habitat loss attributed to climate change. (p.804)

A vulnerability assessment was completed for Gunnison sage-grouse (*Centrocercus minimus*) in the Gunnison Basin (Neely et al. 2011) determined that mesic meadows, springs and seeps, and low vegetation riparian areas were at a high risk of exposure to climate change. These habitats are critical to GRSG for brood rearing of young chicks. The loss of these habitats due to climate change impacts, exacerbated by non-climate stressors such as habitat

¹⁴ Christiansen, T. 2009. Fence marking to reduce greater sage-grouse (*Centrocercus urophasianus*) collisions and mortality near Farson, Wyoming – Summary of interim results. Wyoming Game and Fish Department, Cheyenne, WY.

fragmentation due to development and road building, past over grazing practices, and invasive species have the possibility of reducing the survival of GRSG broods ... In summary, climate change has the potential to have profound impacts for those critical habitats that support GRSG populations within the planning area.

Draft EIS, p.805.¹⁵

Despite this acknowledgement, the Draft EIS fails to provide any description of how climate change will be addressed. Instead, the following ineffectual language is included in the Draft EIS:

In the future, as tools for predicting climate changes in a management area improve and changes in climate affect resources and necessitate changes in how resources are managed, the BLM or USFS may be required to reevaluate decisions made as part of this planning process and to adjust management accordingly.

Draft EIS, p. 454.

BLM must complete a more comprehensive analysis of climate change impacts to greater sage-grouse and adopt management decisions to minimize and mitigate those impacts, and foster adaptation to climate changes. The recently completed Colorado Plateau Rapid Ecoregional Assessment should inform this analysis and assist the agency with managing sage-grouse populations in the face of climate change.

The BLM's Rapid Ecological Assessment (REA) program is as a tool to monitor and respond to the effects of climate change. While not covering the entire planning area for the Northwest Colorado Greater Sage-grouse EIS, the Colorado Plateau REA (Bryce et. al. 2012)¹⁶ covers the southern and western portions of the planning area. According to the Draft EIS, " ... one can reasonably assume that the future climate scenarios for temperature and precipitation will be similar for the rest of the planning area." Greater clarity is needed as to how this REA will be incorporated into this RMP.

It is our understanding, according to the *BLM WO Instruction Memorandum No. 2013-082*, that it is the policy of the BLM to use this REA information and similar information from other large-scale assessments to help prepare land use plans and plan amendments; conduct cumulative impact analyses; establish development, restoration and conservation priorities; develop best management practices; and authorize public land uses.

The IM further states that State Directors are encouraged to:

¹⁵ Neely, B., R. Rondeau, J. Sanderson, C. Pague, B. Kuhn, J. Siemers, L. Gruneau, J. Robertson, P. McCarthy, J. Barsugli, T. Schulz, and C. Knall (eds.). 2011. Gunnison Basin: Vulnerability Assessment for the Gunnison Climate Working Group by The Nature Conservancy, Colorado Natural Heritage Program, Western Water Assessment, University of Colorado, Boulder, and University of Alaska, Fairbanks. Project of the Southwest Climate Change Initiative.

¹⁶ Bryce, S. A., J. R. Strittholt, B. C. Ward, and D. M. Bachelet. 2012. Colorado Plateau Rapid Ecoregional Assessment Report. Prepared for the US Department of the Interior, Bureau of Land Management, Denver, CO.

- Use the REAs and other assessments, where appropriate, in developing new state-wide Environmental Impact Statements (EIS) such as the Greater Sage Grouse EISs, in siting large-scale projects managed at the state or regional level, identifying focal areas for development, restoration and conservation; and in designing state or regional level off-site mitigation strategies.
- Work with regional partners to create interagency teams to review the REAs and other assessments to identify regional challenges and opportunities, describe what is already being done to address these challenges and opportunities, and propose additional actions that could be taken over the next 3-5 years to address them.
- Review the REAs and other assessments to develop a list of potential state-level priorities for policy and program development, data collection, research, and out-year funding.

District and Field Office Managers are encouraged to:

- Identify training and guidance needs that would help the field make effective use of the REAs and other assessments.
- Use the REAs and other assessments, where appropriate, in developing new land use plans, plan amendments and project specific National Environmental Policy Act documents.
- Demonstrate how REAs and other assessments may be used to help identify potential obstacles to achieving our multiple use and sustained yield mission and to more effectively focus and integrate day-to-day management activities and coordinate work with adjoining Field Offices.
- Work with local partnerships to use the REAs and other assessments to facilitate cross-jurisdictional activities.

In addition to the Colorado Plateau REA, additional resources exist which BLM should utilize in addressing climate change as part of the Northwest Colorado Greater Sage-grouse EIS. The National Wildlife Federation recently released a report, *Shifting Skies: Migratory Birds in a Warming World*. <http://www.nwf.org/News-and-Magazines/Media-Center/Reports/Archive/2013/06-18-13-Migratory-Birds-in-a-Warming-World.aspx>. Audubon's 2009 birds and climate report (<http://birdsandclimate.audubon.org/>) documents how 177 of 305 North American migratory bird species have already shifted their winter destinations to the north by an average of 35 miles over the past 40 years.

Lastly, we would like the Northwest Colorado Greater Sage-grouse EIS team to be aware of the National Audubon Society Climate Change Modeling Program. The National Audubon Society has been funded through a grant and cooperative agreement with the U.S. Fish and Wildlife Service (USFWS) to analyze how birds across North America may respond to climate change. Using extensive citizen science data and detailed climate layers, Audubon developed models that characterize the relationship between the distribution of each species and a set of bioclimatic variables. Audubon used these models to forecast species distributions in future time periods based on climate change estimates described by the Intergovernmental Panel on Climate Change. For taxa of concern, Audubon has developed spatially explicit predictions for areas that will remain climatically suitable from 2000-2080. Identification of these climate "refugia" could serve an important role in conservation planning for sage-grouse and other species of concern, whether or not it is formally listed by USFWS. Results of this work are currently being finalized for inclusion in the Audubon report to UDFWS. Please contact Gary Langham (Chief

Scientist, 202-600-7975, glangham@audubon.org) to discuss use of Audubon's climate predictions or address any questions related to Audubon's climate change work.

Recommendations: BLM should complete a comprehensive climate change analysis as part of the Northwest Colorado Greater Sage-grouse EIS and put in place a robust, meaningful adaptive management strategy that minimizes and mitigates impacts to greater sage-grouse from climate change over the life of the plan. The analysis and management decisions should be informed by the Colorado Plateau REA as well as other resources outlined above.

X. Adaptive Management

Over the years BLM has considered various adaptive management proposals for consideration within various Land Use Plans (LUP), including for the Little Snake Field Office Resource Management Plan (LSFO RMP) in Colorado. However, in the case of the LSFO RMP, BLM realized that due to a lack of baseline information, combined with undefined and indeterminate funding to conduct adequate monitoring and compliance made the implementation of a management plan predicated on the application of adaptive management principles to not only be difficult, it would place the efficacy of the entire RMP into question.

Unfortunately, the NW CO Greater Sage Grouse Plan seems willing to follow in those same footsteps stating "if principles of adaptive management are incorporated into the conservation measure (to ameliorate threats to a species), then there is a greater likelihood that a conservation measure or plan will be effective in reducing threats to that species."¹⁷ However, the principles of adaptive management are not being incorporated in this plan, bits and pieces of an adaptive management plan are being utilized and this piecemeal approach only undermines not just the intent of adaptive management, but the overall effectiveness of the plan.

For example, BLM has failed to describe what the conceptualized goals are for an adaptive management program, complete a situation analysis that includes current monitoring, has failed to illustrate how and perhaps most importantly, BLM hasn't provided any timeline for the formulation of the actual adaptive management plan

One of the foremost concerns with any reliance upon adaptive management as an integral part of any management plan is the inherent needs of additional funding to conduct additional monitoring, compliance and enforcement. The DEIS does not illustrate when or where additional or new funding streams will be generated stating only "Funding support and dedicated personnel for broad- and mid-scale monitoring will be renewed annually through the normal budget process. (J-2). Unfortunately, this normal budget process has recently resulted in budget cuts across all agencies within the Department of Interior and Colorado Parks and Wildlife (CPW) just recently adopted a plan to cut \$10 million annually over the next 5 years. The identification of additional and sustainable revenue to conduct the necessary monitoring, compliance and enforcement is critical for any adaptive management protocol to have a chance of success.

Recommendations: BLM must provide details of not just the monitoring protocols on a broad scale, but what agencies are responsible for discrete sets of data, how that data will be incorporated into "feedback loops" and the actual specific management changes that soft and hard triggers may create.

¹⁷ DEIS at page 2-193

BLM should also incorporate cumulative impact analysis as part of any adaptive management program. The information derived from an adaptive management program can be extremely beneficial to better understand to full suite of impacts and potential management changes needed as mitigation.

Additionally, BLM should provide details regarding the costs associated with any adaptive management plan, including those incurred by state agencies, in order to clearly outline what can and cannot be done given current funding climates.

Finally, BLM should strongly consider divesting itself from any adaptive management plan due to both the complexity required for any efficacious plan, funding difficulties and the resources at risk. If BLM wishes to further sage grouse science, we would support the creation of restoration science projects, so we can better understand what restoration techniques can be beneficial and successful in northwest Colorado. We suggest BLM look at establishing a restoration research project in the Pole Gulch area in Moffat County, where impacts to sage grouse could be minimal, but the existing sagebrush community is in “good shape.”

XI. Applying the BLM’s New Mitigation Guidance

BLM now has guidance on regional mitigation in effect. *See*, BLM Instruction Memorandum No. 2013-142 and Draft Manual Section 1794 (Regional Mitigation)¹⁸. In this guidance, BLM formally acknowledges that it can condition approval of uses on sufficient off-site mitigation and provides detailed standards for designing appropriate mitigation. BLM will implement mitigation through overarching regional mitigation strategies (which will be aimed at a landscape level vision), regional mitigation planning (to incorporate into plans), and mitigation implementation (where requirements are incorporated into project approvals). Additional actions to achieve meaningful conservation encompassed in the manual include:

- Explicit authority to “condition” project approval on the applicant’s “commitment” to pay for on- and/or off-site mitigation;
- Providing that BLM may authorize off-site mitigation on non-BLM lands to compensate for impacts on BLM lands and vice versa;
- Mitigation focused on benefitting resources;
- Impact analysis will look at the importance of affected resources (e.g., units of BLM’s National Conservation Lands);
- Mitigation measures should have “long-term durability” (i.e., effective for as long as the land-use authorization affects the resources and values);
- Can apply to existing “land-use authorizations” (e.g., existing leases).

Notably, the manual provides for “Co-Benefits or Layering Mitigation,” stating:

To increase efficiency and avoid duplicating mitigation efforts, consider how mitigation for one resource or value may also have the co-benefit of mitigating for other resources or values. Consider, as a part of the selection criteria, sites where impacts to several resources or values can be mitigated at one location outside the area of impact. Manual, p. 1-13.

¹⁸ Available at:

http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2013/IM_2013-142.html

As an example, the regional mitigation manual provides:

A proposed project may warrant mitigation for impacts to three resources, such as sage-grouse habitat, a protected setting associated with a National Historic Trail, and a scarce visual resource. Selecting one mutually beneficial site to mitigate all three resources may reduce the overall cost and increase the value of the mitigation investment, provided the objectives for all affected resources are met. Manual, p. 1-13.

While the Draft EIS discusses mitigation broadly, including off-site mitigation, but does not incorporate explicit measures or evaluate them. BLM should use this current guidance to develop and incorporate regional mitigation approaches that will meaningfully address development and other damaging activities that may continue in sage-grouse habitat, and that benefits multiple resources that might otherwise be harmed by the same activities, such as energy development.

Further, we would note that Secretary Jewell just Secretarial Order 3330, which focuses on mitigating impacts to public lands from other uses, including energy development., reinforcing the important of taking the opportunity to define and incorporate comprehensive mitigation approaches into this EIS.

Recommendations: BLM should comply with its guidance on regional mitigation to avoid, minimize and mitigate impacts to sage-grouse and other resources through planning and management decisions. BLM's regional mitigation guidance, as well as the recent secretarial order, provides a framework for accomplishing these goals.

XII. Adherence to the Mitigation Hierarchy

The mitigation hierarchy should be clearly described in the Draft RMP. See example text below:

The sequence of mitigation actions will be as described below in three steps.

- **Avoid:** adverse impacts to resources are to be avoided and no action shall be permitted if there is a practicable alternative with less adverse impacts.
- **Minimize:** if impacts to resources cannot be avoided, appropriate and practicable steps to minimize adverse impacts must be taken.
- **Compensate:** appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts that remain. The amount and quality of compensatory mitigation may not substitute for avoiding and minimizing impacts.”

Mitigation is often popularly believed to be limited to compensatory, however this should be preceded by all good faith efforts to avoid or minimize impacts.

While mitigation is an essential element of adaptive management, the RMP should emphasize avoidance and minimization over compensatory mitigation. Environmentally responsible development will limit environmental impacts by guiding projects away from the most environmentally sensitive sites and species. Where avoidance is impossible or impracticable, mitigation measures should generally lead to increasing or stable populations in the project area, as well as at the regional/planning level. We request improvements to the text on mitigation to ensure that a full range of off-site mitigation strategies are considered to improve conditions for wildlife and habitat, in addition to avoidance and on-site mitigation.

Ecoregional health⁴ is critical for maintaining the health of individual ecosystems within the ecoregion. In addition to ensuring that off-site mitigation meets a “no net loss” requirement for resources and values lost on the project site and is tied to the species being impacted, BLM should require that *mitigation take place in the same ecoregion as the project site*, to ensure the continued health of the overall ecoregion. Off-site mitigation is necessary in some instances but should be used with emphasis placed on scientifically defensible habitat improvements and strict development activity restrictions in important habitats.

The COT Report supports conserving Priority Areas for Conservation (PACs) through “an avoidance first strategy” to protect priority habitat and retain management options:

In light of these significant uncertainties, impacts to sage-grouse and their habitats should be avoided to the maximum extent possible to retain conservation options. This approach will ensure that potentially unidentified key components to long-term viability of sage-grouse are not lost, and that management flexibility and the ability to implement management changes will be retained as current information gaps are filled.

Implementing an avoidance first strategy should reduce or avoid continuing declines of sage-grouse populations and habitats, as well as limit further reduction in management and restoration options. When avoidance is not possible, meaningful minimization and mitigation of the impacts should be implemented, along with a monitoring program to evaluate the efficacy of these measures. Conservation measures should be adapted to maximize effectiveness as new knowledge is obtained. (COT Report at 31)

Compensatory mitigation requirements for unavoidable impacts are not explicitly discussed under any of the alternatives proposed in the draft RMP. These should be presented for all surface disturbances (i.e. roads, powerlines, pipelines, wind energy, mining, oil and gas development, etc.). A consistent compensatory mitigation approach across all surface disturbances should be included.

Recommendations: The USFWS is in the process of finalizing a *Greater Sage-Grouse Range-wide Mitigation Framework*. This document will be helpful in improving consistency and meaningful implementation of mitigation to positively influence sage-grouse conservation at the range-wide scale. Going forward, the Northwest Colorado RMP should reference and adhere to the impending Framework.

XIII. Detailed Description of Blended Alternative

a. Introduction

Alternative D is not consistent with the Core Objectives Team Report, or the National Technical Team Report, and will not satisfy the U.S. Fish and Wildlife Service’s PECE Criteria, as discussed previously in these comments. Alternative D will not prevent the need to protect greater sage-grouse under the

⁴ The World Wildlife Fund defines an ecoregion as a “large unit of land or water containing a geographically distinct assemblage of species, natural communities, and environmental conditions.” See <http://www.worldwildlife.org/science/ecoregions/delineation.html>

Endangered Species Act (ESA). In order to achieve that goal, we recommended that the BLM develop a blended alternative that addresses major deficiencies in the Alternative D. Below we outline conservation measures that BLM should implement through a blended alternative. We note that these do not address all of the inadequacies of Alternative D, but focus on the most substantial problems with Alternative D. All of the conservation measures described below are well within the range of alternatives.

b. Blended Alternative: Priority Areas

BLM should designate a proportion of the preliminary priority habitat as greater sage-grouse habitat protection areas/reserves (“Priority Areas”), where protection of habitat clearly takes precedence over other uses and areas are largely off limits to development. Areas within Preliminary Priority habitat that have high biological value and low potential for development can be selected. An example of this approach is described below.¹⁹

The Core Objectives Team Report (COT) report, prepared by a team of federal and state sage-grouse scientists, recommends conserving all sage-grouse populations and avoiding anthropogenic disturbances in priority sage-grouse habitat, in order to achieve the goal of avoiding the need to protect the greater sage-grouse under the ESA. Preliminary Priority Habitat was designated to protect 84% of the greater sage-grouse in Northwest Colorado. In order to achieve the goal of maintaining greater sage-grouse populations to prevent the need to list the bird under the ESA, it is important to have high confidence in the strength and effectiveness of the management prescriptions applied to all of the Preliminary Priority Habitat. Thus, all of the preliminary priority habitat should be designated as an area or set of areas that are largely set aside from development, and managed with prescriptions equal to or stronger than those laid out in the National Technical Team Report. This will result in a high degree of certainty that the goals of the plan will be achieved. At a minimum, it is critical to: 1) improve the conservation measures that will be applied throughout the PPH as described in below, and 2) prioritize at least 50-75% of the PPH on public land or underlain by federal minerals for designation as an area or set of areas largely set aside from development (ideally including at least one priority area in each NW Colorado Greater Sage-Grouse EIS Management Zone).

a. Designating Priority Areas

Priority areas should be formally designated using a special designation in a blended alternative in the final plan. They can be designated as Areas of Critical Environmental Concern (ACECs), or through use of an alternate type of designation that incorporates important management prescriptions. For example, the HiLine RMP in Montana incorporated 2 designation approaches that are used to protect sage-grouse and minimize habitat fragmentation: Grassland Bird/Greater Sage-Grouse Priority Areas, and Greater Sage-Grouse Protection Priority Areas²⁰. These areas had low potential for oil and gas development and

¹⁹ This model would protect from 245,426 - 488,516 acres of PPH on public land (depending on how priorities are set) which is well within the 926,800 acres incorporated in Colorado BLM’s ACEC proposal in Alt. C. It would also improve protection of from 91,385 to 217,055 acres of PPH on other land ownerships underlain by federal minerals (depending on how priorities are set).

²⁰ See Draft HiLine RMP, available at http://www.blm.gov/pgdata/etc/medialib/blm/mt/field_offices/malta/rmp/draft_rmp.Par.77898.File.dat/HL%20Fact%20Sheet-Sage%20Grouse.pdf

were given a high level of protection in the RMP. In either case, it is critical for specific management prescriptions that will be applied in the designated areas to be spelled out in the plan.

a. Designating Priority Areas
i. *ACEC Designation*

When developing or amending a land use plan, such as the Northwest Colorado greater sage-grouse EIS, FLPMA mandates that BLM “*give priority* to the designation and protection of areas of critical environmental concern.” 43 U.S.C. § 1712(c)(3) (emphasis added). ACECs are areas “where special management is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes.” *Id.* § 1702(a).

BLM’s ACEC Manual (1613) provides additional detail on the criteria to be considered in ACEC designation, as discussed in the applicable regulations, as well. *See* Manual 1613, Section .1 (Characteristics of ACECs); 43 C.F.R. § 8200. An area must possess *relevance* (such that it has significant value(s) in historic, cultural or scenic values, fish & wildlife resources, other natural systems/processes, or natural hazards) and *importance* (such that it has special significance and distinctiveness by being more than locally significant or especially rare, fragile or vulnerable). In addition, the area must require *special management attention* to protect the relevant and important values (where current management is not sufficient to protect these values or where the needed management action is considered unusual or unique), which is addressed in special protective management prescriptions. 43 U.S.C. § 1702(a). An ACEC is to be as large as is necessary to protect the important and relevant values. Manual 1613, Section .22.B.2 (Size of area to receive special management attention).

All areas which meet the relevance and importance criteria “must be identified as potential ACECs and fully considered for designation and management in resource management planning.” Manual 1613, Section .21. For potential ACECs (those that BLM has identified as meeting relevance and importance), management prescriptions are to be “fully developed” in the RMP. Manual 1613, Section .22 (Develop Management Prescriptions for Potential ACECs). If an area is not to be designated, the analysis supporting the conclusion “must be incorporated into the plan and associated environmental document.” Manual 1613, Section .21 (Identifying Potential ACECs).

The BLM has determined that the preliminary priority habitat meets the relevance and importance criteria for ACEC designation, and has carried forward the proposal that all PPH be designated as an ACEC to protect sagebrush habitat under alternative C. (PRMP/DEIS, Chapter 2, pg. 40 and Appendix H). We are recommending that BLM designate a proportion of the preliminary priority habitat as greater-sage-grouse priority areas, and that these areas be selected based on high biological priority and low energy development potential. Since these areas will be made up of a subset of the PPH, they clearly meet the relevance and importance criteria. Further, their special worth is increased in comparison with the PPH as a whole because they are selected in part to protect leks within the PPH that support the highest densities of birds within the PPH. Thus, these areas meet the relevance and importance criteria, and we suggest that they be considered for designation as Areas of Critical Environmental Concern in a blended alternative in the final plan.

a. *Alternate Designation Options*

As discussed previously, use of an alternate type of designation that incorporates important management prescriptions may also be appropriate. For example, the HiLine RMP in Montana incorporated 2 designation approaches that are used to protect sage-grouse and minimize habitat fragmentation: Grassland Bird/Greater Sage-Grouse Priority Areas, and Greater Sage-Grouse Protection Priority Areas²¹. These areas had low potential for oil and gas development and were given a high level of protection in the RMP.

In either case, it is critical for these areas to receive a special designation and for specific management prescriptions that will be applied in the designated areas to be spelled out in the final plan.

b. *Identifying Priority Areas: Maps and Description of Analysis to Identify Priority Areas for Designation and Increased Protection*

Priority areas for designation can be identified in a manner that maximizes greater sage-grouse conservation while balancing this need with ongoing energy development (see, e.g. Doherty et al. 2011). We have used aspects of the framework provided by Doherty et al. 2011 (with some adjustments) to provide an example of how areas could be identified for protective designation in a blended alternative. The process can easily be adjusted to change the balance between conservation and development or take into account other relevant considerations (e.g. additional CPW data on biological value of particular areas). RMW, TWS, CEC, Audubon and others proposed this general approach to BLM in our scoping comments. Further, the approach yields potential priority areas for designation that are within the BLM's current management alternatives, and thus can be included in a blended alternative in a final plan.

Prioritize Areas of High Biological Value

The starting point for this analysis is Preliminary Priority Habitat (PPH) identified by Colorado Parks and Wildlife. PPH was delineated to protect 84% of the greater sage-grouse in Colorado. Roughly 39% of the PPH is on BLM and FS land. Roughly 29% is on other land ownerships underlain by federal minerals (See Map 1). It is uncertain whether PPH will have any protection on private land, so it is critical to ensure conservation of PPH on public land, and to improve protections from development of federal minerals on other land ownerships.

1. Identify areas of Preliminary Priority Habitat on public land.
2. Identify areas of Preliminary Priority Habitat on other land ownerships that are underlain by federal minerals.²²
3. Identify areas within PPH on public land and other land ownerships underlain by federal minerals that support high densities of greater sage-grouse (75% of the breeding population).²³

²¹ See Draft HiLine RMP, available at http://www.blm.gov/pgdata/etc/medialib/blm/mt/field_offices/malta/rmp/draft_rmp.Par.77898.File.dat/HL%20Fact%20Sheet-Sage%20Grouse.pdf

²² Note that we are not proposing that areas on private or other non-federal land be given a federal designation, but only that federal minerals on these land ownerships be managed in a manner that provides a higher level of protection that that outlined in Alternative D, and that these areas be priorities for priority for conservation easements and other incentives for private conservation, as well as pursuit of opportunities for land consolidation. It is not necessary to draw boundaries around these areas in the EIS if that is politically untenable; they can be defined in the language in the EIS.

4. Identify areas within PPH on public land that are undeveloped.²⁴
5. Prioritize contiguous areas that meet all of the above criteria. This would result in protection of up to roughly 45% of PPH, with roughly 33% protected on public land, and roughly 12% on other land ownerships receiving some additional protection from mineral development and priority for conservation easements and other incentives for private land conservation (See Map 2). Note that Map 2 shows all areas that meet the criteria, including some very small isolated patches of habitat that could be removed.

Additional Options for Prioritization

1. The above analysis to prioritize areas of high biological value can be a starting point for discussions regarding the relative value of conservation of specific areas. For example, we discussed specific areas based on our on-the-ground knowledge, and identified a subset of areas that might be particularly important to prioritize (See Map 3). Alternatively, this can be used as a starting point for further prioritization as described below.
2. Identify areas within PPH on public land and other land ownerships underlain by federal minerals without exercised valid existing rights/high potential for major transmission line development.²⁵ Within these areas, prioritize areas that support high densities of greater sage-grouse. (Result using 75% of the breeding birds state-wide is shown on Map 4a, result using 50% of breeding birds within the large Northwest Colorado and North Park populations, and 75% of the breeding birds within the Meeker-White River, Parachute-Piceance-Roan and Middle Park populations is shown on Map 4b).²⁶

²³ Areas that support 75% of the breeding birds based on Doherty et al. 2010: http://www.blm.gov/pgdata/etc/medialib/blm/wo/Communications_Directorate/public_affairs.Par.46599.File.tmp/GRSG%20Rangewide%20Breeding%20Density.pdf. Note that this does not necessarily include all of the seasonal habitat types necessary to support birds that breed at these leks. In addition, in some cases the leks themselves are on private land.

²⁴ PPH on roadless BLM and NF land, according to analysis based on BLM supplied route data and size limitations.

²⁵ We defined areas with exercised valid existing rights/high potential for major transmission line development as areas with authorized oil and gas leases held by production, and areas within the West wide energy corridors or the preferred alternatives for the Transwest and Gateway transmission corridors. This does not include federal geothermal leasing, oil shale leases, wind and solar energy rights of way, locatable mining claims or grazing allotments. We have only included existing oil and gas leases that are held by production in our definition of "exercised valid existing rights," because it is common for a large proportion of oil and gas leases to expire without being developed. Colorado BLM often makes this point and BLM's national oil and gas statistics support it, showing that, as of Fiscal year 2012, of approximately 38 million acres under lease nationally, only 12.5 million are in production, while in Colorado, of the 4.2 million acres under lease, only 1.4 million acres are producing. (See http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/statistics.html). Further, BLM's Manual 6310, excludes consideration of existing but undeveloped valid existing rights, including leases, when identifying wilderness characteristics, because "these rights may never be developed." 6310. 06.C.3.d.

²⁶ Areas that support 50% of the breeding birds within the large Northwest Colorado and North Park Populations, and 75% of the breeding birds within the Meeker/White-River, Parachute/Piceance/Roan, North Eagle/South Routt, and Middle Park populations, based on Doherty et al. 2010: http://www.blm.gov/pgdata/etc/medialib/blm/wo/Communications_Directorate/public_affairs.Par.46599.File.tmp/GRSG%20Rangewide%20Breeding%20Density.pdf. Note that this does not necessarily include all of the seasonal habitat types necessary to support birds that breed at these leks. In addition, in some cases, the leks themselves are on private land.

3. Identify areas proposed as ACECs within PPH in existing and draft new BLM Resource Management Plans, including ACECs in the conservation alternative in each draft plan.²⁷
4. Prioritize contiguous areas that are within PPH on public land and other land ownerships underlain by federal minerals that meet a combination of the above criteria for designation. This would result in protection of roughly 14-29% of PPH, with roughly 10-21% protected on public land, and a roughly 4-10% on other land ownerships receiving some additional protection from development of federal minerals and priority for conservation easements and other incentives for private conservation, as well as pursuit of opportunities for land consolidation (See Maps 4a and 4b). Note that Maps 4a and 4b shows all areas that meet the criteria, including some very small isolated patches of habitat that could be removed.

Managing Priority Areas

Priority Areas should be largely off-limits to development. Regardless of whether these areas are considered for designation as ACECs, or using an alternate type of special designation, it is critical for specific management prescriptions that will be applied in the designated areas to be spelled out in the final plan. We spell out recommended management prescriptions for designated priority areas in detail in the description of recommended conservation measures for a blended alternative below.

a. Blended Alternative: Recommended Conservation Measures

a. Fluid Minerals Management

i. *Unleased Fluid Minerals*

1. *Priority Areas*²⁸
2. *Remaining PPH*

Priority areas should be closed to fluid mineral leasing. The National Technical Team Report recommends closing all of the PPH to fluid mineral leasing. Alternative D places a No Surface Occupancy (NSO) Stipulation within PPH. We are concerned that an NSO stipulation may not adequately protect sage-grouse leks and associated nesting and brood rearing habitat, which is essential to conserving the species. The land and mineral ownership patterns in northwest Colorado are patchy, and in some parts of the PPH, the BLM does not own large contiguous areas of both the surface and the mineral rights. In addition, in some parts of the range of the greater sage-grouse in Colorado, the PPH is somewhat patchily distributed. Leasing within PPH with an NSO stipulation may result wells being placed along the edges of PPH, either outside of PPH on public land, or on private land with federal minerals, which may have negative impacts on leks and associated nesting and brood rearing habitat, within the PPH. There is a large body of research described in detail within the NTT report demonstrating significant negative impacts of oil and gas development on sage-grouse populations when development occurs within four miles of leks (some research suggests significant negative impacts may result from development at even greater distances for leks), and recommends closing priority habitat to fluid mineral leasing in part to address this issue. Further, wells placed immediately adjacent to PPH may require access through PPH, resulting in increased surface disturbance and other negative impacts within

²⁷ Maps 4(a) and 4(b) includes existing ACECs, but do not include proposed ACECs in draft BLM RMPs that are undergoing revision. We suggest that BLM considering such ACECS for inclusion in priority areas, particularly those that were proposed for designation to protect important greater sage-grouse habitat.

²⁸ Priority areas identified and designated as described previously in these comments.

PPH, that will not be effectively mitigated by the surface disturbance cap proposed in Alternative D (see discussion of disturbance cap management elsewhere in this document). At a minimum, BLM should close priority areas to fluid mineral leasing, while still applying a NSO stipulation within PPH outside of priority areas. This will provide some insurance for sage-grouse populations should the NSO stipulation prove to be ineffective.

It is reasonable to close priority areas to leasing. As described above, designation can be focused in areas with relatively high densities of birds and relatively low potential for fluid mineral development, and make up a very small proportion of the land currently available for leasing in northwest Colorado. Thus, this is a reasonable compromise between the conservation and National Technical Team alternatives, and Alternative D.

1. *PPH*

The BLM should close the PPH to fluid mineral leasing (for the reasons described above), or at a minimum retain the NSO stipulation for fluid mineral leasing within PPH proposed in Alternative D, in combination with improving disturbance cap management and other provisions below. As outlined in the NTT report, providing adequate protection for priority habitat that has not yet been leased for energy development is essential for the conservation of the species. If this conservation measure is not retained in the final plan, the plan will not provide adequate regulatory mechanisms to conserve the species, and it will be listed under the ESA.

In addition, BLM should consider applying a NSO stipulation for fluid mineral leasing to a 2 mile buffer around leks located within PPH (even when this buffer falls outside of PPH). We are concerned that the plan will not adequately protect leks and associated nesting and brood rearing habitat without this additional provision. As described previously, leasing with a NSO stipulation may result in wells being placed along the edges of the PPH. Alternative D applies a NSO stipulation within 0.6 miles of a lek. However, the best available science, detailed in the NTT report, suggests that a 0.6 mile buffer is inadequate.

Surface disturbance within the PPH should not exceed 3%. BLM must carefully consider whether application of the disturbance cap to the corresponding Colorado Management Zone will keep surface disturbance below thresholds for significant impacts to sage-grouse that have been identified in the scientific literature. Further, the BLM should consider applying the surface disturbance cap to all lands within the PPH, rather than only to ecological sites supporting sagebrush. The BLM should also consider applying a No Surface Disturbance (NSD) stipulation for fluid mineral leasing to a 2 mile buffer around leks located within the PPH. See more detailed discussion in the section below on disturbance cap management.

It is also essential for BLM to retain the prohibition on surface occupancy or disturbance within 4 miles of a lek during lekking, nesting and early brood rearing included in Alternative D, in the final plan.

i. Leased Fluid Minerals

1. *Priority Areas*

Upon expiration or termination of existing leases, do not accept nominations/expressions of interest for parcels within priority areas. A large proportion of the PPH in Colorado is leased for energy

development. There is substantial uncertainty regarding whether greater sage-grouse populations will be able to persist in the face of energy development in Northwest Colorado, without substantial improvement of the conservation measures in Alternative D. Even with the improvements we recommend in these comments, there is some uncertainty regarding whether they will be effective. This makes a conservative approach where some large areas are completely set-aside from oil and gas development essential.

2. Priority Areas and PPH

BLM should limit energy development structures to one per section (640 acres). We recognize that in some instances there may be more than one operator with an existing lease within 640 acres, which could make this provision difficult to implement. We also recognize that in some instances, clustering oil and gas wells away from leks and outside of the most critical nesting and brood rearing habitats, and winter habitat may be beneficial, and that implementing a strict limit of one energy development structure per 640 acres doesn't allow for clustering of multiple wells. However, it is a central conclusion of current science that preserving functional habitat requires limiting the density of energy development structures below a threshold of one structure per 640 acres. To address these issues BLM could consider limiting energy development structures to one per section averaged across the management zone, which would address the situation where more than one operator has existing rights within a 640 acre area. However, this could still result in high densities of wells being concentrated near leks or in the most critical nesting, brood rearing or winter habitats. We recommend combining a limit on energy development structures of one per 640 acres averaged across the management zone (capping the total number of wells at the number that would fit within the management zone at a density of one well per 640 acres, combined with an NSO stipulation applied to a 2 mile buffer around leks within priority habitat, to provide some protection to leks, as well as the most important nesting and brood rearing habitat. Further, we ask that BLM require operators to place wells outside of sagebrush, and in the portion of the least most distal from leks, as well as from known high quality nesting, brood rearing and winter habitat, unless this will absolutely preclude development of the mineral right.

Surface disturbance within the PPH should not exceed 3%. BLM must carefully consider whether application of the disturbance cap to the corresponding Colorado Management Zone will keep surface disturbance below thresholds for significant impacts to sage-grouse that have been identified in the scientific literature. Further, the BLM should consider applying the surface disturbance cap to all lands within the PPH, rather than only to ecological sites supporting sagebrush. The BLM should also consider applying a No Surface Disturbance (NSD) stipulation for fluid mineral leasing to a 2 mile buffer around leks located within the PPH. See more detailed discussion in the section below on disturbance cap management.

It is also essential for BLM to retain the prohibition on surface occupancy or disturbance within 4 miles of a lek during lekking, nesting and early brood rearing included in Alternative D, in the final plan.

b. Mineral Split Estate

Where the federal government owns the mineral estate and the surface is in non-federal ownership, it is essential to apply the same conservation measures applied to public lands to the maximum extent allowed by law. Land and mineral estate ownership is very patchy with the PPH, and particularly in some of the areas that support the highest densities of breeding birds. If conservation measures applied on public

lands are not applied to the maximum extent allowed by law on the federal mineral estate, the landscape scale protection that is necessary to prevent the need to list the sage-grouse under the ESA will not be possible.

c. Disturbance Cap Management

a. *Priority Areas and PPH*

BLM should limit anthropogenic disturbance to 3% within PPH, and apply this disturbance cap in the manner detailed in the NTT report, which is supported by the best available science. The preferred alternative applies a 5% disturbance cap to ecological sites supporting sage-grouse within the corresponding Colorado Management Zone. In contrast, the NTT report recommends managing priority habitat so that discrete anthropogenic disturbances cover less than 3% of any single square mile section, regardless of ownership. Colorado Management Zones are large areas (sometimes more than 100,000 acres in size), and applying the disturbance cap to the Management Zone, rather than each square mile section, may allow a level of disturbance that exceeds the threshold at which negative impacts to greater sage-grouse occur. There is no clear science suggesting that a 5% disturbance cap applied across an area as large as the Colorado Management Zones will be effective at preventing significant impacts to greater sage-grouse. BLM should apply a 3% disturbance cap, calculated in the manner described in the National Technical Team Report across the PPH. At a minimum, BLM should do so within priority areas, while still applying an effective disturbance cap across all of the PPH.

BLM should consider applying the surface disturbance cap to all lands within the PPH, rather than only to ecological sites supporting sagebrush. The BLM should also consider prohibiting surface disturbance within a 2 mile buffer around leks located within the PPH. Application of the disturbance cap to an entire management zone rather than on a per square mile section basis, may allow for concentration of a large amount of surface disturbance around leks and in the most important nesting, brood rearing and winter habitat. Further, because disturbance caps are applied only to ecological sites supporting sagebrush (rather than to the PPH as a whole), in areas where ecological sites supporting sagebrush are patchily distributed, disturbance outside of the ecological sites supporting sagebrush could result in impacts to the functionality of adjacent habitat (e.g. behavioral avoidance of adjacent habitats, edge effects associated with roads). This may be particularly detrimental in in close proximity to leks, and in the most critical nesting, brood rearing and winter habitat. The above provisions might help to address this important issue.

New development of PPH in areas without valid existing rights should not be allowed to exceed the disturbance cap based on offsite mitigation. A substantial proportion of the PPH in northwest Colorado is subject to valid existing rights. In addition, there is a very real risk that offsite mitigation will not prevent a substantial net loss of functional greater sage-grouse habitat due to development of valid existing rights that exceed the disturbance cap (see detailed discussion of issues with offsite mitigation elsewhere in these comments). At a minimum, this provision should be applied to priority areas.

When development of valid existing rights will exceed the surface disturbance cap, approval should be conditioned on effective offsite mitigation. The plan provides no certainty that offsite mitigation will effectively prevent a net loss of functional sage-grouse habitat. The plan must include clear guidelines to ensure the effectiveness of offsite mitigation. We recommend that the BLM work closely with U.S. Fish and Wildlife Service, Colorado Parks and Wildlife, and independent sage-grouse experts to develop

guidelines that will clearly ensure that offsite mitigation will prevent a net loss of functional greater sage-grouse habitat due to surface disturbance that exceeds the disturbance caps. These guidelines should be incorporated into the final plan.

There should be no exceptions to the disturbance caps. Adequate flexibility for project proponents is provided by the offsite mitigation provisions. The current disturbance exception criteria are not clearly defined. Further, there is no provision for tracking exceptions, no cap on the total number of exceptions, and trading of exceptions between management zones. In addition, BLM has not clearly defined the phrase “will not adversely affect greater sage-grouse populations due to habitat loss and disruptive activities”. This combination of problems renders the disturbance caps meaningless, and will allow an unspecified and potentially unlimited amount of surface disturbance.

The BLM must outline a clear plan for determining the current baseline level of surface disturbance in each MZ, and tracking surface disturbance over time, including a schedule. Until BLM has determined the current baseline and set up a tracking system, BLM should not authorize new surface disturbance in PPH. Tracking surface disturbance over time is critically important, and BLM should incorporate the following elements into the process:

- The BLM should build a mechanism for obtaining funding for long-term tracking of surface disturbance into the plan.
- The BLM should create a system that is transparent and allows the public to easily access maps and data online.
- The system must include tracking of all exceptions to surface disturbance cap requirements.
- The system must include regular updating based on aerial or satellite imagery (ideally once a year or more) in order to keep up-to-date on new disturbance that occurs on other land ownerships. The BLM's EIS should incorporate a set schedule for updates to the surface disturbance calculations, and a provision that a moratorium will be put in place on new land use authorizations if BLM does not adhere to the schedule.

d. Surface Reclamation Plan Design Features

Reclaimed land should not be categorized as undisturbed. Surface disturbance may still have negative direct, indirect, and cumulative impacts on sage-grouse even after reclamation. Active restoration or long time periods to allow for natural recovery of the vegetation may be required before habitat function is restored in around disturbed areas. Further, a clear definition of what constitutes successful reclamation is critical, and is not currently provided. BLM should work with USFWS, CPW, and other greater sage-grouse experts to develop a clear definition of what constitutes successful reclamation, and should not re-categorize re-claimed land as undisturbed until habitat function has been fully restored.

d. Lands and Realty Management: Rights-of-Way

a. *Priority Areas and PPH*

BLM should make priority areas exclusion areas for rights-of-way (ROWS). Outside of priority areas, BLM should make PPH an exclusion area for large transmission lines, and an avoidance area for new ROWS (as currently proposed in alternative D), with the several critical improvements. First, no exceptions should be allowed in exclusion areas for large transmission lines. Second, for all other right-

of-ways, avoidance should be required unless BLM has considered alternative locations outside of PPH and documented why they are not feasible. If avoidance is not required, the BLM should require burial of lines unless BLM has considered burial and documented why burial is not feasible. Finally, if avoidance is not required, the project should be subject to the surface disturbance cap and limit on energy development structures as described previously in these comments.

d. Other Management Prescriptions within Priority Areas and PPH

We recommend that BLM adopt the management provisions outlined in the National Technical Team Report for all other management prescriptions, within the PPH. If BLM must deviate from these recommendations because they are not feasible to implement due to technical or legal considerations, then BLM must clearly spell out why the deviation is necessary, and analyze whether the alternate conservation measure that BLM is proposing will be effective in achieving both the conservation objectives outlined in the Core Objectives Report, and regulatory certainty in fulfillment of the USFWS Policy on Effectiveness of Conservation Efforts. Further, the plan is lacking adequate conservation measures in All Designated Habitat, particularly in linkage areas identified by Colorado Parks and Wildlife. We suggest that BLM carefully consider application of improved conservation measures in linkage areas, in consultation with U.S. Fish and Wildlife Service and Colorado Parks and Wildlife. In particular, we suggest that the BLM consider conservation measures that would limit new permanent infrastructure within linkage areas in order to maintain connectivity.

Additional Management Tools for Consideration

XIV. Master Leasing Plans

Master Leasing Plans (MLPs) conduct a more focused level of analysis of oil and gas leasing and development in order to establish a guiding framework and vision for how future development will proceed, addressing resource conflicts by setting out resource condition objectives and protection measures. *See*, IM 2010-117, Handbook 1642-1, Chapter V. The BLM's MLP guidance recognizes the importance of other natural and cultural resources that may be harmed by oil and gas development, and provides a tool that can and should be valuable in managing oil and gas development in sage-grouse habitat.

For instance, an example of a resource condition objective incorporated in Handbook 1624-1 is:

Sagebrush communities will include native grass and forb cover in balance with open to moderate (5 to 25 percent) shrub canopy cover and within the ecological site potential. Perennial grass components will be at or above 10 percent cover. Native forb composition will be at or above 5 percent cover.”

Further, some of the resource protection measures provided in the BLM's handbook include phased leasing, phased development, caps on new surface disturbance (pending acceptable interim or final reclamation), and clustered or directional drilling. These types of resource condition objectives and resource protection measures, developed in the context of sage-grouse habitat, could provide an important tool for managing oil and gas development, as well as identifying protection for other resources.

MLPs have been proposed and/or are under explicit consideration in most of the RMPs being amended by this process, including: North Park (Kremmling RMP), Shale Ridges and Canyons (Grand Junction), Greater Adobe Town (Little Snake, as well as Rawlins and Rock Springs), Dinosaur Lowlands and Eastern Book Cliffs (White River). Those MLPs can and should be incorporated into the final plans that will be approved prior to finalizing this sage-grouse EIS. BLM can then acknowledge the management approaches in those MLPs as part of analyzing and adopting conservation measures for management of sage-grouse habitat.

Recommendations: We formally incorporate these pending proposed MLPs by reference and recommend that the BLM use the MLPs under consideration as a way to fulfill the purposes of this planning effort, and incorporate them into the analysis of alternatives.

XV. Lands with Wilderness Characteristics

1. BLM must comply with current guidance requiring inventory and analysis of lands with wilderness characteristics.

BLM now has current guidance requiring updating its inventory of lands with wilderness characteristics and considering protection of those values. FLPMA requires the BLM to inventory and consider lands with wilderness characteristics during the land use planning process. 43 U.S.C. § 1711(a); *see also Ore. Natural Desert Ass'n v. BLM*, 625 F.3d 1092, 1122 (9th Cir. 2010). IM 2011-154 and Manuals 6310 and 6320 contain mandatory guidance on implementing that requirement. The IM directs BLM to “conduct and maintain inventories regarding the presence or absence of wilderness characteristics, and to consider identified lands with wilderness characteristics in land use plans and when analyzing projects under [NEPA].” Manual 6320 requires BLM to consider lands with wilderness characteristics in land use planning, both in evaluating the impacts of management alternatives on lands with wilderness characteristics and in evaluating alternatives that would protect those values.

The White River, Grand Junction, Kremmling, Colorado River Valley, and Little Snake field offices are all in the process of updating their lands with wilderness characteristics (LWC) inventories as directed by IM 2011-154 and as defined by BLM Manual 6310. Although the LWC inventories are in various stages of completion in these field offices, preliminary inventories of potential LWCs have been completed, identifying over 1 million acres of potential lands with wilderness characteristics across the five field offices²⁹.

Lands with wilderness characteristics are, by definition, relatively large parcels of contiguous unroaded BLM lands that are largely natural and where any human impacts are “substantially unnoticeable”. According to the National Technical Team Report of 2011, “Sage-grouse populations have the greatest chance of persisting when landscapes are dominated by sagebrush *and natural or human disturbances are minimal* (Aldridge et al. 2008, Knick and Hanser 2011, Wisdom et al. 2011)” [emphasis added]. As the BLM looks to identify the highest priority habitats for increased protections for sage-grouse, lands with

²⁹ http://www.blm.gov/co/st/en/BLM_Programs/land_use_planning/lands_with_wilderness.html (last visited on Nov.25, 2013)

wilderness characteristics should be prioritized where they overlap with greater sage-grouse habitat as these are likely to be the highest quality and least disturbed habitats remaining. Protecting lands with wilderness characteristics can support the principles for protecting and managing sage-grouse habitat as outlined in BLM's National Strategy and reiterated in IM 2012-043, namely protecting unfragmented habitats and minimizing habitat loss and fragmentation. Roadless sagebrush habitat will also become increasingly important to facilitate species' adaptation to climate change.

IM 2011-154 and Manual 6320 require BLM to “[c]onsider the benefits that may accrue to other resource values and uses as a result of protecting wilderness characteristics” in land use planning processes. Although BLM seems to have analyzed how proposed conservation measures to protect greater sage-grouse may impact lands with wilderness characteristics, BLM should additionally consider whether and how protecting lands with wilderness characteristics would contribute to protecting and recovering sage-grouse. Moreover, those potential benefits should influence BLM's decision to protect inventoried LWCs as part of its overall purpose of conserving sage-grouse habitat. There are a wide range of values associated with lands with wilderness characteristics which BLM is required to manage as part of its multiple use mandate:

(a) Scenic values – FLPMA specifically identifies “scenic values” as a resource of BLM lands for purposes of inventory and management (43 U.S.C. § 1711(a)), and the unspoiled landscapes of lands with wilderness characteristics generally provide spectacular viewing experiences. The scenic values of these lands will be severely compromised if destructive activities or other visual impairments are permitted.

(b) Recreation – FLPMA also identifies “outdoor recreation” as a valuable resource to be inventoried and managed by BLM. 43 U.S.C. § 1711(a). Lands with wilderness characteristics provide opportunities for primitive recreation, such as hiking, camping, hunting and wildlife viewing. Most, if not all, primitive recreation experiences will be foreclosed or severely impacted if the naturalness and quiet of these lands are not preserved.

(c) Wildlife habitat and riparian areas – FLPMA acknowledges the value of wildlife habitat found in public lands and recognizes habitat as an important use. 43 U.S.C. § 1702(c). Due to their unspoiled state, lands with wilderness characteristics provide valuable habitat for wildlife, thereby supporting additional resources and uses of the public lands. As part of their habitat, many species are also dependent on riparian and other wetland habitats, especially during either seasonal migrations or seasons and years when surrounding habitats are dry and unproductive. Wilderness quality lands support biodiversity, watershed protection and overall healthy ecosystems. The low route density, absence of development activities and corresponding dearth of motorized vehicles, which are integral to wilderness character, also ensure the clean air, clean water and lack of disturbance necessary for productive wildlife habitat and riparian areas (which support both wildlife habitat and human uses of water).

Further, inventorying lands with wilderness characteristics will also provide important data on existing large blocks of habitat and how BLM can restore these blocks of habitat to better match the historic range of variability. Identifying, restoring and protecting substantial roadless areas will provide crucial benefits to wildlife, especially to endangered and sensitive species.

(d) Cultural resources – FLPMA also recognizes the importance of “historical values” as part of the resources of the public lands to be protected. 43 U.S.C. § 1702(c). The lack of intensive human access and activity on lands with wilderness characteristics helps to protect these resources.

By identifying areas where sage-grouse habitat overlaps with lands with wilderness characteristics and designating those areas for sage-grouse conservation, BLM can most effectively identify and protect a suite of values on our public lands. Prioritizing protection of areas with multiple values would be a smart approach to public land management that properly balances conservation with development.

In several parts of northwest Colorado, mapped greater sage grouse habitat overlaps with mapped potential and inventoried lands with wilderness characteristics. For example, in the Little Snake Field Office, where approximately 732,000 acres were originally identified as potential LWCs,³⁰ 293,480 acres overlap with preliminary priority habitat and 302,924 acres overlap with preliminary general habitat for greater sage-grouse. Similarly, in the White River Field Office, around 48,000 acres of BLM-identified lands with wilderness characteristics overlaps with sage grouse habitat, and in the Colorado River Valley Field Office, 44,000 acres of habitat are encompassed in potential and inventoried LWCs.

While BLM has identified preliminary lists of potential lands with wilderness characteristics in all five field offices affected by this planning effort, full field inventories and public input on the proposed inventories has not yet occurred or is ongoing in these field offices. Until full field inventories are completed and the public is given an opportunity to analyze and comment on these inventories, these inventories cannot be considered complete, and therefore BLM should adopt a broad approach to addressing lands with wilderness characteristics in this EIS. Because the potential LWCs were identified on the basis of likely containing at least 5,000 acres of unroaded, undeveloped land, BLM should assume for the purposes of this EIS that all potential LWCs overlapping with mapped sage-grouse habitat may likely provide important habitat and represent good opportunities for sage-grouse conservation.

In field offices where draft LWC inventories have been completed, BLM should utilize the full potential LWC inventory rather than the narrow draft inventory for this EIS because significant changes are likely to occur as BLM moves forward with updating those draft inventories based on public input and new information. We have found that many of the initial draft inventories produced by BLM do not meet the current BLM guidance for identifying lands with wilderness characteristics and must be updated or amended to meet that guidance before being used to inform planning decisions. For example, the White River Field Office’s initial inventory of potential LWCs identified 30 individual polygons totaling 252,000 acres as potential lands with wilderness characteristics. These areas were identified through a “desktop” inventory, using GIS analysis, aerial imagery and other information available to BLM. In response to the *Inventory Update*, The Wilderness Society, Conservation Colorado, and Rocky Mountain Wild set out to conduct our own inventory of the field office, following the very protocols and criteria

³⁰ The Little Snake Field Office has since inventoried 582,591 acres of potential LWCs and found approximately 380,000 acres possess wilderness characteristics. There are an additional 149,000 acres identified as potential lands with wilderness characteristics adjacent to existing BLM Wilderness Study Areas which BLM has not yet inventoried (<http://www.blm.gov/co/st/en/fo/lisfo/plans/lwc.html>). The attached map depicting sage-grouse habitat and LWCs in the Little Snake Field Office shows the full 732,000 acres of potential LWCs due to the fact that the only data for potential LWCs in the Little Snake Field Office we had access to at the time of composing these comments was BLM’s original data for all potential LWCs to be inventoried by the agency.

laid out in revised BLM Manual 6310 (*Conducting Wilderness Inventories on BLM Lands*). The citizen-led inventory, submitted as part of our comments on the BLM White River field office's RMP Amendment³¹, confirmed many conclusions of the BLM's initial efforts; however, it also identified numerous significant gaps in the BLM's preliminary inventory. Specifically, we found two major issues arising from the preliminary inventory:

1) Many parcels were entirely missed by the desktop inventory. Possibly because the BLM's desktop inventory was based on an out-of-date or inaccurate road layer, the resulting collection of potential LWC polygons was deficient and missed several blocks of BLM lands that could qualify as LWCs. BLM Manual 6310 makes clear that the size criterion for wilderness can be met for areas less than 5,000 acres if those parcels are contiguous with areas that have been formally identified to have wilderness or potential wilderness values (Manual 6310, pp. 5-6). Our inventory showed that several units that meet the above criterion—including parcels adjacent to Black Mountain/Windy Gulch WSA, Willow Creek WSA, Bull Canyon WSA, Oil Spring Mountain WSA, as well as parcels along the Colorado/Utah state line which abut parcels which the Vernal Field Office has identified as containing wilderness character—were not identified in the desktop inventory. Our inventory showed that these areas not only meet the size criterion, but also the additional criteria for Lands with Wilderness Characteristics.

2) The 30 potential LWC units that were identified by BLM are often defined by boundaries that do not meet the criteria for boundary delineation laid out in BLM Manual 6310. Manual 6310 states that the boundary delineation for a LWC unit “is generally based on the presence of wilderness inventory roads” (Manual 6310, p. 4). BLM defines a wilderness inventory road as a vehicle route that has “been improved and maintained by mechanical means to ensure relatively regular and continuous use” (Manual 6310, p. 11). A “way” that is either solely “maintained” by the passage of vehicles, is used regularly but not maintained, or was originally constructed using mechanical means *but is no longer being maintained by mechanical methods is not a road (Ibid.)*. Without conducting field visits to these areas with the express intent of assessing whether or not the proposed boundary line meets the definition of a “wilderness inventory road” or other defining feature, it is very difficult to draw an accurate boundary for a potential LWC unit.

After we submitted our inventory of lands with wilderness characteristics in the White River field office, BLM conducted full field inventories of all potential LWCs, including those units originally overlooked by BLM in its draft inventory. The results of this more in-depth inventory confirmed that the initial inventory did in fact contain many errors, and that only after full field inventories were completed, prompted by new information provided by the public, was the true portfolio of qualifying lands identified. This process of draft, public review, and subsequent updating of the inventory is vital to ensuring that the full suite of information of potentially wilderness quality lands is considered and an adequate assessment of wilderness-quality lands is recognized. In the White River Field Office this process resulted in the identification of 35 individual lands with wilderness characteristics units comprising around 310,000 acres—a significant change from the original 30 units and 252,000 acres identified in the draft inventory published in 2011.

³¹ See Attachment 3, *Lands with Wilderness Characteristics in the White River Field Office*, TWS, et al.

Recommendations: BLM should identify lands with overlapping conservation values for protective designation, including considering whether and how protecting lands with wilderness characteristics would contribute to protecting and recovering sage-grouse in northwest Colorado, and incorporate an analysis of these benefits into developing and selecting a proposed plan. BLM should include all potential LWCs in its analysis and management decisions for this EIS, recognizing that the LWC inventories underway in the northwest district are still in progress and are not yet completed.

- II. BLM must address the unique circumstances surrounding lands with wilderness characteristics inventories in each field office in the northwest district.

Each of the five field offices affected by this EIS is in a distinct stage of its LWC inventory update due to variation in resource management plan revision timelines and other project-level analyses and assessments. Therefore this EIS should specifically address the LWC inventory situation for each field office and make management decisions that are suitable for those circumstances.

White River Field Office – In August 2012, the BLM White River Field Office released its *Non-WSA Lands with Wilderness Characteristics Inventory Update*, which identified 30 individual polygons totaling 252,000 acres as potential lands with wilderness characteristics. After reviewing public comment on the draft inventory and completing a full field inventory, BLM revised its inventory to identify 35 individual lands with wilderness characteristics units comprising around 310,000 acres. This revised, complete inventory should be utilized in this sage-grouse EIS to determine areas with multiple conservation values that overlap with sage-grouse habitat and designate those areas as sage-grouse conservation areas.

Grand Junction Field Office – Like the White River field office, the Grand Junction Field Office published a draft inventory of potential lands with wilderness characteristics in 2011 as part of an ongoing planning process (the Grand Junction resource management plan revision). Again, The Wilderness Society, Rocky Mountain Wild, and Conservation Colorado conducted a separate full field inventory of the units provided in the BLM's draft inventory as part of our comments on the draft RMP/DEIS³². Our field work identified approximately 492,000 acres of lands with wilderness characteristics that meet the criteria laid out in BLM's guidance, which differs significantly from the 171,000 acres identified in the BLM's draft inventory of this field office. However, unlike the process in the White River field office, the BLM in Grand Junction has yet to update their draft inventory given the new information provided by conservation groups and more comprehensive field inventory. BLM should conduct full field inventories of all the units identified by conservation groups and submitted in our comments on the draft RMP and should update its existing inventory to reflect any changes made by such an effort. This updated information should be used in the sage-grouse EIS rather than the outdated information currently included and analyzed.

Little Snake Field Office – The Little Snake Field Office signed a final RMP and Record of Decision in October of 2011, prior to the release of IM 2011-154 and subsequent updated Manuals 6310 and 6320. In

³² Attachment 3, *Comments and Recommendations on BLM's Grand Junction Field Office Wilderness Characteristics Inventory Update*

an effort to meet the policies laid out in this guidance, the Little Snake field office conducted a preliminary lands with wilderness characteristics inventory in 2012. This preliminary inventory identified 98 individual units totaling around 802,000 acres of potential lands with wilderness characteristics in the field office. In 2012, field crews conducted field inventories of 55 units and 583,000 acres of individual potential LWC units, not including parcels identified as WSA-adjacent units. This full field inventory resulted in the identification of a total of 41 units totaling 380,000 acres of lands that do meet the criteria for lands with wilderness characteristics. In addition to that 380,000 acres, there are 36 units adjacent to existing WSAs that BLM has identified as potential LWCs. Conservation groups are in the process of conducting full field inventories of these units as we have done in the White River and Grand Junction field offices to provide new information to BLM regarding wilderness resources in the Little Snake Field Office. For the purposes of the sage-grouse EIS, BLM should assume the WSA-adjacent units that overlap with mapped sage-grouse habitat likely provide important habitat resources for sage-grouse and should analyze the full 529,000 acres of potential LWCs for sage-grouse conservation opportunities.

Colorado River Valley Field Office – As part of its ongoing RMP revision process, the Colorado River Valley field office found six units, totaling around 46,000 acres, as areas meeting the criteria as lands with wilderness characteristics (Draft RMP Vol 4, Appendix D). However, this inventory was published in February 2011 before updated guidance for the identification and management of lands with wilderness characteristics (IM 2011-154 and BLM Manuals 6310 and 6320) were released. Because of this fact, this inventory does not meet current policies for identifying lands with wilderness characteristics, and BLM must update its inventory to conform to the new guidance. As part of updating the inventory, BLM must provide a draft revised inventory for public comment prior to finalizing the RMP. Recently, BLM Colorado created a webpage to host statewide LWC information, which includes a map and GIS shapefile of potential and inventoried LWCs across the state. That data seems to indicate that BLM identified dozens of potential LWCs in the Colorado River Valley Field Office outside of the six units included in the draft RMP, and found them not to contain wilderness characteristics. However, there is no supporting documentation for this inventory work or findings on BLM's website. The supporting documentation for these areas should be published and released to the public as required by BLM policy so that the public can analyze and understand why certain units were found not to meet the criteria for lands with wilderness characteristics and why certain boundary decisions were made by BLM. For purposes of the sage-grouse EIS, BLM should assume that all potential LWC units which overlap with mapped sage-grouse habitat may likely provide important sage-grouse habitat and identify sage-grouse conservation opportunities on those lands. Alternatively, BLM could utilize the updated LWC inventory if BLM is able to publish its draft revised inventory for public review, accept public comments on the draft revised inventory, complete necessary field work and update the revised inventory in time to inform the sage-grouse EIS.

Kremmling Field Office – Similar to the Colorado River Valley Field Office, the Kremmling Field Office released its draft RMP and LWC inventory prior to BLM's new guidance being put in place. BLM Colorado's statewide LWC map and data also show additional units in the Kremmling Field Office as potential LWCs that were not included in the draft RMP, and which BLM apparently inventoried at some point and found not to possess wilderness characteristics. The supporting documentation for these areas should be published and released to the public as required by BLM policy so that the public can analyze and understand why certain units were found not to meet the criteria for lands with wilderness

characteristics and why certain boundary decisions were made by BLM. For purposes of the sage-grouse EIS, BLM should assume that all potential LWC units which overlap with mapped sage-grouse habitat may likely provide important sage-grouse habitat and identify sage-grouse conservation opportunities on those lands. Alternatively, BLM could utilize the updated LWC inventory if BLM is able to publish its draft revised inventory for public review, accept public comments on the draft revised inventory, complete necessary field work and update the revised inventory in time to inform the sage-grouse EIS.

Recommendation: At the very least, the analysis included in the Northwest Colorado Greater Sage Grouse Draft LUP/EIS should be updated to include the latest information from BLM on recognized and potential lands with wilderness characteristics found in the five field offices analyzed by this proposed action. For example, the draft currently states that only 116,800 acres of lands have been found by BLM to contain wilderness characteristics within the northwest Colorado planning area (Draft LUP/EIS, p.396)³³. However, according to the most recent update of BLM Colorado's Lands with Wilderness Characteristics webpage, around 1,056,000 acres have been identified as potential or qualifying lands with wilderness characteristics³⁴. These two numbers should be reconciled and updated to match up with the most recent inventories. BLM should incorporate LWC inventory information into the sage-grouse EIS as described for each individual field office above.

Sincerely,

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³³ Later in the BLM's Northwest Colorado Greater Sage Grouse LUP/EIS, it is stated that 242,400 acres have been found to contain, or potentially contain, wilderness characteristics in the planning area (Draft LUP/EIS, p.822). Both numbers are incorrect, as the Little Snake field office alone has identified 529,000 acres that qualify as lands with wilderness characteristics according to current guidance.

³⁴ This number includes 529,000 acres in the LSFO; 171,000 acres in the GJFO; 310,000 acres in WRFO; and 46,000 acres in CRVFO:

http://www.blm.gov/co/st/en/BLM_Programs/land_use_planning/lands_with_wilderness.html

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