June 8, 2018

The Honorable Ryan K. Zinke Secretary of the Interior United States Department of the Interior 1849 C Street, NW Room 6612 Washington, DC 20240

Dear Interior Secretary Mr. Zinke,

The purpose of this letter is to underscore recommendations made in a letter sent to you on October 13, 2017 by members of the sage-grouse science community in light of the recently completed U.S. Geological Survey (USGS) literature review and the Bureau of Land Management's (BLM) May 2018 draft Land Use Plan (LUP) amendments. Conclusions reached by the USGS in their synthesis of sage-grouse science (Synthesis) published since release of the BLM and U.S. Forest Service's LUPs in 2015 suggest that if these agencies proceed with amendments to those LUPs they must do so with a narrow, science-based focus. Unfortunately, we do not believe BLM's recently released draft Environmental Impact Statements (DEISs) reflect such a targeted focus.

Research summarized by the USGS supports our primary concern that amendments to the LUPs may weaken current sage-grouse conservation measures before those measures have been fully implemented and tested for their effectiveness. The Federal LUPs were developed to complement State-level sage-grouse management approaches by incorporating many of the specifics established in those more localized plans, while considering larger-scale dynamics that often cross jurisdictional boundaries and are important for range-wide management. Maintaining both perspectives is critical for long-term conservation of the species. We do not believe this is the time to challenge the work done by countless stakeholders in support of sage-grouse conservation. Rather, we must continue to build on the momentum generated through development of the 2015 plans and allow the processes established in those plans to mature and evolve to realize the sustained conservation of sagebrush landscapes and the wildlife and people dependent thereon.

The sage-grouse is an indicator species for health of the interior West's sagebrush steppe ecosystem (e.g., Synthesis pg. 7), and healthy sagebrush habitats not only support over 350 plant and animal species including some of America's most iconic species of wildlife, but are essential for economic sustainability of human communities in the western U.S. Today, sage-grouse are present in just over half their historical range, the number of males counted each spring for the majority of populations across the range of the species has declined since the 1960s (e.g., http://www.wafwa.org/), and populations are projected to decline farther if current trends in habitat degradation and loss continue (e.g., Synthesis pg. 21).

Summary

The habitat conservation framework established in the LUPs provides a critical foundation for realizing the long-term goal of increasing sage-grouse populations across the range of the species. In our view, the conservation measures in the current LUPs are reinforced by the USGS synthesis and there is no scientific evidence to support weakening them.

- 1. Many of the plan amendments proposed in the 2018 DEISs weaken landscape-scale management aspects of the LUPs by adopting project-level approaches. It is critical that Federal agencies retain measures outlined in the LUPs collectively focused on conserving the landscapes necessary to sustain sage-grouse populations.
- 2. Strictly adhering to adaptive management principles is critical for the effective management of sagebrush habitats long-term. We recommend that agencies incorporate data-driven decision support tools into their day-to-day management to ensure informed decision-making across spatial scales and to establish the framework necessary to manage adaptively at all of those scales.

- 3. Management of sage-grouse habitats must be implemented to maintain the landscape matrix the species depends on seasonally and annually. We recommend that sagebrush landscapes be managed holistically and collectively, and that all sage-grouse habitats regardless of designation remain an integral component of that management approach.
- 4. Habitat objectives represent one of the few places in the LUPs where agencies directly address the underlying issue with sage-grouse conservation of habitat degradation across the sagebrush biome. We recommend management of sagebrush habitats focus on restoring and maintaining vegetative conditions in the reference state long-term (vegetative species composition) while simultaneously addressing short-term goals of vegetative structure (standing crop).

Adaptive Management

Achieving long-term conservation success requires strict adherence to adaptive management principles when managing sagebrush habitats for sage-grouse. Following these principles will increase the likelihood of attaining long-term conservation goals across the sage-grouse range. The USGS described several decision support tools and monitoring approaches that, if employed, would facilitate the adaptive implementation of sage-grouse management strategies (Synthesis pgs. 25 and 29). The BLM has not integrated these tools in their day-to-day decision-making processes, and does not outline an approach for the integration of these types of tools in the DEISs. For example, the majority of Environmental Assessments for oil and gas lease sales in the Intermountain West developed by the BLM since adoption of the LUPs do not include analytically-derived forecasts of the response of sage-grouse to the foreseeable development of those leases. Beyond the fact that this results in the BLM making management decisions with incomplete information, the lack of an analytical framework from which to monitor management activities limits the ability of the agency to manage sagebrush habitats adaptively at the scales necessary to sustain sage-grouse populations. We recommend that the BLM integrate empirically-derived decision support tools necessary to inform day-to-day management decisions into their approaches to implementing the LUPs to ensure informed decision-making and to establish the framework necessary to manage adaptively.

Decision-Making

We recommend that changes to management approaches established in the LUPs only be pursued in defined areas where regionally-specific sage-grouse data have been used to suggest changes would not negatively impact habitat use or population growth-rate of sage-grouse populations. In lieu of this level of information, we recommend that management approaches and objectives established in the LUPs be used as minimum standards in sage-grouse habitats. It is important to recognize that the management approaches and objectives included in the LUPs were established from a preponderance of evidence provided by research conducted throughout the range of the sage-grouse, and as such will be appropriate in most situations and areas. Research published since 2015 does not change this conclusion (e.g., Synthesis pgs. 7 and 12). We want to emphasize that because of regional variability in sage-grouse habitats and habitat selection parameters (e.g., Synthesis pg. 12), using locally-derived data to develop regionally-specific management approaches and guidelines is the preferred approach to management. Importantly, this recommendation assumes that managers are not substituting current habitat conditions that may be suboptimal for sage-grouse for objectives necessary to improve degraded conditions.

Primary Concerns from Original Letter

Specific concerns discussed in detail in our original letter were identified through a review of the Report in Response to Secretarial Order 3353:

1. Many recommendations have the potential to result in fewer acres of priority and general sage-grouse habitat limiting management options for the species.

We recommend that managers view the landscape holistically from the need to provide large, functional, connected habitat patches that include the diversity of resources sage-grouse require seasonally, and that sage-grouse habitat management boundaries or habitat designations consider the extent and diversity of habitats required by the species annually and generationally. Information reviewed by the USGS strengthens the need for

this approach to identifying and managing landscapes required by the species. The importance of ensuring that areas designated to promote sage-grouse conservation (i.e., designated priority habitats [PHMA]) adequately consider all seasonal habitats; the importance of ensuring that the implementation of spatially-derived management approaches (e.g., lek buffers to identify important habitats) is based on the amount of usable habitat and incorporates all necessary seasonal habitats; and the importance of managing PHMA and general habitats (GHMA) collectively to account for indirect effects of management decisions were all conclusions of research reviewed by the USGS (Synthesis pgs. 8 and 11). Connectivity, and the genetic dispersal within and among priority areas afforded through that connectivity, is important for maintaining sage-grouse populations, and the loss of connectivity is a strong predictor of long-term population declines (Synthesis pgs. 7, 14, 25 and 29).

To conserve sage-grouse, areas of management focus (i.e., PHMA) need to include all necessary seasonal ranges (e.g., breeding, summer and winter ranges), and these distinct habitats need to be effectively connected within and among priority areas (i.e., dispersal of individuals that results in gene flow within and among priority areas must be maintained). Amendments proposed to the LUPs reducing or eliminating management options in designated habitats – particularly proposed amendments in GHMA – limit the ability of agencies to manage at scales necessary to maintain these connections. The site-level approach to management promoted by the proposed amendments could result in situations where, for example, an impact could be minimized at the local scale yet remain an impact at larger scales (e.g., impacts to a critical travel corridor between seasonal ranges or among priority habitats; impacts to a regionally-limiting seasonal habitat type), and these residual impacts would go unnoticed until priority populations suffer. We recommend that the BLM manage the landscape holistically and collectively, and that all sage-grouse habitats regardless of designation remain an integral component of that management approach.

2. Many recommendations have the potential to limit the ability of managers to effectively manage anthropogenic aspects of the sagebrush biome.

Research published since 2015 corroborated negative relationships between oil and gas development and sagegrouse populations and life-history behaviors (Synthesis pg. 13), strengthening the importance of collectively maintaining oil and gas management approaches outlined in the LUPs in designated habitats range-wide. Many of the proposed amendments to the LUPs restrict management options to those identified through "project-level NEPA," for example, limiting long-term and large-scale management effectiveness. Proposed amendments that allow for waivers, exceptions and modifications to stipulations in designated habitats based on project-specific evaluations restrict the spatial-extent of impact assessments. Further, amendments that eliminate or weaken the need to prioritize the placement of anthropogenic impacts outside of designated habitats limit the effectiveness of landscape-scale conservation measures. Project-scale assessments generally take into account breeding habitats used by sage-grouse attending leks potentially disturbed by a project, and represent the agencies' approach to minimizing on-site impacts of development. These approaches do not effectively consider indirect or cumulative effects that may occur at larger spatial scales; these potential impacts for the most part are managed through the prioritization commitment. We recommend agencies retain oil and gas (and other anthropogenic disturbances) management approaches established in the LUPs collectively and only consider changing these approaches where analyses of regionally-specific sage-grouse data suggest that the changes will not negatively impact sage-grouse populations across all spatial scales.

3. Many recommendations have the potential to limit the ability of managers to effectively manage vegetative aspects of the sagebrush biome.

We recommend that vegetation goals in sage-grouse habitats be established relative to ecological site conditions, and that managers strive towards restoring and maintaining vegetative conditions in the reference state long-term while addressing short-term goals of vegetative structure. In the context of managing livestock and implementing habitat enhancement projects to restore and/or maintain quality sage-grouse habitats, this is a product of addressing both the standing crop to provide needed vegetative structural conditions in the short-term while addressing species composition to sustain those vegetative conditions long-term. The USGS reviewed several papers that emphasized the need to address both these short-term and long-term goals to consistently provide high

quality habitats for sage-grouse (Synthesis pg. 17). It is important to reiterate from our original letter that much of western rangelands experienced a shift in understory grass and forb species composition more than 100 years ago necessitating that today's approaches to range management address vegetative species composition while maintaining the vegetative structural conditions required by sage-grouse (i.e., simultaneously managing the restoration of habitats to reference conditions while managing current conditions to maintain sage-grouse populations). Given these challenges and the need to pursue innovative management approaches to address these challenges, the process of how the LUPs are implemented and evolve is as important as the actual management actions outlined in the plans.

In situations where site-specific habitat data are not available, we further recommend that the objectives established for vegetation structure, cover, and composition in the LUPs be maintained in priority habitats. This recommendation is supported by research summarized by the USGS suggesting that concealment provided by dense, tall shrubs and live and standing dead herbaceous vegetation (grasses and forbs) is important for sage-grouse especially during the nesting and brood-rearing seasons (Synthesis pg. 11). Although some recent research at the site scale questions the evidence for a ubiquitous positive relationship between grass height and sage-grouse nest success, the preponderance of information published since 2015 illustrated a positive relationship between measures of vertical cover (e.g., visual obstruction; herbaceous vegetation height) and nest and brood-rearing site selection and survival (Synthesis pg. 11). It is important to reiterate that the habitat objectives established in the LUPs represent one of the few places in the plans where vegetative degradation across the sagebrush biome is directly addressed, and as such represent an important aspect of the long-term management approach outlined in the LUPs.

Conclusion

Many of the changes proposed in the 2018 DEISs to amend the 2015 LUPs promote management at project-level spatial scales and cumulatively could result in the ineffective management of the landscapes required to conserve sage-grouse populations. Failure to take into account large-scale dynamics when managing sage-grouse will likely lead to an overall loss of habitat quantity and quality resulting in population declines. We recognize that all conservation and management ultimately occurs at the local level. However, local-level decisions must be fully informed as to the potential consequences of those decisions at larger spatial scales. Science-based programs where local-level decisions empirically informed at the regional scale (i.e., the scale necessary to encompass the habitats required by the population(s) being managed, which in some areas may include tens of thousands of acres) and considering relationships at the range-wide scale are the most efficient way we can successfully and sustainably engage in proactive conservation and restoration of the sagebrush system and the wildlife and people dependent on this system. The 2015 LUPs provide the platform from which these local efforts can proceed; and developing approaches to maximizing the effectiveness of and participation in these local efforts is a real need (Synthesis pg. 23). Consideration of landscape-scale and range-wide population dynamics are critical aspects of local efforts addressed through Federal engagement in sage-grouse conservation efforts.

The science community is available to provide ongoing consultation about the science as well as how we can collectively move forward with a science-based approach to managing and conserving sage-grouse and sagebrush habitats on our Federal public lands. We thank you for your consideration of our points and recommendations.

Respectfully,

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