From:	Frazer, Gary
To:	Noreen Walsh
Subject:	Re: draft, predecisional, deliberative process
Date:	Friday, October 24, 2014 3:19:59 PM
Attachments:	FWS.GrSG.mineral withdrawal mapping transmittal memo.executive review.draft 102314 (04) (1) AES suggested edits.docx

---

Suggested edits, as we discussed. -- GDF

Gary Frazer
Assistant Director -- Ecological Services
U.S. Fish and Wildlife Service
(202) 208-4646

On Thu, Oct 23, 2014 at 9:39 PM, Noreen Walsh <noreen_walsh@fws.gov> wrote:

> 2 of 2

Pre-Decisional; Draft; For Internal Review Purposes Only. Do Not Distribute.

Memorandum

October 23, 2014

To: Director, Bureau of Land Management
Chief, U.S. Forest Service

From: Director

Subject: Greater Sage-Grouse: Additional Recommendations to Refine Land Use Allocations in Highly Important Landscapes

Pursuant to our October 1, 2014 leadership discussion regarding the federal land management planning process for greater sage-grouse (sage-grouse) conservation and as a continuance of our ongoing coordination and advice regarding your land management plan revisions, we are providing recommendations to further assist your agencies in the important management decisions you are currently finalizing. During the ongoing coordination effort for the planning process, we have provided conservation advice in the form of the 2013 Conservation Objectives Team final report (COT report), our comments on the draft federal plans including comprehensive analyses of alternatives, and the National Policy Team (NPT) Guidance, as well as other consultative activities.

This memorandum and associated maps respond to a request from the Bureau of Land Management (BLM) to identify a subset of priority habitat most vital to the species persistence, within which we recommend the strongest levels of protection ~~from harm caused by locatable mineral development~~. The areas we have identified on the attached map are a subset of the already identified Priority Habitat Management Areas (PHMA). The areas we have identified within PHMA represent recognized "strongholds" for the species that have been noted and referenced by the conservation community as having the highest densities of the species and other criteria important for the persistence of the species. For example, the Western Association of Fish and Wildlife Agencies' 2004 Conservation Assessment of Greater Sage-Grouse and Sagebrush Habitats (Connelly, et al., 2004; Figure 13.1, attached) included a similar geographic distribution of these stronghold areas for breeding populations of sage-grouse. In addition, in 2010, Doherty et al. produced the first sets of breeding density maps, which clearly illustrate high densities of breeding birds exist in very similar locations. Most recently, Chambers et al. (2014) produced maps of relative resilience and resistance to invasive species and wildfire impacts to sagebrush habitats that also align closely with the subset of priority habitats we have identified in the Great Basin region.

Strong, durable, and meaningful protection of federally administered lands in these areas would provide additional certainty and help obtain confidence for long-term sage-grouse persistence. To be clear, enhanced protections in the stronghold areas do not obviate the need to follow the NPT guidance in the entirety of PHMAs and general habitat. ~~Additionally, for those land use allocations not explicitly addressed in the NPT guidance, as is the case with locatable minerals, final allocative decisions should avoid disturbance to PHMAs. We recommend withdrawal from mineral entry in **all the identified "highly important areas" or "strongholds"** as shown on the attached map. To maximize long-term certainty and to address the recommendations in the COT we recommend the withdrawal of all locatable minerals in all the identified areas in our attached maps.~~

Comment [GDF1]: In recognition of Ren's concern, is there a way and any value in also citing to the continued need to avoid habitat loss within PACs, or would that be entirely redundant to our reference to PHMAs?

We have previously advised and continue to recommend that BLM and US Forest Service (Forest Service) land management plans be designed to meet the objectives outlined in COT report. The attached maps highlight areas where it is most important that BLM and Forest Service institutionalize the highest degree of protection to help promote persistence of the species. ~~Specifically, the COT report addressed the threat of mining, and established an objective of "maintain stable to increasing sage-grouse populations and no net loss of sage-grouse habitats in areas affected by mining" and recommended "avoidance of new mining activities and associated facilities within occupied habitats including seasonal habitats." To date it does not appear that mechanisms are in place to achieve this for locatable minerals on federal lands.~~

~~Further, we note that prior to completion of the COT report, the recommendations for withdrawal from mineral entry in priority sage-grouse habitat areas were included in the BLM's 2011 National Technical Team (NTT) Report (pages 24-25). Lastly, we note BLM contemplated pursuing locatable minerals withdrawal in the range of alternatives considered for some draft Resource Management Plan (RMP) revisions and amendments.~~

~~In addition, we recommend the important stronghold areas be designated as Areas of Critical Environmental Concern (ACECs) for sage-grouse conservation as a clear indication of the significance of these areas to the conservation of greater sage-grouse. Again, we note BLM contemplated designating ACECs in the range of alternatives for some draft RMP revisions and amendments.~~

Criteria, Methodology and Rationale

We used the following criteria to identify areas within PHMAs in which the most conservative approach should be applied:

- Existing high-quality sagebrush habitat for sage-grouse;
- Highest breeding densities of sage-grouse;
- Areas identified in the literature as essential to conservation and persistence of the species (Knick and Hanser 2011); and,
- A preponderance of current federal ownership, and in some cases, adjacent protected areas that serve to anchor the conservation importance of the landscape.

In addition, we evaluated these areas against related efforts by partner organizations (NatureServe and Conservation Biology Institute) to determine relative agreement between analyses. Using Data Basin, a mapping and analysis platform, we verified our analysis is consistent with landscape-level sage-grouse conservation opportunities and needs, as defined by the above criteria as well as additional considerations, including the modeled "velocity" of climate change onset in various parts of the range and the potential for fire and invasive species impacts on sage-grouse habitat. Lastly, we examined the spatial relationship between these areas and other important habitat conservation values in the sagebrush-steppe ecosystem, including shrub-steppe passerine birds (Hanser and Knick 2011) and mule deer winter range (identified by the Western Governors Association Crucial Habitat Assessment Tool) and found association between these areas and the additional conservation values.

Rangewide Map (Map 1)

See below for regional maps and individual unit descriptions.

Great Basin Region (Map 2)

- **Southern Idaho/northern Nevada**: This general area is comprised almost entirely of federal surface lands. The area contains five designated federal Wilderness areas, and protected areas for bighorn sheep conservation. Sage-grouse breeding densities are very high.

- **North-central Idaho**: This area is anchored by Craters of the Moon National Monument, is comprised of mostly federal surface land ownership, and has a high density of breeding sage-grouse.

- **Areas adjacent to the Sheldon-Hart Mountain National Wildlife Refuge Complex, Oregon and Nevada:** This area occurs predominately on federal surface lands, and includes several Wilderness Study Areas (WSAs). It contains some of the highest sage-grouse breeding densities in Oregon and both of these national wildlife refuges (NWRs) are actively managing for sage-grouse conservation.

- **Southeastern Oregon/north-central Nevada:** This area is predominately federal surface lands and contains five designated WSAs. Breeding densities of sage-grouse are high.

Rocky Mountain Region (Maps 3 and 4):

- **Southwestern/south-central Wyoming** (Map 3): This expansive area is predominately federal surface estate and represents some of the best remaining sage-grouse habitat within the entire range of the species. The area includes four currently designated WSAs, one federal Wilderness area, and several areas managed for historic and cultural resources (which exclude development). Seedskadee National Wildlife Refuge is in the vicinity.

- **Bear River Watershed** (Northeastern Utah/Southwestern Wyoming, Map 3): This area has a high density of breeding sage-grouse. Cokeville Meadows NWR is located nearby.

- **North-central Montana** (Map 4): This area comprises the highest breeding sage-grouse densities in Montana. It follows the Missouri River, is adjacent to Charles M. Russell NWR. This area also provides wintering habitat for sage-grouse migrating seasonally from Alberta, Canada, where the species listed as endangered under the Canadian Species at Risk Act.

References

U.S. Fish and Wildlife Service. 2013. Greater sage-grouse (*Centrocercus urophasianus*) Conservation objectives: final report. U.S. Fish and Wildlife Service, Denver, CO.

Connelly, J.W., S.T. Knick, M.A. Schroeder, and S.J. Stiver. 2004. Conservation assessment of greater sage-grouse and sagebrush habitats. Western Association of Fish and Wildlife Agencies. Unpublished Report. Cheyenne, WY.

Doherty, K.E., J.D. Tack, J.S. Evans, and D.E. Naugle. 2010. Mapping breeding densities of greater sage-grouse: A tool for range-wide conservation planning. BLM Completion Report. Interagency Agreement # L10PG00911.

Chambers, J. C.; Pyke, D. A.; Maestas, J. D.; Pellant, M.; Boyd, C. S.; Campbell, S. B.; Espinosa, S.; Havlina, D. W.; Mayer, K. E.; Wuenschel, A. 2014b. Using resistance and resilience concepts to reduce impacts of invasive annual grasses and altered fire regimes on the sagebrush ecosystem and greater sage-grouse: A strategic multi-scale approach. Gen. Tech. Rep. RMRS-GTR-326. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 73p.

Bureau of Land Management. 2011. A Report on National Greater Sage-Grouse Conservation Measures. Bureau of Land Management, Washington, DC.

Knick, S.T., and S.E. Hanser. 2011. Connecting pattern and process in greater sage-grouse populations and sagebrush landscapes. Pp. 383 – 405 *in* S.T. Knick and J.W. Connelly (editors). Greater Sage-Grouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology (vol. 38), University of California Press, Berkeley, CA.

Hanser, S.E. and Knick, S.T. 2011. Greater Sage-Grouse as an Umbrella Species for Shrub and Passerine Birds: A Multi-Scale Assessment. Pp. 475 – 487 *in* S.T. Knick and J.W. Connelly (editors). Greater Sage-Grouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology (vol. 38), University of California Press, Berkeley, CA.

State Wildlife Agencies of the Western United States. West-wide Crucial Habitat Data Set. Western Governors' Crucial Habitat Assessment Tool: Mapping Fish and Wildlife Across the West. Western Governors' Association. Published October 15, 2014. Accessed October 15, 2014. http://www.westgovchat.org

Data Basin, *see* http://databasin.org/

Enclosures

Maps 1-4

Figure 13.1, from Connelly, et al, 2004.

DRAFT

Pre-Decisional; Draft; For Internal Review Purposes Only. Do Not Distribute.

Memorandum

October 23, 2014

To: Director, Bureau of Land Management
Chief, U.S. Forest Service

From: Director

Subject: Greater Sage-Grouse: Additional Recommendations to Refine Land Use Allocations in Highly Important Landscapes

Pursuant to our October 1, 2014 leadership discussion regarding the federal land management planning process for greater sage-grouse (sage-grouse) conservation and as a continuance of our ongoing coordination and advice regarding your land management plan revisions, we are providing recommendations to further assist your agencies in the important management decisions you are currently finalizing. During the ongoing coordination effort for the planning process, we have provided conservation advice in the form of the 2013 Conservation Objectives Team final report (COT report), our comments on the draft federal plans including comprehensive analyses of alternatives, and the National Policy Team (NPT) Guidance, as well as other consultative activities.

This memorandum and associated maps respond to a request from the Bureau of Land Management (BLM) to identify a subset of priority habitat most vital to the species persistence, within which we recommend the strongest levels of protection ~~from harm caused by locatable mineral development~~. The areas we have identified on the attached map are a subset of the already identified Priority Habitat Management Areas (PHMA). The areas we have identified within PHMA represent recognized "strongholds" for the species that have been noted and referenced by the conservation community as having the highest densities of the species and other criteria important for the persistence of the species. For example, the Western Association of Fish and Wildlife Agencies' 2004 Conservation Assessment of Greater Sage-Grouse and Sagebrush Habitats (Connelly, et al., 2004; Figure 13.1, attached) included a similar geographic distribution of these stronghold areas for breeding populations of sage-grouse. In addition, in 2010, Doherty et al. produced the first sets of breeding density maps, which clearly illustrate high densities of breeding birds exist in very similar locations. Most recently, Chambers et al. (2014) produced maps of relative resilience and resistance to invasive species and wildfire impacts to sagebrush habitats that also align closely with the subset of priority habitats we have identified in the Great Basin region.

Strong, durable, and meaningful protection of federally administered lands in these areas would provide additional certainty and help obtain confidence for long-term sage-grouse persistence. To be clear, enhanced protections in the stronghold areas do not obviate the need to follow the NPT guidance in the entirety of PHMAs and general habitat. ~~Additionally, for those land use allocations not explicitly addressed in the NPT guidance, as is the case with locatable minerals, final allocative decisions should avoid disturbance to PHMAs. We recommend withdrawal from mineral entry in **all the identified "highly important areas" or "strongholds"** as shown on the attached map. To maximize long-term certainty and to address the recommendations in the COT we recommend the withdrawal of all locatable minerals in all the identified areas in our attached maps.~~

Comment [GDF1]: In recognition of Ren's concern, is there a way and any value in also citing to the continued need to avoid habitat loss within PACs, or would that be entirely redundant to our reference to PHMAs?

We have previously advised and continue to recommend that BLM and US Forest Service (Forest Service) land management plans be designed to meet the objectives outlined in COT report. The attached maps highlight areas where it is most important that BLM and Forest Service institutionalize the highest degree of protection to help promote persistence of the species. ~~Specifically, the COT report addressed the threat of mining, and established an objective of "maintain stable to increasing sage-grouse populations and no net loss of sage-grouse habitats in areas affected by mining" and recommended "avoidance of new mining activities and associated facilities within occupied habitats including seasonal habitats." To date it does not appear that mechanisms are in place to achieve this for locatable minerals on federal lands.~~

~~Further, we note that prior to completion of the COT report, the recommendations for withdrawal from mineral entry in priority sage-grouse habitat areas were included in the BLM's 2011 National Technical Team (NTT) Report (pages 24-25). Lastly, we note BLM contemplated pursuing locatable minerals withdrawal in the range of alternatives considered for some draft Resource Management Plan (RMP) revisions and amendments.~~

~~In addition, we recommend the important stronghold areas be designated as Areas of Critical Environmental Concern (ACECs) for sage-grouse conservation as a clear indication of the significance of these areas to the conservation of greater sage-grouse. Again, we note BLM contemplated designating ACECs in the range of alternatives for some draft RMP revisions and amendments.~~

Criteria, Methodology and Rationale

We used the following criteria to identify areas within PHMAs in which the most conservative approach should be applied:

- Existing high-quality sagebrush habitat for sage-grouse;
- Highest breeding densities of sage-grouse;
- Areas identified in the literature as essential to conservation and persistence of the species (Knick and Hanser 2011); and,
- A preponderance of current federal ownership, and in some cases, adjacent protected areas that serve to anchor the conservation importance of the landscape.

In addition, we evaluated these areas against related efforts by partner organizations (NatureServe and Conservation Biology Institute) to determine relative agreement between analyses. Using Data Basin, a mapping and analysis platform, we verified our analysis is consistent with landscape-level sage-grouse conservation opportunities and needs, as defined by the above criteria as well as additional considerations, including the modeled "velocity" of climate change onset in various parts of the range and the potential for fire and invasive species impacts on sage-grouse habitat. Lastly, we examined the spatial relationship between these areas and other important habitat conservation values in the sagebrush-steppe ecosystem, including shrub-steppe passerine birds (Hanser and Knick 2011) and mule deer winter range (identified by the Western Governors Association Crucial Habitat Assessment Tool) and found association between these areas and the additional conservation values.

Rangewide Map (Map 1)

See below for regional maps and individual unit descriptions.

Great Basin Region (Map 2)

- **Southern Idaho/northern Nevada**: This general area is comprised almost entirely of federal surface lands. The area contains five designated federal Wilderness areas, and protected areas for bighorn sheep conservation. Sage-grouse breeding densities are very high.

- **North-central Idaho**: This area is anchored by Craters of the Moon National Monument, is comprised of mostly federal surface land ownership, and has a high density of breeding sage-grouse.

- **Areas adjacent to the Sheldon-Hart Mountain National Wildlife Refuge Complex, Oregon and Nevada:** This area occurs predominately on federal surface lands, and includes several Wilderness Study Areas (WSAs). It contains some of the highest sage-grouse breeding densities in Oregon and both of these national wildlife refuges (NWRs) are actively managing for sage-grouse conservation.

- **Southeastern Oregon/north-central Nevada:** This area is predominately federal surface lands and contains five designated WSAs. Breeding densities of sage-grouse are high.

Rocky Mountain Region (Maps 3 and 4):

- **Southwestern/south-central Wyoming** (Map 3): This expansive area is predominately federal surface estate and represents some of the best remaining sage-grouse habitat within the entire range of the species. The area includes four currently designated WSAs, one federal Wilderness area, and several areas managed for historic and cultural resources (which exclude development). Seedskadee National Wildlife Refuge is in the vicinity.

- **Bear River Watershed** (Northeastern Utah/Southwestern Wyoming, Map 3): This area has a high density of breeding sage-grouse. Cokeville Meadows NWR is located nearby.

- **North-central Montana** (Map 4): This area comprises the highest breeding sage-grouse densities in Montana. It follows the Missouri River, is adjacent to Charles M. Russell NWR. This area also provides wintering habitat for sage-grouse migrating seasonally from Alberta, Canada, where the species listed as endangered under the Canadian Species at Risk Act.

References

U.S. Fish and Wildlife Service. 2013. Greater sage-grouse (*Centrocercus urophasianus*) Conservation objectives: final report. U.S. Fish and Wildlife Service, Denver, CO.

Connelly, J.W., S.T. Knick, M.A. Schroeder, and S.J. Stiver. 2004. Conservation assessment of greater sage-grouse and sagebrush habitats. Western Association of Fish and Wildlife Agencies. Unpublished Report. Cheyenne, WY.

Doherty, K.E., J.D. Tack, J.S. Evans, and D.E. Naugle. 2010. Mapping breeding densities of greater sage-grouse: A tool for range-wide conservation planning. BLM Completion Report. Interagency Agreement # L10PG00911.

Chambers, J. C.; Pyke, D. A.; Maestas, J. D.; Pellant, M.; Boyd, C. S.; Campbell, S. B.; Espinosa, S.; Havlina, D. W.; Mayer, K. E.; Wuenschel, A. 2014b. Using resistance and resilience concepts to reduce impacts of invasive annual grasses and altered fire regimes on the sagebrush ecosystem and greater sage-grouse: A strategic multi-scale approach. Gen. Tech. Rep. RMRS-GTR-326. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 73p.

Bureau of Land Management. 2011. A Report on National Greater Sage-Grouse Conservation Measures. Bureau of Land Management, Washington, DC.

Knick, S.T., and S.E. Hanser. 2011. Connecting pattern and process in greater sage-grouse populations and sagebrush landscapes. Pp. 383 – 405 *in* S.T. Knick and J.W. Connelly (editors). Greater Sage-Grouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology (vol. 38), University of California Press, Berkeley, CA.

Hanser, S.E. and Knick, S.T. 2011. Greater Sage-Grouse as an Umbrella Species for Shrub and Passerine Birds: A Multi-Scale Assessment. Pp. 475 – 487 *in* S.T. Knick and J.W. Connelly (editors). Greater Sage-Grouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology (vol. 38), University of California Press, Berkeley, CA.

State Wildlife Agencies of the Western United States. West-wide Crucial Habitat Data Set. Western Governors' Crucial Habitat Assessment Tool: Mapping Fish and Wildlife Across the West. Western Governors' Association. Published October 15, 2014. Accessed October 15, 2014. http://www.westgovchat.org

Data Basin, *see* http://databasin.org/

Enclosures

Maps 1-4

Figure 13.1, from Connelly, et al, 2004.

DRAFT