From:	Wiechman, Lief
To:	Matt Kales
Subject:	Re: GRSG: draft LCA narrative
Date:	Thursday, October 16, 2014 3:02:12 PM
Attachments:	FWS.GrSG.LCAs.narrative.draft 101614.mk (LW edits).docx

---

My edits are pretty picky and primarily editorial, and I'm not wed to most of them. Take or leave...
If this is put together in a 'packet' form of sorts... we might consider attaching Figure numbers to each map and identifying them parenthetically in the doc. If not, disregard.

LW

Lief Wiechman
Sage-Grouse Ecologist
U.S. Fish & Wildlife Service
Mountain-Prairie Region
307.772.2374 x236
lief_wiechman@fws.gov

On Thu, Oct 16, 2014 at 2:33 PM, Matt Kales <matt_kales@fws.gov> wrote:

> Folks,
>
> As discussed. Please review ASAP and then we can group edit at 300 pm (I'll come back down to the conference room). I highlighted some items in red and am clearly still struggling with where to put the Craters of the Moon unit (I don't have the maps in front of me). Beyond that, I think the most important items are making sure the math adds up and the narrative for the specific units matches the maps. Any/all other substantive edits welcome. See you in a few. Thanks.
>
> Matt Kales
>
> Special Assistant for Greater Sage-Grouse Conservation
>
> Office of the Regional Director
>
> US Fish and Wildlife Service, Mountain-Prairie Region
>
> Office: (303) 236-4576

Mobile: (720) 234-0257

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

US Fish and Wildlife Service
Greater Sage-Grouse Conservation
Landscape Scale Conservation Opportunities
Preliminary Recommendations, October 16, 2014

Background and purpose

The following narrative describes preliminary recommendations for proposed "Landscape Conservation Areas" (LCAs) for greater sage-grouse (sage-grouse). These areas feature large, relatively intact landscapes and are comprised primarily of federal surface ownership, some of which includes existing protected areas ~~such as~~including but not limited to National Wildlife Refuge System fee lands that could serve as "anchors" for expanded protection efforts. Additionally, these proposed LCAs consist largely (~75%) of Priority Areas for Conservation (PACs), as identified in the 2013 Conservation Objectives Team Final Report. Durable and meaningful protection of these proposed LCAs would represent a significant contribution to sage-grouse conservation and could help provide the adequate regulatory mechanisms necessary to ensure the persistence of the species in the future.

Note: This is an initial, coarse-scale analysis and the identification of non-federal lands in the maps accompanying this narrative does not imply any intention of inclusion in any formal conservation effort that may result from this draft document. Further refinement of this concept will more clearly delineate non-federal lands.

Criteria, methodology and rationale

We applied the following criteria to identify the proposed LCAs:

- Existing high-quality sagebrush habitat for sage-grouse;
- High breeding densities of sage-grouse;
- Areas identified in the literature as essential to conservation (Knick and Hanser 2011); and,
- A preponderance of current federal ownership, including existing protected areas.

In addition, we evaluated the proposed LCAs 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 the proposed LCAs and other important habitat conservation needs in the sagebrush-steppe ecosystem, including mule deer winter range, and found generally strong agreement between the proposed LCAs and these additional habitat conservation needs.

In summary, our rationale for identifying the proposed LCAs for sage-grouse is science-driven and underpinned by the current literature; oriented on large, contiguous blocks of federal land containing existing anchor points for connectivity and landscape-level conservation; and, creates the potential to protect key habitats for a wide array of sagebrush-obligate or dependent species.

Comment [LW 1]: Geographies?

DRAFT

Proposed LCAs, by region

Great Basin Region

Northern Great Basin LCA: This proposed LCA includes the three units described immediately below. The entire area captured in the LCA was described by Knick and Hanser (2011) as one of two areas range-wide essential to sage-grouse persistence and conservation. The majority of the surface estate is federal and provides the large landscapes required to sustain this species. This entire area totals approximately 10,251,000 acres.

- **Southern Idaho/northern Nevada**: This unit is comprised almost entirely of federal surface and most of it is contained within designated PACs. The area contains five designated federal Wilderness areas, protected areas for bighorn sheep conservation, and at least one designated cultural site [identify] with significant resource use restrictions. Sage-grouse breeding densities are very high. The total area is approximately 5,614,000 acres.

    - **North-central Idaho**: This unit is anchored by Craters of the Moon National Monument, is comprised of mostly federal surface ownership, and has a high density of breeding sage-grouse and is mostly contained within PACs. Idaho National Energy Laboratory is located within this unit and this Department of Energy facility has been an active partner in sage-grouse conservation for several years. This area contains~~is~~ approximately 5,435,000 acres~~ in size~~. [Don't have maps in front of me so need confirmation where this unit goes.]

- **Sheldon-Hart Mountain National Wildlife Refuge Complex, Oregon and Nevada:** This unit occurs predominately on federal surface, 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. Nearly the entire area falls within ~~PACs~~PAC delineations. There is currently great interest by conservation organizations in securing connectivity between the two refuges for the express purpose of sagebrush conservation. This area is 2,400,000 acres in size.

- **Southeastern Oregon/north-central Nevada:** This area is predominately federal surface (Bureau of Land Management and US Forest Service) and contains five designated WSAs. Breeding densities of sage-grouse are high and the area is almost entirely comprised of PACs. This area ~~totals~~ contains approximately 2,237,000 acres.

Rocky Mountain Region:

Wyoming Basin LCA: This proposed LCA includes the two units described below (Southwestern/south-central Wyoming and the Bear River watershed). The entire area was described by Knick and Hanser (2011) as one of two areas identified range-wide as essential to sage-grouse persistence and conservation. While some private lands are encompassed in this area, the majority of the surface is federal and provides the landscapes required to sustain this species. This area totals approximately 2,793,000 acres.

Comment [LW 2]: Shouldn't this be it's own, piece and not a subset of the above?

DRAFT

- **Southwestern/south-central Wyoming**: 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 one National Historic Area (which excludes development). The area also encompasses Seedskadee National Wildlife Refuge and a majority of the lands being managed under the Bureau of Land Management's recently completed Lander Resource Management Plan revision. Most of the area falls within PAC delineations and are currently being managed under the Wyoming Core Area strategy. This unit is approximately 2,361,000 acres in size.

- **Bear River Watershed** (Northeastern Utah/Southwestern Wyoming): This area has a high density of breeding sage-grouse and is comprised primarily of PACs [insert %]. Cokeville Meadows NWR is entirely contained within the Wyoming portion, and the Bear River Migratory Bird Refuge is currently leading a landscape-level, public-private partnership to conserve the watershed using both fee and easement acquisitions. A majority of the private lands south of the Utah portion of this proposed LCA are owned by Deseret Land and Livestock, a large private ranch that is very active in sage-grouse conservation. This unit is approximately 432,000 acres in size.

North-central Montana LCA: This area comprises the highest breeding sage-grouse densities in Montana. It follows the Missouri River, including Charles M. Russell NWR, and more than half the area is contained within ~~PACs~~PAC delineations. There are numerous private inholdings, but a large area of private land to the north of the area is a focus area for various conservation organizations working to restore and manage native prairie habitats and species, including sage-grouse. This area also provides wintering habitat for sage-grouse migrating seasonally from Alberta, Canada, where the species listed as endangered under the federal Species At Risk Act. This area totals approximately 2,361,000 acres.

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.

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.

DRAFT