From:	Carol Schuler
To:	Gary Frazer
Cc:	Dan Ashe; Paul Souza; Noreen Walsh; Michael Thabault; Anne Kinsinger
Subject:	RE: Sage-Grouse Conservation Buffers
Date:	Tuesday, November 18, 2014 1:15:43 PM
Attachments:	DOI Buffer Report Brief 11.10.14.docx

Yes. Here's the briefing paper we used for W&S last week. We are preparing a technical release and talking points, and will get these to you once we have approval. Let me know if you would like to schedule a briefing this week or next.

Carol

Carol Schuler, Senior Science Advisor
Ecosystems Mission Area
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From: Frazer, Gary [mailto:gary_frazer@fws.gov]
Sent: Tuesday, November 18, 2014 10:53 AM
To: Carol Schuler
Cc: Dan Ashe; Paul Souza; Noreen Walsh; Michael Thabault; Anne E Kinsinger
Subject: Re: Sage-Grouse Conservation Buffers

Carol -- FWS leadership is out of the office at a Directorate meeting this week, so I doubt that we could schedule a briefing. But do you have an exec summary and/or press release that you could share on a close hold basis before this goes public? -- GDF

Gary Frazer

Assistant Director -- Ecological Services

U.S. Fish and Wildlife Service

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On Tue, Nov 18, 2014 at 12:52 PM, Carol Schuler <cschuler@usgs.gov> wrote:

As you know, we are getting close to releasing a report on conservation buffers for sage-grouse leks that was requested by BLM. We'd like to offer to brief you on the findings of this report. We have briefed BLM as a collaborator on the project and would like to share the information with you prior to the report's release. It will likely be released later this week. Let us know what will work for you.
Carol

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INFORMATION/BRIEFING MEMORANDUM

DATE: November 10, 2014
TO: Jennifer Gimbel, Deputy Assistant Secretary Water and Science
FROM: Anne Kinsinger, Association Director, Ecosystems, U.S. Geological Survey
SUBJECT: Conservation Buffer Distance Estimates for Greater Sage-Grouse

A new U.S. Geological Survey (USGS) report will soon be released that compiles and evaluates the influence of human activity on greater sage-grouse populations with the purpose of helping establish buffer distance values for use in conservation measures for greater sage-grouse habitat. This assessment was requested by the Bureau of Land Management (BLM) and other Department of Interior (DOI) leaders in late September, 2014.

Background

Conservation measures have been developed by federal land managers to reduce the impacts of human land-use on greater sage-grouse populations. These measures can range from complete closure of important habitats to the seasonal restriction of human activity within specified distances (i.e., buffers) around sage-grouse communal breeding locations, known as leks. Across the range of the greater sage-grouse a wide variety of buffer distances have been posed as appropriate for providing protections for the species. A set of common measures across the sage-grouse range can help DOI leaders refine and implement conservation actions for this species.

Discussion

The report summarizes the published literature on quantitative estimates of buffer distances or disturbance thresholds for greater sage-grouse associated with six categories of land use or disturbance (e.g., surface disturbance, energy development) that are typically found in land use plans. Within each category, a table is provided showing the minimum and maximum distances of observed effects found in the scientific literature, as well as an interpreted distance range for possible conservation buffers based on information in the scientific literature and the review of a collaborative science team.

The scientific literature indicates that 90-95% of sage-grouse movements are within 8 km (5mi) of lek sites, and the majority of females nest within approximately 5 km (3.1mi) of the lek. This suggests that considerable protection of sage-grouse could be achieved using protective measures within these generalized conservation buffer distances. However, sage-grouse movement patterns can vary widely between populations because of differences in the configuration of sagebrush habitat on the landscape and the condition of those habitats.

Next Steps

An early copy of the report will be provided to BLM during the week of November 10, 2014 because as their status as a collaborator and requestor for the synthesis. Within the next two weeks, the report will be released publicly as a USGS Open File Report. Briefings will be scheduled with DOI, DOI Bureaus, and other interested state and federal agencies.

Bibliographic information about the report will be: Manier, D., Z. Bowen, M. Brooks, M. Casazza, P. Coates, P. Deibert, S. Hanser, and D. H. Johnson., In Press, Conservation Buffer Distance Estimates for Greater Sage-Grouse: A review: U.S. Geological Survey Open-File Report.

Lek Buffer Distance Estimates[1]				
Disturbance Type[2]	**Literature minimum**	**Interpreted range (low)**	**Interpreted range (upper)**	**Literature maximum**
Surface Disturbance	3.2km (2mi)	5km (3.1mi)	8km (5mi)	20km (12.4mi)
Linear Features	400m (0.25mi)	5km (3.1mi)	8km (5mi)	18km (11.2mi)
Energy Development	3.2km (2mi)	5km (3.1mi)	8km (5mi)	20km (12.4mi)
Tall Structures	1km (0.6mi)	3.3km (2mi)	8km (5mi)	8km (5mi)
Low Structures	200 m (0.12 mi)	2 km (1.2mi)	5 km (3.1mi)	5.1 km (3.2mi)
Activities	400 m (0.12 mi)	400 m (0.12 mi)	2 km (1.25 mi)	4.8 km (3mi)

[1] Manier, D., Z. Bowen, M. Brooks, M. Casazza, P. Coates, P. Deibert, S. Hanser, and D. H. Johnson., In Press, Conservation Buffer Distance Estimates for Greater Sage-Grouse: A review: U.S. Geological Survey Open-File Report.

[2] Surface Disturbance – Multiple causes, immediate and cumulative influences
Linear Features – Roads, pipelines
Energy Development – Oil, gas, wind, solar
Tall Structures – Electrical, communication, meteorological
Low Structures – Fences, buildings
Activities – Noise and related disruptions (does not include habitat loss)