

From: [Noreen Walsh](#)
To: [Pat Deibert](#)
Subject: RE: Dist cap guidance
Date: Saturday, January 17, 2015 7:26:09 PM

Pat, I can't thank you enough for the quick look and note; very helpful. I do not know why ID is going a different direction. When first asked, Terry said she knew they were going with 3% and she had no information how they were calculating it. Now I have seen further indication the calculations in ID are different but I don't recall ever discussing it etc. I acknowledge less than perfect memory though! I have sent the question to Ed and await his response.

I am however heartened that the wording below is close to what you all had agreed to because this has been characterized as what will be used everywhere other than ID.

Again, thank you, for your willingness to always answer questions and review, even on a holiday weekend. You are appreciated, very much,

Noreen

From: Pat Deibert [mailto:pat_deibert@fws.gov]
Sent: Saturday, January 17, 2015 7:14 PM
To: Noreen Walsh
Subject: Re: Dist cap guidance

Noreen - I did a quick read and this is very close to all the work we have done on monitoring before - which makes me wonder why they felt compelled to re-draft. I had no major heartburn but I'm unfamiliar with the supporting documentation for table 1. It may be there but I would have to spend some time with it to sort through. I don't understand the difference in ID - their equation actually allows for more disturbance than the rest of the range and I'm uncertain as to the justification (and again the need to create something new after we had jointly finished the national guidance). I would like to compare the equations for disturbance to those we agreed to in their disturbance white paper - no flags popped up except that they look different from my memory. Of course I don't have that paper with me at home to do the comparison. I hope this helps - I don't see anything fatal but would like the chance to cross reference back to the documents we negotiated months ago.

Pat

Sent from my iPhone

On Jan 17, 2015, at 3:24 PM, Noreen Walsh <noreen_walsh@fws.gov> wrote:

Pat,
Have you seen this before? I am hoping it is familiar to you, a version you have already seen.
Note especially the yellow areas, they caught my eye.
Thanks,
NW

Attachment IV

Greater Sage-Grouse (GRSG) Land Use Plans Disturbance Caps Guidance

Purpose

- I. Provide the planning units with land use planning actions that need to be incorporated into the administrative draft proposed plans **to respond to the 3% disturbance cap once it is exceeded** in either the Biologically Significant Units (BSU) or at the project scale.
- II. Provide guidance on the use of the west-wide habitat degradation (disturbance) data layers as well as the use of locally collected disturbance data for BSUs to determine if the disturbance cap has been exceeded as the land use plans (LUP) are being implemented.
- III. Provide guidance on the use of locally collected disturbance data for project authorizations to determine if the disturbance cap has been exceeded as the LUPs are being implemented.
- IV. Provide guidance on the inclusion of fire in disturbance calculations.
- V. Provide guidance on the use of the density of energy and mining facilities during authorizations
- VI. Provide guidance on the use of the BER analysis in the land use plans (Chapter 2, Affected Environment) and the use of the “west-wide” sagebrush availability and habitat degradation data/estimates for the Priority Habitat Management Areas in each population for monitoring and management purposes as the LUPs are being implemented.
- VII. Provide guidance on what is considered in the disturbance calculations versus what is considered for the disturbance cap.

Guidance

- I. Planning units (except in Wyoming--Nevada will use a cap—discussions are on-going) will include the following land use plan actions within their administrative draft proposed land use plans (ADPPs) that states:
 - a. *If the 3% anthropogenic disturbance cap is exceeded on lands (regardless of land ownership) within GRSG Priority Habitat Management Areas **in any given Biologically Significant Unit**, then no further discrete anthropogenic disturbances (subject to applicable laws and regulations, such as the 1872 hard rock mining law, valid existing rights, etc.) will be permitted by BLM within GRSG Priority Habitat Management Areas in any given Biologically Significant Unit until the disturbance has been reduced to less than the cap.*
 - b. *If the 3% disturbance cap is exceeded on all lands (regardless of land ownership) within a **proposed project analysis area** in a Priority Habitat Management Areas, then no further anthropogenic disturbance will be permitted by BLM until disturbance in the proposed project analysis area has been reduced to maintain the area under the cap (subject to applicable laws and regulations, such as the 1872 hard rock mining law, valid existing rights, etc.).*

The BLM NV/NE California Greater Sage-Grouse RMP Amendment will use a disturbance cap—discussions ongoing.

- II. Use of west-wide habitat degradation data as well as the use of locally

collected disturbance data to determine the level of existing disturbance:

- a) In the GRSG Priority Habitat Management Areas in any given Biologically Significant Unit, use the west-wide data at a minimum and/or locally collected disturbance data as available (e.g., DDCT) for the anthropogenic disturbance types listed in Table 1.

III. Use of locally collected disturbance data for project authorizations:

- a) In a proposed project analysis area, digitize all existing anthropogenic disturbances identified in the GRSG Monitoring Framework and the 7 additional features that are considered threats to sage-grouse (Table 2). Using 1 meter resolution NAIP imagery is recommended. Use local data if available.
- b) Existing disturbance will be calculated in Wyoming using the Density and Disturbance Calculation Tool (DDCT). This tool along with the State of Wyoming's Core Area Strategy allows for the use of a 5% disturbance cap.

IV. Fire-burned and habitat treatment areas will not be included in the project scale degradation disturbance calculation for managing sage-grouse habitat under a disturbance cap. **These areas will be considered part of a sagebrush availability when rangewide, consistent, interagency fine- and site-scale monitoring has been completed and the areas have been determined to meet sage-grouse habitat requirements.** These and other disturbances identified in Table 3 will be part of a sagebrush availability evaluation and will be considered along with other local conditions that may affect sage-grouse during the analysis of the proposed project area.

V. Planning units are directed to use a density cap related to the density of energy and mining facilities (listed below) during project scale authorizations. If the disturbance density in a proposed project area is on average less than 1/ 640 acres, proceed to the NEPA analysis incorporating mitigation measures into an alternative. If the disturbance density is greater than an average of 1/ 640 acres, either defer the proposed project or co-locate it into existing disturbed area (*subject to applicable laws and regulations, such as the 1872 Mining Law, valid existing rights, etc.*).

- Energy (oil and gas wells and development facilities)
- Energy (coal mines)
- Energy (wind towers)
- Energy (solar fields)
- Energy (geothermal)
- Mining (active locatable, leasable, and saleable developments)

VI. Planning units are directed to continue using the baseline data from the 2013 USGS Baseline Environmental Report (BER) in the Affected Environment section of the proposed plans/ FEISs. West-wide sagebrush availability and habitat degradation data layers will be used for the Priority Habitat Management Areas in each population for monitoring (see the GRSG Monitoring Framework in the Monitoring Appendix of the EIS) and management purposes as the LUPs are being implemented. The BER reported on individual threats across the range of sage-grouse while the west-wide disturbance calculation consolidated the anthropogenic disturbance data into a single measure using formulas from the GRSG Monitoring Framework. These calculations will be completed on an annual basis by the BLM's National Operation Center. Planning units will be

provided the 2014 baseline disturbance calculation derived from the west-wide data once the RODs are signed that describe the Priority Habitat Management Areas.

VII. Planning units are directed to use the three measures (sagebrush availability, habitat degradation, density of energy and mining) in conjunction with other information during the NEPA process to most effectively site project locations, such as by clustering disturbances and/or locating facilities in already disturbed areas. Although locatable mine sites are included in the degradation calculation, mining activities under the 1872 mining law may not be subject to the 3% disturbance cap. Details about locatable mining activities should be fully disclosed and analyzed in the NEPA process to assess impacts to sage-grouse and their habitat as well as to BLM goals and objectives, and other BLM programs and activities.

Additional Information/Formulas

Disturbance Calculations for the BSUs and for the Project Analysis Areas:

- For the BSUs: **% Degradation Disturbance = (combined acres of the 12 degradation threats*) ÷ (acres of all lands within the PHMAs in a BSU) x 100.**
- For the Project Analysis Area: **% Degradation Disturbance = (combined acres of the 12 degradation threats¹ plus the 7 site scale threats²) ÷ (acres of all lands within the project analysis area in the PHMA) x 100.**

¹ see Table 3. ² see Table 2

Project analysis area method for permitting surface disturbance activities:

- Draw the project analysis area polygon which consists of a 4 mile buffer around the proposed project footprint plus areas intersected by any 4 mile buffers from nearby leks or mapped seasonal habitats.
- Map disturbances or use locally available data. Use of NAIP imagery is recommended. In Wyoming, burned areas are included in this step.
- Calculate percent existing disturbance using the formula above. If existing disturbance is less than 3%, proceed to next step. If existing disturbance is greater than 3%, defer the project.
- Add proposed project disturbance footprint area and recalculate the percent disturbance. If disturbance is less than 3%, proceed to next step. If disturbance is greater than 3%, defer project.
- Calculate the disturbance density of energy and mining facilities (listed above). If the disturbance density is less than 1 facility per 640 acres, averaged across project analysis area, proceed to the NEPA analysis incorporating mitigation measures into an alternative. If the disturbance density is greater than 1 facility per 640 acres, averaged across the project analysis area, either defer the proposed project or co-locate it into existing disturbed area.
- If a project that would exceed the degradation cap or density cap cannot be deferred due to valid existing rights or other existing laws and regulations, fully disclose the local and regional impacts of the proposed action in the associated NEPA.

ID and WY will use the disturbance calculation methodology developed prior to this guidance.

Table 1. Anthropogenic disturbance types for disturbance calculations. Data sources are described for the west-wide habitat degradation estimates (Table copied from the GRSG Monitoring Framework)

Degradation Type	Subcategory	Data Source	Direct Area of Influence	Area Source
Energy (oil & gas)	Wells	IHS; BLM (AFMSS)	5.0ac (2.0ha)	BLM WO-300
	Power Plants	Platts (power plants)	5.0ac (2.0ha)	BLM WO-300
Energy (coal)	Mines	BLM; USFS; Office of Surface Mining Reclamation and Enforcement; USGS Mineral Resources Data System	Polygon area (digitized)	Esri/Google Imagery
	Power Plants	Platts (power plants)	Polygon area (digitized)	Esri Imagery
Energy (wind)	Wind Turbines	Federal Aviation Administration	3.0ac (1.2ha)	BLM WO-300
	Power Plants	Platts (power plants)	3.0ac (1.2ha)	BLM WO-300
Energy (solar)	Fields/Power Plants	Platts (power plants)	7.3ac (3.0ha)/MW	NREL
Energy (geothermal)	Wells	IHS	3.0ac (1.2ha)	BLM WO-300
	Power Plants	Platts (power plants)	Polygon area (digitized)	Esri Imagery
Mining	Locatable Developments	InfoMine	Polygon area (digitized)	Esri Imagery
Infrastructure (roads)	Surface Streets (Minor Roads)	Esri StreetMap Premium	40.7ft (12.4m)	USGS
	Major Roads	Esri StreetMap Premium	84.0ft (25.6m)	USGS
	Interstate Highways	Esri StreetMap Premium	240.2ft (73.2m)	USGS
Infrastructure (railroads)	Active Lines	Federal Railroad Administration	30.8ft (9.4m)	USGS
Infrastructure (power lines)	1-199kV Lines	Platts (transmission lines)	100ft (30.5m)	BLM WO-300
	200-399 kV Lines	Platts (transmission lines)	150ft (45.7m)	BLM WO-300
	400-699kV Lines	Platts (transmission lines)	200ft (61.0m)	BLM WO-300
	700+ kV Lines	Platts (transmission lines)	250ft (76.2m)	BLM WO-300
Infrastructure (communication)	Towers	Federal Communications Commission	2.5ac (1.0ha)	BLM WO-300

Table 2. The seven additional features to include in the disturbance calculation at the project

scale

1. Coalbed Methane Ponds
2. Meteorological Towers
3. Nuclear Energy Facilities
4. Airport Facilities and Infrastructure
5. Military Range Facilities & Infrastructure
6. Hydroelectric Plants
7. Recreation Areas Facilities and Infrastructure

Table 3. Relationship between the 18 threats and the three habitat disturbance measures for monitoring and disturbance calculations.

USFWS Listing Decision Threat	Sagebrush Availability	Habitat Degradation	Energy and Mining Density
Agriculture	X		
Urbanization	X		
Wildfire	X		
Conifer encroachment	X		
Treatments	X		
Invasive Species	X		
Energy (oil and gas wells and development facilities)		X	X
Energy (coal mines)		X	X
Energy (wind towers)		X	X
Energy (solar fields)		X	X
Energy (geothermal)		X	X
Mining (active locatable, leasable, and saleable developments)		X	X
Infrastructure (roads)		X	
Infrastructure (railroads)		X	
Infrastructure (power lines)		X	
Infrastructure (communication towers)		X	
Infrastructure (other vertical structures)		X	
Other developed rights-of-way		X	

Background

In the USFWS's 2010 listing decision for sage-grouse, the USFWS identified 18 threats contributing to the destruction, modification, or curtailment of the sage-grouse's habitat or range (75 FR 13910 2010). In April 2014, the Interagency GRSG Disturbance and Monitoring Sub-Team finalized the Greater Sage-Grouse Monitoring Framework (hereafter, framework) to track these threats. The 18 threats have been aggregated into three measures to account for whether the threat predominantly removes sagebrush or degrades habitat. The three measures are:

- Measure 1: Sagebrush Availability (percent of sagebrush per unit area)
- Measure 2: Habitat Degradation (percent of human activity per unit area)
- Measure 3: Density of Energy and Mining (facilities and locations per unit area)

The BLM is committed to monitoring the three disturbance measures and reporting them to the FWS on an annual basis. However, for the purposes of calculating the amount of disturbance to provide information for management decisions and inform the success of the sage-grouse planning effort, the data depicting the location and extent of the 12 anthropogenic types of threats will be used at a minimum in the BSUs and those same 12 anthropogenic and the additional 7 types of features that are threats to sage-grouse will be used in the project analysis areas.

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