

# SAGE-GROUSE UPDATE

SAGEGROUSE\_UPDATE@EWYOMING.GOV, NO. 5

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## FREQUENTLY ASKED QUESTIONS (FAQS)

WHAT IS A FEDERAL OIL AND GAS UNIT VS. A DRILLING AND SPACING UNIT?

Page 2 of Executive Order 2011-5 #2 states in regard to existing activities, "...Provided these activities are within a defined project boundary (such as a recognized federal oil and gas unit, drilling and spacing unit, mine plan, subdivision plat, etc.) they should be allowed to continue within the existing boundary..."

A federal oil and gas unit is a spatial agreement between the BLM and one or more operators formed for the purpose of exploring or developing subsurface oil and gas resources. Among other things, a unit agreement allows multiple operators to develop an area as though it were a single lease, and also allows for sharing of the costs and risks of exploration and production.

A drilling and spacing unit refers to an area that is allocated by the State (i.e., the Wyoming Oil and Gas Conservation Commission) for the placement of wells that will result in the most efficient drainage of an oil or gas reservoir. A drilling and spacing unit generally consists of 40, 80, 160, 320, or 640 acre spacing and will apply to all leaseholders within the defined area. This applies to both surface and down-hole spacing, except in the case of horizontal drilling. Generally, units with horizontal wells are spaced at 640 acres.

Other types of federal and state unit agreements exist for activities such as enhanced recovery and gas storage, but the executive order does not reference these as defined project boundaries.

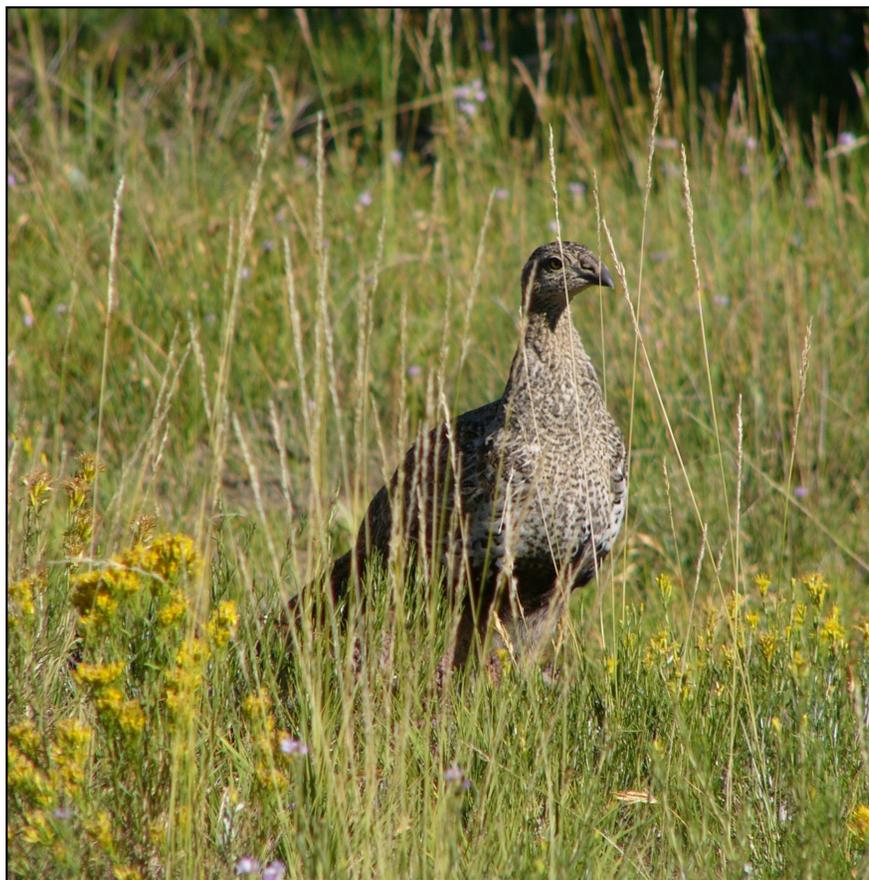


Photo courtesy of John Dahlke

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## HOW DO I COUNT DISRUPTIONS FOR THE 1/640 DDCT CALCULATION?

First and foremost, remember to differentiate the two DDCT calculations: 1) the disturbance calculation (5%) and 2) the density calculation (1/640).

The disturbance calculation is the amount of existing and proposed disturbance (in acres) in the DDCT area that is limited to 5% of the DDCT area according to Executive Order 2011-5. For this calculation, disturbances are roads, well pads, landscape conversions (post-1994), subdivisions, mine units, etc. Everything that has altered, fragmented, or removed suitable sage-grouse habitat in a core area from use is counted and should be digitized.

The density calculation is a count (1, 2, 3, 4, 5, etc.) of the oil and gas and mining disruptive activities per 640 acres. Executive Order 2011-5 recommends that this count does not exceed an average of 1 well pad or 1 mining site per 640 acres within the DDCT area.

This is not a legal 640 acres (i.e., an entire legal section), but is 640 acres averaged across the DDCT area. So, once all of the disturbances have been digitized in the DDCT area, those disturbances or disruptions that are well pads or active mining development areas are counted towards the 1/640 density calculation.

The DDCT model developed by the BLM will output the data for both calculations. To figure out what the average disruption count is across the DDCT area, you need to do a little math. Solve for X.

Example:

$$\frac{1x}{640} = \frac{18}{19000} - \text{oil \& gas/mining disruptions}$$

$$1x \cdot 19000 = 640 \cdot 18$$

$$19000x = 11520$$

$$\frac{19000x}{19000} = \frac{11520}{19000}$$

$$x = 0.60631$$

The disruption count for this DDCT area is 0.61 per 640 acres, which meets the guidelines in the executive order.

## DO PERMITTED BUT NOT CONSTRUCTED DISTURBANCES COUNT?

When using the DDCT to calculate the percent surface disturbance in the DDCT area, it is important to remember to account for both existing on-the-ground disturbances *and* permitted but-not-yet constructed disturbances. For instance, as you are digitizing disturbance in the DDCT area, you may be capturing existing roads, well pads, mining areas, residential developments, vegetation conversions, etc. that are visible at a 1:5000 scale (you may zoom in to a finer scale than this). But, you must also account for and digitize surface disturbances that have been permitted for which construction has not yet started; for instance, permitted wells and access roads or an approved subdivision. Although dirt, so to speak, has not yet been moved on these projects, they are considered a liability because they have been permitted to occur, and may occur at any time. Only once a permit has expired and will not be renewed can you forgo counting it towards the DDCT disturbance calculation.

It is a good idea to talk to folks from the county and local offices of state and federal agencies to determine what activities have been permitted in the area that you may not yet see on the ground. As you are digitizing the disturbance in your DDCT area, it may help you and the reviewer if the disturbance is digitized in a few colors to differentiate among the potential types (i.e., existing, permitted but not constructed, pre-1994, etc.).

## IS WILDFIRE CONSIDERED "DISTURBANCE"?

Yes, wildfire is considered a disturbance for the purpose of the DDCT. According to Executive Order 2011-5, "Following wildfire, lands shall be treated as disturbed pending an implementation management plan with trend data showing the area returning to functional sage-grouse habitat." In other words, a plan for recovery to suitable sage-grouse habitat must be developed and implemented and data demonstrating recovery (i.e., trending towards 5% sagebrush canopy cover) must be obtained for a wildfire area to be considered transitional sage-grouse habitat, and thus not disturbed.

FAQs continued on pg. 5

## DEFINITIONS: LEK LANGUAGE

*The following definitions have been derived from the Wyoming Game & Fish Department Handbook of Biological Techniques\**

### ACTIVE VS. INACTIVE (ANNUAL STATUS)

An “active” lek is one that has been attended by male sage-grouse during the strutting season. Documenting an active lek includes observation of birds using the site or signs of strutting activity.

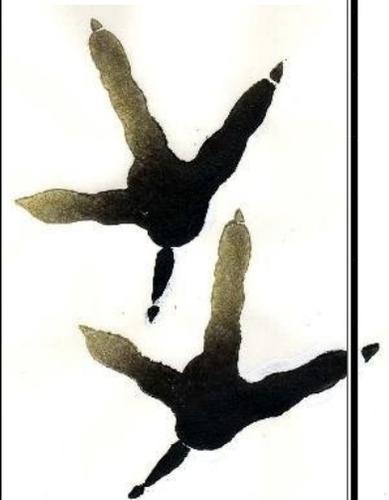
An “inactive” lek is one for which there is sufficient data that no strutting activity occurred at the site throughout the strutting season. Documenting an inactive lek is more complex than documenting an active lek. Absence of strutting grouse during a single site visit is insufficient to establish an inactive lek. To designate a lek as inactive the observer must document 1) an absence of birds on the lek during at least 2 ground surveys (conducted under ideal conditions: April 1—May 7, no precipitation, light or no wind, and 1/2 hour before to an hour after sunrise) separated by at least 7 days, or 2) a ground check of the exact known lek site late in the strutting season (after April 15) that fails to find any droppings or feathers indicating strutting activities. The inactive status may not be established by aerial survey data.

### UNKNOWN (ANNUAL STATUS)

An “unknown” lek is a lek for which status as active or inactive has not been documented. Determining the status of a lek is important, especially given the language of Executive Order 2011-5. It is better to have 2 good lek visits every other year to make the determination that a lek is inactive, than to visit the lek every year, not see any birds, and keep the unknown status. As a general rule, leks should be checked with enough visits to determine whether it is active or not.



Photo courtesy of Wayne Zickefoose



## LEK LANGUAGE, CONT'D

### OCCUPIED VS. UNOCCUPIED (MANAGEMENT CATEGORY BASED ON ANNUAL STATUS)

An “occupied” lek is one that has been active during at least 1 strutting season within the prior 10 years. Occupied leks are protected through prescribed management actions during surface disturbing activities, and in particular by Executive Order 2011-5.

An “unoccupied” lek may be either destroyed or abandoned. An *unoccupied destroyed* lek is a formerly active lek site and surrounding sagebrush habitat that has been destroyed and is no longer suitable for sage-grouse breeding. A lek site that has been altered as a result of strip mining, paving, conversion to cropland, or has undergone other long-term habitat type conversion is also considered destroyed. Destroyed leks are not monitored unless the site has been reclaimed to suitable sage-grouse habitat. An *unoccupied abandoned* lek is one that is in otherwise suitable habitat that has not been active during a period of 10 consecutive years. To be designated as abandoned, a lek must be “inactive” (see criteria on pg. 3) in at least 4 non-consecutive strutting seasons spanning the 10 years. The site of an abandoned lek should be surveyed at least once every 10 years to determine whether it has been reoccupied by sage-grouse.

### UNDETERMINED (MANAGEMENT CATEGORY BASED ON ANNUAL STATUS)

An “undetermined” lek is one that has not been documented as active in the last 10 years, however survey information is insufficient to designate the lek as unoccupied. Undetermined lek sites are not protected through prescribed management actions during surface disturbing activities until sufficient documentation is obtained to confirm the lek is occupied. Executive Order 2011-5 specifically refers to “occupied” leks, and does not offer protection to leks that are managed as undetermined within designated core areas.



Photo courtesy of Tom Christiansen

### CITATION:

Christiansen, T. 2007. Chapter 12: Sage-grouse (*Centrocercus urophasianus*). Pages 12-1 to 12-51 in S.A. Tessmann (ed). Handbook of Biological Techniques: third edition. Wyoming Game and Fish Department. Cheyenne, WY.

\*includes draft language from the 2011 revision of the Handbook of Biological Techniques.

## FAQS, CONT'D

### WHERE CAN I FIND 1994 ORTHOPHOTO QUAD IMAGERY?

1994 Orthophoto quad imagery is recommended for use for evaluating disturbance in the DDCT area for projects in northeast Wyoming. Per Executive Order 2011-5, "*Land in northeast Wyoming (Figure 1 of Attachment B) that has had sagebrush removed post-1994 (based on Orthophoto interpretation) and not recovered to suitable habitat will be considered disturbed when using the DDCT.*" This U.S. Geological Survey data—Black and White Digital Orthophoto Quarter-Quadrangles 1994 for Wyoming—can be found on the Wyoming Geographic Information Science Center (WyGISC) Geolibary at <http://wygl.wygisc.org/wygeolib/catalog/main/home.page>. For more information, contact WyGISC at (307) 766-2532 or email [wygisc-info@uwyo.edu](mailto:wygisc-info@uwyo.edu).

### ARE SAGE-GROUSE SEASONAL HABITAT MODELS AVAILABLE?

The statewide seasonal habitat modeling/mapping effort is being conducted by U.S. Geological Survey with funding support from industry, U.S. Fish and Wildlife Service, BLM, and local sage-grouse working groups. This modeling/mapping is expected to be completed in early 2012.

### HAVE A QUESTION?

Email it to

[sagegrouse\\_update@ewyoming.gov](mailto:sagegrouse_update@ewyoming.gov)

## KEEPING YOU IN THE LOOP

- ◆ Wyoming sage-grouse RMP amendments for six BLM field offices are scheduled to be completed by the end of 2012. For more information on the amendment and timeline, visit:

<https://www.blm.gov/epl-front-office/eplanning?planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=18703>

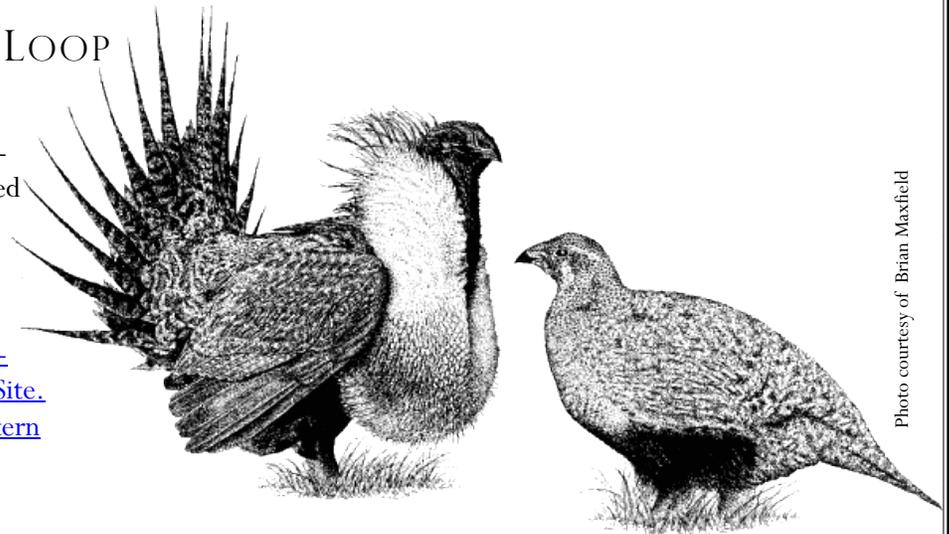


Photo courtesy of Brian Maxfield

- ◆ The National Greater Sage-grouse Planning Strategy has set in motion a BLM effort to conduct rangewide planning for the greater sage-grouse. This conservation strategy will involve amending some 70 field office Resource Management Plans (RMPs) from the Great Basin to the Dakotas by 2015 and an interim Instruction Memorandum. For more information, visit: [http://www.blm.gov/wo/st/en/prog/more/fish\\_wildlife\\_and/sage-grouse-conservation/energy.html](http://www.blm.gov/wo/st/en/prog/more/fish_wildlife_and/sage-grouse-conservation/energy.html)
- ◆ Information on Candidate Conservation Agreements with Assurances (CCAAs) is available from the USFWS Wyoming Ecological Services field office online at: [http://www.fws.gov/wyominges/Pages/LandownerTools/CCAA/CCAA\\_Home.html](http://www.fws.gov/wyominges/Pages/LandownerTools/CCAA/CCAA_Home.html)
- ◆ Interagency Sage-Grouse Update newsletters are available on the WGFD website at [http://gf.state.wy.us/wildlife/wildlife\\_management/sagegrouse/index.asp](http://gf.state.wy.us/wildlife/wildlife_management/sagegrouse/index.asp) and also on the ftp\_piaa site.

## WHAT ARE WE WORKING ON NOW?

Our working group (BLM, WGFD, USFS, NRCS, and State Agencies) continues to meet on a regular basis to discuss issues that come up regarding the implementation of the core area strategy. We are continuing to hammer out workable solutions to issues brought to our attention from folks in the field, and work to provide clarity on policy and process questions as they arise.

### EXECUTIVE ORDER & DDCT TRAINING

In July, the WGFD and the BLM hosted a training event open to the public on the policies and procedures related to Executive Order 2011-5. The first day of the workshop focused on discussion about the policy and its implementation. The second day of the workshop focused on the technical procedure, namely using the Density and Disturbance Calculation Tool. Workshop materials are available on the ftp\_piaa site in the 'PIAA(DDCT)\_Resources—July 2011 EO-DDCT Training' folder.

### DDCT TOOLS AND DATA

We are continuing to work with GIS folks from the NRCS, BLM State Office, WGFD, and Wyoming Geographic Information Science Center (WyGISC) to develop a web-based DDCT application where projects can be uploaded, digitized, calculated, and stored. The web application proposal is designed to create data consistency, both in inputs and in outputs, and alleviate data access issues related to using the DDCT on a statewide scale. A dedicated "data steward" is an integral component of this proposal.

The development of the application has begun, and we are continuing to work towards funding to create a data steward position. The web application is expected to be operational before the end of the year. We will plan another training event for use of the new application.

In the meantime, you can continue to use the DDCT model that was developed by the BLM (available on the ftp\_piaa site in the 'GISfiles' folder). The model runs in ArcGIS 9.2 and 9.3 and no longer requires X-tools. The BLM model does not run in ArcGIS 10.

### EXISTING UNIT AGREEMENTS WITHIN SAGE-GROUSE CORE AREAS

Earlier this year, the Sage-Grouse Implementation Team (SGIT) determined that federal oil and gas and State-delineated drilling and spacing units (see FAQ pg. 1) existing prior to the core area strategy (8/1/08) are not subject to the core area requirements of the executive order, and oil and gas development within the unit boundaries may exceed the density and disturbance caps. It has been determined that federal oil and gas units and drilling and spacing units cover about 5.2% of core area, or approximately 791,154 acres. In September, members of the SGIT will continue their conversation regarding units to discuss the potential impacts of continued unitized development in core areas.

### SAGE-GROUSE 'CHEKOV'

As more DDCTs are being completed and submitted by industry and agencies for review, the interagency team identified a need for consistency in that review. The 'sage-grouse chekov (check-off)' has been developed for DDCT reviewers. The worksheet is a tool for reviewers of the Greater Sage-Grouse Core Area Protection Executive Order 2011-5 DDCT (Attachment B-Permitting Process) to help determine the completeness and accuracy of the DDCT inputs and outputs provided by a project proponent. It is available on the ftp\_piaa site in the 'PIAA(DDCT)\_Resources' folder.

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### Questions, comments, or concerns?

Email [sagegrouse\\_update@ewyoming.gov](mailto:sagegrouse_update@ewyoming.gov)

Contact Mary Flanderka at (307) 777-4587  
or Amanda Losch at (307) 777-2967

## FTP\_PIAA SITE INSTRUCTIONS

### **USING INTERNET EXPLORER:**

1. Open Internet Explorer and enter <ftp://gf.state.wy.us/> in the browser.
2. Enter username: ftp\_piaa and password: piaa123.
3. Go to right side of toolbar and click Page (next to print button).
4. Scroll down and click 'Open FTP Site in Windows Explorer'.
5. Re-enter username and password.

### **USING WINDOWS EXPLORER:**

1. Left click Windows Start button on bottom left corner of screen.
2. Go to Computer and enter ftp://gf.state.wy.us/ in the browser.
3. Enter username: ftp\_piaa and password: piaa123.

**TIP:** Download documents to your desktop before opening or printing.

**REMINDER:** Download the latest data from the ftp site each time you do a DDCT.

### **TROUBLE SHOOTING:**

1. Open Internet Explorer browser and go to Tools on the right side of toolbar.
2. Scroll down to Internet Options.
3. Go to the Advanced tab and check the following boxes under Browsing:
  - a. Enable FTP Folder View
  - b. Use Passive FTP
4. Try accessing the ftp site again.