

# SAGE-GROUSE UPDATE

SAGEGROUSE\_UPDATE@EWYOMING.GOV, NO. 2

MARCH 16, 2011



Photo courtesy of Tom Christiansen

## FREQUENTLY ASKED QUESTIONS (FAQS)

SHOULD THE PROJECT IMPACT ANALYSIS AREA (PIAA) PROCESS BE CONDUCTED ON A NOTICE OF STAKING (NOS), IN ADDITION TO AN APPLICATION FOR PERMIT TO DRILL (APD) IN SAGE-GROUSE CORE AREAS?

NO, the PIAA process is not needed for an NOS, but is required for an APD in core areas.

SHOULD THE PIAA PROCESS BE CONDUCTED ON LEASE SALES IN SAGE-GROUSE CORE AREAS? WHAT ABOUT GEOPHYSICAL SURVEYS?

NO, lease sales in core areas do not require the PIAA process. Geophysical surveys may require the PIAA process depending on the anticipated level of ground disturbance, but are more likely to be covered with Conditions of Approval (COA) that limit activity during certain times of the year and within certain distances of leks.

WHAT IS THE PROJECT BOUNDARY FOR A VEGETATION TREATMENT?

The project boundary of a vegetation treatment inside or outside of sage-grouse core areas is the area in which there is authorization to conduct the work. Inside core areas, acres of planned disturbance will be factored into the 5% disturbance calculation and should be known or well-estimated based on the treatment prescription.

IS THE PIAA PROCESS REQUIRED FOR A VEGETATION TREATMENT IF IT WILL NOT RESULT IN REDUCTION OF SAGEBRUSH CANOPY COVER TO LESS THAN 15%?

NO, the PIAA process is not necessary for a vegetation treatment that does not result in reduction of sagebrush canopy cover to <15%, but a documented plan, objectives, and results of the treatment are necessary (see *WGFD Protocols for Treating Sagebrush to Benefit Sage-grouse*).

### INSIDE THIS ISSUE:

|                              |   |
|------------------------------|---|
| FAQS, CONT'D                 | 2 |
| PIAA EXAMPLE:<br>BISON BASIN | 3 |
| NEW & UPDATED ITEMS          | 7 |
| IN THE LOOP                  | 7 |
| WHAT'S NEXT?                 | 8 |
| FTP SITE<br>INSTRUCTIONS     | 8 |

IS THE PIAA PROCESS REQUIRED FOR AQUATIC HABITAT PROJECTS THAT OCCUR IN CORE AREAS?

NO, aquatic habitat projects will not require the PIAA process as long as they do not result in the reduction of sagebrush canopy cover to <15%. They will be required to implement applicable seasonal stipulations and provide project documentation (see *WGFD Protocols for Treating Sagebrush to Benefit Sage-grouse*). So, instream structures and associated bank projects requiring the small-scale removal of sagebrush will not require the PIAA process, but are subject to timing stipulations (see *Executive Order 2010-04 page B-4, #7*).

THE PIAA MODEL OUTPUT INCLUDES A LEK-BY-LEK ANALYSIS OF SURFACE DISTURBANCE. WHAT IS THIS ANALYSIS FOR, AND HOW DO I USE IT?

The lek-by-lek analysis provides the percentage of disturbed and undisturbed lands within 4 miles of a lek that falls within core area. Not all lek-by-lek analyses are equal in size, because in some cases, very little of the 4-mile lek buffer actually falls within core area. The point of the lek-by-lek analysis is for the biologists and project proponents to use the information to drive alternatives and decision making. The lek-by-lek analysis can be joined to tables with information such as peak male counts allowing biologists to better analyze the impacts of a project.

For example, if analysis showed that the disturbance within one lek boundary was equal to 12 percent but the male count has been 0 for the past 2 years a biologist or proponent may analyze impacts differently than if the same lek has had a peak male count of 70 for the past 2 years. The lek-by-lek analysis is another tool to analyze the impacts associated with a particular project.

HOW DO YOU DETERMINE WHAT IS SUITABLE HABITAT WITHIN SAGE-GROUSE CORE AREAS?

All core areas are considered suitable habitat unless otherwise mapped using established vegetation mapping protocols.

HOW LONG ARE THE RESULTS OF THE PIAA PROCESS VALID?

The results of the PIAA process are good for the life a project, and once a project is approved, it will count as "permitted" surface disturbance for future PIAA analyses. Clearly defined project boundaries must depict the area that is anticipated to be disturbed. This permitted disturbance must be added to the disturbance layer.

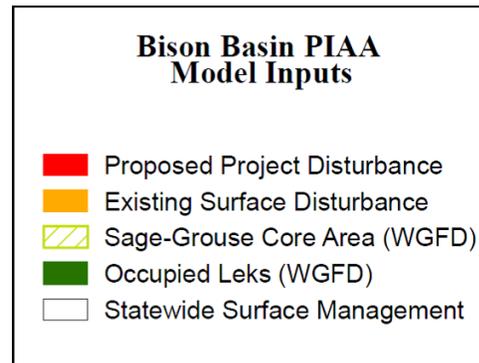
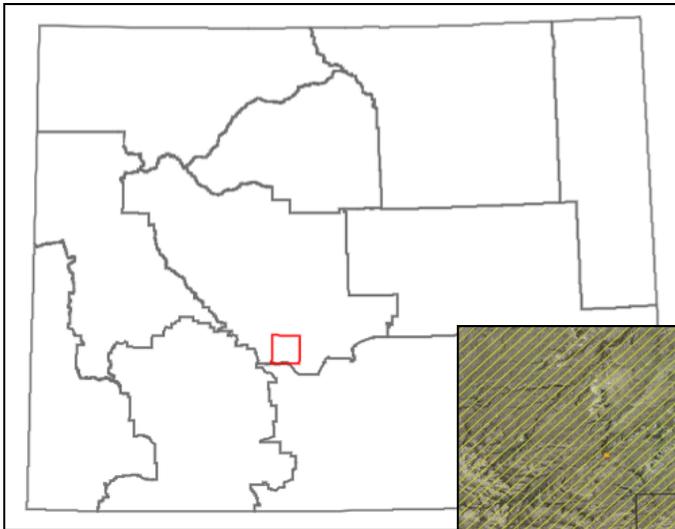
For example, Joe Biologist is planning a 3-phase vegetation treatment in sage-grouse core area that will occur over the course of 10 years. Joe should create a shapefile that depicts the project boundaries (i.e., the area that he intends to disturb via treatment in 3 phases over the course of 10 years). Joe must conduct the PIAA process to determine whether or not his proposed project meets the disturbance recommendations (limited to 5% of suitable sage-grouse habitat per an average of 640 acres) set forth in the State of Wyoming Greater Sage-Grouse Core Area Protection Executive Order 2010-4. If Joe's proposed project is approved and the PIAA analysis indicates that it does not exceed the vegetation disturbance cap, then Joe may go forward with his project. Joe's project area should be digitized in the surface disturbance layer so that future PIAA analyses can account for this approved vegetation disturbance. The PIAA analysis that he conducted in 2011 is good through 2021 for all phases of the treatments, and he need not repeat the analysis UNLESS a treatment does not go as planned and his project boundaries are altered. Joe may then need to conduct the PIAA process again to determine whether or not the unanticipated disturbance will exceed the 5% cap, and he must now account for all the activities (i.e., disturbances) that have been permitted or have occurred on the ground since his first analysis. He should also adjust the shapefile and the disturbance layer to account for what really happened on the ground (i.e., the actual disturbance) after each phase of the project is complete.

HAVE A QUESTION?

Email your questions to

[SAGEGROUSE\\_UPDATE@EWYOMING.GOV](mailto:SAGEGROUSE_UPDATE@EWYOMING.GOV)

## PIAA: BISON BASIN

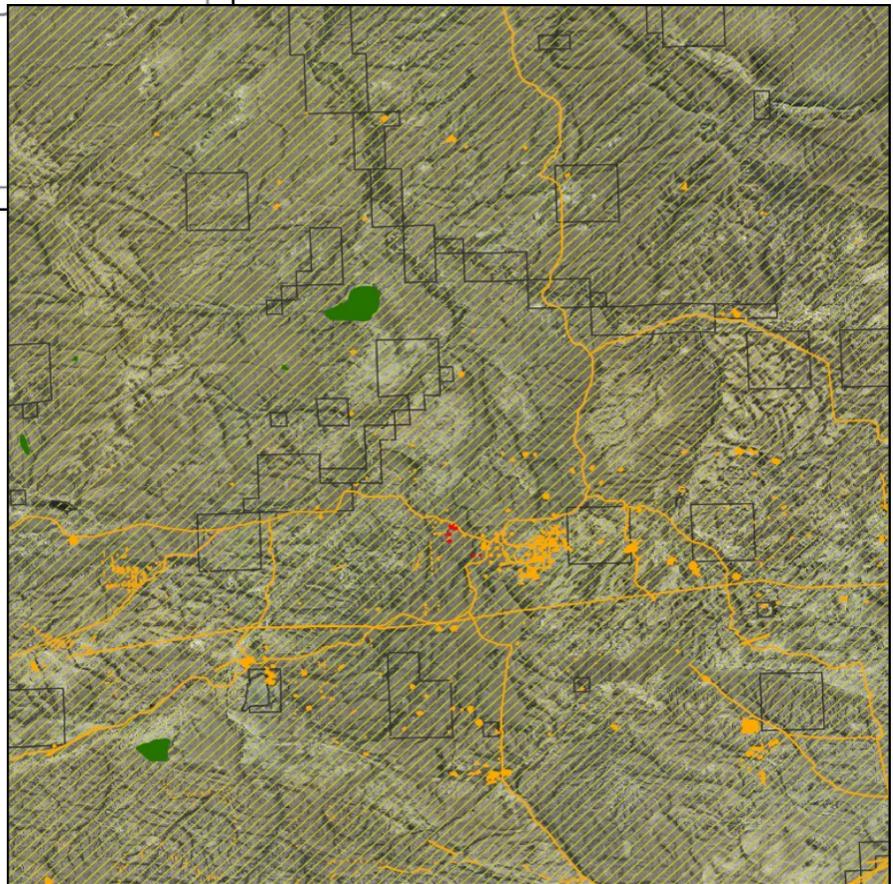


### BACKGROUND

The Bison Basin project is a series of lease-held wells that are outside of an oil and gas unit on BLM land. The project includes the proposed wells and associated pads and access roads.

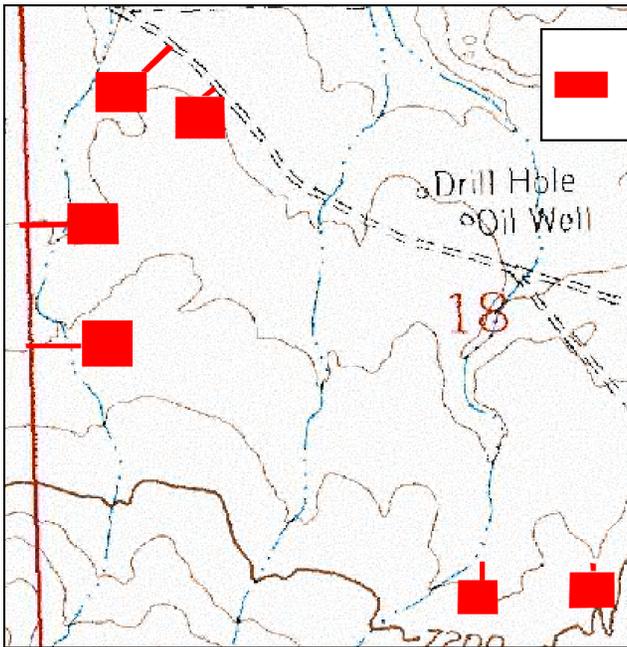
At a minimum, a person conducting the PIAA process will need:

- 1) the proposed project boundary shapefile (should be provided by the project proponent);
- 2) the WGFD sage-grouse core areas (v.3) layer;
- 3) the WGFD occupied leks perimeter file (these are polygons not points);
- 4) the Wyoming BLM statewide surface management layer; and
- 5) the surface disturbance feature class from the SurfDist geodatabase (initially, the existing disturbance may or may not be digitized for the project area).



*\*\*This PIAA example illustrates the steps the BLM PIAA model completes with the input of project and area specific information.*

### PIAA: BISON BASIN, CONT'D



 Proposed Project Disturbance

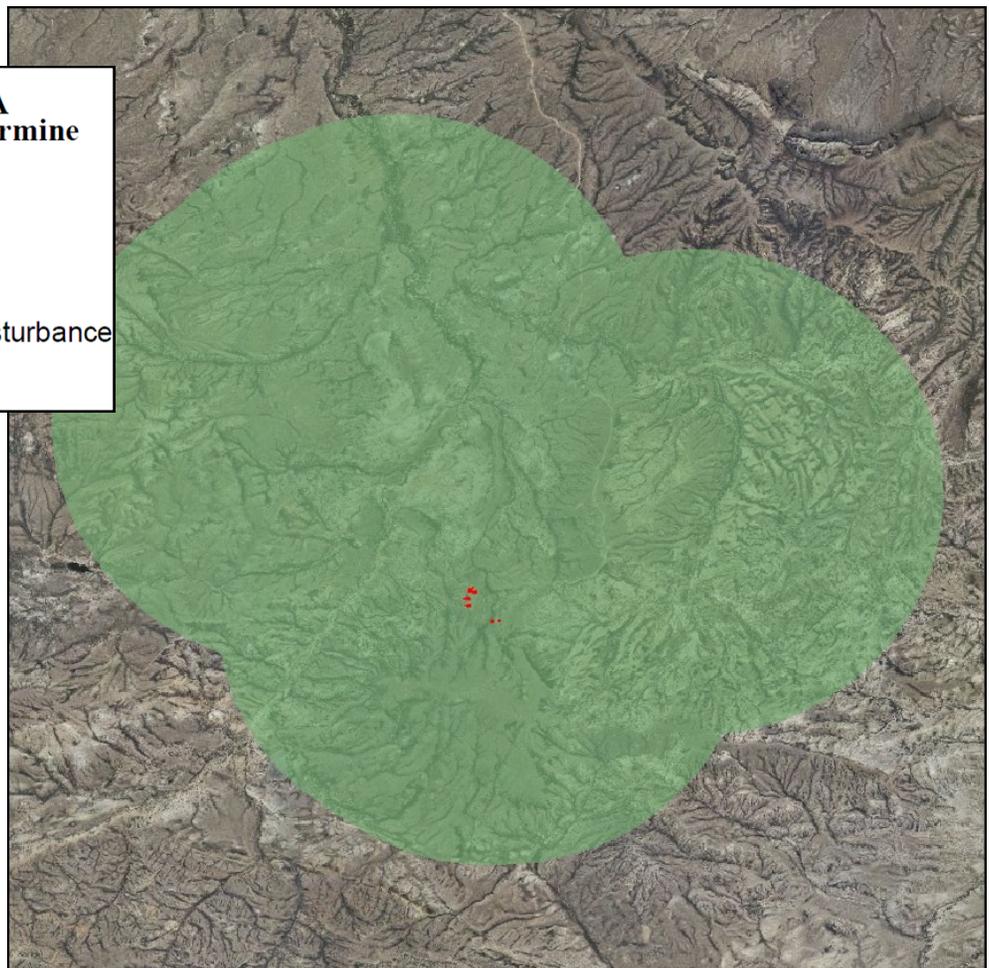
The proposed surface disturbance may have to be digitized off of a hard copy map, or else should be a digital file provided by the project proponent.

A “disrupt” and a “disturb” field must be added to the attribute table of the proposed project boundary file. Using a value of 1 in both fields allows the model (*BLMModel 030911*) to count the proposed disturbance in the 5% surface disturbance calculation and the 1/640 density calculation (refer to *PIAA Process Manual* for more detailed instructions).

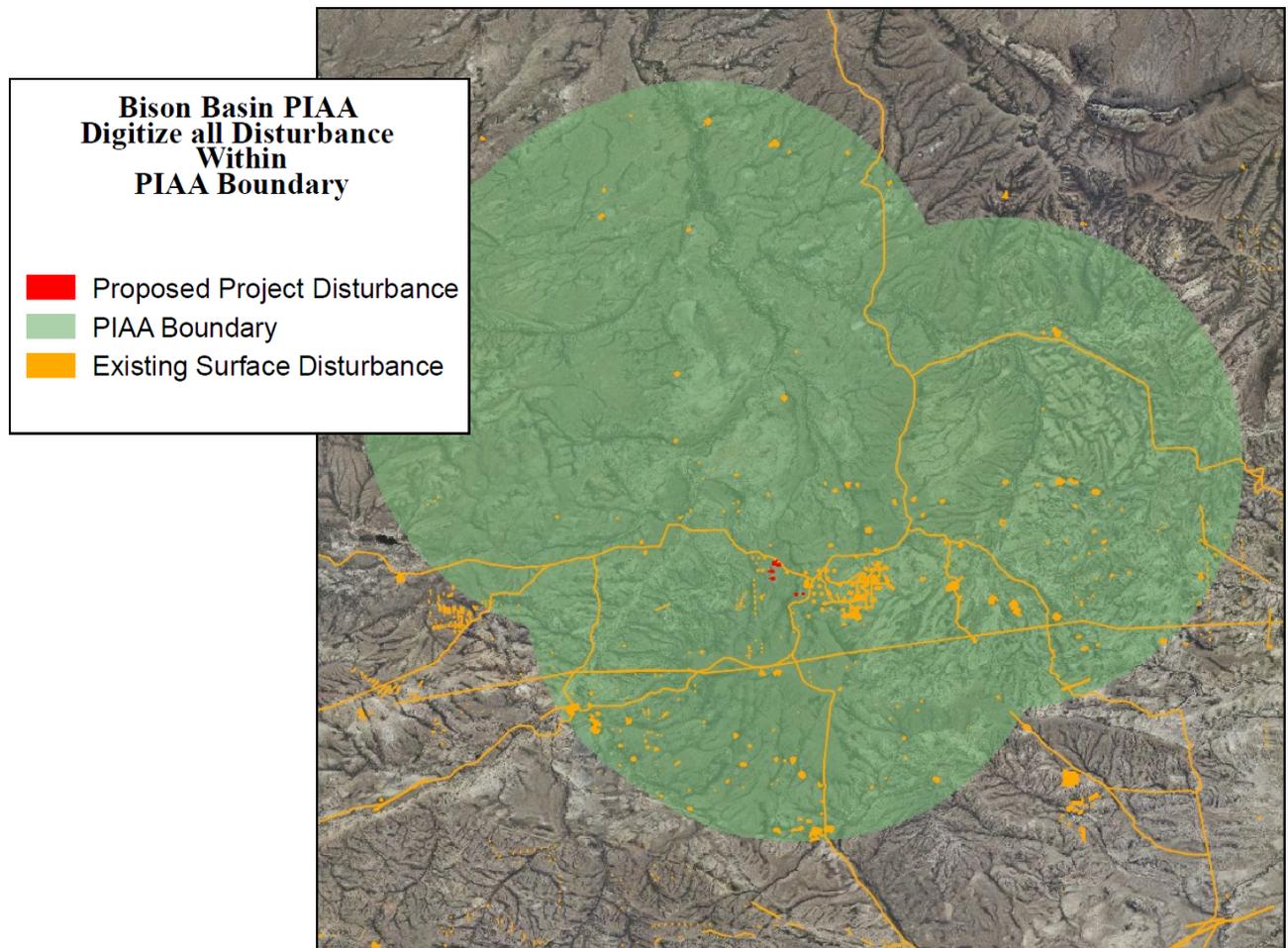
**Bison Basin PIAA  
Model Run #1 to Determine  
PIAA Boundary**

 Proposed Project Disturbance  
 PIAA Boundary

In the PIAA process the proposed project boundary is buffered by 4 miles and clipped to the core area boundary. The occupied leks within the 4-mile buffer around the proposed project boundary are then buffered themselves by 4 miles and clipped to the core area boundary. These polygons are then unioned and dissolved, creating the PIAA.



## PIAA: BISON BASIN, CONT'D

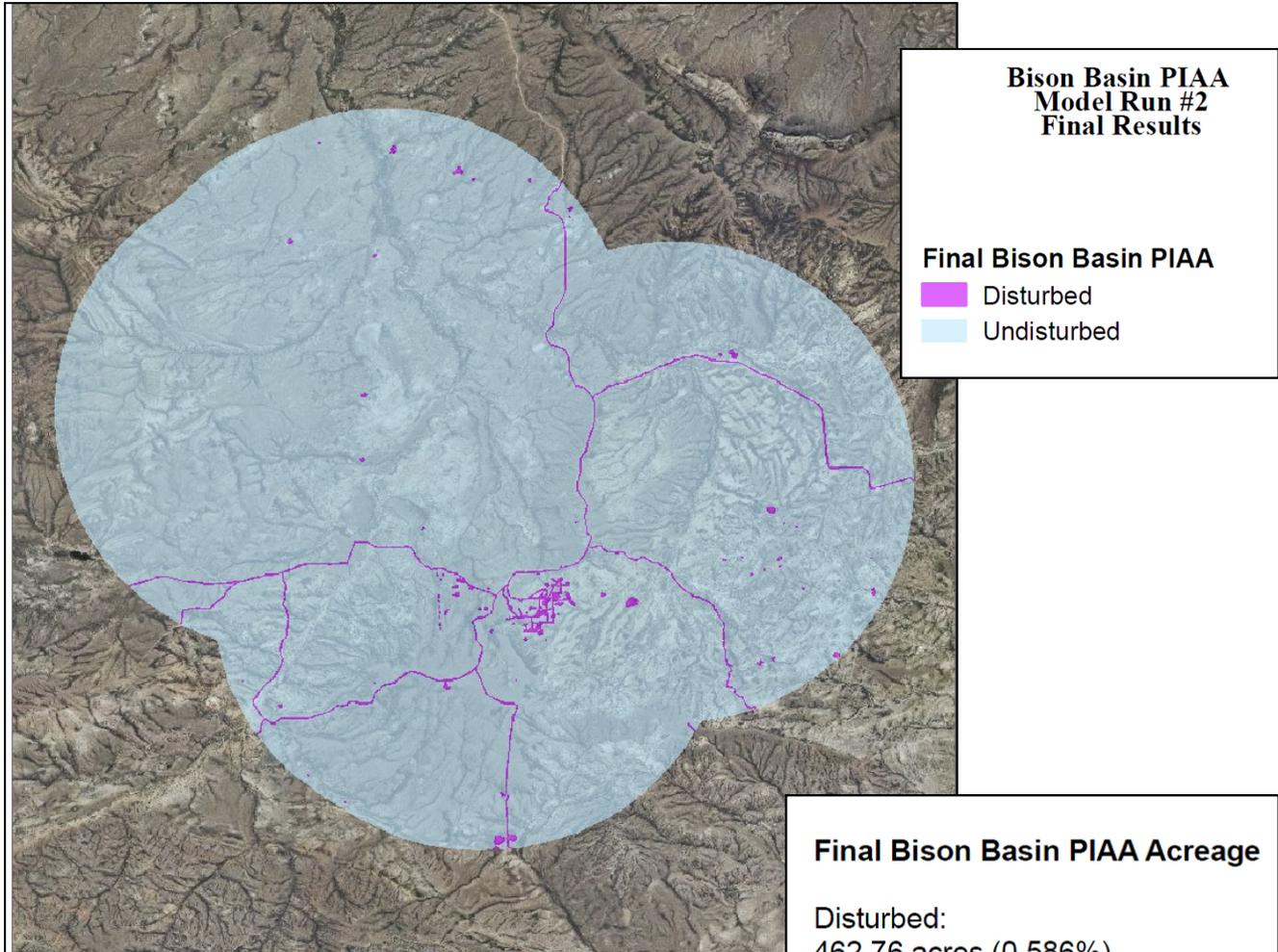


## SURFACE DISTURBANCE AND DISRUPTIVE ACTIVITY

All disturbance must be accounted for using existing disturbance files (e.g., SurfaceDist feature class from the SurfDist geodatabase, roads, oil and gas wells, etc.). Any missing or inaccurately captured disturbances must be digitized using NAIP imagery at a minimum 1:5000 scale and the Sketch Tool on ArcMap. All of the surface disturbance polygons are dissolved to avoid over calculating the disturbed area.

Additionally, the “disrupt” and “disturb” fields in the attribute table of the SurfaceDist feature class must be populated with a value of 1 in order for the model to accurately calculate the number of disruptive activities per average of 640 acres (i.e., density calculation). If a disruption captured in the surface disturbance file is later determined not to be a disruptive activity, the field value can be changed to 0 and the model rerun to get an accurate 1/640 density calculation.

## PIAA: BISON BASIN, CONT'D



The model outputs appear in the 'FinalAnalysis1283\_Lyr' and the 'FinalIndivLek\_Lyr'. The attribute table of the 'FinalAnalysis1283\_Lyr' displays the total number of acres in the PIAA that are disturbed and undisturbed, as well as the percent of disturbed and undisturbed area. The percent of disturbed area within the PIAA is calculated by dividing the acres of disturbed area (i.e., unsuitable habitat) by the acres of undisturbed area (i.e., suitable habitat), then multiplying by 100. This percentage represents the amount of surface or vegetation disturbance, and is limited to 5% of suitable habitat within the PIAA.

The attribute table of the 'FinalIndivLek\_Lyr' file displays the percent disturbance for each lek within the PIAA boundary. See FAQs on pg. 2 for more information on how to use the lek-by-lek analysis.

The *PIAA Process Manual* was jointly developed by BLM and WGFD GIS specialists. It is a guide intended to clarify the purpose of the PIAA process, outline the data needed to conduct the PIAA process, instruct on how to use the BLM model, as well as how to delineate a PIAA step-by-step. The PIAA process is also outlined in Executive Order 2010-4. The *PIAA Process Manual* is available on the [piaa\\_ftp](#) site.

## NEW & UPDATED ITEMS

### FTP\_PIAA SITE

#### Folder: PIAA Resources

- ◆ The PIAA Process Manual has been updated: *V\_PIAA\_Process\_Manual\_Updated030911*

#### Folder: GISfiles

- ◆ The PIAA model has been updated for ArcGIS 9.2 and 9.3 and no longer requires X-tools: *BLMModel030911*



Photo courtesy of Stan Harter

## IN THE LOOP

- ◆ To date, a new Executive Order has not been signed by Governor Mead, but action is anticipated at the end of April 2011.
- ◆ BLM IM 2010-012 is in the process of being updated and is anticipated to be completed and signed pending the issuance of a new Executive Order.
- ◆ 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>
- ◆ Sage-grouse policy and procedure workshops for industry, state agencies, and other interested organizations are being planned for June/July 2011.
- ◆ 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)



## WHAT ARE WE WORKING ON NOW?

Our working group continues to meet on a bi-weekly 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.

### COORDINATION WITH STATE AGENCIES

Our working group invited representatives from State agencies to our meeting on Feb. 14 to discuss conflicts and issues pertaining to the Executive Order, and to find out what the various agency processes are for its implementation. We had the opportunity to meet with folks from the Office of State Lands and Investments (OSLI), State Engineer's Office (SEO), Department of Transportation (WYDOT), the Department of Environmental Quality (DEQ), and the Wyoming Oil and Gas Conservation Commission (WOGCC).

### PIAA TOOLS AND DATA

We are continuing to work with GIS folks from the NRCS, BLM State Office, WGFD, and Wyoming Geographic Information Science Center (WyGIS) to pro-



Photo courtesy of Tom Christiansen

pose a web-based PIAA 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 conducting PIAAs on a statewide scale. A dedicated "data steward" is an integral component of this proposal.

### SGIT MEETING

The Sage-grouse Implementation Team (SGIT) is scheduled to meet this month to discuss the PIAA web application proposal, as well as to discuss a few other topics to clarify the language in the Executive Order.

---

## FTP\_PIAA SITE INSTRUCTIONS

1. Enter <ftp://gf.state.wy.us/> in your Windows Explorer internet browser.
2. Enter Username: **ftp\_piaa** and Password: **piaa123** in the dialogue box.
3. Your webpage will read: FTP root at gf.state.wy.us, followed by a line of instructions.
4. Accordingly, click **Page** on the internet browser toolbar, and then scroll down the menu and click **Open FTP Site in Windows Explorer**.
5. Enter the same username and password as described in Step 2.

Now you will be able access GIS data (GISfiles folder) and documents from the workshops (PIAA\_Resources).

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

---

## Questions, comments, or concerns?

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

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