Jonah Interagency Office
Pinedale Anticline Project Office

JIO-PAPO Continues to Evolve

This fall, JIO-PAPO reclamation specialist and Pinedale Field Office (PFO) weed coordinator Deej Brown left Pinedale in search of greener pastures in the Kemmerer Field Office. In the wake of her departure, Cara Farr, JIO-PAPO rangeland management specialist, and Windy Kelley, JIO-PAPO/WDA agriculture program coordinator, will be assuming reclamation duties. Cara and Windy will be working closely with the BLM fluid minerals staff and the operators to ensure every effort is made to achieve successful reclamation as quickly as possible. Summer Schulz, PFO rangeland management specialist, will be responsible for weed management.

A new DEQ air quality engineer/inspector will be coming on board in December and will concentrate on inspection activities in the Pinedale Anticline. This person will join Jennifer Frazier, the DEQ inspector responsible for the Jonah field. Additionally, we are in the process of hiring a data manager to oversee the massive amounts of monitoring data the JIO/PAPO receives and which needs to be placed into the online JIO and PAPO databases.

The open application season for 2011 project funding has ended. We have received 19 applications for funding from either the JIO or the PAPO accounts. These applications are being reviewed by our staff and will be forwarded with recommendations to the respective Board of Directors for a vote at the March board meeting.

Other 2010 Reclamation News

In the Jonah field, five EnCana locations accounting for 8.75 acres have met roll-over criteria. This brings the total EnCana roll-over acreage to 21.5 acres on 13 sites. EnCana is the only company with sites that rolled over.

This field season marked the first year of monitoring on the Pinedale Anticline Project Area (PAPA) under the 2008 SEIS ROD guidelines. The USGS database for the PAPA is progressing and operators should begin uploading their data this winter.

Please feel free to contact Cara Farr (cara_farr@blm.gov; 307-367-5339) or Windy Kelley (WKelle@state.wy.us; 307-367-5378) if you have any reclamation questions pertaining to the Jonah or Pinedale Anticline fields.

Inside this issue:

Greetings! My name is Windy Kelley

I am the new Jonah Infill Office (JIO) and Pinedale Anticline Project Office (PAPO) agriculture program coordinator for the Wyoming Department of Agriculture (WDA).

In my brief time with WDA and the JIO/PAPO, I have had the opportunity to meet several of you at various meetings, including the Grazing Board Meeting in October, as well as in the field. I know there are many of you that I have not yet met, but I look forward to formally introducing myself and getting out on the ground to see and learn about your work.

Please feel free to contact me if you have any questions about the WDA, the JIO/PAPO, or if you're ever passing through and want to stop by the office. My email address is WKelle@state.wy.us and my office phone number is (307) 367-5378.

Windy Kelly

Mesa Mule Deer Winter Habitat Improvement Project

The northern end of the Pinedale Anticline known as the Mesa has been well documented relative to its importance for approximately 3,000 to 5,000 wintering mule deer from the Sublette Mule Deer Herd.

The potential for increasing shrub productivity on winter ranges through fertilization was documented by Len Carpenter in 1975, among others. Carpenter studied sagebrush ranges in Middle Park, Colorado with three study sites located in mule deer winter ranges with elevations from 7,800 to 8,200 feet and average annual precipitation from 11 to 14 inches. Carpenter found that "total herbage and shrub herbage yields significantly increased with increasing levels of nitrogen fertilizer each year. Nitrogen fertilizer did not consistently increase forb and grass yields." In addition, with respect to the herbicide treatment, "the herbicide reduced shrub herbage, total herbage, and forb yields in all years. Grass yields increased in all years on the herbicide treated plots."

On the basis of Carpenter's study and a few others, the PAPO originally proposed to fertilize and treat approximately 800 acres with SPIKE (tebuthiron). This would primarily increase shrub production for mule deer and had the potential to increase herbaceous production to benefit other species. After scoping and further analysis, the scope of the project was reduced and an alternative was selected which included the application of nitrogen on two adjoining sites totaling approximately 468 acres.

The nitrogen application was completed on October 23. Precipitation soon followed which helped the nitrogen penetrate the soil and avoided loss of the product.

Sagebrush leaders and herbaceous production will be closely monitored on an annual basis during the next several years to determine the success of the treatment. Future projects or phases are being considered and identified pending the success of the project based on the monitoring results.

Each of these bags held approximately 450 pounds of urea (fertilizer).

Above and below: The "Bobcat" was used to load the hopper or spreader that the helicopter used.

Approximately 30 tons of fertilizer was applied to achieve the 40 and 80 pound rates on about 468 acres.

Over 100 trips were made with the spreader attached to the helicopter to complete the project.

Actual spreading of the fertilizer.

Jonah Infill Data Management System

To enable the JIO to monitor reclamation efforts required by the Jonah Infill Record of Decision (ROD) and help with reclamation decisions, a web application database was developed by the United State Geological Survey (USGS) Fort Collins Science Center for the JIO.

This application is now available to the public on the web and can be accessed through the JIO-PAPO web site at http://www.wy.blm.gov/jio-papo/ or through this USGS link http://data.fort.usgs.gov/jio/home

Fig. 1 shows how the application appears when you first open it. Fig. 2 shows several options for reviewing data from various operators and also generates reports. Fig. 3 shows data pertaining to individual sites.

The USGS is currently working on a similar database for the PAPO. The Pinedale Anticline Data Management System (PADMS) will have a few more data requirements as detailed in the Pinedale Anticline ROD. The PADMS will be available sometime in the future.

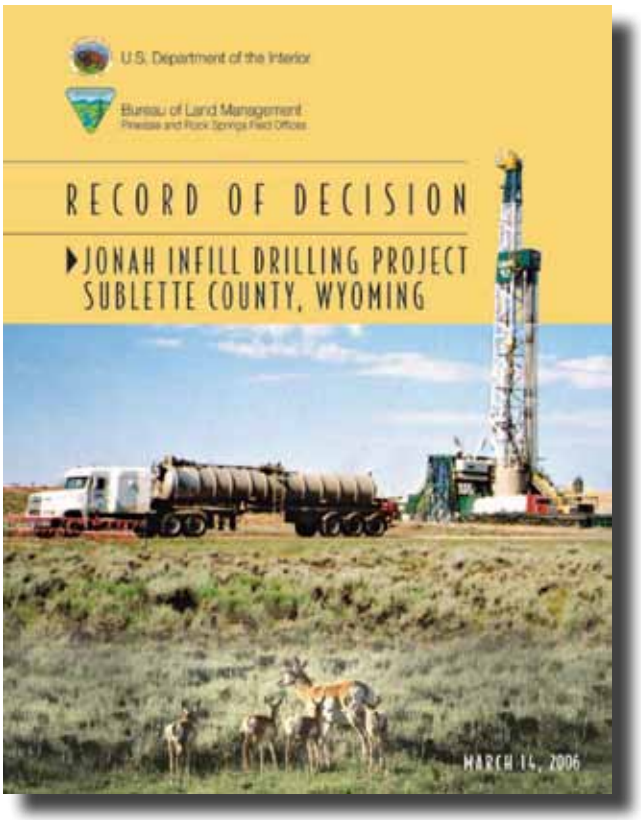

Fig. 1 (Screen capture from Web site)

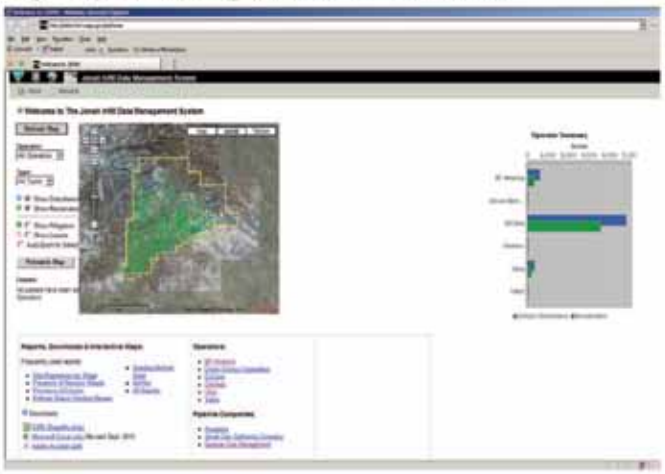

Fig. 2 (Screen Capture inside of application)

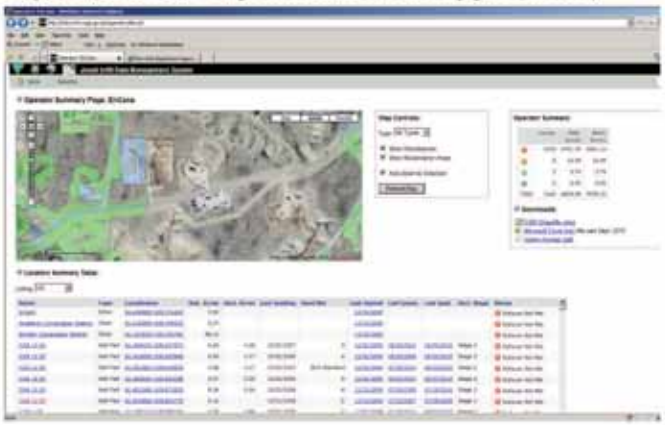

Fig. 3 (Screen Capture inside of application)

Summary results of the 2009 sage-grouse monitoring on the Pinedale Anticline

In March 2009, the PAPO contracted with KC Harvey, Inc., to monitor sage-grouse in the Pinedale Anticline Project Area (PAPA). The purpose was to meet monitoring requirements of the Supplemental Environmental Impact Statement (SEIS) Record of Decision (ROD) for the Pinedale Anticline Oil and Gas Exploration and Development Project Area and included capturing and collaring sage-grouse hens, tracking them to determine nesting success and habitat selection, and monitoring noise levels at leks.

In late March to mid-April, KC Harvey field scientists captured and collared 89 sage-grouse hens from five lek complexes in the PAPA. Three of the lek complexes were in oil and gas development areas and two were in reference areas.

After capture, the collared sage-grouse hens were tracked between one and three times per week through the nesting period in early June. The hens were then tracked on a monthly basis during the summer and fall to determine habitat selection. Fifteen of the collared hens were mortalities in 2009; five prior to the nesting period, five during and five after.

Sixty-seven (80%) of the remaining 84 collared hens initiated a nest. The proportion of hens initiating a nest in reference complexes was 74 percent compared to 87 percent for the development areas. Thirty-one percent of sage-grouse hens had a successful hatch, with a slightly higher successful hatch rate in reference area complexes (33%) compared to development area complexes (29%). Egg predation was common with 35 nests predated. Of these, 20 were from mammalian predators, 11 from avian predators and 4 were unknown.

After the nesting period, KC Harvey field personnel tracked collared sage-grouse hens on a monthly basis to assess habitat selection. Analysis of the distance between tracking locations and oil and gas development areas provided the information to determine the avoidance distance referred to in the ROD. Comparison of the 2009 data with 2010 and future years of data will satisfy the habitat selection monitoring requirements defined in the ROD.

During late March to mid-April, noise-monitoring equipment was also deployed for a series of ten and five day periods at 13 leks within the development complexes. Noise monitoring results indicated that none of the monitored leks had average noise levels above the thresholds defined by the ROD. However, subsequent review indicated that the thresholds were not developed using data from the Pinedale Anticline area. In the future, noise data collection from the project area is recommended to determine if the existing noise thresholds are representative or if they require modification.

The entire 2009 sage-grouse Monitoring Report may be found at http://www.wy.blm.gov/jio-papo/papo/index.htm