



June 2009

*Bureau of Land Management * Wyoming Department of Agriculture *
Wyoming Game & Fish * Wyoming Department of Environmental Quality*

JIO AND THE NEW PAPO

Submitted by Jim Lucas, JIO/PAPO Coordinator

The Jonah Interagency Mitigation and Reclamation Office (JIO) has been operating since its inception in March 2006 with the signing of the Record of Decision for the Jonah Infill Oil & Gas Development Project. The Charter Members of the JIO, the Bureau of Land Management (BLM), Wyoming Game and Fish Department (WG&FD), Wyoming Department of Agriculture (WDA), and Wyoming Department of Environmental Quality (WDEQ), set the stage early by creating a very proactive and innovative interagency office dedicated to mitigating the impacts of intensive oil and gas development in the 30,000-acre Jonah Natural Gas Field. Since 2006, the JIO, along with many other partners, has funded numerous mitigation projects including conservation easements, wildlife-friendly fence modifications, wildlife escape-ramp installations, woodstove change-out installations for improved air quality, livestock mitigation and many other projects through its \$24.5 million Mitigation Fund.

Then something next door to the Jonah Field happened! The Pinedale Anticline Natural Gas Field, with its 200,000 acres of world-class resources including North America's longest pronghorn antelope migration route, enters the picture. Like the Jonah, the Pinedale Anticline also includes one of North America's greatest concentrations of natural gas. In order to properly and responsibly develop this natural gas resource to a similar intensity as the Jonah Field, a Record of Decision (ROD) for the Pinedale Anticline Project Area was executed in September 2008 by the BLM. This ROD created the Pinedale Anticline Project Office (PAPO) along with a \$36 million Mitigation and Monitoring Fund. Since the charter members of the PAPO were the same member agencies as the JIO, along with the addition of Sublette County to the group, it became obvious to everyone that it would be advantageous to utilize the same JIO staff for the new PAPO in order to create an efficient, cost-effective "force" to perform mitigation and monitoring in both gas fields. This concept was accepted and formalized in the first meeting of the PAPO Agency Managers Committee in April 2009. The Pinedale Anticline ROD also provided for additional positions for WDEQ and WG&FD to accomplish the responsibilities and commitments of the PAPO.

Today, the public, oil and gas operators, governmental agencies, and other interested parties can contact the one unified staff for all matters of the JIO and PAPO. Contact information is listed on the last page of this newsletter, and your questions and comments are welcome at any time. Stay tuned for the many great things that will happen in the future for the JIO and the new PAPO.

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New Web Application Supports Reclamation Decision Making

To help the JIO efficiently track significant amounts of data and meet management objectives, the USGS Fort Collins Science Center Web Applications Team developed the *Jonah Infill Data Management System*. This Web-based application collects information that the JIO will use to assess reclamation efforts and determine whether (1) interim and long-term requirements and criteria are being met, (2) reclamation and monitoring protocols are providing appropriate and sufficient information, and (3) data are being collected as specified. The information will support decision-making regarding reclamation activities associated with oil and gas activities in the Jonah Field—and for the first time, it will allow trends to be evaluated in real time.

When first opened, the application displays a summary page of the entire Jonah Field (Figure 1). From there, users can explore the field using the embedded mapping application or choose to view detailed disturbance and reclamation data and reports. The application uses a customized interface designed to help both land managers and gas company operators collect and share standardized reclamation assessment and monitoring data. Both agency personnel and gas company operators were involved in the design process to ensure that the user interface would be straightforward and the reporting requirements clearly defined.

The data on the opening page map represents a disturbed area in the Jonah Gas Field. To create these data points, users upload polygons that represent a disturbed or reclaimed area. The blue area in Figure 2 is an example of what a polygon looks like once it has been uploaded. Qualitative and quantitative data on reclamation efforts for these disturbed areas are then stored in a clearinghouse, allowing users to perform simple and complex queries and produce maps and reports.

In addition to storing area-specific data, the application compiles summary information across all disturbed areas. This allows users to view information on a selected area, a selected gas company, and the entire Jonah Field. These features will enable the JIO to evaluate large amounts of data and derive information that was previously unavailable, such as total acreage impacted, spatial changes over time, habitat fragmentation, stage of reclamation by pad or as a summary, and success of reclamation efforts. Future plans include public access to summary reports, thus providing an effective tool for public outreach.

Figure 1: Screen capture of the Jonah Infill Data Management System (USGS Image).



Figure 2: Aerial Image of part of the Jonah Natural Gas Field (left). Close up of a blue polygon used to represent a disturbed area (right). Aerial imagery courtesy of BLM.



2008 Surface Disturbance Report

Submitted by Lisa Reinhart, State of Wyoming Department of Agriculture

One of the many innovations in the Jonah Record of Decision was the establishment of an acreage “roll-over” credit. What that means is although a total of 20,334 acres are allowed to be disturbed in Jonah, only 14,030 (46% of the 30,500 ac. field) can be disturbed at any given time. Therefore, once the 14,030 mark is reached, land must be successfully reclaimed in order for more acreage to be disturbed. This “roll-over” caveat gives an incentive for gas operators to restore the land to a functioning ecosystem as quickly as possible. This requirement also demands close attention to surface disturbance tracking.

The graph on the upper right shows field disturbance by operator at the end of December, 2008. The column in blue indicates the number of acres disturbed, the column in red indicates how many acres are allowed before requiring roll-over for additional disturbance.

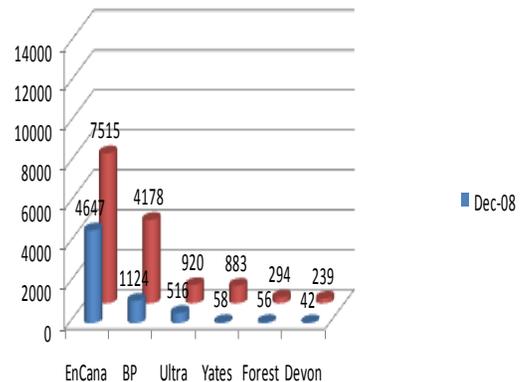
The graph on the bottom right shows total field disturbance by operator. Notice, total field disturbance at the end of December 2008 was 6,442 acres.

You may review the Reclamation Criteria at: http://www.wy.blm.gov/jonah_office/docs/reclamation_criteria_020807.pdf

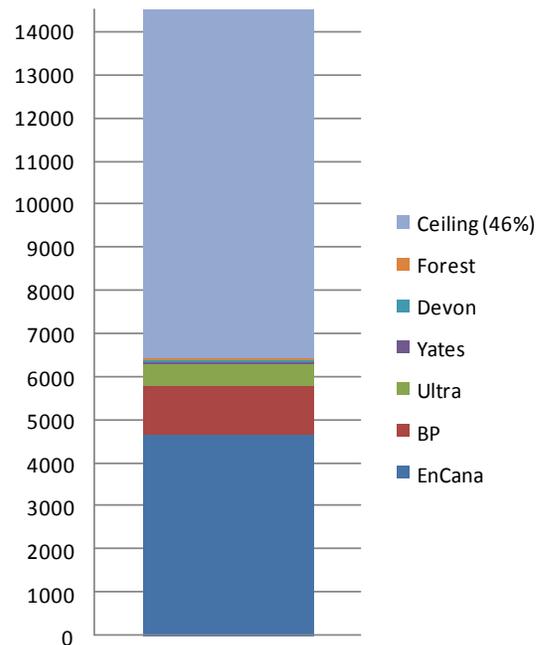
STAY TUNED

Disturbance is tracked on a bi-annual basis and updated versions will be available in following newsletters.

Disturbance tracking by Operator



Current Field Disturbance by Operator as of 12/31/08



Wardell Buffalo Trap

Submitted by Robert Schweitzer, BLM Mitigation Team Member

The Wardell Buffalo Trap is one the most significant known prehistoric archaeological resources in Sublette County. First investigated by the University of Wyoming's Dr. George Frison in the 1970's, the site was in imminent jeopardy of destruction by erosional processes due in part by increased OHV use of the area by the Jonah development work force.

In 2007, the JIO, provided funding to the Bureau of Land Management, in partnership with the National Park Service and Ultra Petroleum to undertake a comprehensive program of site stabilization, artifact curation and National Historic Landmark (NHL) designation for this unequaled cultural resource. James Douglas 'Sam' Drucker, BLM-PFO archaeologist, spearheaded this effort to protect and enhance this unparalleled archaeological resource. James Drucker's efforts resulted in the acquisition of funding for the various and disparate elements of the project through all the partners listed above.

The Wardell Buffalo Trap circa 1971. Note dog smelling for bones in center foreground



The Wardell Bone Bed as excavated by Dr. George Frison in 1971



Bison skull in the Wardell bone bed



Work to complete site stabilization included excavation, recovery and analysis of cultural artifacts exposed in a deep erosional channel and the installation of rip rap in engineered locations to prevent additional impacts to the site from erosion. This work was completed in the Autumn of 2007. Additional project funded

site enhancements include the removal of an aging protective fence and the installation of interpretive kiosks for public education and outreach.

Plans for the upcoming 2009 field season include fieldwork and site inventory associated with completion of the NHL designation paperwork. This work will be conducted under the direction of Dr. Daniel Walker, the head of the Wyoming State Curatorial Facility, with the assistance of students from the University of Wyoming and several local volunteers from the Sublette County Historical Society.

Excavation of the bone bed in the Summer of 2007



National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. Many of the most renowned historic properties in the United States are Landmarks. Mount Vernon, Pearl Harbor, the Apollo Mission Control Center, Alcatraz, and the Martin Luther King Birthplace in Atlanta, Georgia are Landmarks that illustrate important contributions to the Nation's historical development. Today, fewer than 2,500 historic places bear this national distinction. Through auspices of this project the Wardell Buffalo Trap will achieve its rightful place as one of the Nation's most significant cultural treasures.

Still Burning Your Trash?

By Jennifer Frazier, State of Wyoming Department of Environmental Quality

"Howdy neighbor, whatcha got cookin' over there?"

"Well, that's my burning trash that you're smellin'!"

Did you know that there are alternatives to burning your trash?

"Well, I've always burned my trash!"

Maybe so, but there are many more plastics in today's trash, and burning plastics is not so great for the air we breathe.

"Well, it's cheaper!"

Is it really cheaper when you consider the health of our children and their future?
Probably not.

Information from an EPA study showed that smoke from burning trash in a barrel contains **particulate matter, carbon monoxide, hydrogen chloride, hydrogen cyanide, benzene, styrene, formaldehyde, arsenic, lead, chromium, benzo(a)pyrene, dioxins, furans and PCBs**. Although substances such as particulate matter, carbon monoxide and formaldehyde can cause immediate health effects with enough exposure, some chemicals such as dioxin can build up in foods and in your body. Some of these chemicals can remain in the environment for a long time and can remain on your property (for example, soil outside and dust inside your home).

"What are my alternatives?"

Recycle!

Check Out Sublette County's Recycling Center

Reduce and Re-Use!

Try using less...maybe have a garage sale

Try Curb-Side Pick-Up!

There are local businesses in town who offer to pick up your trash for a small fee



Let's make this a "thing of the past"!

Environmental Campaign

What Can I do?



WINNERS



of the

EPA-Certified Stoves!!!

1. Linda Baker
2. Jim Silvey
3. Disney Brunette
4. Todd Stearns
5. Windy Noble
6. Richard Winkler
7. Aaron Swift
8. Keith Raney
9. Caroline Brazell
10. Tia Leo
11. Corrina Dorman
12. Karen Fernstern
13. Robert / Lou Love
14. Mark Kalal
15. Tera Adams
16. Andy Bowden
17. Kayla Williams
18. Catherine Woodfield
19. Daryl Sonnenberg
20. Lauri McClain
21. Tim Zebulske
22. Steve Roberts
23. Ann Stowe
24. Joe Bozner
25. Jim Murphy
26. Karen Taylor
27. Mary Goicocechea
28. Floyd Roadifer
29. Wes Shields
30. Jason Ray
31. Belinda Green
32. Gary Hayward
33. Ken Oberreit
34. Robert Pauly
35. Kathy Vodopich
36. Sandy Smith
37. David Vlcek
38. Blake Greenhalgh
39. Dan Stroud
40. Arthur Kolis
41. Joe Hugo

**If you see your name on the list, please come to an information session on June 3rd @ the BLM Building from 6PM – 8PM
Stove Vendors and Installers are Welcome**



Jonah Interagency Office, The Conservation Fund and Wyoming Stock Growers Agricultural Land Trust protect 1,800 acres

As part of an ongoing effort to safeguard wildlife habitat within the Green River valley, a group of public agencies and nonprofit groups protected more than 1,800 acres on a working ranch through a conservation easement, a legal, voluntary agreement that calls for the landowner to permanently restrict the type and amount of development that occurs on his or her property.

Wyoming Game & Fish Department, an agency of the Jonah Interagency Mitigation and Reclamation Office (JIO), identified the Cottonwood Ranches as a priority for conservation because of its prime habitat for sage grouse, Shiras Moose, mule deer, pronghorn antelope and numerous migratory birds. The entire property is classified as crucial winter range for one or more big game species.

The Conservation Fund worked with the owners of the Cottonwood Ranches, the Botur family, to complete the easement. Funding for the purchase came from JIO, the Wyoming Wildlife and Natural Resources Trust Fund, and the Doris Duke Charitable Foundation through The Nature Conservancy. The Wyoming Stock Growers Agricultural Land Trust will monitor and enforce the restrictions set forth in the easement.

"This is a new model – all of us working together towards a common goal – and we've now permanently protected just under 5,000 deeded acres and helped enhance over 35,000 acres of the most critical habitat in the Green River Valley over the past 12 months – a testament to the JIO and the other groups all pulling in the same direction," said Luke Lynch, Wyoming state director for The Conservation Fund.

"The Wyoming Stock Growers Agricultural Land Trust appreciates the contributions of the Botur family in keeping important agricultural lands in production," said Mark Eisele, Board President, Wyoming Stock Growers Agricultural Land Trust. "Maintaining open spaces and the long-time ranching heritage benefit the entire community."

Conservation easements are a valuable tool in conservation, with benefits beyond habitat protection. Landowners are eligible for various tax incentives for putting their land under an easement. Because the land remains privately owned, property taxes are still generated, securing the base of the local economy. The easement on the Cottonwood Ranches also ensures that the property will forever be used as a working ranch, preserving the legacy of ranching that the area is known for.

"It is these kinds of successes, with motivated people, to do great things in this landscape of our home, our Wyoming, that keeps me going," said Freddie Botur, owner of Cottonwood Ranches. "While achieving a great number of acres that will be protected from future development in prime habitat, we have also increased the ability for our ranch to be an agricultural success, a story that is also parallel to the success of all the incredible species that it supports."

"This is such a great opportunity for all of us, to address a myriad of things that will benefit all resources, and in particular wildlife and livestock," said Dan Stroud of the Jonah Interagency Office. "Perhaps even more important, is the building of relationships that will hopefully perpetuate over time; with an emphasis on the sharing of information between all partners with the ultimate goal of enhancing both wildlife habitat and livestock needs. With the partners and players involved, we can all benefit from everyone's ideas as well. It's just a win:win scenario for all involved." "This JIO project exemplifies how livestock and wildlife values can be incorporated into stewardship practices that maintain both a viable ranch operation and sage-grouse habitats," said Lisa Reinhart of the Wyoming Department of Agriculture. "We are always excited and proud to be a part of projects that preserve Wyoming's ranching heritage and demonstrate excellent stewardship of Wyoming's natural resources."

This deal is part of a broader effort to protect land in the Green River valley. On Cottonwood Ranches, the partners had previously protected over 1,000 acres and are working with the Botur family to place more of the ranch under an easement. The first easement pioneered the use of funds from JIO, which was established to mitigate impacts of oil and gas development on the nearby Jonah Field. In Boulder, The Conservation Fund, JIO and Wyoming Stock Growers Agricultural Land Trust placed over 2,000 acres on MJ Ranch under an easement last fall.





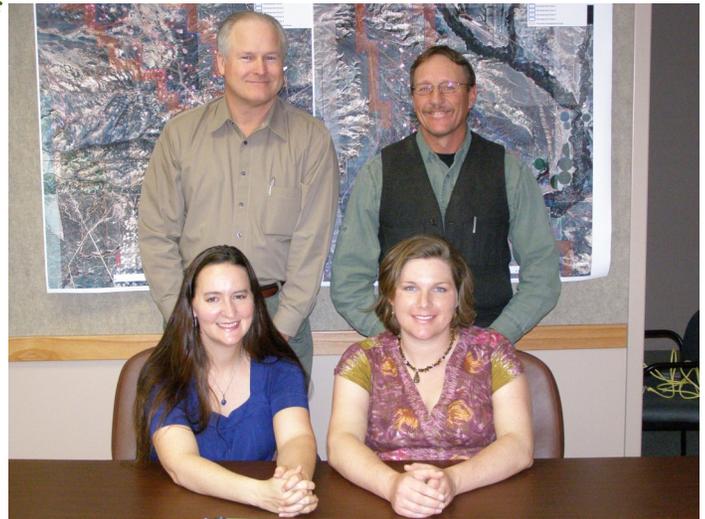
What is the Jonah Interagency Office?

The Jonah Natural Gas Field is an area of west central Wyoming, south of the town of Pinedale in the Upper Green River Basin, and has one of the richest concentrations of natural gas in the United States. Several unique approaches were instituted in the Jonah Infill Development Project Record of Decision (ROD), to include funding by EnCana Oil and Gas (USA), Inc. and BP America Production to a \$24.5 million fund. This fund established the Jonah Interagency Mitigation and Reclamation Office (JIO) to provide overall management of on-site field monitoring and off-site mitigation activities.

The JIO is staffed with a person from each of the Wyoming Department of Agriculture, Wyoming Game & Fish Department, Wyoming Department of Environmental Quality and the Department of the Interior/Bureau of Land Management.

The Pinedale BLM provides support to the JIO with a mitigation team for project implementation. This staff consists of a Wildlife Biologist, Rangeland Management Specialist, Planner, Archeologist, and Reclamation Specialist.

Jim Lucas (top left) Dan Stroud (top right)
Jennifer Frazier (bottom left) Lisa Reinhart (bottom right)



Contact us for more information at:

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