June 2008

JIO Develops Strategic Plan

JIO had a motto for some time; "We make it up as we go." That is not longer true, as we are currently in the process of developing a Strategic Plan that specifically identifies what we will be doing for the remainder of JIO life.

The plan serves to guide our monitoring and mitigation efforts. Specifically, it outlines what we are looking for relative to on the ground projects, and how those projects will be monitored and measured for success.

Any future project proposals will be accepted at any time of the year, rather than once or twice annually. Proposals will be examined very closely to determine if they meet the goals and objectives identified in the Strategic Plan.

Coupled with this effort, we released a Request for Proposals and will be working with a contractor to collect baseline vegetation inventory for the priority areas targeted for off-site wildlife mitigation (See pages 4 & 7 for details). Inventory will be collected using Ecological Site Descriptions and Similarity Indices to determine current plant communities. Additional information collected pertains to shrub health and vegetative diversity. The information collected will aid in determining the best locations for conservation and treatments, and provides a starting point to determine the effectiveness and change a mitigation project may have on the landscape.

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Cottonwood Ranches Conservation Easement By Dan Stroud

The Cottonwood Ranches project represents a great value to the JIO off-site mitigation goals. This project contains two parts including a Conservation Easement and a Conservation Plan. The Conservation Easement protects 1,042 acres of important wildlife habitat on private land from future subdivision, while the conservation plan highlights a partnership between Freddie Botur (landowner), the Jonah Interagency Office, the Bureau of Land Management, the Office of State Lands and Investments, and the Wyoming Game and Fish Department. The Conservation Plan identifies specific goals and objectives for an area of approximately 27,000 acres containing a mixed ownership of private, state and federal lands.

Wildlife values for the area under the conservation plan are many, including concentrations of sage-grouse, pronghorn use and migratory corridors, sagebrush habitats for a myriad of sagebrush dependent and obligate species, elk crucial winter range and feedground, and important seasonal range for moose. Within the area are 4 active sage-grouse leks and it is in close proximity to an additional 13 active leks. The majority of the area is considered wintering, nesting and brood-rearing habitat for sage-grouse. On one survey conducted during the late brood-rearing season, approximately 265 sage-grouse were observed.

General goals for the conservation plan include 1) Promote a healthy, productive mosaic of shrub age classes and canopy covers with a diversity of plant species in sustainable sagebrush communities and 2) Maintain and/or improve migration corridors for pronghorn and other big game species that use the Bench Corral area. Objectives identify specific vegetation parameters to be used as targets and are based on individual ecological site potential and capabilities of sagebrush upland and riparian communities. A baseline vegetation inventory utilizing ecological site descriptions and similarity indices (e.g. condition) will be done during the upcoming field season to further fine-tune objectives, as well as identify strategies to meet the objectives.

Perhaps the two most important facets of the project include the "protection" of wildlife habitat on private lands and setting the stage for a 20-year partnership to improve the area, especially for those species impacted in the Jonah Field. Partners will be working directly with the landowner and allotment manager to identify specific projects that meet the needs of all partners. Future projects could include anything from better distribution of livestock through water developments, small vegetation treatments designed to enhance herbaceous diversity, and widening existing intermittent riparian corridors.

Similar projects have been submitted for JIO funding, and with 27,000 acres already under a conservation plan, it will not take many more similar projects to meet a target of the enhancement of 90,000 acres; the overriding goal of JIO Wildlife Mitigation.

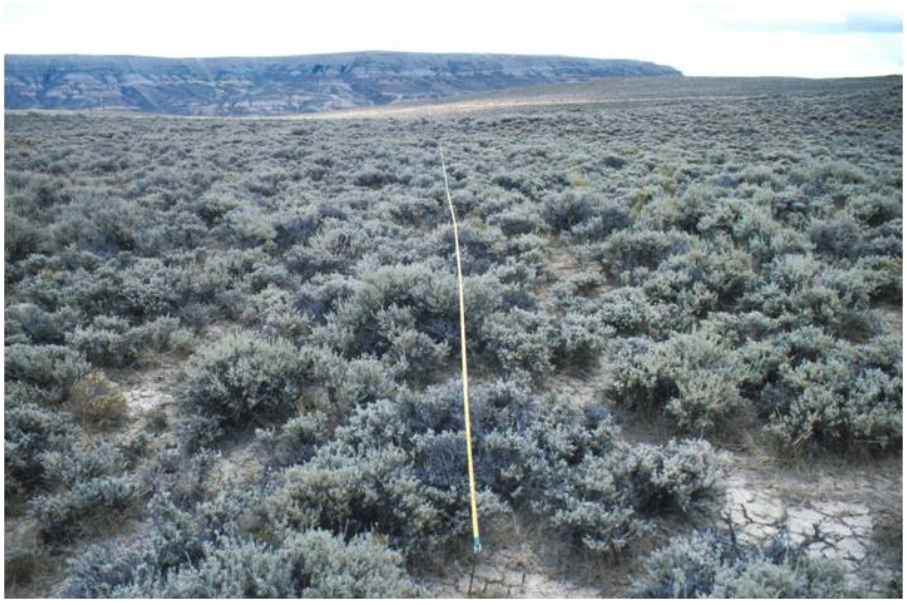
Other funding partners contributed to the finalization of this project including the Wyoming Wildlife Trust and the Doris Duke Charitable Foundation.

Photo courtesy of Freddie Botour

2008 Approved Mitigation Projects

Type Project	Project Name	Amount Approved	How Project Meets JIO Goals
Wildlife	Dynamic Message Signs	$ 62,500	Protects antelope migration corridors at highway crossings.
Wildlife	Noble Cora Peak Wildlife Project	$ 64,640	Provides drinking water in crucial wildlife migration areas, enhancing riparian vegetation for wildlife, and potentially improving vegetation across the entire allotment by implementing better livestock distribution and rotational grazing.
Wildlife	Water Trough Bird Ramps	$ 36,500	Prevents sage-grouse and other animal drownings in livestock watering facilities.
Wildlife	CRC Conservation Easement	$1,300,000	Permanently protects the "Funnel Bottleneck" portion of the pronghorn antelope migratory corridor. Project also protects sage-grouse nesting and brood rearing habitats.
Wildlife	Diamond H Ranch Conservation Easement	$ 700,000	Preserves areas with a variety of high value wildlife habitats. Mitigation opportunities include conservation of sage-grouse habitat and maintenance of important antelope migration corridors.
Wildlife	Rock Creek Sub-Division Antelope Migration Fence Modification	$ 15,000	Improves antelope migration corridors at fence crossings.
Wildlife	Cottonwood Ranches II Conservation Easement	$ 733,000	Preserves and enhances wildlife habitats.
Wildlife	Aspen Ridge Project	$ 320,000	Direct acquisition of properties is not within the purview of JIO. Willing to discuss alternative project ideas such as an easement up to $320,000.
Wildlife	Sommers/Grindstone Cattle Co. Conservation Project	$ -	Preserves wildlife habitats. Project needs further development prior to funding commitments.
Wildlife	Cross Lazy Two Ranch	$ -	Preserves and/or enhances wildlife habitats. Project needs further negotiations prior to funding commitments.
Wildlife	Boulder Lake Common Allotment Improvement Project	$ 236,065	Achieves a landscape mosaic of native vegetation species diversity and successional stages capable of supporting all native wildlife species.
Cultural	Pronghorn Movement and Prehistoric Hunters	$ 82,100	Enhances the understanding of the paleontology of the Upper Green River Basin.
Cultural	Educational Prehistoric/Historic Rotating Artifact Display & Traveling Exhibit	$ 50,000	Extends understanding of archaeological settlement patterns and paleoenvironmental reconstructions.
Livestock	Don Rogers Livestock Mitigation Project	$ 67,500	Relocates livestock away from development activities.
Livestock	Rendezvous Ranches Livestock Mitigation Project	$ 322,571	Relocates livestock away from development activities.
Recreation	New Fork, East Fork Rivers Confluence Boat Ramp and River Access	$ 92,000	Improves access to recreational users and provides public awareness of natural resources.
Total Funding Approved		**$4,081,876**	

Baseline Vegetation Inventory Started



Inventory efforts are focused on sagebrush communities.

There's no use trying to fix it, until you know it's broke.

We have been somewhat plagued with the lack of quality vegetative information in the area and therefore a constant question is, "How can you do projects, if you don't know what you have on the ground"? This is a good question we all have, so we decided to embark on an inventory for the areas we have identified as "focus areas." (See page 7)

The inventory is built upon the foundation of Ecological Site Descriptions, which take into account the soils and precipitation, but also identifies the possible different plant communities and herbaceous potential of a site. This information aids in determining whether or not a site can be "improved" or changed to a different plant community that is more desirable. In addition, we identified specific shrub attributes (shrub cover, height, density and age class) that identify parameters important to both sage-grouse and other wildlife species which depend upon sagebrush communities.

Inventory location priorities start with several JIO funded projects and will expand from there. This information provides a good foundation to build projects upon and will allow us to determine the effectiveness of mitigation projects.

Many tools are available for enhancing sagebrush communities. The photo above shows a site being aerated & seeded while the photo below show the mosaic result of mowing.

John A. Arambel Reservoir Project: 3 Years Later

by Stephen Reynolds

The Juel Reservoir had been an important feature of the Sublette Flats BLM grazing allotment for decades. The initial reservoir was designed with a capacity of over 300 acre feet covering a footprint of about 80 acres. Sometime in 2000 the headgate area of the dam had failed, leaving a breech of the dam rendering its function as a reservoir useless.

Photo by Stephen Reynolds

A project management team was formed to engineer and permit the dam repair, with an additional focus of using techniques to test habitat enhancement within the 2,000 acre area. Pete Arambel, the Sublette Flats grazing allotment holder became a key contributor to the project. Improvement ideas ranged from the deployment of snow fences to the use of a new piece of rangeland improvement equipment, the Lawson Aerator. The project soon became a considerable pilot for demonstrating how offsite mitigation would work. EnCana made a substantial commitment to fund the initial phase of project design, dam repair and the establishment of test plots for the Lawson Aerator.

Photo by Stephen Reynolds

Work began earnestly in the fall of 2005 with the dam repair. Under the new permit from the Wyoming State Engineer's Office the reservoir was renamed the John A. Arambel Reservoir. John A. Arambel, Pete's father, had been the grazing allotment holder for decades and had used the reservoir as a key spring lambing water source area. The new reservoir was permitted at 345 acre feet with a prospective foot print of about 100 acres.

Another key project factor of project measurement was designed to include wildlife and vegetative monitoring for a period of at least five years.

As the JIO entered its first season of utilizing $24.5 million for mitigation, the remaining activities of the pilot project was proposed as a JIO project. A contract to support these efforts for five years, representing $499,000 was approved and implemented in the fall of 2006.

From the initial plan the function of the reservoir, for its historical uses, was the primary goal of the project. Since winter run off and spring rains had filled the reservoir at times during its history, it was assumed that the natural water source would be sufficient. However, after two years of experience and research into the weather history, it was determined that the current drought conditions, lasting at least 7 years to the present, would leave the reservoir essentially dry for nine months of the year.

In 2007 a proposed amendment to the project produced a water well, next to the eastern shore line. As the well was drilled, it proved successful, with an initial flow of 30 gpm artesian. During the drilling phase a water bearing formation, non-artesian, of an estimated potential of 300 gpm, was proved. So, the addition of the well enhanced the function of the reservoir, as such, year around.

The spring of 2008 was late by historical records, but wildlife monitoring, for sage grouse, began in April and continues into the summer. An area, including a five mile radius around the reservoir, has become the wildlife monitoring scene. While the data is not yet complete for the five year period, it is clear that the activities of wildlife, sage grouse, antelope, raptors and the bunnies are diverse within the area and have the potential to respond to habitat enhancements.

The vegetative data monitoring is also ongoing, and it is too soon to determine the effects of the Lawson Aerator. However, it is also clear from observation that the repair of the dam and the addition of water resources is an obvious enhancement to the area. Pete Arambel once again looks to the function of the reservoir as part of his grazing use plans.

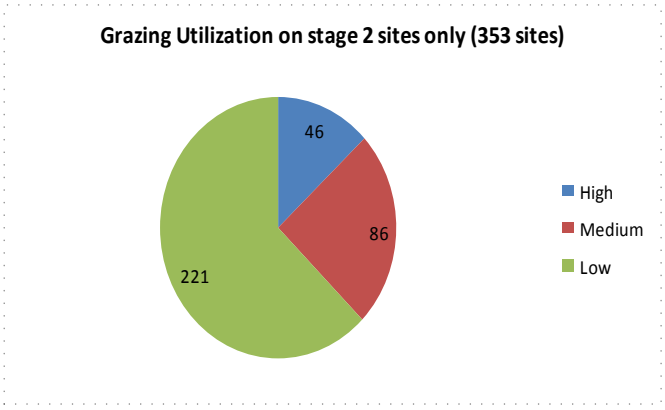
Adaptive Management Recommendation for Livestock

Since the signing of the Record of Decision, the JIO in cooperation with the BLM and livestock permittees, have recorded the impacts to livestock operations. Although the impacts vary by allotment (poisonings, vehicle collisions, calves falling into pipeline junctions, illnesses, etc.) we recognize that intensive development of the Jonah Field, does indeed have negative impacts to livestock grazing. Although attempts have been made to mitigate these impacts "on-site", the loss of livestock has continued.

Through numerous discussions between all parties involved, we feel the best way to mitigate the impacts of intensive mineral development on livestock operations, is to provide compensatory mitigation funding to either relocate livestock to alternative pastures during the development phase of the project or to provide funding for projects that attract livestock away from the development area.

The JIO has committed funding to accommodate these needs for the anticipated development phase of the Jonah Field (7 years).

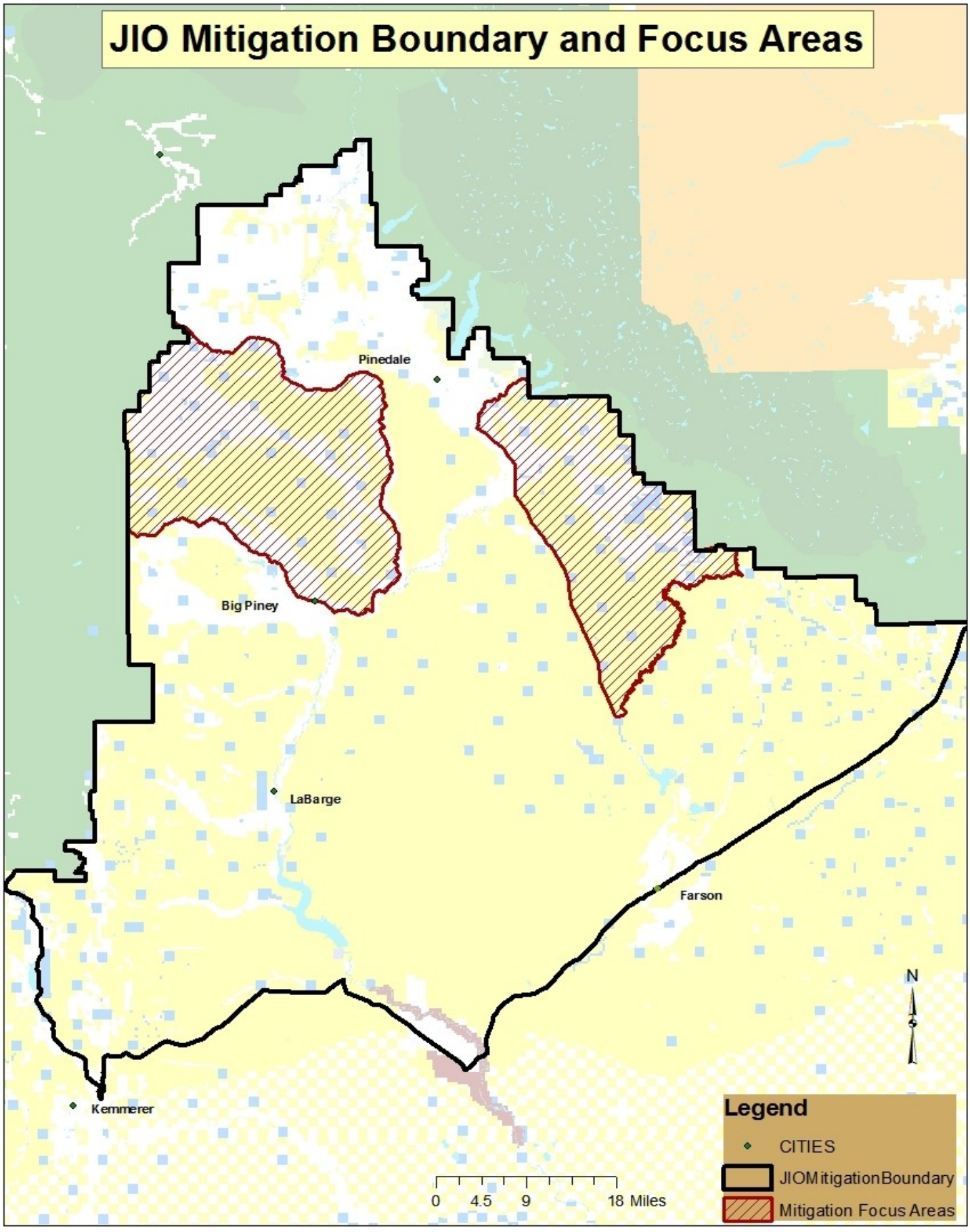
The next issue to address is the effects of grazing on reclamation. Although data has not been collected to specifically analyze the impacts of grazing on reclamation, it has been noted by the operators that some locations are intensively grazed during the reclamation phase. According to the qualitative data submitted in the 2007 operator reclamation reports, 353 locations were reclaimed to a point where perennial vegetation had been established on the site. Of those 353 locations, 13% were rated as grazed heavily, 24% were rated as grazed moderate, and 62% were rated as grazed lightly.



Recommendations:

The JIO recommends the BLM recognize the learned impacts of intensive mineral development on livestock grazing in future energy development projects. We recommend the use of compensatory mitigation to offset these impacts. Livestock grazing can be mitigated by utilizing operator provided funding to either purchase alternative pastures in areas away from the development area or to fund other projects that attract livestock away from the development area.

In addition, the JIO recommends the BLM recognize the effects of livestock grazing on reclamation. Although specific data is not available to determine the extent of the impact, the operators have recognized these impacts and have moved towards fencing locations that receive heavy grazing pressure. To resolve this issue, operators could offer mitigation funding to relocate livestock to alternative pastures in lieu of fencing. EnCana reported intentions of fencing approximately 100 locations in 2007 to prevent grazing pressure on reclamation. They estimated a monetary figure of $1,500 per pad site of 3-4 acres for fencing materials and operating and maintenance for 2 years per pad. This dollar figure could easily be transposed to determine an appropriate figure to dedicate for alternative pasture in lieu of fencing each proposed well pad in future energy development projects.


JIO Mitigation Boundary and Focus Areas
Pinedale
Big Piney
LaBarge
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CITIES
JIOMitigationBoundary
Mitigation Focus Areas

What is the Jonah Interagency Office?

IMPACTED SPECIES— BREWER'S SPARROW

The Brewer's Sparrow is a small bird that occurs in sagebrush communities, including in the Jonah Field. It is considered a "neotropical migrant". This means that it migrates and lives in areas for up to 6 months of the year that are "tropical" in nature, and includes areas in Mexico, and Central and South America. Brewer's sparrows nest either on the ground or low in the shrub canopy and are considered sagebrush obligates, meaning that they depend on sagebrush communities for breeding or year-round habitat. These birds typically have clutch sizes of 3-4 in an open-cup type of nest. Incubation time is approximately 11-13 days with an 8-9 day fledging period. These birds typically feed on insects, and to a lesser extent, seeds.

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