

**Wildlife/Reclamation sub-committee agreement  
November 8, 2011 PAWG meeting**

**Sub-committee members**

PAWG representative: Bart Myers

Possible other members:

Representative(s) from Operators with reclamation experience

Wyoming Game and Fish Department Biologist

Representative from Wyoming Reclamation Restoration Center

NRCS

SCCD

BLM/PAPO staff

BERRY Center staff

**Issue:** The Pinedale Anticline Wildlife Monitoring and Mitigation Matrix was triggered for mule deer in 2010. Through the course of consultation with the public and cooperating agencies, the BLM developed a series of actionable items to guide their initial mitigation response. A key actionable item resulting from this process was the review of the current reclamation practices. Specifically, the BLM committed to consulting with the Wyoming Game and Fish Department (WGF) regarding the development and use of; non-native seed mixes, containerized plants, and alternative methods for site preparation and seeding.

On April 29, the BLM formally requested input from the WGF regarding these and other matters and received a response on May 31, 2011. On November 8, 2011 the BLM requested the PAWG provide advice/recommendations on the enhanced reclamation suggestions.

**Purpose:** Provide the PAWG with recommendations for consideration of forwarding to the BLM regarding the proposed enhanced reclamation approaches (attached). Specifically whether the suggestions are appropriate, any other positive or negative considerations for the suggestions, where on the Pinedale Anticline, the various techniques or strategies would be most beneficial, how to proceed with implementing any recommended techniques, and whether or not additional techniques or strategies should be considered.

On November 8, 2011, the BLM provided the suggestions from the WGF, and made a presentation overviewing the various suggestions which include: The use of native and non-native species in reclamation seed mixes, the use of container-grown plants, the use of soil amendments, alternate seeding methods/seed sources, and protocols for defining reclamation success/failure and follow-up actions in the event of failure.

- Task:**
1. Review the materials provided by the BLM, coordinate with others such as the University of Wyoming or operators as needed.
  2. Develop a proposed memorandum to provide to the PAWG which: Considers each suggestion, the identified pros and cons, and makes a recommendation regarding whether or not and if so where to consider utilizing the various methods. In the event additional considerations or methods are identified, provide the PAWG with a discussion of the pros and cons.
  3. Coordinate any needs for BLM staff support through the PAWG member on the Sub-committee
- Deliverables:**
1. The sub-committee will draft a memorandum for the PAWG to review. The draft will include details or proposed advice/recommendations.
  2. Present an overview of the proposed recommendations at the PAWG meeting.
- Due date:** Draft memorandum/presentation by Feb 7, 2011 PAWG meeting

In Reply Refer To:

1784 (WYD01)

PAWG

October 5, 2010

**MEMORANDUM**

**TO:** Pinedale Anticline Working Group

**FROM:** Shane DeForest, Field Manager, Pinedale Field Office

**SUBJECT:** Request for Advice/Recommendations

The Pinedale Anticline Wildlife Monitoring and Mitigation Matrix was triggered in 2010. Through the course of consultation with the public and our cooperating agencies, the BLM developed a series of actionable items to guide our initial mitigation response. A key actionable item resulting from this process was the review of the current reclamation practices. Specifically, the BLM committed to consulting with the Wyoming Game and Fish Department (WGF) regarding the development and use of; non-native seed mixes, containerized plants, and alternative methods for site preparation and seeding.

On April 29, the BLM formally requested input from the WGF regarding these and other matters. On May 31, 2011, we received a response from WGF. We subsequently held a meeting on

August 5 to discuss the input and gather additional information. The BLM request and WGF response can be found at:

[http://www.blm.gov/wy/st/en/field\\_offices/Pinedale/anticline/wildlifemtg.html](http://www.blm.gov/wy/st/en/field_offices/Pinedale/anticline/wildlifemtg.html)

I would like to request advice and recommendations from the PAWG regarding the suggestions received from WGF in response to BLM #2 and BLM #3 on WGF's May 31 letter.

In addition to the referenced letters, I would offer the following excerpts from the August 5 meeting discussions:

## **Enhanced Reclamation:**

### **Non-native Species**

Seed mixes used are variable. How seeds are planted also seems to vary and produces varying results. We should be cautious about adding more seed to an already heavy seed mix. Consider subtracting seeds from the mix if additional species are going to be tried. It was observed that Globe Mallow is strong this year if in the mix, for instance; but we need to compare with other years to see if there are any consistent patterns in species which always come in very heavy before we should consider reducing some species from a mix. Winter fat is a suggested addition of a browse species on WGFs list, but if it is a New Mexico variety it is not as palatable, so should recommend other sources.

Given mule deer is the current focus; is there any value in focusing more on shrub mix? Diversity is key (sage grouse, etc. is also out there and needs focusing just on mule deer may discount the needs of other species). WGF would like to try the 3 subspecies of rabbit brush as well as some other earlier successional plants such as lupine, rabbit brush. These are more tolerant to disturbance and could be more successful. Hybrid sagebrush such as Bonneville is documented to be more palatable and could be used. Ultimately the disturbed patches are small holes in the sagebrush landscape and would likely fill in with sagebrush over time on their own from the outside undisturbed plants, and so non-natives which have higher relative nutritional value and are more resilient to disturbance might be advisable. The BLM prefers using native species unless unavailable or not effective. Certainly there are instances where natives have proven un-effective, and if there is a local consensus, a decision to use non-natives could be made. Some non-natives may only live a few years. However it varies by species and some species with this characteristic are more resilient than others. In some species individual plants may only live a few years, but are naturally better at reseeding themselves and could be more persistent, for example Forage Kochia.

### **Shrub transplanting**

This has been tried successfully in Idaho. In that project, it was accomplished with nursery grown seeds, planted by volunteers and cost approximately \$.25/\$.50/plant. Sagebrush isn't the only plant on winter range which has value. We have a lot of mixed shrub sites with species such as Serviceberry. They seem confined to certain areas on the Mesa, but receive a lot of deer use. Expanded plantings of these off site could complement any pad plantings of sagebrush. It was discussed that maybe these species, where they occur, are limited because of sagebrush increasing on the range and maybe use of prescribed burns around the edges of these patches could get them to expand. It was noted that the areas where these species occur are areas that catch snow, and removing the sagebrush around the bottoms of these areas probably would expand these shrub sites, but it would take time to get to the point where there were more. Planting these edges once the sagebrush is removed could speed this up. Sagebrush planting of container seedlings has had about a about 30% success in Idaho. Some areas had better success.

### **Refine geographic boundaries:**

Discussing where to apply container plantings or look at increasing other desirable shrubs like serviceberry by treating the sagebrush, migration routes and stopover areas are an obvious opportunity. However, don't forget that the boundaries of these migration routes and stopover areas will change each year somewhat. Species like serviceberry are not widely distributed and probably occur in specific habitats, so should be careful expecting success with this species in every instance

### **Container planting** (local seed, grow out, rate/density)

Pads ready for final reclamation might be a focus since they wouldn't be re-disturbed. Could take a different approach for every phase of the reclamation and focus different techniques based on the setting.

Focus areas may consist of:

- Final reclamation (plugged and abandoned well). Try container planting.
- Interim reclamation. Use enhanced seed mix. (Plus soil amendments?)
- Pipelines. Could plant container sagebrush in rows or strips on the ROWs. That way when new pipelines are laid next to existing ones and older reclamation is re-disturbed, plants remaining would be larger and new plants would be larger.
- Natives in general are harder to establish, less resistant to disturbance, and many would come in over time anyway, it's a question of how long we are willing to wait for it to happen.
- We use a lot of resources trying to get everything back right away, when we could be focusing on the issue of habitat/browse quality and get high nutrition/easy to establish things in quickly and with more success.
- One operator is using some soil amendments and it is working.
- If we specify a method of seeding, we assume the liability of poor results. On the other hand, if we specify an outcome, the operators are liable for the result however long it takes and however many times they have to do it over. However, there is a point of diminishing returns with bare ground when too much time passes and the likelihood of success with seeding; even under the best circumstances is reduced.
- Consider specifying the use of container plantings or non-native species in seeding if after some number of attempts to get native species back using seeding fails,
- Operators stockpile soils removed in pad construction. If the spoil pile sits for too long, the reclamation of the site once this soil is re-spread has been less successful. In these cases, container planting, etc. might be a good choice.