

## **Atlantic Rim Review Team Meeting Notes**

**April 15, 2015**

### *Update on Muddy Creek Sensitive Fish Working Group:*

The Working Group received stormwater BMP data from the Operators in the fall, and used this information to determine the failure rate of BMPs. The following information was provided to the Review Team:

Warren Resources BMP Failure Rate:

Fall 2014: 2.9%

Fall 2013: 9.8%

Escalera Resources BMP Failure Rate:

Fall 2014: 13.6%

Fall 2013: 97.1%

Both companies have shown an improvement in BMP success. Spring stormwater BMP data are due to the BLM no later than June 1, 2015. It was suggested that information on which BMPs failed where should be provided to the Review Team; this is currently being compiled by the BLM.

### *Update on Greater Sage Grouse Working Group:*

The Working Group met on January 7, 2015 to discuss the potential adaptive management measures that are being developed. The document outlining these measures has not yet been finalized; the group hopes to have this finalized soon and will be sending it to the Review Team later this spring.

### *Update on Big Game Working Group:*

The Working Group met on April 10, 2015 to continue discussing the potential adaptive management measures that are being developed for mule deer in the project area. The document outlining these measures has not yet been finalized; the group hopes to have this finalized soon and will be sending it to the Review Team later this spring.

The Wyoming Game and Fish Department (WGFD) is working on developing official migration corridors and will be determining the recommended management within those migration corridors. The Baggs Mule Deer Initiative is in the process of developing a landscape scale approach on how to protect the mule deer herds in the area.

### *Update on Shrub Dependent Songbird Working Group:*

The new agreement for song bird monitoring should be finalized later this spring. The BLM has received funding for one more year of monitoring.

### *Update on Reclamation Working Group:*

The Working Group had several goals for the 2014-2015 period:

1. Develop appropriate and defensible reclamation standards for the Big Game and Greater Sage Grouse Working Groups;
2. Improve weed management;
3. Improve communication between companies regarding reclamation, especially for weed management;
4. Formalization of the rollover process;
5. Discuss the potential planting of non-native species in the project area;
6. Review of reclamation data and completion of field tours;
7. Discussion on reference sites and desired plant communities, as well as the use of produced water for watering of reclamation.

The proposal for the use of non-native species has not yet been received by the BLM; however, the use of non-natives would occur in saline, lowland, drainage areas where so far successful reclamation has proved challenging. The proposal would have to go through the Review Team, through the Rawlins Field Office, the High Desert District Office, and ultimately the Wyoming State Office. The field tour will visit locations in the project area where the Operators are considering the use of non-natives.

### *Cultural Resources Programmatic Agreement:*

The Programmatic Agreement (PA) was signed between the State Historic Preservation Office, the BLM, and Operators and lays out how adverse effects to trails and cultural resources in the area will be addressed. The PA will need to be amended to include Escalera Resources as a new company in the project area. The agreement also calls for a compensatory mitigation committee, which is to meet on a regular basis; these meetings have not occurred since 2010 and will need to be reinitiated. The existing PA is attached to these notes; the Review Team should expect to see the revised PA later this summer.

### *Warren Resources Activity Update:*

#### Drilling Activity

Currently, there are 306 CBM wells, 30 water disposal wells, 7 monitoring wells, and 10 conventional wells in the Spyglass Hill Unit, with a production of 22 million cubic feet of gas per day and 90,000 barrels of water per day. In 2014, 33 new wells were drilled: 21 in Doty Mountain, 9 in Sun Dog, and 1 in Grace Point totaling 175 acres of new surface disturbance. In order to maintain the unit, 17 wells would need to be drilled prior to September 11 of 2015. Due to the high volume of water in the unit, Warren has proposed to the BLM's Reservoir Management Group (RMG) that drilling of the 17 obligation wells be deferred until 2016. For 2015 activity, Warren proposes to plug and abandon 8 wells, convert 4 wells to injection wells, and return 12 wells to production.

## Reclamation Activity

Warren has been aggressively spraying Halogeton with Telar, 2-4-D, Escort, and Stinger. Seeding and re-seeding activities were conducted in 2014 and will be conducted in 2015. Soil amendments (nutrients and minerals) were added to 10 well sites in 2014 and 2 pipeline sites. In 2014, 11 sites were submitted for rollover and in 2013 9 sites were submitted. Warren has no plans to submit more sites for rollover in 2015.

## Monitoring

Warren participates in Greater Sage-Grouse monitoring as well as raptor monitoring. In addition, they are involved in shrub dependent songbird monitoring, a pronghorn study, and mule deer monitoring. In addition, stormwater monitoring and submitting the information to the BLM has occurred for the past two years.

## *Escalera Resources Activity Update:*

### Drilling Activity

Escalera drilled no new wells in 2014, but performed workovers on 20 wells and performed cleanup of casing, equipment, and perforations. In 2015, Escalera plans to drill 5 CBM wells and 2 injection wells in Catalina Pod D. The Catalina Unit automatically contracts at the end of 2017 and in order to ensure efficient operation of the unit, two participating areas (A and B) must be joined and the Catalina participating areas consolidated. Escalera also plans to complete the plugging and abandoning of the ARW 1 well and initiate reclamation. The 1791-11-31 well has been plugged and abandoned, and the location will also be reclaimed this year. Two locations in the E Pod are also proposed for reclamation this year.

2016 development is anticipated to continue in the Pod D area as there are 5 additional locations that Escalera wishes to develop prior to unit contraction. There are no plans at this time to undertake a program to fully develop all proposed locations in Pods F, G, H, & I. Any development in these areas would likely be limited and proximate to areas of existing wells, infrastructure, and human presence.

Post-2017 and unit contraction, it is unlikely that any addition wells would be drilled.

### Reclamation Activity

Reclamation activities occurred in Pod A, the MAD1 washout, Pod E's central delivery point, and Pods C and E. The reclamation that was assessed in 2014 by Escalera was deemed unsuccessful, and the company is working on a plan for successful reclamation in collaboration with the BLM. This includes a joint weed management effort with both Escalera and Warren participating.

*Escalera Resources and Warren Resources Joint Weed Management:*

Both Escalera and Warren have identified the need for increased cooperation and communication between the operators in the project area for weed management and access road maintenance. In order to do this, the operators have identified areas where this can occur, such as roads that are used by both operators. In addition, the operators are working on a weed management approach that would include notifying the other of management and reclamation in weed infested areas so the other operator could undertake recommended support activities on the other side of the communal line to improve overall chances for successful reclamation. The companies intend to collaborate in their approach to weed problems and share information and management practices which would result in success, and to coordinate on projects to test and compare outcomes of various approaches to weed management and mitigation.

*Anadarko Activity Update:*

Anadarko has constructed one wellpad in the northern part of the project area on fee, but drilling and completion of this well is not a priority and funding has not been obligated. If no funding is received to drill this well, it will be plugged and abandoned. Approximately 200 acres of unsuccessful reclamation is in the Jolly Roger and Red Rim areas.

*Discussion:*

Industry is responsible for demonstrating successful achievement of the performance goals. It was suggested that the progress that industry has made towards achievement of the performance goals be reported at one of the Review Team meetings, and also posted to the website so that the information is available to the public. It was also suggested that updates from each Working Group be made at each meeting. Finally, it was suggested that the meetings be scheduled on a regular basis (i.e. the third Thursday in April every year, the second Tuesday in November every year). The project manager will be drafting a letter to be reviewed by the Review Team for these suggestions, which also include designating meetings (such as the spring meeting is annual planning; fall meeting would be to evaluate performance goal success, etc.).

The use of non-native species in reclamation seed mixes was discussed briefly. Warren will be officially proposing the use of non-native species to the Review Team in the near future. In addition, Warren will be proposing reduced raptor nest monitoring in order to re-focus funding for mule deer and sage grouse treatments.

Once the 9-plan amendments for Greater Sage-Grouse are completed, the Sage Grouse Working Group will need to figure out how it will affect adaptive management for sage grouse in the Atlantic Rim project area.

The discussion then turned to how wildlife exception requests could be expedited, particularly for reclamation work that is done in the spring.