



## Twin Falls District Resource Advisory Council



MEETING MINUTES  
6/18/2015

### **Resource Advisory Council (RAC) members present:**

#### ***Category One – Commodity Interest***

- Richard Austin
- Mike Henslee
- Daniel Butler
- Jeffrey Williams
- James Wills

#### ***Category Two – Non-Commodity Interest***

- Dayna Gross
- Shauna Robinson
- Brett Stevenson
- Peggy Stanley
- LaMar Orton

#### ***Category Three – Public Interest***

- Jody Hawkins
- Tom Courtney
- Charles Howell (*arrived 10:00 a.m.*)
- Katie Shewmaker
- Hunter Osborne

**Quorum Present:**  Yes  No

### **Bureau of Land Management (BLM) representatives present:**

Michael Courtney - District Manager  
Heather Tiel-Nelson- Public Affairs Specialist  
Jeff Ross, Jarbidge Assistant Field Manager  
Codie Martin, Shoshone Field Manager  
Carol Hearne, Acting Burley Field Manager  
Christine Vance, Records Assistant TFD  
Dustin Smith, Fire Ecologist

### **Public Attendees:**

Eric Quitugua- The Voice/Times-News

*Note to readers: A copy of each handout listed in the text of, or at the end of these minutes, is on file with the official copy of the minutes in the BLM Twin Falls District Office. Persons desiring*

*to view handouts should contact Christine Vance at (208) 735-2063, or by email at [cvance@blm.gov](mailto:cvance@blm.gov).*

*Copies of certified minutes are posted on the Idaho BLM website at:*

*[http://www.blm.gov/id/st/en/res/resource\\_advisory/twin\\_falls\\_district/meeting\\_minutes.html](http://www.blm.gov/id/st/en/res/resource_advisory/twin_falls_district/meeting_minutes.html)*

## **Item I: Welcome and Introductions**

Carol Hearne was introduced as the acting Burley Field Manager. She is on a detail from her home unit at the BLM Challis Field Office and will be returning there at the conclusion of her detail.

Jeff Ross was also introduced as the new Assistant Field Manager for Jarbidge. Jeff brings with him 26 years of BLM service in several different positions. Until recently, he was the Jarbidge Field Office Archeologist.

*Public comment period opened at 9:13. There were members of the public present. Public comment period closed at 09:56 without comment.*

## **Item II: Walker Ranch Geothermal Project Overview**

Burley Assistant Field Manager Jim Tharp gave an overview of the Walker Ranch Geothermal project. According to the presentation, there are two types of geothermal power plants; steam and binary. Flash steam stations pull deep, high-pressure hot water into lower-pressure tanks and use the resulting flashed steam to drive turbines. The hot water flows up through wells in the ground under its own pressure. As it flows upward, the pressure decreases and some of the hot water boils into steam. The steam is then separated from the water and used to power a turbine/generator. Any leftover water and condensed steam are injected back into the reservoir, making this a sustainable resource. With binary cycle geothermal power plants, pumps are used to pump hot water from a geothermal well, through a heat exchanger, and the cooled water is returned to the underground reservoir. A second binary fluid with a low boiling point is pumped at fairly high pressure through the heat exchanger, where it is vaporized and then directed through a turbine. The vapor exiting the turbine is then condensed by cold air radiators or cold water and cycled back through the heat exchanger.

The United States Department of Energy built their first Binary Geothermal plant in 1982 in the Raft River resource area over seen by the Burley Field Office. The plant only ran for a few months before shutting down. The plant and all the wells are entirely on private land. In 2002 US Geothermal acquired the project and constructed a 13 megawatt (mw) net capacity power plant. In 2008 commercial power generation was achieved using the existing plant.

The Burley BLM has seven active leases for geothermal energy. The leases are nominated and competitively sold. Walker Ranch holds two, Agua Caliente holds four, US Geothermal holds the rest. The Walker Ranch Geothermal project includes five permitted wells on BLM land, including a monitoring well that has been drilled. The BLM has received an application for 13 additional wells and a utilization plan for an approximately 25 mw plant, and the infrastructure to

connect the wells. The Environmental Assessment is currently being worked on for the application and should be completed Fall/Winter 2015.

### **Item III: Burley Landscape Sage-grouse Habitat Restoration Project Overview**

The Burley Landscape Sage-grouse Habitat Restoration Project began in 2010 and focuses on controlling juniper encroachment and the active restoration/conservation of sage-grouse habitat. To date, over 18,000 acres has been completed and 14,800 more acres are left in planned projects. The treated areas are on both private and BLM managed land.

Currently there is a partnership in place that helps fund this project. Agencies include state, federal, and private individuals working together to rehabilitate the areas. This allows opportunities for more treated areas and creates a good dialogue for consistent management of the project areas. The partnership was awarded the 2014 Rangeland Stewardship Award for their progress in improving sage-grouse habitat in southern Idaho.

### **Item IV: Tour Walker Ranch Geothermal Project**

Richard Austin, Vice President of Research for the Walker Ranch presented this segment.

The first stop was a monitoring well. This well has a smaller sized pad and is drilled to only reach 5,000-5,500 feet as opposed to the 7,000 feet for a production well. The production wells are not used to pump the water for the geothermal projects to the power stations. This well was drilled in a location that had undergone seismic testing to determine the depth and potential sources of water and to test the water to ensure that there is no contamination occurring during the production process. As the well was being drilled, the engineers analyzed the various soil and rock layers to determine if this is a viable area for production. Monitoring wells are drilled only vertically, with horizontal drilling only occurring if the well is believed to be productive.

The hole that is drilled is about 10” in diameter, this allows for a 6” hole and a 4” casing. Every piece of the pipe that is put into the ground is cemented in from the bottom to the top to the depth of 3,500 feet. The lines are pressure tested to 1000 psi. The casing and cement are there to prevent any leaks from leaching into ground water and soil.

There is a 100X300 foot pit near the wells so the excess water used during drilling can be stored and not broadcast on the surrounding landscape. This helps to reduce the impact to the surrounding area.

Wildlife considerations needed to be managed when drilling this production well. Before drilling occurred there were numerous surveys done for any special status animal species like sage-grouse, ferruginous hawks, and pygmy rabbits. Regulations say that drilling may not occur within 2,000 feet of nesting ferruginous hawks. Drilling was temporarily halted on the monitoring well when it looked like a pair of hawks was going to nest on a nearby power pole. The pair ended up nesting elsewhere and drilling was allowed to continue.

The tour continued to a production well located on private land near the monitoring well. These wells are deeper and have a larger pad sight. When deciding on where to place a production well the company considers water temperature, pressure, and formation. The ideal temperature is 275-290 degrees Fahrenheit into the station. The higher the temperature the more effective it will be in producing energy. The water flow average is 200 gallons per minute in this area. All of the piping from the wells to the station is done above ground for easier maintenance and accessibility. The pipes are on rails so they can be easily moved if ever needed. There are only a few degrees of heat lost per mile that the water is piped. Submersible pumps are used when needed to get the water pressure where it needs to be to get it to the station.

**Item V: Tour Burley Landscape Sage-grouse Habitat Restoration Project**

Dustin Smith, Fire Ecologist for the Burley Field office presented this segment.

The tour was then taken to the Cottonwood area to look at some of the treatments that have been used for the Burley Landscape Sage-grouse Habitat Restoration Project. This area was treated in several different ways over the years. One method was the lop and scatter. This involves crews going out with loppers and/or chainsaws and cutting the juniper into smaller pieces and then scattering that across the landscape to decompose over time. The other method is mechanical mastication. This is done with a specialized piece of machinery that uses either a drum or a disk with attached teeth to pulverize the junipers and create manageable compost for the ground. That compost is spread and provides ground cover for seedlings and animals until new growth takes place. This equipment is contracted out to private companies that own the machinery. The cost of purchasing, maintaining, and training operators was viewed as not practical.

The total costs of the treatments used are far less than what the BLM usually spends on post-fire rehab. By putting the juniper back to where it has been historically it allows fires that would burn through that area to burn at a lower temperature and not cause damage to the soil.

**Handouts Provided:**

- 1- Burley Landscape Sage-grouse Habitat Restoration Project maps and pictures (16pp)**

Minutes certified by:

Mike Henslee chairman  
Mike Henslee, TFD RAC Chairman

10/05/15  
Date

Michael Courtney  
Michael Courtney, TFD Manager

10/13/2015  
Date

Minutes recorded by:  
Christine N. Vance, TFD Records Assistant