

LOWER DOLORES WORKING GROUP
Meeting 6 Summary
May 11, 2009

Note: Presentations, documents, meeting summaries, agendas and other information related to the Lower Dolores Working Group process are posted at <http://ocs.fortlewis.edu/drd/>. There is a button on the left on the home page for the Lower Dolores Working Group.

Meeting summary: The April meeting summary will be reviewed at the next meeting.

General information: A master list of issues, opportunities and concerns gathered from the last five meetings was compiled and presented by facilitator Marsha Porter-Norton. Group members should look over it during the break before the next meeting to make sure everything they want to see on the list is present. The list will not be made final for some time, however.

Public comment: None

Review of process: From now until the third week of July, the Working Group will take time off. The Dolores River Dialogue (“DRD”) Technical Committee suggests that once the group reconvenes in July, it should focus on different segments of the river, using either the reaches utilized by the DRD science team or the river and stream segments as described in the Wild and Scenic Rivers (“WSR”) suitability analysis included in the 2007 Draft Revised San Juan Public Lands Resource Management Plan. The Working Group will talk about the Outstandingly Remarkable Values (“ORVs”) of each segment, the DRD science analysis, and recommendations for protecting the ORVs.

The Working Group will likely be asked if it wants to form a smaller drafting committee to hammer out a document representing the group’s concerns and interests. It is hoped that the process will be brought to conclusion by the end of the year. The group will try for consensus but if it is not reached in certain areas, there may have to be a weighted vote.

Minerals, Oil and Gas

Agency perspective: Tom Rice, Bureau of Land Management (“BLM”) natural-resource specialist with the Dolores Public Lands Office (“DPLO”) gave a PowerPoint presentation on basics of oil and gas production on federal lands.

The BLM manages all the federal minerals under the surface of federal lands, as well as the federal minerals under private surface (split estate). There is a great deal of split estate in Montezuma County.

Four times a year, the BLM state office in Lakewood conducts a lease sale. Properties that private companies are interested in leasing are nominated. Locally, the DPLO conducts an internal review of the nominated properties with all its staff. The agency can apply lease stipulations to protect different values, or can defer some parcels because of resource concerns. The decision is passed back to the state office.

When the lease sale takes place, the public has an opportunity to comment.

Types of lease stipulations:

- **No surface occupancy (“NSO”).** This is the strictest tool. It was used in the Dolores River Canyon; the DPLO allows no oil and gas activity or construction activity within the river valley or just on top of the rim (a quarter-mile buffer zone) in order to protect visual resources. This does not necessarily mean no drilling, but any drilling would have to be directional.
- **Controlled surface use.** This is specified in cases such as where an underground mine is present, or in order to protect watersheds.
- **Lease notice (buyer-beware approach).** When a company leases a property, threatened/endangered-species clearance, cultural-resources clearance, or other measures may be required.
- **Timing limitations.** These are restrictions on when oil and gas activity can occur and are designed to protect wildlife during certain seasons, for example.

When the agency wants to move forward with a lease, it must have an application for permit to drill (“APD”) from the operator.

The majority of oil and gas activity in this area occurs within the Paradox Basin and involves natural gas or oil. Farther east is the San Juan Basin, where coal-bed methane is plentiful. Carbon-dioxide extraction is ongoing on Canyons of the Ancients National Monument.

Tom discussed the stratigraphy (geographic layers) in the area and showed the boundaries of the Gothic shale play area. Gothic shale is incredibly tight, dense shale containing natural gas. It takes a large amount of water to fracture, or “frac”, it. Drilling requires about 1 acre-foot of water and hydraulic fracturing takes more than 8 acre-feet of water. The water in this area is being leased out of the municipal and industrial pool managed by the Dolores Water Conservancy District. These quantities of water may decrease as technology improves.

Tom explained some terms used in discussing oil and gas production:

Directional drilling allows a surface unit in one spot to aim for a target thousands of feet away horizontally. Directional drilling is done at an angle. Horizontal drilling involves drilling downward, then at a 90-degree angle.

A closed loop system keeps water used in energy production within a closed system and means fewer surface pits for used water. When large amounts of groundwater are present in proximity to drilling, steps must be taken to protect it, and a closed loop system does that.

One of the reasons there has been an explosion of energy activity in this area is because several pipelines and/or transmission lines are already in place to transport the energy. There are a couple of major crossings both above and below McPhee Dam across the Dolores River for power- and pipelines.

Future energy projects the DPLO is keeping an eye on include:

- Potash. This is present west of Dove Creek. Prices have dropped recently so interest has declined.
- Uranium
- Solar
- Wind. Data is being collected to see if wind power is viable here.

Industry perspective: Jim Felton, communications manager for Bill Barrett Corp., discussed energy development. Bill Barrett is an oil and gas exploration company with an appetite for exploration that is heartier than most companies'.

Bill Barrett has leased approximately 400,000 acres in this area, the Paradox Basin. The target is the Gothic shale. It's been known for a long time that the shale contains significant stores of natural gas, but extracting it has always been difficult. Bill Barrett looks at logs from wells drilled decades ago that were not feasible then because of technology or price, and ascertains whether they might be feasible for drilling today. Shales are thin layers. The key to unlocking the shale gas is to drill down to the layer, then horizontally. Current technology allows for about a half-mile of drilling horizontally.

After looking at old logs, the company then conducts seismic testing to reveal anomalies in the sub-surface that may suggest oil or gas resources. The testing does not reveal exact locations, however. Drilling a single well costs \$5 million to \$6 million, and it may be years before Bill Barrett knows whether this will be a viable field.

Jim discussed some broad issues involving energy and provided a handout on an "Oil and Gas Economic Impact Analysis" for Colorado and on U.S. energy consumption. He said one-third of the people on earth have never used electricity; they burn cow manure or wood to generate heat. They want the lifestyle we have.

Every year since this country's inception, its demand for electricity has grown. There are no silver bullets for our energy challenges. Approximately 23 trillion cubic feet of natural gas per year is consumed in the United States, and this amount is expected to grow as 100 million more people are added to the country by 2050, as projected by the Census Bureau.

Oil companies in the United States control only about 3 percent of the world's reserves. Domestic natural gas provides a real opportunity for meeting energy needs. Extracting and using natural gas would reduce emissions, reduce foreign dependence, and possibly provide an export to our European allies. The current supply of natural gas in the United States is abundant, as the recession is affecting industrial demand for construction materials and development, and prices are low.

Renewable energy is still a small factor. Wood generated more electricity for this country last year than wind and solar combined.

Jim said when it comes to energy, the "low-hanging fruit" has already been picked. Unconventional resources require the use of a great deal of technology.

Less than half of 1 percent of BLM land has an oil and gas presence on it. Jim said, of all uses of public land, the least "impactful" is oil and gas. Furthermore, it provides revenues. There is only one federal agency other than the Minerals Management Service that generates more revenues.

Oil and gas is a \$23-billion-per-year industry in Colorado. It provides jobs with much higher salaries than typical jobs in rural communities.

Discussion: A group member asked whether roads, pipelines, transmission lines and related disturbance were included in the acreage estimate that showed that oil and gas was the least impactful use of public land. Jim said probably not.

In response to other questions, Jim said Bill Barrett's type of natural-gas drilling is very different from coal-bed methane drilling, which is predominant in La Plata County.

It takes 4 to 6 weeks to drill a well. A producing gas well will operate about 30 years. To drill 50 wells in a year in this area would cost approximately \$200 million to \$250 million and would generate \$175 million in royalties. Fifty wells in operation would generate \$75 million to \$170 million in royalties and another \$40 million to \$80 million in taxes.

Bill Barrett has drilled about 12 exploratory wells so far. The company could be aiming at 50 wells per year, but it will probably take two or more years to ascertain whether the field is viable.

Steve Beverlin, DPLO manager, said the new supplement to the San Juan Public Lands' draft resource management plan describes the potential for 1,700 new wells in the local area over the next 20 years.

Grazing

Public-lands perspective: Steve Beverlin discussed grazing and range management on San Juan Public Lands.

Grazing permits are issued to private ranchers for a 10-year period. The permit identifies number of livestock, season of use, and percent of public land in each allotment. At the end of that period, the permit is reviewed. Within the next two years the DPLO must conduct a NEPA analysis on all its permits.

Permittees are responsible for maintenance of any range improvements (ponds, fences) they create. An allotment may have one or more permittees using it. There are 95 allotments across the DPLO landscape, and 110 permittees. Permittees deal with many issues, including recreational users, wildfire, soil conditions, wildlife, oil and gas, wild horses, and invasive species.

Steve said most permittees care about the long-term health of the land and voluntarily reduce their livestock numbers during droughts.

Monitoring standards have to be met while livestock is on the land. BLM land must meet Colorado standards and guidelines for rangeland health.

Discussion: Rowdy Suckla said in Coyote Wash, which is within a wilderness study area, his family has had cattle grazing for 40 years and through good management the land has flourished even through the drought.

Gerald Koppenhafer said you can never starve money out of a cow. There are some bad operators, but most are good. The few bad ones seem to give everyone a black eye but they don't stay in business long.

Permittee perspective: Al Heaton and Rowdy discussed their own experiences. Al's allotment joins Rowdy's at McIntyre Canyon. Al also has recreation permits to take guests along on cattle drives.

Al said wildlife follows the cattle because the cattle chew off dead and decadent plants. On the East Pines, Al has a seven-year rotation program. Every pasture gets one year of rest every seven years. This is consistent with the way his family manages its private lands, which are co-mingled with its public allotments.

Al said the wildlife appreciates the water wells and ponds. The whole ecosystem benefits from these things being maintained and care for.

There are “exclosures” of a half-acre or slightly larger to keep livestock out of certain areas. Near almost every exclosure, Al said, the range conditions outside are as good as or better than within the exclosure.

Al sets up his own rangeland-health monitoring sites in addition to the agency’s. Students from the Colorado School of Mines come down and earn college credits for learning about the grazing management done on his allotments.

Al and Rowdy said agriculture creates open space. If they were to lose their grazing allotments they would have to subdivide their land because there is not enough private land available to support their livestock, and ranchers couldn’t afford to own that much private land and pay taxes on it. That’s why there is a multiple-use concept for public lands. Different users will affect each other to some extent, but you have to be respectful and try to get along.

Discussion: Rowdy and Al were asked whether they had any conflicts with recreational boaters. They said they do not. Most rafters have been good neighbors.

Issues, Concerns and Opportunities from Tonight’s Meeting

Opportunities

- Find out whether there are impacts from and to livestock-grazing within the individual reaches, and what they are. And is grazing of value?
- Do not place too much emphasis on what a “bad apple” does. Concentrate on maintaining what we have.
- One of the ORVs is ecology, which includes riparian vegetation. Proper grazing can actually improve that particular value. Focus on how these uses interface with the values. There may be a positive impact.

Next meeting: The next meeting will be Monday, July 20, at the Lewis-Arriola Community Center, with dinner at 6 and the meeting at 6:30 p.m.