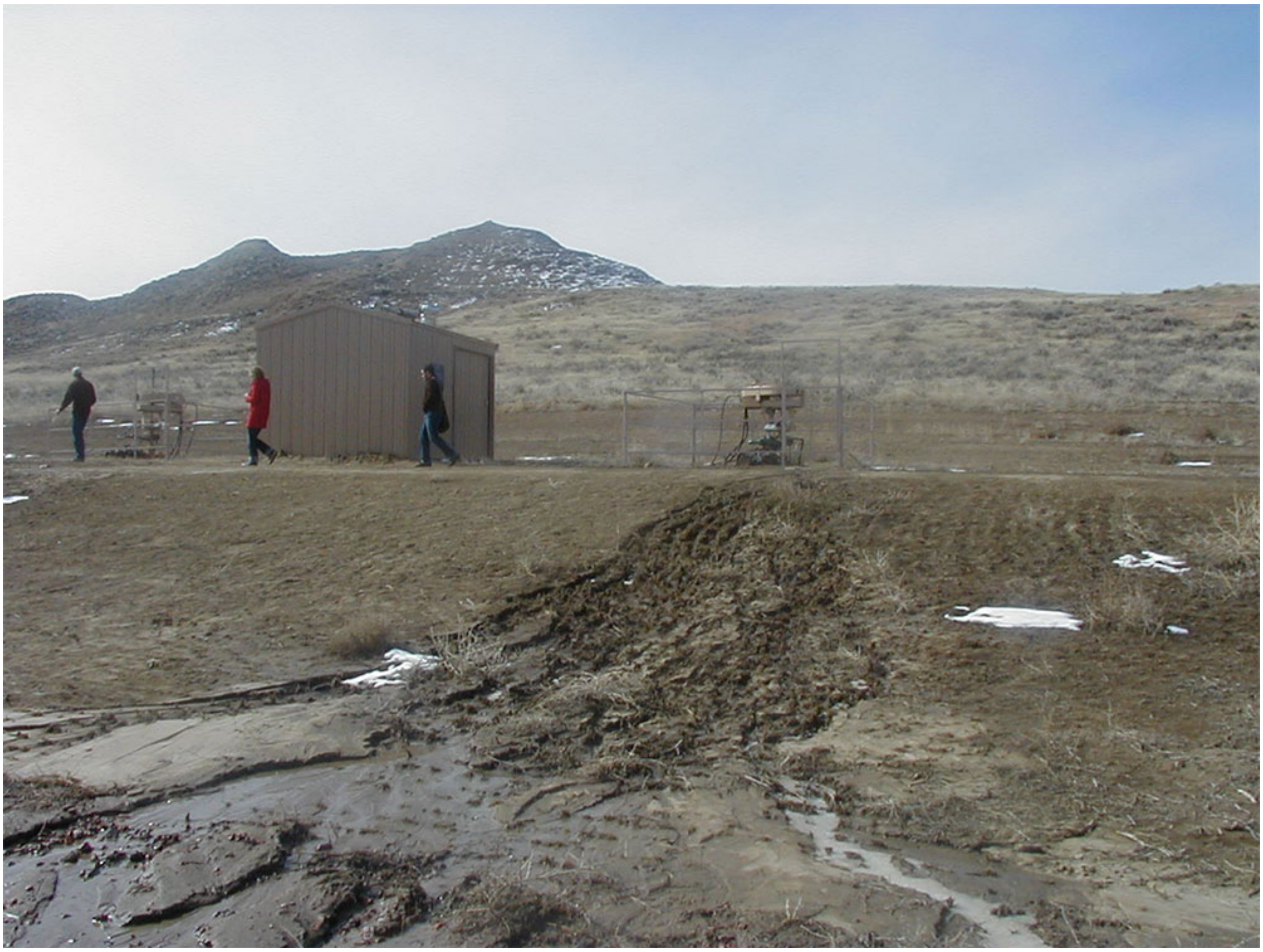
Aftermath of a Drilling Boom: Wyoming stuck with abandoned gas wells

Dustin Bleizeffer



This coal-bed methane gas well in the Powder River Basin leaked water, which caused some erosion. The facility was abandoned by its operator, and the state later plugged the well and reclaimed the area. (Courtesy of Jill Morrison — click to view)

By Dustin Bleizeffer
— May 21, 2013

The Powder River Basin coal-bed methane gas industry that drilled at a pace of 2,500 wells annually for a decade has been in sharp decline in recent years. Operators have mostly stopped drilling and are now idling thousands of wells, and perhaps thousands more have been abandoned — "orphaned" — by operators struggling financially.

Last week, Wyoming lawmakers heard testimony that the number of orphaned wells likely exceeds 1,200 — and more will be added to the list of liabilities to the state.

State officials say they're having difficulty measuring the exact scope of the problem due to complex recordkeeping among multiple agencies. Ryan Lance, director of the Office of State Lands and Investments, told WyoFile that his staff is working through stacks of files to try to determine which operators owe money, and how much.

The Powder River sometimes runs dry in this arid region of northeast Wyoming, yet only a small portion of groundwater associated with coal-bed methane gas development was put to beneficial use. (Dustin Bleizeffer/WyoFile — click to view)

In some cases, the orphaned wells devalue ranch properties, and in other cases they complicate a promise that the industry made at the onset of the play: that some wells would be transferred to ranchers for use in watering livestock on the arid high plains.

Coal strata are often aquifers in the region. In some areas, the production of coal-bed methane gas has substantially drained the coal aquifer because operators had to pump large volumes of water from the coal to get the methane gas also contained there to flow to the surface. By 2010, the industry had pumped 783,092 acre feet of water from the coals, according to the Wyoming State Geological Survey. That's enough water to fill Lake DeSmet three times.

Only a small percentage of that water was put to beneficial use.

"There's concern from land and mineral owners who are not getting surface use and damage payments anymore. … Money is spent on attorneys trying to recoup surface use payments," as well as royalties, said Jill Morrison of the Powder River Basin Resource Council, a landowner advocacy group based in Sheridan.

Morrison testified before the Joint Minerals, Business and Economic Development Interim Committee last week in Gillette.

Committee member Rep. James Byrd (D-Laramie) said that for years he and others on the committee have heard warnings about the potential for orphaned wells and unpaid bills in the coal-bed methane gas play, "and now it is happening."

While some operators, such as Anadarko Petroleum Corp., are financially sound enough to plug wells that are no longer commercial, a handful of smaller operators flirt with bankruptcy and fail to conduct required maintenance on the wells, creating potential hazards to human health and the environment. Some operators have simply walked away from their coal-bed methane properties in the basin.

That leaves the job of plugging wells and reclamation to the state, which will rely on an industry-funded orphan well account to cover the cost. The task of plugging and reclaiming orphaned coal-bed methane facilities, and collecting unpaid user fees and royalties, is divided among state agencies and the Wyoming Bureau of Land Management. So far, the state agencies do not have a complete picture of the scope of the problem and the resources available to address it.

The clean-up job

The state's orphan well fund comes from a "conservation tax" mill levy imposed on all oil and gas producers in the state. "There are no citizen tax dollars paid to plug these wells," Wyoming Oil and Gas Conservation Commission supervisor Grant Black told the commission.

The state legislature allocates $2 million per biennium from the fund to the Oil and Gas Conservation Commission. A portion of the money is also used to operate the commission's operations. The commission's board can vote to increase the mill levy if it appears in danger of being tapped dry.

The state has plugged and reclaimed about 100 wells per year on average, so it could take more than a decade to fix the current orphan well liability. "So if you're a rancher or landowner, and you have wells on your property, you may be a decade or more out on getting these wells plugged," Morrison told committee members.

Black was noncommittal about a timeframe for plugging and reclaiming the current count of 1,200 orphaned wells and many more wells that will likely become orphaned in years to come. That didn't satisfy members of the minerals committee. Sen. Chris Rothfuss (D-Laramie) said, "I'd like to see that," referring to a timeframe for completing the job.

Sen. John Hines (R-Gillette) is a rancher in Campbell County. He said he and his neighbors live with idle and abandoned coal-bed methane gas wells. He told Black, "To wait 10-12 years to get a mess on your property cleaned up that you had nothing to do with is unacceptable."

Ownership of surface and minerals involved in coal-bed methane gas is divided between fee (or private), state and federal. It's unclear how many wells fall under jurisdiction of the state and how many fall under jurisdiction of Wyoming BLM. Unlike the state of Wyoming, BLM doesn't have an orphan well fund.

Wyoming BLM officials said that at the start of fiscal year 2013, there 196 idle coal-bed methane wells on federal minerals, and no orphaned wells on federal minerals. "The bonds that are in place on the idled CBM wells range from $0 to $300,000 depending on the operator," Wyoming BLM spokeswoman Lesley Elser told WyoFile via email. "There have not been any actions at this point that would require us to step in and collect the bond."

Oil and gas bonding

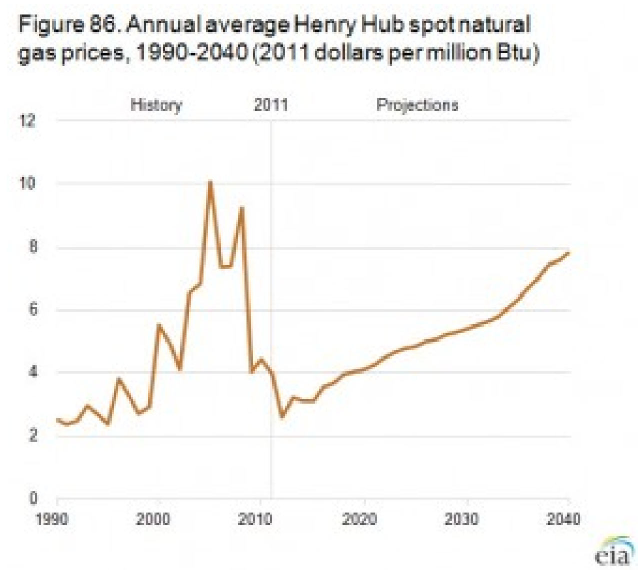
Before the state dips into the industry-funded orphan well account, it collects bonds posted by oil and gas operators responsible for the abandoned facilities. But the amount of bond posted usually covers only a small fraction of the liability. The state allows operators to post a minimum "blanket bond" of $75,000 for an unlimited number of wells, but it can ask for a higher amount.

In recent years, as the orphan well problem became apparent, the Wyoming Oil and Gas Conservation Commission began identifying operators at risk of abandoning coal-bed methane wells, and demanded additional bonding. The agency also aided at-risk operators in finding potential buyers in hopes that more financially-solvent companies would maintain the properties.

But the effort has yielded limited success. For example, the Oil and Gas Conservation Commission was able to get California-based USA Exploration & Production to increase its bonding level for its holdings of nearly 150 coal-bed methane gas wells at risk of being orphaned. When the commission revoked USA Exploration's bonds earlier this year for failure to meet testing and reclamation requirements, it collected a total $154,000. Yet the total cost to plug and reclaim the properties could cost an estimated $1.4 million.

"This is probably one of the most important things before the commission right now that we have to address," said Black.

The state's assurances that it will rectify the problem fall flat with some landowners in the region who, at the onset of the coal-bed methane gas play more than 10 years ago, warned that the state and federal bonding requirements were too low to ensure proper de-commissioning and reclamation.



(Courtesy of U.S. Energy Information Administration.)

Contacted by phone, Johnson County rancher Steve Adami said a coal-bed methane operator abandoned some facilities on state sections of his ranch about five years ago, and the facilities still have not been properly reclaimed. "It's so frustrating. We just shouted from the rooftops — from 10 years ago until now — that 'the bonding is inadequate, the bonding is inadequate,' and their attitude was, 'Leave us alone you whiny snots,'" Adami said.

During public comment before the minerals committee last week, Campbell County rancher Marge West said the state needs to fundamentally change its bonding rules for the oil and gas industry. West, and the Powder River Basin Resource Council, say the state ought to follow the federal model applied to the coal mining industry, which requires mining operators to post bond for 100 percent of the reclamation liability.

A 2009 University of Wyoming study suggested a new formula for setting reclamation bonds in the oil and gas industry. Primarily, the state should link bonding rates to production, and account for loss of suface land value. The study pointed to weaknesses in the current system. "One of the big shortcomings of the current bonding system is that it does not properly handle the time value of money," according to the study's authors. "The average life of an oil and gas well can be decades, and the value of having a small bond returned at the end of the production period is negligible from the operator's standpoint. … At an annual rate of inflation of 3 percent, $25,000 in reclamation cost today will cost the state $45,553 in 20 years."

Shifting from CBM to shale oil in the PRB

Ever mindful of maximizing returns for shareholders, oil and gas producers constantly shed marginal properties and replace them with what's hot on the commodities market, and what can deliver quick returns.

The resulting migratory pattern of drilling rigs followed by production is making a complete circle in Wyoming's Powder River Basin. Anadarko Petroleum Corp., for example, is shifting from dry gas (coal-bed methane) to liquids, plugging some 1,100 coal-bed methane gas wells last year while tapping deep shale oil in the basin.

Anadarko has drilled 15 horizontal shale oil wells in the basin since 2011, and it plans to drill up to 17 more this year, according to company officials. In some instances, Anadarko will drill for deep oil on the same properties where it used to produce coal-bed methane gas.

"So we see (the Powder River Basin) moving from a gas province into an oil province," said Ryan D. Helmer, subsurface manager of coal-bed methane for Anadarko.

Helmer and Anadarko general manager, Nichols W. Schoville, both testified before the Joint Minerals, Business and Economic Development Interim Committee in Gillette last week. Anadarko, one of the biggest coal-bed methane gas players in the basin, plans to continue plugging hundreds of its coal-bed methane gas wells each year.

The decision to switch from coal-bed methane to oil stems from a combination of low natural gas pricing, strong oil prices, and the fact that coal-bed methane gas is mostly played out in the basin.

"The play is maturing. The best spots have been drilled," said Helmer, adding that the industry may still continue to drill some new coal-bed methane wells in the basin's remaining sweet spots.

One of the sweet spots is in the Fortification Creek area between Gillette and Buffalo where the industry wants to drill some 500 wells. But that full development scenario has been on hold while the BLM considers special protections for prime wildlife habitat in Fortification Creek. The area is home to a rare high plains elk herd — a prime hunting resource.

The Powder River between Gillette and Buffalo runs through the center of Wyoming's largest coal-bed methane gas field. (Dustin Bleizeffer/WyoFile — click to enlarge)

Anadarko officials asked Wyoming lawmakers for assistance in convincing federal land managers to allow the industry's drilling plans to move forward.

Wyoming lawmakers asked if overly burdensome federal regulations were to blame for the demise of coal-bed methane in northeast Wyoming. No, said Helmer. The coal-bed methane is simply played out — at least beyond the hayday decade when the industry averaged 2,500 new wells per year.

Helmer said Anadarko has already developed primary production from about 95 percent of its coal-bed methane fairway properties along the Powder River. There are still limited opportunities in the fairwayhe said, where the resource looks to be commercially viable in the $4 to $6 per thousand cubic feet (mcf) range. But other coal-bed methane properties in the region won't reach commercial viability until prices climb to the $7 to $9 range, he said.

"A large part of this is the field is maturing. … We would not expect to get back to 2,500 wells per year even if prices got back up," said Helmer.

The Powder River Basin was once Wyoming's largest natural gas producer at more than 1 billion cubic feet per day, due to the boom in coal-bed methane gas.

Anadarko expects the national average price of natural gas to remain in the $4 to $5 range for the next eight to 10 years, citing forecasts from the U.S. Energy Information Administration. "That's primarily driven by the amount of the gas supply we have in the U.S. right now," said Helmer.

That $4 to $5 per mcf stability depends on the nation maintaining a normal annual cycle of filling natural gas storage during the warm season and drawing it down in the cold season. Natural gas is still prone to slipping below $4 per mcf — a particular concern in Wyoming because natural gas is the state's single largest source of revenue. "It's very winter dependent and very weather dependent at this point in time," said Helmer.

"There are better oil and liquid opportunities to invest in," added Schoville.

Lawmakers asked whether some existing pipeline gathering systems for coal-bed methane could carry natural gas that's associated with the current shale oil play in the basin, helping to curb the need to flare, or burn, that gas, for which there are no immediate gathering systems tied to new oil well drilling locations — a major economic, human health, and environmental concern.

Anadarko officials said that's not likely, because the existing coal-bed methane gathering systems were built for low-pressure, dry gas, as opposed to the gas that's associated with deep oil, which is wetter and under higher pressures.

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CBM

$50 million in debt, High Plains Gas promises to revive coal-bed methane

JUNE 16, 2014 6:00 AM • BY BENJAMIN STORROW STAR-TRIBUNE STAFF WRITER

To hear Bob Mitchell tell it, coal-bed methane is on the cusp of a revival. The industry has been in disarray ever since natural gas prices plummeted several years ago and thousands of wells, which sprouted up across the Powder River Basin during the early 2000s, were abandoned.

But the industry's fortunes are looking up thanks in part to a new technology called the Gazmo. At least that is what Mitchell says.

When a typical coal-bed methane well produces natural gas, or methane, water is a byproduct. The Gazmo keeps the water in the ground while bringing the gas to the surface, considerably lowering an operator's production costs, Mitchell says.

“We can make money at present gas prices or even at lower gas prices,” Mitchell said.

He predicts that High Plains Gas, a Sheridan-based company where Mitchell is a consultant, will soon have 3,000 producing coal-bed methane wells.

Mitchell has many doubters, but his prediction carries enormous implications for Wyoming and the landowners who have signed agreements allowing High Plains to drill on their property.

The collapse of the coal-bed methane industry around 2010 saw some operators file for bankruptcy and abandon their former wells. Many landowners never received the mineral royalties promised to them, and the state was saddled with the task of cleaning up the wells left behind.

Gov. Matt Mead announced a $7.7 million plan last year to close some 1,200 of these so-called orphaned wells over the next four years.

And those numbers could easily rise if more companies file for bankruptcy. Cleanup costs could reach as high as $31 million if all of the approximately 3,100 at-risk wells are added to the list of what the state is already responsible for plugging, according to a report released by the governor's office last year.

Many of the at-risk wells belong to High Plains. The company now owns 3,000 nonproducing coal-bed methane wells. By its CEO's own estimate, High Plains is $50 million in debt. And the Gazmo is commercially untested, state regulators say.

The company is scheduled to appear before the Wyoming Oil and Gas Conservation Commission next month to explain its plans for the wells.

Ed Pressley, High Plains CEO, says the company is working on a plan to restart production. The plan would get the state off the hook for closing High Plains' wells and bring a windfall in tax revenue and royalty payments, he says. It would also help the company avoid what regulators say amounts to $5.7 million in additional bonding payments.

The state requires oil and gas companies to pay a bond on all wells they drill. The bond is almost like an insurance policy for the state.

Its intent is to cover the costs of plugging a well and reclaiming the land if a company should run into financial troubles and not be able to pay for the cleanup itself.

If production at a well stops, the state requests an additional bond because the risk of a company running into financial trouble is higher.

The additional bond can sometimes be avoided if a company can produce a plan to either bring the wells back into production or plug the wells. That is what Pressley hopes to present to the oil and gas commission next month.

"It will be exciting that we can prove these wells are an asset to investors and to the treasury of the state of Wyoming," Pressley said.

But state regulators are wary. A company can sometimes avoid an additional bond payment on its idle wells if it has a demonstrated track of following through on its plans to restart production or plug them, said Tom Kropatsch, natural resources program supervisor for the oil and gas commission.

"I guess we've had a lot of calls from landowners and mineral owners previously involved with High Plains about unmade payments that were due for surface use agreements," Kropatsch said. "We take that into account, along with the plans High Plains has previously provided to us. That is the background we come into with High Plains with their plans going forward."

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Bob Mitchell is at the center of a messy drama involving another coal-bed methane producer, Black Diamond Energy. The facts of what happened in that case are fiercely contested, but the end result is this: Last week the oil and gas commission issued Black Diamond an ultimatum. The company has 30 days to come up with nearly $4.2 million to pay the state in additional bonds.

If it fails to do so, the state is going to pull the bonds Black Diamond has already paid and use the money to close the company's 340 wells.

Black Diamond, a Buffalo-based company, already faced its own woes prior to the decision. Johnson County has issued an $812,000 lien against the company for failure to pay taxes. One ranch with Black Diamond wells on its property filed a request with the oil and gas commission to bar the company from its land for failure to honor the terms of a surface use agreement. Another landowner has requested the oil and gas commission pull the company's bond and close the wells.

Black Diamond says it is only in this position because of Mitchell, who purchased Black Diamond's debt after the company defaulted on a $32 million loan from S&T Bank of Pittsburgh.

The two parties entered a tentative agreement in 2011 that would have seen Mitchell receive $65,000 and some of Black Diamond's wells in exchange for the coal-bed methane producer's debt. Eric Koval, of Black Diamond, says Mitchell proposed selling Black Diamond's debt back to the company for $1 million.

The deal was never reached.

Black Diamond says Mitchell tried to foreclose on the company and seize its assets. Mitchell says he only tried to foreclose on Black Diamond after it refused to meet the terms of their agreement. Each accuses the other of foul play.

The dispute remains tied up in court.

From the perspective of state regulators, the legal drama has played out long enough. When wells change hands, both parties are required to sign a document approving the transfer, they say. That has not happened to date, meaning the wells still belong to Black Diamond. And, regulators say, Black Diamond is not complying with state regulations.

"We can continue to let the court issues play out, but I'm not sure we have confidence in either party's ability to post the bond," Kropatsch says.

Mitchell's company, Mitchell Resources LLC, is owned by High Plains Gas Inc.

Much to prove

High Plains Gas today faces $50 million in debt obligations in the form of bond payments to federal and state governments, back taxes and royalty payments to landowners, Pressley said.

Much of that debt was accumulated by previous owners, said Pressley, who bought High Plains in March 2013.

A High Plains subsidiary, CEP M Purchase, was threatened with a $533,520 fine by the Interior Department's Office of Natural Resources Revenue last week for not reporting production at its wells on federal land.

The company cannot meet its debt obligations today but intends to in the future by bringing its wells back online with the Gazmo technology, he said.

Retrofitting a well with Gazmo technology costs about $50,000. Pressley said. He expects about 1,000 wells to be back in production within the next year. The cost of starting those wells would be $50 million based on Pressley's projections.

But the cash flow would be greater than the cost, Pressley said. He expects each well pad to net $100,000 based on previous levels of production and the lower production costs wrought by the Gazmo. If 1,000 wells each produced $100,000, that would equal $100 million.

Pressley also pledged to spend $10 million each year for the next 10 years on reclamation, adding that the company plans to continue acquiring nonproducing coal-bed methane wells. High Plains' goal is to own 5,000 wells, he said.

There are doubts as to whether the company will succeed. Mark Watson, the Wyoming Oil and Gas Commission supervisor, said the Gazmo technology has never been proven on a commercial scale.

Pressley agrees but says High Plains has perfected the water and gas separation technique.

"This is the first time it is going to be deployed for a company to produce commercial quantities of gas into the sale line," he said.

The High Plains CEO says the state faces a choice over what to do with his company's wells.

"There are only three things that can be done: put them into production; find somebody who will pay millions and millions of bonding -- that does not exist. And the third one is the horrific deal of plugging and abandoning. There is no money for that, except taxpayer money," Pressley said.

Taxpayers likely would not be on the hook. Wyoming pays the cost of plugging abandoned gas wells through production taxes on oil and gas companies.

Broke, out-of-compliance CBM operator asks for another chance

— *July 12, 2014*

It was one hell of a party in the Powder River Basin. The whole place burned brightly as big oil corporations and small-time operators alike drilled coal-bed methane gas wells at a pace of 3,000 new wells a year.


Dustin Bleizeffer

Ranchers saw second-cousins, third uncles and ex-brothers-in-law they never knew they had roll into Gillette with retooled water well rigs they'd purchased at auctions on their journey to Wyoming, and go to work. Some of them even got rich. But when the inevitable bust hit circa 2008, an ugly hangover quickly took hold for just about every company that wasn't under the umbrella of major oil and gas corporation.

Workers were laid off, offices were abandoned, wells were left idle and unattended, bills unpaid. It re-ignited resentment among ranchers who appreciate what oil and gas brings to their rural economy but hate the fact that the party always gets too rowdy.

Today, there remain a handful of small operators — broke and long out of compliance with state and federal regulations — who scrape and borrow and promise to bring wells back to production, usually under shifting ownership and new company names. One of these is Patriot Energy Resources, passed back and forth like a 2002 Ford F150 driven hard and put away wet, well beyond its halcyon days of the Powder River Basin coal-bed methane gas boom.

Patriot's new owner, High Plains Gas, says the outfit still has great assets. It has wells with gas, a pipeline gathering system, *and* a fancy new technology to lower the cost of production — "Gazmo" technology. Nary a drop of water will be produced with the gas, its promoters claim, a production savings that will overcome the extremely low wellhead price of maybe $4 per thousand cubic feet (mcf) of gas.

High Plains CEO Ed Pressley says he understands perfectly that his plan to revive his new subsidiary Patriot — and in turn re-ignite coal-bed methane — is met with cynicism.

“There are people who are disgusted and outright mad and have a right to be. And we’re going to work to mend those fences, and work to be a good corporate citizen,” Pressley told WyoFile late last week.

On Tuesday, Pressley and his attorneys will make their case to the Wyoming Oil and Gas Conservation Commission, explaining why the commission should waive an increase in idle well bonding and allow them to gradually begin putting Patriot’s wells back into production, beginning with Phase 1 this summer. *(Story continues below this graph.)*

Patriot Energy Resources (Luca) and High Plains Gas; breakdown of wells and financing | Create Infographics

Yes, both Patriot and High Plains are deeply in debt — some $50 million, by Pressley’s estimate. Both companies are out of compliance with, and owe money to, at least six different state and federal agencies. Pressley says the companies’ credit is too toxic for banks to put up sureties or cash bonds to meet increased bonding demands from state and federal agencies. But they do have investors willing to put up the money needed to enact Gazmo and Phase 1.

Rather than force the forfeiture of existing bonds and plugging the wells for good, Pressley says it’s in everybody’s interest that Patriot’s wells are put back into production, creating a cash flow that will go toward bonding, mechanical integrity testing on long-idled wells, reclamation, and paying off debts to government and private parties alike.

“We think once gas production starts and successful application of our technology gets known out there, confidence will be regained,” said Pressley. “The alternative is they reject (our plan), and the wells … Well, there isn’t really another option other than belly up.”

The plan, or plea, to the Wyoming Oil and Gas Conservation Commission (OGCC), is not an original. The commission’s staff has gone to extraordinary lengths to aid and encourage several broke coal-bed methane operators to get their idle and orphaned wells in order. In April 2013, after several years of giving the company more time to straighten its house, the five member commission (chaired by Gov. Matt Mead) finally forced forfeiture of $154,000 in bonds posted by USA Exploration & Production for failing to test and/or plug more than 100 idle coal-bed methane gas wells in Campbell County.

Others have met a similar fate in the past couple of years. So why is Patriot — and its parent company High Plains — deserving of another chance?

OGCC staff notes that at least one recent extension in the Patriot case was due to complications in the March 2013 purchase of Patriot by High Plains. Patriot’s former owner, Luca Technologies, failed to transfer files to High Plains, so the new owners had to comb through government databases to compile their own records of wells, well logs and other critical information related to the coal-bed methane gas facilities.

“Prior to these factors, and throughout this period, Commission staff has worked diligently with everyone involved to bring these companies into compliance,” said Tom Kropatsch, OGCC natural resources program supervisor.

It’s important to note that the five-member commission — not OGCC staff — ultimately bears responsibility for the agency’s decisions on matters of bond forfeiture and fines. And the commission faces sharp criticism for what some describe as a tendency to ignore the concerns of landowners while coddling broke, out-of-compliance operators instead of enforcing rules and regulations, enabling a bad situation to become worse.

"It's such a gigantic morass of unpaid bills, of multi-millions of dollars in unhonored contracts — it's inconceivable and nearly laughable that it could last to this point and that the state could take them seriously. … How does this happen?" said Jill Morrison, organizer for the Sheridan-based landowner advocacy group Powder River Basin Resource Council (PRBRC).

Jill Morrison and Kenny Clabaugh survey an ephemeral draw flooded and frozen with coal-bed methane water on a Campbell County ranch in 2006. (Dustin Bleizeffer/WyoFile — click to enlarge)

The PRBRC represents many landowners in northeast Wyoming where thousands of coal-bed methane wells have been left idle and orphaned — for more than five years, in some cases. In their role as government watchdog, the PRBRC deserves much of the credit for forcing the state to finally take action in a years long pandemic of orphaned wells in the Powder River Basin.

In December 2013, Gov. Mead asked for, and subsequently got, a $3 million appropriation toward the state's long-existing orphan well fund — a fund paid for via a mill levy, or conservation tax, among all state oil and gas producers. The state can use the money to plug and reclaim orphan wells and related facilities. At the time, the state listed 1,220 wells in its expedited orphan well plugging and reclamation plan, acknowledging that another 2,300 idle coal-bed methane gas wells "at risk" of being abandoned/orphaned — Patriot's and High Plains' wells among them — may be added to the roster, adding another $18 million to the total plugging and reclamation liability; again, paid for via oil and gas operators through the conservation tax.

At Tuesday's hearing, the OGCC commissioners could impose thousands of dollars in fines and demand forfeiture of about $3 million in bonding posted by Patriot. That doesn't take into account similar actions the commission — or that the Wyoming Office of State Lands and Investments and a host of other entities — could take against both Patriot and High Plains in the future. According to documents obtained by WyoFile, the companies likely owe millions more in unpaid mineral royalties to the state and feds, which split authority and jurisdiction among several agencies for wells on state and federal minerals.

In addition to those debts, Patriot Energy and High Plains Gas also face claims by several landowners of unpaid mineral royalty payments and surface use payments. In some cases, landowners say they will not allow access to the wells until the operators make good on surface use contracts. There's also a question of whether the companies have electrical power service to operate their wells.

But Patriot, and High Plains, deserve another chance, says Pressley. He says they have a buyer for the gas — United Energy Trading. While the wells have sat idle, the coal formations have recharged with water, according to Pressley, spurring the microbial stimulation of methane gas, and most all of the workings are there to breath new life into what was one of the brightest burning gas plays in the nation (before the shale gas revolution busted Powder River Basin coal-bed methane).

"We think putting the wells into production is the answer," said Pressley, adding that the companies would dedicate $10 million per year of the new cash flow toward bringing wells and other facilities into compliance. "We had the boom and we now have the bust. Those wells are there. The company owns those wells, and the question is what to do?"

The PRBRC's Jill Morrison, and many of the thousands of landowners they represent, have heard many similar pleas and bargains since long before coal-bed methane kindled a boom in the Powder River Basin.

“The state just coddles these companies and holds their hands for years,” Morrison told WyoFile. Meanwhile, taxpayers, mineral owners and landowners are left unpaid, and wondering if idle and orphaned wells pose a threat to their health and agricultural operations.

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The continued cost of Wyoming's orphaned wells

Wyoming’s oil and gas regulators are in the process of plugging thousands of orphaned oil and gas wells in the state, many left in the wake of coal-bed methane’s steep rise and precipitous fall.

Regulators updated lawmakers on the Joint Minerals, Business and Economic Development committee, which met Thursday in Casper, on the process and cost of filling the pocked landscape of Wyoming. Environmentalists took the opportunity to tell lawmakers that the issue of orphaned wells is ongoing.

Though rule changes have allowed the Wyoming Oil and Gas Conservation Commission to more aggressively monitor companies’ idle wells, as well as hold higher bond amounts to cover the eventual cost of reclamation, not all orphaned wells are fully bonded to the cost of reclamation.

But the bill left behind by companies gone bust is significant.

The accumulated cost to fill 1,258 orphaned wells since the commission began an accelerated orphan well project in 2014 was $4.6 million more than the bond money available to the commission.

The state regulation agency pays the difference between the insurance on the wells and the cost of filling them.

The money to cover that comes from the conservation tax levied on operators.

It’s important that adequate bonding be maintained going forward, said Jill Morrison of the landowners group Powder River Basin Resource Council.

Morrison told the committee Wyoming is not out of the woods in terms of companies defaulting on their liabilities before paying the tab.

This is of particular concern in the current climate of low oil prices.

“At some point, companies are going to try to shed those liabilities when well production starts to decline significantly,” Morrison said. “Then we’re gonna be trying to plug or get bonding for idle wells that are 10,000 to 15,000 feet deep. I don’t think we’re over the hump on this in the future.”

But the issue of bonding is not just one of orphaned wells — wells whose operators went bust. There are also wells that have been taken out of production but are still owned by a producer.

Companies may be required to post additional bonding for wells after one year of being idle, at a rate of $10 per foot.

According to the commission’s report Thursday, 8,881 idle fee wells have been idle for more than a year, requiring either a plan for continued operation or idle well bonding. If the total bond amount was immediately collected, it would add up to about $211 million. In reality, about $60 million is not currently held by the commission.

The explanation for that discrepancy is that producers are able to submit a plan to the commission to either plug idle wells or bring them back to production rather than pay the idle well bonding fee, according to the commission’s report. The commission also allows some leeway to operators, who can submit a cost estimate justifying a fee less than the $10 per foot of the well bore, accounting for some of the difference.

Much of the commission’s work now is made possible by increased bonding requirements, updated in the commission rules late last year. The requirements were considered a compromise both from environmentalists, who wanted a $150,000 blanket bond, and industry officials, who argued for significantly less.

http://trib.com/business/energy/scars-of-a-boom-the-lingering-impact-of-coal-bed/article_e448029f-32a8-5599-87b8-10e6a668153f.html

FEATURED

Scars of a boom: The lingering impact of coal-bed methane

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ARVADA -- Salt glistened in the sun along the banks of the Powder River south of Arvada, where dead cottonwoods loomed like ghosts over the rushing water.

“It was like a national park. It was beautiful,” said Brett Sorenson, a local rancher who once rode his blue roan quarter horses beneath the cottonwood canopy near the river’s shores. “And to not have that anymore, it blows my mind.”

Sorenson, 61, was standing on a bluff overlooking the river. It was early October. The Arvada rancher estimates roughly 1,600 trees died on his riverside property since coal-bed methane production boomed last decade. Fallen trunks and branches litter his land. He tried for a time to keep up with the toppled limbs, clearing the wood to make way for a new field. But after a while he stopped. He couldn’t keep up with the remaining trees that continued to die.

Sorenson blames a surge in coal-bed methane production for the trees’ deaths. He is not the only one.

The Powder River snakes through the lowlands of Arvada on Oct. 21. Salt can be seen along the river's banks, a byproduct of saline produced water runoff from coal-bed methane well production.

Ryan Dorgan, Star-Tribune

Nearly five years after coal-bed production collapsed, unable to compete with shale plays in the eastern U.S., questions continue to linger about the environmental damage done during the last decade, when drilling in this rolling, open country reached a fever pitch.

Who will clean up and pay for thousands of coal-bed wells abandoned by bankrupt companies remains unknown. Wyoming committed to reclaiming roughly 3,900 wells, almost 600 of which have been plugged this year, but the U.S. Bureau of Land Management has taken little action to address the 4,000 idle wells on federal land.

Some landowners are now suing companies that sold their wells to smaller firms that later went bankrupt. Sorenson is involved in one such case. A Sheridan County jury awarded him an almost $1.1 million judgement earlier this year. Pennaco Energy, a

Marathon Oil subsidiary, is responsible for paying cleanup costs, the court ruled, despite the fact it sold to now-defunct High Plains Gas in 2010. Pennaco has appealed the ruling to the state Supreme Court. The case will be heard next month.

But perhaps the biggest mystery of all are the dead cottonwoods, many still standing, stripped of their bark and leaves. The trees hint at one of the biggest fights during the boom: the amount of water produced by coal-bed wells discharged into rivers and streams.

Landowners and conservationists bitterly opposed such discharges, saying they threatened the future of the Powder River and the people and animals it sustained. State officials contended the discharges had little impact on water quality and permitted large quantities of produced water, much of it laden with salt, to be discharged into the river.

Years after those battles subsided Sorenson says he has found vindication in a 2014 University of Wyoming study. It concluded the salty discharges from coal-bed wells into the Powder River were responsible for the cottonwoods' demise.

But the state Department of Environmental Quality dismissed the finding, saying it failed to provide a conclusive link. Regulators are now scaling back their monitoring program, as coal-bed production continues to sink.

“DEQ knows the salts are killing these trees, but they’re not stopping them,” Sorenson said. “That’s a Wyoming river. I want to make them accountable for what they did.”

Brett Sorenson, 61, looks out across what once was thick cottonwood forest Oct. 21 on his family's ranch along the Powder River in Arvada. Sorenson has lost more than 1,500 trees from produced water runoff — a byproduct of coal-bed methane wells that dot the Powder River Basin landscape. "When they rolled in here, it was promises this, promises that, and they've kept none of those promises," Sorenson said. "It was 14 years of hell — just hell, every day."

photos by Ryan Dorgan, Star- Tribune

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The Powder River runs nearly 500 miles, winding its way down from the Big Horn Mountains above Kaycee, where the South and Middle forks meet. It weaves around the hills and bluffs of northeastern Wyoming, before crossing into Montana, where it eventually combines with the Yellowstone River.

It is one of the last undammed prairie rivers in the lower 48 and home to more than 20 fish species, including the rare sturgeon chub and western silvery minnow.

Coal-bed methane discharges into the river have been a concern almost since the time production began to increase in the 1990s. CBM wells produce large amounts of water along with the methane companies seek to capture and sell. In 2008, near the height of the CBM boom, Wyoming coal-bed operators produced 750 million barrels of water, according to state statistics.

All that water needs to go somewhere, but it is generally salty, making disposal a complicated task. Companies have chosen to inject it into aquifers, treat it before discharging it into a river or, when it is of good enough quality, provide it as water for irrigation or livestock. Sometimes water can be discharged directly into flowing streams if it is judged to be of good enough quality.

State records show that CBM producers discharged almost 47,000 tons of dissolved sodium into the Powder River and its tributaries between 2009 and 2014, a period when coal-bed production was generally on the decline.

Those figures represent a worst-case scenario, said Jason Thomas, DEQ coal-bed methane permitting coordinator. Sometimes the salts evaporate or are absorbed before reaching the river. The numbers themselves are based on companies' maximum potential production, he said, noting that firms occasionally discharge less than what is reported.

Still, the amount of salt discharged into the river has long been a concern of local landowners here. Sorenson pushed the state to study the cause of the dying cottonwoods on his property, fearing the salt water was responsible. The results appeared to validate his worries.

"These persistent salts essentially became a long-term drought for the cottonwoods, which are not salt tolerant and respond in a similar manner as drought," Brent Ewers, a professor of plant physiological ecology at the University of Wyoming, wrote in his 2014 report about the trees' decline.

Powder River Basin CBM

A coal-bed methane well

sits dormant on Brett Sorenson's property along the Powder River on Oct. 21 in Arvada. About a dozen CBM wells dot Sorenson's property among the more than 1,500 dead cottonwood trees, felled due to being overwhelmed by the saline produced water runoff from CBM production.

Ryan Dorgan, Star-Tribune

Growth rates began to decline after coal-bed production surged and nearly all ages of trees died, the lone exception being trees younger than five years, Ewers wrote. He predicted they, too, would ultimately perish.

"The continuing decline in these cottonwood stands strongly suggests that unless the stress inducing environment (CBM water) is alleviated, the cottonwood mortality will likely continue leading to loss of cottonwoods along the flood plain," Ewers wrote.

The University of Wyoming researcher did not respond to requests for comment.

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The study drew a rebuke from the DEQ. Ewers' study did not observe salt buildup in the root zone -- equipment restraints prevented researchers from taking samples deeper than 2 meters -- record precipitation levels or examine local groundwater, DEQ Water Quality Administrator Kevin Frederick wrote in response to the study.

The lack of data raises questions over whether the trees died from drought, he said, noting that the rains in the late 2000s could have arrived too late to save the trees. Few, if any, changes in salinity have been observed in the Powder River, Frederick added.

"We would therefore propose that while CBM development cannot be ruled out as a contributor to the cottonwood mortality observed along the Powder River near Arvada, a direct cause-effect relationship cannot be established as strongly as the draft report currently implies," Frederick said.

Bill DiRienzo, the manager of the DEQ's pollution discharge elimination system, or WYPDES, elaborated in an interview. Regulators developed a water quality calculation to determine how much salt and other pollutants from coal-bed discharges the river could withstand.

The formula is based in large part on water flows. Companies are generally allowed to discharge more in the spring when water levels are high but are curtailed in the late summer and early fall when water levels are low.

The Powder River is naturally salty and sodium levels can be influenced by periods of low flow, DiRienzo said. Regulators, he noted, have long tracked water quality in the river. He pointed to a 2012 study by the U.S. Geological Survey, saying “the results of that report are that there really was no significant change in water quality in the river.”

That point has been debated for years, but concrete answers remain allusive. The USGS report cited by DiRienzo notes that sodium absorption rates, an indicator of sodium levels, vary widely throughout the Powder River. But it notes that test sites around Arvada observed a significant upward trend in sodium absorption rates. It concludes coal-bed development could be responsible for the trend.

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Powder River Basin CBM

“I grew up here with my dad on this river and spent 60 years of my life on this river,” Brett Sorenson said. “I'd never seen anything like it.” Sorenson lost more than 1,500 cottonwood trees on his riverside ranch in Arvada, a symptom of saline water penetrating the root system of the trees as a result of coal-bed methane well production runoff.

Ryan Dorgan, Star-Tribune

Coal-bed methane production was down by more than 50 percent between 2010 and 2014. The largest producer in the basin today is Carbon Creek Energy, a Sheridan-based company led by Wyoming Oil and Gas Conservation Commissioner Tom Fitzsimmons.

Carbon Creek bought 6,800 wells this year from what were the two biggest coal-bed producers, Anadarko Petroleum and WPX Energy. Terms of the deal were not disclosed, but regulatory filings put the total transaction at roughly $267 million.

The company relies on a $70 million water collection system built by Anadarko to pump produced water to an aquifer near Midwest, where it is injected underground. The effort is due in large part to the fact that the water is potable, Fitzsimmons said.

“The direct discharge into Powder River is not something that we seek to do,” Fitzsimmons said. “We seek to find beneficial use for landowners or reinjection.”

DEQ officials nonetheless anticipate companies will continue to discharge sodium into the river and its tributaries, though at levels slightly below what was observed in 2014. Department figures put last year’s sodium discharges at nearly 7,300 tons.

The state doesn’t plan any further study of the dying cottonwoods, DEQ officials said. With production down, it did not seem an appropriate use of funds, they said. Several water quality testing stations along smaller tributaries are scheduled to be removed.

“It is an isolated incident. I don’t think cottonwoods are dead all the way up and down the river. It is specific to his property,” DiRienzo said. There are some cases, he added, where cottonwood trees have been flooded to death.

But Arvada residents say Sorenson’s is not an isolated case. Rick Floyd, a local rancher, said he lost two-thirds of his cottonwoods to flooding along a 14-mile stretch of Wild Horse Creek.

The state has shown a repeated unwillingness to respond to landowners' concerns, Floyd said, echoing a sentiment voiced by others here. The 60-year-old rancher said he never saw salt along the riverbanks before coal-bed production began.

“Isolated? I don’t think so,” Floyd said. “As soon as that water got to running full tilt down through here, it went to killing meadows, flooding them. That methane water ain’t no good."

Of state regulators, he added, “they don’t care what happens … A hell of a lot of the state’s political. The methane’s got a hell of a lot more money than we do. And money talks in this state.”

Follow energy reporter Benjamin Storrow on Twitter @bstorrow

Benjamin Storrow

Oil & Gas Bonding Reform Is A Common-Sense Solution to A Significant Problem: Just Look At Wyoming

SUMMARY: When an oil and gas company wants to develop federal minerals, it is required under the Mineral Leasing Act (MLA) to provide a bond sufficient for ensuring that the well will be cleaned up in case the operator goes bankrupt or otherwise abandons the well without having fully plugged and adequately reclaimed it.

Companies are similarly required to post bonds when they drill on lands under state jurisdiction, as well. Because every state takes a different approach to the management of oil and gas operations, bonding requirements look different across different states' lands. This is why it is critical that the Bureau of Land Management (BLM) maintain oversight responsibility of the federal bonding program, to ensure that all the wells drilled on federal lands and minerals across the country are fully plugged and adequately reclaimed.

Many factors can significantly increase the cost of cleaning up oil and gas wells, and under the MLA the BLM is supposed to set bond amounts at the necessary level for ensuring that "complete and timely" reclamation occurs. The minimum bond amounts provided in the BLM's leasing policies are meant to provide baseline levels for federal oil and gas bonds, but the current minimum amounts were first set in the 1950s and 1960s, and they have not been updated since – not even to account for either inflation or the changes in technology that now allow for oil and gas companies to drill deeper, more destructive wells.

As a result, the Government Accountability Office (GAO) has found the average bond amount that the BLM holds for all oil and gas wells to be grossly inadequate for covering the costs associated with cleaning up just one well, let alone the costs for cleaning up all of the wells covered by a single blanket bond. This is why U.S. taxpayers have already been left with the enormous bill required to foot the difference and protect public health, safety, and the environment from the threat of orphaned wells – costs that should instead be borne by the oil and gas operators who created the pollution in the first place. According to the BLM, there are at least 15,000 orphaned wells already littered on public lands across the country. Under current bonding requirements that govern the onshore oil and gas leasing system, this number is expected only to increase.

Thankfully, common-sense solutions to reform the federal bonding program are underway, as the Interior Department has proposed to, among other necessary changes, revise the minimum oil and gas bond amounts to protect taxpayers from having to bear the industry's reclamation-related liabilities. Adequate bonding regulations are critical for ensuring complete and timely reclamation of oil and gas well sites and go a long way towards protecting our public lands, waters, wildlife, and communities. Moreover, in order to reap private benefit from public resources, it is perfectly reasonable that oil and gas companies be required to put up the full amount of money necessary for ensuring they clean up after themselves.

The BLM's proposed updates to its bonding framework are coming after updates that have been made to several states' bonding policies in recent years. The state of Wyoming in particular offers a useful case study for examining how bonding reform does not harm the

industry, and still allows for oil and gas companies of all sizes to profitably operate. Wyoming updated its bonding regulations in 2015 without any complaint from companies with operations on state and private lands. After the new requirements went into effect, oil production steadily increased, and in 2018 oil production on state lands hit its highest level in 2018. The upward trend was driven by hundreds of new wells drilled by a variety of oil and gas companies including smaller, local companies. .

As the BLM undergoes its rulemaking to reform the antiquated federal onshore oil and gas leasing program, it is clear that long-overdue updates to the federal bonding system will do little to impact the industry's continued ability to operate on federal public lands, and will instead have significant benefit in protecting public lands from becoming riddled with orphaned wells and protecting American taxpayers from being stuck with the bill to clean them up.

The State of Wyoming Dramatically Improved Its Bonding Requirements For Oil And Gas Wells In 2015.

The Industry Has Only Flourished Since.

In 2015, Wyoming Increased The Costs For Bonding On State Public Lands & Private Lands.

The Bust Of Wyoming's Coalbed Methane Industry Left Thousands of Abandoned Wells Littered Across The State. The Total Costs Of Reclaiming These Wells Reached Tens Of Millions Of Dollars – Far-Exceeding The Total Amount In Bonds That The State Had Available For Cleanup.

When The Coalbed Methane Industry Went Bust, The State Of Wyoming Was Left Having To Deal With The Clean Up Of Almost 4,000 Abandoned Wells. "When energy booms go bust, the public is often left responsible for the cleanup. That's because while most states and the federal government make companies put up at least some money in advance to pay for any mess they leave behind, it's often not enough. After the methane industry collapse, there were almost 4,000 wells in Wyoming that the company responsible walked away from." [NPR, 10/19/15]

The Mess Created By These Abandoned Wells Combined With The Insufficiency Of The Bonds That Were Supposed To Cover Them Risked Costing The State Tens Of Millions Of Dollars. "Now Gillum and Campbell, who work for the Wyoming Oil and Gas Conservation Commission, are in charge of making sure they get cleaned up and plugged. In Wyoming, the bust of the coalbed methane industry has left the state on the hook for tens of millions of dollars in cleanup. While most states and the federal government make companies put up at least some money in advance to pay for any mess they leave behind, it's often not enough." [KUNC, 09/28/15]

In Response, A State Regulatory Agency Headed By Republican Governor Matt Mead Unanimously Decided To Increase The Cost To Bond Wells.

In 2015, Wyoming's State Oil Regulator Voted Unanimously To Raise Bonding Rates. "The Wyoming Oil and Gas Conservation Commission voted unanimously Tuesday to raise the bonds oil and gas companies pay on their wells, effectively increasing the rate from $25,000 to $100,000. The move…represented Wyoming's response to thousands of coal-bed methane wells abandoned throughout the Powder River Basin in recent years." [Casper Star-Tribune, 12/08/15]

- **The Decision To Update The State's Oil And Gas Bonding System Was A Common-Sense Action, Necessary For Addressing The Root Cause Of The Orphaned Well Crisis That The State Found Itself Dealing With – And That The State Didn't Want To Be Dealing With Again In The Future.** "When it comes to reclamation, we don't think much about it during the boom, but then all of a sudden, when the rigs have left, the employment is gone, then we start looking at what we have and wondering why we didn't spend more time figuring out how to solve that problem before it became a problem." [Wyoming Public Media, 08/30/13]

Wyoming Increased The Rate For Statewide Bonding To $100,000 – Quadrupling What Most Operators Had Paid Under Old, Lax Rules.

Wyoming Raised Its Blanket Bonding Rate To $100,000 After Most Operators Had Been Paying Just $25,000 To Cover All Of Their Wells Across the State. "Under the former rules, the bonding rate for an individual well was $10,000 for wells of less than 2,000 feet and $20,000 for wells deeper than 2,000 feet. The new rule applies a rate of $10 per foot for all wells. But many companies choose to post what is called a blanket bond, which covers all their wells. The commission set a blanket bond rate of $75,000 several years ago, but the majority of producers (some 196 firms) were grandfathered under the rule. They maintained blanket bonds of $25,000. The changes approved Tuesday remove that provision and raise the blanket bond rate to $100,000." [Casper Star-Tribune, 12/08/15]

- **The New Rules Gave Regulators More Oversight Of Well Transfers, And Included Important Provisions Allowing For Additional Bonding By New Operators, If Existing Bonds Were Insufficient.** "The new rules also give regulators more oversight when wells are sold from one company to another. During the coalbed methane boom, large companies sold their wells — and the responsibility for plugging them — to smaller companies that then went under when prices crashed. As proposed, the new rules would allow the Oil and Gas Commission to hold on to the seller's bond for up to six months, to make sure the buyer is financially sound." [KUNC, 09/28/15]

The New Rules Added A $10 Per-Foot Cost For Wells Covered Under Individual Well Bonds, To Reflect The Higher Cleanup Cost Associated With Modern, Deeper Wells. Bonds for Individual Wells Are Also Required to Be Adjusted Every Three Years, To Account For Both Inflation And Actual Plugging Costs.

The New Rules Also Required That Individual Wells Be Bonded At A Rate Of $10/Foot To Account For Deeper Wells Requiring More Money To Clean Up. "Currently, instead of posting a blanket bond, companies with only a small number of wells currently may opt to post $10,000 bond for each well less than 2,000 feet deep and $20,000 for each well deeper than that. That will change to a flat rate of $10 per foot of the well bore distance under the new rules." [Associated Press, 12/08/15]

The Requirement That Bonds For Individual Wells Be Based On Depth Acknowledges That The Cost of Plugging and Reclaiming Wells Has Gone Up Over Time As Technology Now Allows For Companies To Drill Deeper, More Complex Wells. "In the past, the majority of orphaned wells were shallow (2,000 feet or less) coalbed methane wells on small pads. Today, horizontal oil wells range from 10,000 to 15,000 feet deep, with pads up to 40 acres, and could cost exponentially more to plug and reclaim." [WyoFile, 06/02/20]

- **Average Well Depth Has Steadily Increased Over The Past Seventy Years.** "In 1950, well depth averaged about 3,700 feet, and in 2008, it averaged about 6,000 feet. Newer wells may be drilled 10,000 feet vertically." [GAO, 09/18/19]

- **Research Has Found There To Be A Very Strong Relationship Between The Total Drilling Depth At Any Location And The Total Cost of Reclamation.** "The national data indicate that the trend toward deeper wells holds true for the U.S. as a whole. Although well depth is only one relevant factor affecting the reclamation cost of a well, a variety of research has identified a direct relationship between well depth and reclamation cost." [Center for Western Priorities, 02/18]

Also Significant Were The Changes That WOGCC Put In Place To Address Idle Wells – Under The New Rules Implemented In 2015, Wells Found To Not Be Producing, Injecting, Or Disposing In An Economic Manner May Now Require An Increased Bond Amount.

- **Idle Wells Are Those Most At Risk Of Being Abandoned Without Being Properly Plugged And Adequately Reclaimed, And Now Wyoming Ensure That Idle Wells Are Subject To Bonding Requirements That Adequately Reflect That Risk.** "Currently we require financial assurance that wells are drilled to the highest safety standards and that they will be competently plugged, abandoned, and site-reclaimed when they no longer produce. The

Wyoming Oil and Gas Conservation Commission also requires modest bonds to assure operators clean up and plug wells when their useful lives are over. And we require when a well has not produced for three years (is "idle") the operator must provide a bond (like an insurance policy or a cash guarantee) of $10 per foot, which can be used by the state to properly plug and reclaim the well if the operator does not do so." [WyoFile, 06/02/20]

- **The Implementation of Idle Well Bonds – Which Are Primarily Posted By Smaller Companies – Has Significantly Increased The Total Amount in Bonds That Wyoming Now Holds.** "As of July 3, 2023, we held total bonds in the amount of $335,279,174. Idle well bonding of $234,757,092, made up about 70% of the total." [WOGCC Supervisor Report to Commission, July 2023]

Wyoming's Oil Industry Recognized The Importance Of The Updated Bonding Requirements And Did Not Express Concerns With Putting Up Higher Bonds.

The Oil Industry Acknowledged That Operators "Could Live With" The Changes.

The Petroleum Association of Wyoming Didn't Have Concerns About The Increased Bonding Requirements For Oil And Gas Operations On State Lands. "John Robitaille, vice president of the Petroleum Association of Wyoming, which represents the oil and gas industry, said he didn't believe the group would have concerns about the bonding increase." [Wall Street Journal, 09/22/15]

The Petroleum Association Of Wyoming Said The Oil Industry "Could Live With" The Changes. "The Petroleum Association of Wyoming didn't find the changes too objectionable at first blush. 'I'm sure we'll see some people complaining, but overall I think it will be something that we could probably live with,' Petroleum Association of Wyoming President Bruce Hinchey said Friday." [Associated Press, 12/08/15]

Republican Governor Matt Mead Said The Industry Recognized The Changes Were Popular And Necessary To Satisfy The Public.

Republican Governor Matt Mead Said The Oil Industry Recognized That Taxpayers Shouldn't Have to Pay To Clean Up Abandoned Wells And That The Public Wanted Assurance That Public Lands Wouldn't Be Harmed By Wells Left Behind. "'I think what we've done effectively is proactively looked at this situation so we don't leave taxpayers holding the bag,' Gov. Matt Mead said in an interview. And while industry is struggling, 'they recognize that in order to have the best success in oil and gas, you have to be able to address these things to where the public is satisfied that we're doing our job of being good stewards of the land.'"[Casper Star-Tribune, 12/08/15]

In The Years Following Enactment of Wyoming's New Bonding Requirements, It Is Clear That The Updated Regulations Have Not Hurt Wyoming's Oil

Industry. In Fact, Increased Production From Wells Drilled Under The State's Increased Bond Amounts Has Enabled Production To Reach New Heights.

Oil And Gas Production On State Public Land Increased After The State Improved Its Bonding Requirements– To Its Highest Level In 25 Years.

Wyoming's Bonding Changes Went Into Effect On February 1, 2016. "Effective February 1, 2016, the WOGCC revised its bonding rules to increase the required bond amounts. Now, an individual well bond is ten dollars per foot of length of the well bore and the blanket bond amount covering all wells of an operator is one hundred thousand dollars." [Oil and Gas, Natural Resources, and Energy Journal, September 2016]

By 2018, Oil Production In Wyoming Had Risen To Its Highest Level In 25 Years. "Oil production in Wyoming has risen to its highest level in 25 years. The Wyoming State Geological Survey (WSGS) discovered the increase while updating its online map of oil and gas drilling." [Wyoming Public Media, 06/05/19]

- **Natural Gas Production Also Rose.** "Natural gas production was also on the rise, with 1.81 trillion cubic feet produced in 2018. New wells accounted for 8% of that production, WSGS said." [Oil City News, 06/05/19]

The Record-Setting Production Was Driven By New Wells Drilled Under Wyoming's Updated Bonding Requirements.

New Wells That Were Drilled Following The State's Updated Bonding Requirements Went Into Effect Were Responsible For One-Fifth Of Wyoming State Lands' Record-Setting Production In 2018. "Wyoming produced 88 million barrels of oil in 2018, with new wells contributing over 21% of that production output. The last time oil production was at this level was in 1993, according to the Wyoming State Geological Survey who announced the information on Tuesday, June 4." [Oil City News, 06/05/19]

- **Wyoming Saw 599 New Wells Drilled Statewide In 2018 That Helped Drive Production.** "It wasn't just increased production from existing wells: one out of every five wells was new. 599 new wells were completed last year. Campbell and Converse counties came out ahead with the most oil production." [Wyoming Public Media, 06/05/19]

Wildcatters, Which Tend To Be Smaller Businesses, Were Also Drilling More Under The New Requirements.

A State Budget Forecaster Noticed Year-By-Year Increases In New Rig Counts In Wyoming In The Years Following The State's Bonding Changes. "Through the first six months of CY 2019, Wyoming oil production is on pace to be the highest annual oil production in at least 25 years – dating back to the early 1990s. The number of active oil rigs in Wyoming throughout CY 2019 has outpaced rig counts in CY 2018, which in turn were higher than in CY 2017. For example, Baker Hughes GE (BHGE) reports 25 oil rigs active in Wyoming as of September 2019, which compares favorably to the 17 oil rigs reported one year ago." [Wyoming Consensus Revenue Estimating Group State Government Revenue Forecast, October 2019]

In 2018, 599 New Wells Were Completed In Wyoming, Including An Increase In Wildcat Wells. "The WSGS provides annual updates to their Interactive Oil and Gas Map of Wyoming. Data about new oil and gas wells are inputted. 599 new wells were completed in Wyoming in 2018. WSGS says that 235 of these were in traditional fields in Sublette County but that the state and particularly eastern Wyoming is seeing more 'wildcat' wells." [Oil City News, 06/05/19]

- **Wildcat Drillers Tend To Be Small Businesses.** "Wildcatting often involves smaller firms and can involve both high risk and high reward for stakeholders. [...] Another aspect of wildcat drilling involves small producers exploring for oil in fields that have already been fully exploited by larger oil companies. These fields can have sizable pockets of oil reserves that are uneconomic for larger producers due to economies of scale but are still worthwhile for smaller, more agile wildcat drillers." [Investopedia, 04/25/22]

Wyoming's State Budget Forecaster Was So Impressed By Increasing Production And Industry Optimism That It Adjusted Its Five-Year Production Estimate Up By 19 Million Barrels Of Oil.

A Report From The Wyoming Consensus Revenue Estimating Group (CREG) Said Wyoming's Oil Production On State Lands Was "Substantial." "Wyoming oil production in CY 2018 increased by 12.3 million barrels (bbls) (16.3 percent) over CY 2017 levels. Moreover, in the first half of CY 2019 last year's trend line gains have been sustained, increasing 7.1 million bbls over the first six months (17.1 percent). These substantial gains in total Wyoming oil production are achieved against a backdrop of annual year-over-year declines in conventional oil well production since CY 2010."

The CREG Report Found "Optimism" In Public Statements From Oil Companies, And Credited The Industry For Strength In Tax Collection. "The optimism of Wyoming oil production, particularly in the Powder River Basin (PRB), is evident in the statements of publicly traded exploration and production companies operating in the region. Additionally, there are pipeline expansions and conversions that will expand access to markets for Wyoming oil and are responsible for some of the strength in total statewide sales and use tax collections." [Wyoming Consensus Revenue Estimating Group State Government Revenue Forecast, October 2019]

- **CREG Is Wyoming's State Government Budget Forecaster.** "The Consensus Revenue Estimating Group (CREG) is responsible for formulating projections for the main sources of income to the major accounts in the State. CREG was created by a mutual, informal agreement between the executive and legislative branches in 1983. CREG's purpose is to provide reliable and consistent revenue estimates which are be used by the executive branch and the Legislature in the state's budgeting process." [Wyoming Legislature, accessed 07/23/23]

In October 2019, CREG Was So Impressed With The "Upward Production Trend" That It Adjusted Its Five-Year Forecast Up By 19 Million bbs More Than It Had Previously Expected. "CREG expects that upward production trend will continue, albeit at a more conservative pace throughout the forecast period with total production ultimately rising to 111 million bbls, or 19 million bbls higher by CY 2024 than previously forecast in the January 2019 CREG report." [Wyoming Consensus Revenue Estimating Group State Government Revenue Forecast, October 2019]

And It Wasn't Just Development On Existing State Lands Leases That Increased Following Enactment Of Wyoming's New Bonding Requirements – In The Year Following The New Standards Being In Place, Total Annual Revenue Generated From The Sale Of New State Oil And Gas Leases Also Skyrocketed.

In 2016, The Year That The Wyoming Oil And Gas Conservation Commission Enacted Oil And Gas Bonding Reform, Total Bonus Bid Revenue Generated Across All Lease Auctions Held That Year Increased By Sixty Percent Over The Previous Year. In 2015, state oil and gas lease sales generated $4.5 million in revenue from oil and gas bidders purchasing parcels for lease. In 2016, the year the new state's new bonding requirements were put into effect, revenue from bonus bids increased by sixty percent, to $7.2 million. [Office of State Lands and Investments, accessed 08/02/23]

The Next Year, Bonus Revenue From State Lease Sales Skyrocketed To Over $60 Million. In 2017, an entire year following Wyoming's adoption of new bonding requirements for oil and gas operations on state lands, the industry's interest in acquiring new leases soared, resulting in the state generating a total of more than $60.6 million in bonus bid revenue alone from state oil and gas lease sales. Companies purchased a total of 181,534 acres of state lands for lease at the three auctions held throughout the year, at an average bid of $334 per-acre. [Office of State Lands and Investments, accessed 08/02/23]

CONCLUSION: The updates that the state of Wyoming implemented to its bonding requirements in 2015 were common-sense solutions to address a serious problem -- thousands of abandoned wells were littered across the state, and bond amounts were not enough to cover the enormous bill to clean them up. The Wyoming Oil and Gas Conservation Commission knew the problem would just continue to balloon into the future if the root cause of it wasn't addressed, and so they took appropriate action – including raising the bonds that oil and gas companies pay on their wells to more closely reflect the costs of plugging and reclaiming wells on state lands. The oil and gas industry said it expected to weather the changes just fine; and in fact companies did even better than fine, with new wells that were drilled under the updated bonding requirements leading to record-setting production in the years following the implementation of the new standards.

Federal public lands are now facing a similar issue, as there are thousands of orphaned wells across the country that have been left unplugged, with the surrounding lands unreclaimed. To protect taxpayers from having to continue to pay to clean up the mess, the Bureau of Land Management has proposed several common-sense solutions to reform the outdated federal bonding system, including raising minimum bond amounts to align with the expected costs of plugging and reclaiming wells on federal public lands. As has already been observed at the state-level in Wyoming, these changes will not hinder the industry's ability to lease and develop in the places where companies have always had an interest in oil and gas, and will instead go a long way towards ensuring oil and gas companies – not taxpayers – are held accountable for cleaning up after they're done using public lands.

Bankupt methane farmers propose way out of bind on Wyoming project

trib.com/business/energy/bankupt-methane-farmers-propose-way-out-of-bind-on-wyoming-project/article_7c0ef1c9-04c7-56ed-a8a0-c6893e0c9dcd.html

By LAURA HANCOCK Star-Tribune staff writer October 27, 2013

Executives of bankrupt methane farming company Luca Technologies Inc. sent a letter to Gov. Matt Mead and other state officials saying they are $1.9 million short in bonding of their wells but have a plan to plug them that involves selling a natural gas gathering system subsidiary to another company.

State agencies want well operators to obtain bonding as a protection measure in case operators go out of business or bankrupt. In such cases, the state would use the bond money to plug the wells. But Luca never obtained enough bonding for all of its wells, said Grant Black, Wyoming state oil and gas supervisor.

The Golden, Colo.-based company produced methane in coal-bed methane wells in the Powder River Basin that had previously been depleted of the gas. Luca used a proprietary process of feeding microbes that live in coal seams with water and chemicals.

Two years ago, the company lobbied the Wyoming Legislature to create a regulatory framework for its new industry. But in July, Luca filed for Chapter 11 bankruptcy protection in federal court in Denver, saying that low natural gas prices and delays in federal permitting caused investors, which had poured more than $100 million into the company, to pull financing.

The company is now in the process of selling all its assets to pay off creditors, which include residents and businesses in Wyoming. The state and Campbell County also allege the company underpaid taxes, which the company denies.

But Jill Morrison, of the landowner conservation group the Powder River Basin Resource Council in Sheridan, has studied bonding shortfalls in Wyoming and calls the plan that Luca executives outlined in the letter "a bit of a scam." And Black, the state's oil and gas supervisor, said Luca’s accounting of its wells is inaccurate – that the company owns more wells in Wyoming than the letter states.

The governor and officials from the Wyoming Oil and Gas Conservation Commission, the Wyoming Department of Environmental Quality and the Wyoming Office of State Lands and Investments are considering the letter and don’t know whether they’ll go along with Luca’s proposal, according to the officials or their spokesmen.

The plan

In the Oct. 11 letter to Mead and state officials, the company said that for the wells to be economical, it must find a buyer willing to implement its technology. No one has been willing to buy the wells. In addition, the company also been permitted to discharge water into reservoirs.

Luca subsidiary Patriot Energy Resources LLC owns the wells.

“Patriot has virtually no money, no ability to sell its wells and limited assets to try to pull a deal together that would allow it to pay off creditors, plug and abandon wells and reclaim or release water reservoirs,” the letter stated. “The transaction proposed below is the best alternative that Patriot was able to craft.”

But Patriot’s sister company, Patriot Energy Gathering LLC, has significant equipment for the gathering system and no debt.

The proposed transaction would be a four-way contract among Patriot Energy, the state, Gillette-based Justice Oil and Gas LLC and Gillette-based Windcreek Services Inc., according to the letter:

- Justice Oil currently owns on average a 15 percent working interest in 407 of the company’s wells. Under the proposed transaction, Justice would provide cash, up front, to help plug wells if the state would release Justice from future plugging liability of those wells. That cash would help pay Patriot’s existing debts, then allow Patriot to use its remaining assets to plug wells.
- Patriot would assign all the equipment of the gathering system to Windcreek, which would own it free of obligations.
- Windcreek would be assigned all of Patriot’s bonds.
- When the state was able to prove that Windcreek properly plugged a well, it would release to Windcreek about $4,750 in bonds per well within 30 days. If reservoirs were properly reclaimed or released to landowners, DEQ would release bond money to Windcreek in 30 days.

The letter states that Patriot, Justice and Windcreek have agreed to the deal. Luca executives wrote in the letter that they want Mead’s office to coordinate for three state agencies.

State reactions

Renny MacKay, a spokesman for Mead, said in an email that the bankruptcy creates a complex situation. Mead and the state agencies are reviewing Luca’s proposal.

“The state agencies are compiling information and researching the legal, environmental and regulatory ramifications of Luca’s bankruptcy and will formulate a plan that is best for Wyoming,” MacKay said.

Black, the Wyoming state oil and gas supervisor, said the number of wells in Wyoming described by Luca executives is inaccurate. They said they had 786 wells on private and state-owned lands.

He said his agency, the Wyoming Oil and Gas Conservation Commission, has documented 826 wells on private lands, 86 wells on state lands and 11 injection wells that are on private lands but are regulated by DEQ.

Additionally, the company has 451 wells on federal land, making for a total of 1,374 wells in Wyoming, Black said.

Black agreed with the Luca executives' assessment that it is $1.9 million short in bonding.

In November, Black said that the company's executives will appear before the Oil and Gas commission because the state wants to cash some of Luca's bonds held by a California bank. Black said the bank holds Luca assets that the commission can collect.

As for the proposal, Black's agency will help the governor review it and decide whether to accept it.

"I'm not aware that what has been proposed has been done in the past," he said. "We're still evaluating that. It's really hard to say [whether the proposal might be accepted]."

Bridget Hill, director of the Office of State Lands and Investments, said her office is still investigating the shortfall. Luca claims it has $541,090 in bonding for the wells on state lands. She said her office doesn't have an opinion on Luca's letter yet.

Bill DiRienzo of DEQ said that Luca's bonding for reservoirs is current. The company has 32 permits allowing it to discharge into 89 reservoirs.

Other reactions

In an email statement to the Star-Tribune, Luca attorney Matt Micheli said that the proposed transaction is in good faith.

"Patriot is trying to be creative and use any existing assets to meet this obligation," he said.

But Morrison of the Powder River Basin Resource Council described having to draw a diagram to understand the proposed transaction. She is concerned that Windcreek wouldn't have to post a bond for Luca's shortfall. There are no guarantees the state would be protected, she said.

She also is concerned that Justice Oil and Gas would get off the hook for liability of plugging wells under the deal. The proposed deal doesn't say how much money or footage Justice would pay for plugging.

“It’s a bit of scam, I think,” she said.

The owner of Windcreek did not return messages to the Star-Tribune. Black, the state oil and gas supervisor, said Windcreek is a well-plugging company.

Justice is owned by Gillette attorney John Daly. State law is specific on plugging, and surface owners are not responsible for plugging them. If the state doesn’t go through with the proposed transaction, he is not sure what Justice’s liability on plugging the wells would be.

Daly said that many of the Luca wells he has interest in are on his ranch, north of Gillette. He insists the deal isn’t easy for his company.

“The state of Wyoming, Justice and Luca are all big losers in this,” he said of the bankruptcy.

Reach state reporter Laura Hancock at 307-266-0581 or at laura.hancock@trib.com. Follow her on Twitter: @laurahancock.

Methane farming firm Luca files for bankruptcy

trib.com/business/energy/methane-farming-firm-luca-files-for-bankruptcy/article_beb3e6d7-6aed-5316-a4de-083907e93a97.html

By LAURA HANCOCK Star-Tribune staff writer August 7, 2013

Luca Technologies Inc., a company that planned to harvest natural gas by feeding microbes within Wyoming coal seams, has filed for bankruptcy protection in federal court in Colorado.

The company struggled to get federal permits and had trouble with its finances, particularly after natural gas prices hit 10-year lows in 2012, according to company employees, company documents and previous news stories.

“Any time you have something that’s brand new, that’s never been done before, it takes a lot of time and resources and money to get it through and build a regulatory framework that allows that technology to be implemented,” said Matt Micheli, a Luca attorney.

The Golden, Colo.-based company is liquidating its methane farming technology and assets through a Chapter 11 bankruptcy proceeding, Micheli said.

The bankruptcy was filed July 15, according to court documents. Several Wyoming businesses and state agencies are listed in creditors in Luca's court filings.

The company’s investors asked Luca executives to lay off all but three employees, said Micheli, who is one of the three.

In Wyoming, the company and its technology made news in Campbell County, where its pilot project was located, and in Cheyenne, where it successfully lobbied the Wyoming Legislature to pass a bill to establish state regulation of the promising new industry.

“I’ll say one thing: They had a heck of a good idea,” said John M. Kennedy, CEO of Kennedy Oil in Gillette, which is listed as a creditor. “And there’s a lot of people who believe that this is a possibility and it’s kind of the wave of the future.”

According to filings with the Securities and Exchange Commission, Luca’s investors were Kleiner Perkins Caufield & Byers, One Equity Partners, Oxford Bioscience Partners and BASF Venture Capital.

The three employees remaining “are three that our board of investors thought were the ones that could shepherd it through the bankruptcy and liquidation process,” Micheli said.

The highest number of employees at Luca was about 110, but the number was lower by the time of the layoff because there had been previous employee reductions, Micheli said.

In court documents, Luca states its primary assets are intellectual property, including patents and proprietary information, interest in 1,350 natural gas wells and a gathering system in the Powder River Basin. Luca expects the bankruptcy process to conclude in about 90 days.

Regulation wins, losses

The company had tested its technology on more than 400 wells in the Powder River Basin beginning in 2006, and said in SEC filings that it successfully produced methane. As the company moved toward commercialization of its method, it successfully lobbied the Legislature, which in February 2011 approved legislation to establish regulations of its nascent industry.

Months later, the Wyoming Oil and Gas Conservation Commission determined the methane farming process -- which is sometimes called microbial enhancement or biogenic gas generation -- could operate under existing rules and laws. Methane is the principle component of natural gas, according to the SEC filing.

In addition to Luca, Centennial, Colo.-based Ciris Energy is producing methane in Powder River Basin coal through methane farming.

With state regulations clarified, Luca worked with the Bureau of Land Management for approval and permits to extract federal minerals, the SEC filing states.

But by the end of May 2012, Luca CEO Robert Cavnar told the Billings Gazette and other media it planned to sue the federal government. Cavnar had said the company and the BLM agreed to a permitting process and Luca had applied for the application and paid $40,000. But the BLM wanted more money. Cavnar didn’t think the permit would ever get approved. A BLM spokeswoman at the time said the agency suspended the application process because of Luca’s failure to pay the fees.

The Star-Tribune checked federal court records and Luca never did file a suit.

On Wednesday, BLM spokeswoman Beverly Gorny said her agency and Luca were back working together as recently as the spring on a unitization agreement. Unitization lets companies explore, develop and operate an area so that drilling and production may proceed in the most efficient and economical manner, according to the BLM’s website.

“We can’t speak to their financial background,” Gorny said. “We had been working with them at the field office, the district office, the state office and Washington [D.C.] level."

The BLM had separate regulatory paths for mining coal and extracting natural gas, Luca’s technology presented a challenge, Gorny said. She said the federal minerals belong to the public and it’s the BLM’s job to protect them.

“We were trying to find a mechanization that seemed to be a hybrid,” she said.

Luca faced another setback from the price for natural gas, which had hit 10-year lows, The Associated Press reported in May 2012.

Creditors add up

Luca attorneys submitted to the court 32 pages of names of possible creditors, including several state agencies.

Kennedy Oil's claim against Luca totals $80,000, court documents state.

About five years ago, Luca purchased hundreds of wells west of Gillette from Kennedy Oil, John Kennedy said. They came with about five water reservoirs, which Kennedy described as ponds or small lakes. Some of the reservoirs have had methane in the water, he said.

As part of the sale, Luca was supposed to get a bonding company to guarantee reclamation of the reservoirs, Kennedy said. But bonding was delayed because local ranchers said they were interested in the reservoirs for current or future use, and Luca was working with them. Meantime, the BLM made some reclamation requirements that ranchers balked at, Kennedy said.

"I should have been much, much tougher with them a few years ago with the situation," Kennedy said. "They kept claiming they were making progress, they were going to have the proper paperwork with the BLM."

If Kennedy is stuck with reclamation, he believes it may cost $160,000. The $80,000 figure described in court documents was based on an estimate made years ago, he said.

"If I reclaim my reservoirs, there's my claim against Luca," he said.

Staff at We'll Clean it Up cleaned Luca's Gillette office once a week, on Sundays, said Helen Fuller of We'll Clean it Up.

"They called us and told us to quit," she said. "But they owed us for a couple of months."

She said Luca owes $1,400.

The Wyoming Department of Environmental Quality is listed as a creditor. Luca got numerous bonds on coal-bed methane wells, injection wells and discharge pits to cover reclamation costs in case of bankruptcy, said DEQ spokesman Keith Guille. Guille was unsure of the number of bonds. At this point, no bonds have been forfeited to DEQ, he said.

Officials at the Wyoming departments of Transportation and Revenue, the Wyoming Secretary of State's Office and the Wyoming Oil and Gas Conservation Commission said their records indicated Luca didn't owe any money, even though they're listed as creditors.

Ryan Lance, director of the Office of State Lands and Investments, said Luca owes $96,905.04 in total surface impact payments. Of that, it owes $77,524.03 to the state and $19,381.01 to ranchers for the loss of grazing lands.

The company is short about $30,000 in bonding for wells on state land, Lance said.

“I guess my view is I think Luca made great effort to generate potentially substantial revenue for the state for royalties and taxes,” he said. “It is just unfortunate they are in the current predicament they are in. We are going to do our best to make sure the state‘s made whole.”

Reach state reporter Laura Hancock at 307-266-0581 or at laura.hancock@trib.com. Follow her on Twitter: @laurahancock.

Storm Cat reaches deal with state over more than 2,000 wells and $10 million in unpaid bonds

trib.com/business/energy/storm-cat-reaches-deal-with-state-over-more-than-2-000-wells-and-10-million/article_a680b9f3-729c-5423-98f3-0a6ef2064a8b.html

June 14, 2017

Heather Richards

The Wyoming Oil and Gas Conservation Commission voted Tuesday on a compromise with a bankrupt coal bed methane company that has pleaded for patience for more than a year over its failure to post $10 million worth of bonds.

The state will not recoup the total amount that Denver-based Storm Cat Energy owes for 2,432 wells in northern Wyoming. But commissioners decided unanimously that if the company can reach court approval for the sale of its producible wells to Summit Gas Resources of Sheridan next month the state would come out with a better if unconventional deal.

Storm Cat and Summit, meanwhile, have a final chance to create a viable business out of bankruptcy.

“It looks like to me a reasonable resolution that puts the state in a better position than it is now,” said Gov. Matt Mead on Tuesday afternoon. “I’m supportive and appreciate the work to get it done.”

Storm Cat and Summit have until August to close the sale of 696 wells that can still produce gas. Sheridan-based Summit will post $2 million in bonds with the state within a month of the sale, and Commission staff is given the authority to pull bonds if the companies fail to meet their obligations. The state will focus on the 1,736 wells that are at the end of their lives. However, it’s unclear when it will begin plugging them.

It’s an unconventional trade-off. But after a full morning of testimony, the commission thought it was a better way to bring the Storm Cat saga closer to resolution.

The deal, made over lunch, was scrawled out on a sheet of legal pad by Summit and Storm Cat’s lawyer Tom Throne of Sheridan, after commissioners pushed back on the idea of pulling the bonds immediately.

If the sale of Storm Cat’s best wells is successful, production can resume in a field estimated to have 42 billion cubic feet of gas left to recover, the companies argued. If not, the state can pull existing bonds and add Storm Cat’s wells to the long list of orphaned wells Wyoming has to plug from the coal bed methane bust. Given the low price of gas, the companies’ petroleum expert said the field would be too expensive to redrill if the existing wells were plugged and reclaimed.

A victim of coal bed methane’s rapid boom and bust, Storm Cat, a subsidiary of Denver-based Battalion Resources, has languished in bankruptcy proceedings for more than a year. Its chief financial officer, Chris Naro, has been in the hot seat before the Commission on a nearly monthly basis since last spring, when commissioners first called the company to account for its failings, including unpaid taxes, a failure to do integrity testing on wells and the shortage of idle well bonds.

After a year of granting extensions, Commission Supervisor Mark Watson called for a resolution no later than May. That too was extended, with Tuesday meant to bring finality to the issue.

The hitch with the two companies’ plan is that Summit will not foot the full bonding obligation — at least not right away. It has acquired $2 million in funding for reclamation costs, part of which is already owed to the state for Summit’s wells. The $2 million bonds, to be posted in late summer, would be similar to a revolving stash of cash, passed on to cover each batch of wells that Summit brings back to life.

Three private landowners with Storm Cat wells on their properties submitted letters to the Commission saying they want the idle wells plugged and reclaimed.

Adding to the controversy is the fact that the wells are legacy wells, once owned by the J. M. Huber Corp.

In part a response to the chaos of the CBM bust, Wyoming law makes it possible to hold legacy owners accountable for orphaned wells, meaning Huber could find itself on the hook.

The Commission staff's original argument that the bonds be pulled immediately was in part an end to the year of charitable extensions and in part a desire to work with Huber, which had expressed interest in freeing itself from liability by partially funding reclamation.

Storm Cat's story is indicative of a larger drama that played out in Wyoming. Companies that bet big on drilling relatively cheap wells to tap coal bed methane were hit by a falling price of natural gas. The Storm Cat wells were first drilled in the early 2000s, when the spot price was averaging $6. That price has dropped by half, with no promise of a near-term rise.

After the CBM bust, thousands of wells were left on state, private and federal land. A program set up to plug those wells and reclaim the surface was started by the governor and the Oil and Gas Conservation Commission. A tax is levied on operators to feed an orphan well fund to pay the hefty cost of cleaning up the bust.

That job is ongoing.

There were 2,909 wells left for the state to plug, convert to water wells or reclaim as of May. If all of Storm Cat's wells were added to that list, that would add another 2,432 wells in one fell swoop.

Follow energy reporter Heather Richards on Twitter @hroxaner

The New York Times

December 24, 2013

Wyoming May Act to Plug Abandoned Wells as Natural Gas Boom Ends

By DAN FROSCH

DENVER — Hundreds of abandoned drilling wells dot eastern Wyoming like sagebrush, vestiges of a natural gas boom that has been drying up in recent years as prices have plummeted.

The companies that once operated the wells have all but vanished into the prairie, many seeking bankruptcy protection and unable to pay the cost of reclaiming the land they leased. Recent estimates have put the number of abandoned drilling operations in Wyoming at more than 1,200, and state officials said several thousand more might soon be orphaned by their operators.

Wyoming officials are now trying to address the problem amid concerns from landowners that the wells could contaminate groundwater and are a blight on the land.

This month, Gov. Matt Mead proposed allocating $3 million to pay for plugging the wells and reclaiming the land around them. And the issue is expected to be debated during next year's legislative session as lawmakers seek to hold drilling companies more accountable.

"The downturn in natural gas prices has forced small operators out of business, and the problem has really accelerated over the last couple of years," said the governor's policy director, Shawn Reese. "Landowners would like their land to be brought back to a productive status and have orphaned wells cleaned up."

Drilling companies in Wyoming typically lease land from the state, private owners or the federal Bureau of Land Management, depending on who owns the mineral rights.

The state's Oil and Gas Conservation Commission already budgets $1 million a year to plug abandoned wells. And under the governor's proposal, the commission would appropriate another $3 million over the next four years in an effort to restore property value and reduce the risk of contamination.

The money would come from a conservation tax that oil and gas companies pay.

Still, given the number of wells already abandoned and the concern that more will soon be deserted, the money is not expected to go far. The state estimated that closing the 1,200 wells already abandoned would cost about $8 million.

Compounding the problem, state officials estimate that Wyoming may also have to plug 2,300 wells that are sitting idle but have not been entirely abandoned by operators.

There are also 400 idle wells scattered across land owned by the Bureau of Land Management, which has its own criteria for determining when a well on its land is considered abandoned or idle. State officials said they would need to work with the bureau to help deal with those wells, too.

Governor Mead also wants the commission, which he sits on, to review the conservation tax and bonding requirements for drilling companies to determine whether they are sufficient.

Currently, companies must pay a $75,000 blanket bond to cover all of the wells they operate — often numbering in the hundreds — on state and private land in Wyoming. Once a well stops producing and is deemed idle, the operator must pay up to $10 a linear foot in bonding to offset the cost of reclamation.

But it is at that point that some companies drift into financial trouble and cannot pay the additional fees, leaving the state to scramble to make up the cost.

The governor's proposal has drawn support from landowner groups like the Powder River Basin Coalition, which has been pushing the state to take a tougher tack toward financially marginal drilling companies.

"There has been a lot of hand-holding and coddling over the years when it comes to oil and gas operators and their ability to pay the bonding," said Jill Morrison, an organizer with the group.

Ms. Morrison said that the issue had largely been ignored during Wyoming's peak boom years — from 1995 to 2004.

"We are really pleased there is an actual plan to move forward with an aggressive plugging and reclamation strategy," she said.

The proposal is also backed by the Petroleum Association of Wyoming, which favors raising the conservation tax to help pay for plugging fees. The group also supports higher bond fees for operators with tenuous finances.

"It's how you weed out companies that are too risky to go into business with," said the group's president, Bruce Hinchey.

But getting drilling companies who claim to be on the verge of collapse to take responsibility for wells they still technically own has proved difficult.

One such company, Patriot Energy Resources, which owns about 900 idle wells on state and private land, said in an October letter to Governor Mead that it was $1.9 million short of full bonding on those wells after the bankruptcy filing of Luca Technologies, its parent company.

Patriot has proposed allowing another drilling company to take on a part of its debt, saying it will have to abandon its wells otherwise. “Without this deal or something similar, Patriot will be forced to file for bankruptcy and turn these wells and reservoirs over to the state of Wyoming,” a company official wrote in the letter.

Renny MacKay, a spokesman for Mr. Mead, said the state was weighing the offer.

State Senator John J. Hines, a Republican who represents mineral-rich Campbell and Converse Counties, said it was vital for lawmakers to take up the issue swiftly, because natural gas was so important to Wyoming’s economy.

“All of this just came to a head at once,” said Mr. Hines, who heads the Senate’s minerals committee.

Last spring, Mr. Hines was told by Patriot that the hum of gas drilling activity on his own sprawling cattle ranch would soon grow quiet.

Soon after, the company, which leased parcels of Mr. Hines’s land, disappeared completely — leaving behind more than 40 coal-bed methane wells and a jumble of pipes and pumps.

“They informed me that they were shutting down because they were short of funds,” Mr. Hines said. “All of it, in my opinion, needs to be cleaned up.”

Franke: DOI's proposed leasing rule would protect farmers and ranchers

wyomingnews.com/opinion/guest_column/franke-dois-proposed-leasing-rule-would-protect-farmers-and-ranchers/article_02e24c34-3c5f-11ee-ab0e-8b2cc037d2f5.html

August 17, 2023

As president of Rocky Mountain Farmers Union, I represent members across three western states. For many of these families, public lands are part of their daily life, and essential to the success of their family operations, many times going back generations.

In addition, hunters, fishers, farmers and rural western communities depend on federal land for business and recreation. It's our responsibility to steward public land and ensure that it is protected because it's deeply intertwined with our lifestyle, and, hopefully, that of our children and future generations.

That's why I'm thankful that the Department of the Interior (DOI) recently released a proposed rule to update the federal oil and gas leasing program. This new rule ushers in much-needed reforms that align with our needs — the people who are on the land day in and day out. It will reduce conflict between leasing and other uses that are essential to supporting Westerners' way of life: open land, farming, ranching, hunting, fishing, recreation and more.

For far too long, the outdated federal oil and gas program has been open to speculators by allowing oil and gas corporations to lease land with little to no potential for drilling and let it sit idle. The proposed reforms will limit speculative oil and gas leasing on lands where development has little to no chance of occurring, allowing for better federal land management for grazing and conservation.

Seventy-one percent of Western voters believe that drilling should only occur on land that has the highest likelihood of producing oil and gas, and we are glad that the Interior Department listened.

Another integral component of DOI's proposal is the increase in federal bonding rates, which many of our western leaders in Congress have championed. When this proposal is finalized, oil and gas companies will be held accountable to pay the full cost of cleaning up wells once they're done drilling, protecting ranchers, farmers and rural communities from having to shoulder the cost.

This idea has been overwhelmingly popular across the West — 93% of voters believe that oil and gas companies should pay to clean up at the end of drilling and production — and when finalized, that will become a reality.

Federal bonding reform also means healthier grazing by addressing the root cause of thousands of wells being left behind by the industry to potentially contaminate our public lands and waters. It's shockingly common for cattle to come across orphaned or abandoned oil and gas infrastructure, and now, reforms to the federal bonding system will safeguard land and herds from the threat of future orphaned wells.

DOI's proposal will implement updates which ensure farmers, ranchers and rural communities are not alone to bear the burden of oil and gas leasing and drilling clean-up on public lands. Being a good steward of public lands is critical to maintaining our western way of life, and with this proposed rule, the Biden administration is listening and taking steps to ensure our lands are protected for generations to come.

Bill Rekindles Debate Over Split Estate

wyomingpublicmedia.org/open-spaces/2014-02-14/bill-rekindles-debate-over-split-estate

Stephanie Joyce February 14, 2014

Open Spaces

There's a fight brewing in Wyoming over the rights of landowners who don't own the minerals below their properties. In 2005, the legislature passed a Split Estate law, but now, one lawmaker is saying it may be time to revisit the issue, in light of changes in drilling technology and intensity.

Senator Jim Anderson introduced a bill this week that would increase bonding on split-estate properties. Wyoming Public Radio energy reporter Stephanie Joyce joins us to discuss the bill, and its implications.

WILLOW BELDEN: So, what does this bill do?

STEPHANIE JOYCE: The bill itself is relatively straightforward. Right now, if companies and landowners can't reach a surface use agreement, the company can petition the Oil and Gas Commission to "bond-on" -- basically, they post money with the Commission to cover the cost of any damages to the property, and then they're allowed to proceed, with or without the landowner's consent. Currently, the standard bonding amount is $2,000. This bill would increase the standard bond to $10,000. Landowners would still be able to petition the Oil and Gas Commission for a higher bond, if they felt it was necessary, but that base amount would be higher.

BELDEN: Senator Jim Anderson, who represents Converse County, District 2, is the main sponsor of the bill. What were his reasons for introducing it?

JOYCE: Well, Senator Anderson told me he got an earful from his constituents during a meeting in January in Douglas about the shortcomings of the Split Estate law, and decided maybe it's time to have another conversation about it, especially in light of new drilling technologies and the increasing intensity of drilling in some areas. Here he is:

JIM ANDERSON: "Bonding is kind of a tip of the iceberg. If in fact there are other issues that lie deeper, underlying issues, then perhaps this would be an opportunity to discuss those. But if not, then we'll just dealing with the bonding issue and let the others lie."

JOYCE: So, while bonding is the only thing that's actually on the table this legislative session, we're likely to hear more about this issue over the coming year.

BELDEN: How has the bill been received in the Legislature?

JOYCE: The vote to introduce the bill was overwhelming in support. Twenty-five senators voted to discuss it in committee, while just five voted against it. But the Petroleum Association of Wyoming is pretty strongly opposed to it, and a similar bill died last year. So, it will definitely be discussed, but whether it passes or not remains to be seen.

BELDEN: What are the Petroleum Association's objections?

JOYCE: Well, I talked with Bruce Hinchey, the Association's executive director, and he basically just said that he doesn't feel it's necessary. He couldn't articulate what kind of impact it would have on the Association's member companies if the bonding amount were increased, but he said the current system for dealing with landowner complaints -- petitioning the Oil and Gas Commission to raise the bonding amount -- is just fine.

Unsurprisingly, Senator Anderson and the landowners I've spoken with disagree. Amber Wilson, with the Wyoming Outdoor Council, says starting with the higher amount, rather than relying on the Commission process, would be more efficient.

AMBER WILSON: We're always talking about trying to speed things up, and the more you don't set this up for success from the start, the more you're going to bog down the process.

JOYCE: The other thing is that the Oil and Gas Commission hearing process is very formal. You're expected to show up with your attorney, present exhibits… A lot of landowners say it's overwhelming, and that was another reason Senator Anderson gave for introducing the bill.

BELDEN: Are there other potential impacts of this legislation, other than maybe reducing the need for Commission hearings?

JOYCE: There's also a feeling among some landowners and landowner groups that a bigger bond would be a bargaining chip. As Alex Bowler with the Cheyenne Area Landowner's Coalition put it, right now, bonding-on for $2,000 might seem like "the path of least resistance" to oil and gas companies… rather than negotiating a surface use agreement that might total many thousands of dollars. He thinks the $10,000 amount would incentivize more negotiations.

That might be a bit of a straw-man though. Bonding-on isn't exactly common practice. There were more than a thousand wells drilled in Wyoming in 2013, and only 22 of those were subject to bonding. Presumably for the rest of them, companies were able to negotiate surface use agreements. There's also no indication that there's an increase in the amount of bonding-on that's happening. Nevertheless, it tends to be a very heated topic when it does happen.

BELDEN: We'll look forward to hearing more as the bill moves through the Legislature. Thanks.

JOYCE: Thank you, Willow.

BELDEN:That was WPR's energy reporter, Stephanie Joyce, discussing split estate bonding.

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Regulatory agencies have weak controls for bad oil and gas operators

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Open Spaces

We recently reported that an oil and gas company operating in Wyoming was fined by the federal Office of Natural Resource Revenue for not submitting production reports. Turns out, the company has a history of poor behavior in the state, fiscally and environmentally. Although Pure Petroleum's gross neglect of its responsibilities is somewhat of an exception, it does point to big flaws in the oil and gas industry's reclamation system.

IRINA ZHOROV: The Office of Natural Resources Revenue fined Pure Petroleum for not submitting production reports starting in 2006. The Bureau of Land Management started having issues with the company around 2008. The state Oil and Gas Conservation Commission filed a complaint in 2010.

Here's Tom Kropatsch, of the Oil and Gas Commission, listing just some of the state's complaints:

TOM KROPATSCH: …Failure to report the spill, failure to operate two pits in a workman like manner, they had unpaid conservation taxess, they weren't posting their idle well bond that was past due, they hadn't performed MIT, or mechanical integrity tests…

ZHOROV: Today, it is 2013, and Pure has not addressed any of the issues with any of the agencies. It did, however, leave behind abandoned wells, some of them messy, for the state to deal with.

KROPATSCH: To date with Pure Petroleum we've spent $645,743 on the cleanup.

ZHOROV: For just these sorts of instances, oil and gas operators have to put up bonds, in case they bail on their responsibility to clean up once they finish producing. But these bonds are just a fraction of what it actually costs to plug a well. For example, the BLM will take just a $25,000 state blanket bond to cover all of the wells an operator has in the state, which could be hundreds. Or it will take a $150,000 national blanket bond, which could cover thousands of wells. The Commission asks for a $75,000 blanket bond. Pure had a $25,000 BLM blanket bond and $93,000 bond with the state.

KROPATSCH: We've sent more money on the cleanup so far to date than they had posted in bond and the remainder of that money comes out of the orphan well fund which is paid from conservation taxes the operators pay.

ZHOROV: Pure, by the way, owes conservation taxes. So, to summarize: Pure had about $118,000 bonded to the state and feds combined. So far, the state alone has spent nearly six times that on cleanup. And Pure has 101 wells on the state's orphan list, almost all of them on private land, which means the state will spend a lot more.

So what happened?

JILL MORRISON: I think in Wyoming the proverbial chickens have come home to roost on the regular boom and bust we see in the oil and gas development.

ZHOROV: That's the Powder River Basin Resource Council's Jill Morrison, who has been following Pure's demise and similar problems in the industry for years.

MORRISON: What I have observed as I have been watching this process unfold over the last 5-10 years is a lot of coddling and hand holding by the state of these companies that are clearly incapable of managing a decent business where they're going to be responsible. And the state keeps giving them another chance and another chance and another chance.

ZHOROV: Indeed, neither the state nor the BLM has a clear policy on how patient to be with bad operators and approaches them on a case by case basis. The BLM Buffalo Office Supervisory Petroleum Engineer, Matthew Warren, worked with Pure:

MATTHEW WARREN: There's not really any policy on that, and the way the regulation is written I don't know necessarily how to be stricter.

ZHOROV: Then there's the bonding system itself. University of Wyoming's Department Head of the Agriculture and Applied Economics Department, Roger Coupal, studied this issue. Simply put, he says bonds are too low to cover reclamation if an operator doesn't do the work. He estimates that it costs about $30,000 to reclaim one well, while the bond per well in the state is usually closer to $6,000.

ROGER COUPAL: Why have a bond? Well, the bond is there, the stated reason is because it gives them an incentive to clean things up. Well, it it's not big enough, it's not going to give the incentive.

ZHOROV: Coupal says in theory, the bonds were supposed to be big enough to cover actual costs. That's how it works in coal mining, for example.

The BLM and Wyoming's Commission *can* ask for additional bonds after production starts, if they suspect they might need them. The state did ask, but Pure did not put up those bonds. The BLM never got around to asking.

Further, the bonds don't grow over time. The BLM does not put them into interest accruing accounts. The state does, but the interest does not go towards reclamation.

Coupal points out that most companies do follow through and clean up. Their incentive, however, is not the bonds.

COUPAL: The companies tend to, especially the majors, tend to want to for reputation, if for no other reason, because they're usually in here for the long run and they want to make sure they have a good reputation.

ZHOROV: But Pure certainly isn't alone. The state has 1,200 wells on its orphan list, a large percentage of them from the coalbed methane boom. The BLM has many idle wells, though it's not clear how many they will have to clean up. The Commission has promised to speed up its orphan well cleanup program next spring, but in 2011 and 2012 combined, it only got to 35 wells.

COUPAL: When it comes to reclamation, we don't think much about it during the boom, but then all of a sudden, when the rigs have left, the employment is gone, the we start looking at what we have and wondering why we didn't spend more time figuring out how to solve that before it became a problem.

ZHOROV: It's not just the physical remains, either. Pure Petroleum owes over half a million dollars in severance taxes, interest, and penalties to the state. That's not even counting what it owes to the feds.

For Wyoming Public Radio, I'm Irina Zhorov.