Bill Eikenberry
Rancher and former Associate Director of the Bureau of Land Management in Wyoming

Testimony on:
"Protecting Investment in Oil Shale the Next Generation of Environmental, Energy, and Resource Security Act'' or the ''PIONEERS Act"

Presented to the U.S. House Subcommittee on Energy and Mineral Resources
November 18, 2011

Thank you Chairman Lamborn and Ranking Member Holt for the opportunity to testify today on the PIONEERS Act and the important question of the feasibility and wisdom of developing oil shale deposits in Colorado, Utah and Wyoming.

Opening remarks
I am a former land manager who served over 30 years with the U.S. Department of the Interior and most recently served as the associate state director of the U.S. Bureau of Land Management in Wyoming. I was also an adjunct professor of natural resources at the University of Wyoming. Today, I tend to my ranch in south eastern Wyoming and pay keen attention to the energy development issues in the West and how those activities would affect rural communities and the agricultural sector.

As you may know, we are seeing record levels of oil and gas development in the United States. In fact, drill rig activity is higher today than at any point in the last 24 years. Also, both production of oil and gas are higher today than when President Bush left office.

Still, I can appreciate the concern the members of this committee have when it comes to producing energy, creating jobs, and growing revenue. I believe that to achieve this goal, Congress should ensure that oil and gas companies "use it or lose it" and develop the 22 million acres of public lands already leased for development. Industry should also seek to develop the 7,000 drilling permits where they have a green light to drill – over half of which are in my home state of Wyoming.

Unfortunately, oil shale will fail to achieve any of the goals aimed at by this committee. The only thing blocking oil shale development is the same thing that has blocked it for 100 years. It is the low-quality resource of the rock and physics.

Oil shale is just an opportunity to fuel Wall Street-style speculation on our public lands. Without the breakthrough in technology for commercial oil shale development – which industry says is at least a decade or more away -– there are no jobs, there is no energy, and there is no revenue in oil shale.

In fact, the legislation introduced by Congressman Lamborn would actually invite throwing more taxpayer-funded subsidies at a failed resource, shift the cost oil shale research onto local government, and communities, put water resources at risk, gamble away 2 million of acres of public lands for speculation, and risk losing real jobs in the agricultural, tourism, and outdoor recreation sectors.

I urge the committee members to unequivocally oppose the PIONEER Act and vote no on this legislation.

No Jobs, No Energy, No Revenues

Regardless of whether you support, oppose, or like most people are uncertain about oil shale development, the fact remains that the fundamental problem with oil shale is the rock itself. This bill will do nothing to change that fact. Oil shale is not feasible because industry leaders such as Shell Oil, ExxonMobil, and Chevron have not been able to solve the many technical, economic and environmental hurdles, despite decades and hundreds of millions of dollars of testing and researching various technologies.

What Congress, through this legislation, is looking to do is step in front of the Department of the Interior, circumvent a process underway that has strong local input from stakeholders across the West, and force bad land use and economic decisions that would directly hurt local communities and economies. It is because of those concerns – concerns I have about the fundamental goals of the PIONEERS Act – that I am here today.

As industry continues its decades-long research and tests technologies with the goal of developing commercially-viable business models, we have time to make sure that we ask and answer the correct questions. The PIONEERS Act presents oil shale as a viable jobs and energy program. If Congress is looking at oil shale to spur economic growth, we as a country are in a mess of trouble.

For more than 100 years, boosters have promised that pulling oil out of rock-solid kerogen formations in the West would be easy, and the region would be awash in jobs, fortunes and eternal economic prosperity if we only tapped it. That's the central trust of the PIONEERS Act. The reality though is that such overly optimistic promises of oil shale have throughout history shown to be pure hype. In the 1910s and 1920s, people were lured West by oil shale boosters' promises of jobs and easy money. But that hype busted in the mid-1920s when oil reserves were found in Oklahoma, Texas and California -- shattering the livelihoods of thousands of people in Wyoming and Colorado's Western slope.

The same dynamic played out in the 1940s and again the late 1970s into the 1980s. I lived through those turbulent times in the 1980s and can tell you that lofty promise by industry and government hurt people.

In 1980, Exxon announced at a meeting in western Colorado that they would be developing 8 million barrels per days by 2010. In 1981, the Reagan administration approved a $1.2 billion loan guarantee for Exxon's Colony oil shale project. One year later, in May 1982, Exxon pulled the plug on its Colony oil shale project and more than 2,000 local workers lost their jobs over night.

Twenty-eight years later, not a single barrel of oil from shale has made its way into the nation's commercial oil supply. It's not for a lack of trying – and it not a result of any particular federal policy. Industry heavyweights like Shell and ExxonMobil have hundreds of thousands of acres of private oil shale lands on which to test their technologies. They've also invested hundreds of millions of dollars. They still cannot produce oil from oil shale.

The current research program the Bush Administration initiated in 2007 is progressing but is yielding few results. Shell Oil recently announced that it was shifting gears and is now looking to develop deeper deposits. Enefit USA (formerly OSEC) told the BLM in a July 2011 report that they were taking a step back and reviewing their entire approach to research. Chevron, in their quarterly reports to the BLM, has likewise shown little progress.

Why is this background important? The bill states oil shale is "one of the best resources available for advancing American technology and creating American jobs." Aside from the fact that the leading companies are not American – they are Dutch, French, and Estonian – until there are technologies, there are no jobs, there is no energy, and there is no revenue. What there is, is hope and hype, and that's it.

Shifting the Cost of Doing Business on to Local Governments and Giving the More Taxpayer Handouts to Big Oil

While it is not the intent of the PIONEERS Act to hurt local communities, one of the unintended consequences of this legislation is that the very local communities that would be responsible for supporting development could be severely negatively impacted by development.

Local governments, as the host communities, would be charged with developing the infrastructure necessary to support commercial development. That means our communities would need to provide schools, housing units, hospitals, police and fire departments, social services, road improvements, and the like. The way governments pay for these improvements is through royalty payments. Under current law, 49% of royalties go the states and local governments to bear the financial costs of supporting local governments.

As Democrat Keith Lambert and Republican Ken Parsons, two local elected officials from western Colorado stated in an August 2011 editorial in the *Grand Junction Daily Sentinel*, "Cutting the royalty rate by more than half, as rules set in place by the previous administration provide, effectively removes millions of dollars intended to help our communities provide the increased services and infrastructure necessary to accommodate the industry." Congress, in a rush to "accelerate" oil shale, has yet to discuss in any serious way the potential impact development would have on local governments. To conclude, as the PIONEERS Act does, that Congress should force the BLM to levy low royalties at the expense of taxpayers without first examining the fiscal impacts on local governments is extremely troubling.

At Congressman Lamborn's oil shale hearing in Grand Junction in August 2011, Jim Spehar, the former Mayor of Grand Junction, Colorado, raised this very issue. As Spehar stated in written testimony:

> "Whether you oppose or support oil shale development, it's irresponsible not to be planning now for potential development and the possible impacts. That examination of impacts demands more than just a science project. But current research is focused primarily on technology, not the broad range of social, economic, environmental and other community impacts that will result if the technical research is ultimately successful. Just as the industry desires certainty in what's required of it, so do communities deserve that same degree of certainty as to what the expectations of will be of their local governments, non-profits and other agencies, schools, hospitals, for infrastructure and services associated with the development of this industry."

Instead of following this sage advice and examining the impacts of foisting an unproven industry on local governments with incredible unknowns, Congress instead is now trying to subsidize industry and tear down the BLM all for a gamble on oil shale – one that has been a losing bet for 100 years. Lost in this shuffle are the real impacts on local governments, rural agriculture, and communities.

The reviews that the BLM is undertaking – the reviews this Act seeks to upend – are critical to understanding these and other impacts. It is reprehensible for Congress to subsidize large, highly profitable corporations at the expense of local communities, while also attempting to undermine two extremely important reviews that the BLM is undertaking. Companies such as ExxonMobil, Chevron, and Shell can afford to pay the costs of their own research.

Gambling on Oil Shale at the Expense of Real Jobs and Western Economies

Just as local governments would feel the impacts of potential development, so too would our ranchers, farmers, water districts and others whose livelihoods rely on access to clean air and water.

The PIONEERS Act, by working recklessly to "accelerate" potential oil shale development, might be asking western communities to trade real jobs we have right now in the agricultural, tourism, and outdoor recreation industries for the promised, but never delivered, employment from oil shale.

In 2008, the BLM determined that large-scale development of oil shale – the goal of the PIONEERS Act – would fundamentally change the face of western Colorado. Currently, our communities and economies are agriculture based, but also benefit from diverse income sources such as recreation, hunting, fishing, retirement, colleges, tourism, and real oil and gas energy production. The BLM forecasts that if large-scale industrial oil shale development were ever to become possible, it would dry up our farms and ranches, diverting scarce water supplies to industrial uses, thereby changing the economic and social fabric of our communities.

In fact, major corporations already have extensive water rights that they could use for oil shale speculation. As Congressman Lamborn knows, using large quantities of water for oil shale, as the BLM, GAO, Rand Corporation and Colorado water users have concluded would be needed, would have profound impacts on the state and on economies. Utah would face similar challenges. As a rancher I have huge concerns with the potential impacts to agriculture oil shale development would bring. When coupled with existing massive oil and gas production, the cumulative impacts could be staggering.

It is for these that Ken Neubecker, the executive director of the Western Rivers Institute and a past president of Colorado Trout Unlimited, offered this sage advice in written testimony to the House Natural Resources Committee:

> "Taken in isolation the water needed for full oil shale development is legally and physically available. However, as Wayne Aspinall noted 'In the West, when you touch water you touch everything.' Water in the West is no longer a resource to be developed; it is a fully developed resource. Simply put, the water needed for oil shale development will come from someone else's current or planned use. It will have water supply implications far beyond the boundaries of the open spaces of northwest Colorado, eastern Utah and southwest Wyoming."

Hunting and fishing is also central to our region. Not only are these activities part of who we are as a people, but they are also a central part of our economies. Already oil and gas development in the Piceance Basin is impacting herds. Rushing potential large-scale oil shale development on top of this existing energy framework, as the PIONEERS Act seeks to do, could be devastating to this important industry.

One final issue this committee should examine is the energy demands and associated impacts on our air and water. Independent studies by Dr. Adam Brandt at Stanford and Dr, Cutler Cleveland have concluded that it might actually take more energy to develop oil shale than the amount of energy that can be recovered from oil shale. The reason is the huge energy demands associated with production. The BLM estimated that producing just 100,000 barrels of oil per day from oil shale would require 1.2 MW plant with enough capacity to power 1.2 million homes each year. Those power plants do not yet exist, and that is a significant hurdle for development. If companies use natural gas to power production, the demands would likewise be astounding. To produce 2,400 MW, a very efficient combined cycle gas power plant would require approximately 135 BILLION cubic feet of natural gas,[1] or about 10% of Colorado's gas production. The fuel bill would be about $600 million per year.

Industrializing the local landscape brings massive amounts of air pollution. Communities in Wyoming, Colorado and Utah are already experiencing worse air from natural gas development than Los Angeles. The cumulative impacts of oil shale and oil and gas development must be understood, as poor air would not only compromise public health but would also seriously impact other sectors of the tourism and outdoor recreation industry.

---

[1] There is roughly 1000 Btu per cubic foot of gas. A 2400 MW combined cycle power plant would generate about 18 million MWh per year at an 85% capacity factor. The heat rate might be 7.5 MMBtu/MWh, implying 135 billion cubic feet of gas per year.

Closing
I support Interior Secretary Ken Salazar commitment to take a fresh look at two key decisions that were rushed to at the end of 2008 regarding oil shale. As a rancher I too am concerned about what we are getting into with oil shale and the amount of water that commercial development might require. Ensuring oil shale doesn't steal or pollute my water or that of my neighbors requires moving carefully, and I support Secretary Salazar's caution. I also support the strong work by the BLM to ensure that stakeholders from across the West have a seat at the table in this decision. Understanding the impacts before proceeding with oil shale commercial development is just common sense – but it is common sense that this legislation seeks to undermine.

In summary, I would again like to thank the committee for the opportunity to testify today.
I sincerely urge the committee to consider the dangers in rushing ahead with oil shale speculation and the serious cost that it could bring to western rural communities and local economies.

I urge the committee to vote "no" on the PIONEERS Act and allow the current BLM stakeholder process to move forward so that everyone has a voice in this incredibly important decision.