



PRESENTATION BY MARK FIX
NORTHERN PLAINS RESOURCE COUNCIL
GOVERNOR'S ENERGY SUMMIT
OCTOBER 2005

Introduction

- Thanks for the opportunity to be here.
- My name is Mark Fix. I ranch on Tongue River and chair the Northern Plains Resource Council's coal bed methane task force.
- Northern Plains is a grassroots conservation and family agriculture group. We organize Montana citizens to protect our water quality, family farms and ranches, and unique quality of life.
- Northern Plains was formed in the early 1970s by a handful of ranch families who didn't want to sit back and let eastern interests turn Montana into a boiler room for the nation. At the time, there was a massive push to strip mine coal through southeastern Montana and build power plants.
- Northern Plains' early work led to passage of the Surface Mining Control and Reclamation Act at the federal level and similar legislation here in Montana. These laws go a long way toward balancing coal strip mining with protection of farm and ranch land and our water and air.

Coal Bed Methane: Doing It Right

- We first became involved in the coal bed methane issue in late 1999 when we started getting calls from members who were being contacted by methane companies about drilling for methane on their property.
- We didn't know much about the process then, and we've been diligently educating ourselves and our neighbors and anyone who'll listen to us ever since.
- Many of us rely on natural gas to heat our homes. Methane is a form of natural gas and is a valuable resource.
- Northern Plains is not opposed to coal bed methane development, as long as it's done responsibly. Some of our members may someday develop their own methane resource.
- Methane development is a simple process, but it has a lot of implications for the land, the water, and the people who live in southeastern Montana. It's for that reason that Northern Plains has become so involved in this issue. Our members live and work in southeastern Montana. Many of them ranch, like I do, or farm. Some live in rural communities that rely on the farm and ranch economy.
- We call our approach to coal bed methane development Doing It Right. And, doing it right means honoring the rights of private landowners when drilling on or adjacent to their property. It means adopting best available technologies to minimize damages. It means taking care of the water in a responsible manner. It means involving the public in the decision-making process. It means making sure the companies post damage deposits – or bonds – that are sufficient to cover the costs of clean up to protect taxpayers from having to

bear the burden of clean up should a company go bankrupt. And, it means active enforcement of existing laws.

While there are a lot of issues I could talk about related to coal bed methane development, I'd like to focus on three: 1. what to do with the water; 2. rights of landowners facing unwanted drilling on their property; and 3. reclamation and bonding laws.

Water

- To drill for methane gas, you have to pull a lot of water out of coal seam aquifers.
- When you pump water out of aquifers that feed water wells and springs, the result is pretty predictable. The wells and springs often go dry.
- Most methane water is currently sprayed directly into unlined impoundments such as the one pictured here [SLIDE 1; The big leaker]. This impoundment is located on Youngs Creek just across the border in Wyoming at Fidelity Exploration and Production Company's field. As you can see, these impoundments leak.
- This Landsat-7 satellite image taken on August 16, 1999 showing the area between the Tongue River (left) and lower Prairie Dog Creek (right) in Sheridan County, Wyoming [SLIDE 2]. At this time the area is mostly ranchland with irrigated agriculture (bright green) in the river valleys. Drilling for coalbed methane in this part of the Powder River Basin accelerated in following years. Wyoming - Montana border is shown by brown line at top. Image is 5 miles across.
- This Landsat-5 satellite image was taken on August 5, 2004 showing the same area between the Tongue River (left) and lower Prairie Dog Creek (right) in Sheridan County, Wyoming following five years of coal bed methane drilling [SLIDE 3]. By this time many methane wells have been drilled in this area: the system of dirt access roads appears as a network of pale lines. Much of the water produced from the methane wells is being held in large retention ponds (blue spots scattered throughout the image). Some of these were pre-existing small reservoirs, originally built by ranchers in stream channels to capture snowmelt for watering livestock, that have been enlarged to hold CBM water. Many are new ponds constructed off-channel specifically for the CBM operation (these are typically larger). Wyoming - Montana border is shown by brown line at top. Image is 5 miles across.
- Methane companies also spray the water directly on the ground. This is called "land application." [SLIDES 4 AND 5] The companies would like us to believe this is irrigation. These slides show land application. When you deluge a plot of land with high sodium water, you can see what happens.

A Solution to the Water Problem

- As you can see, the methane water problem is twofold. First, by pumping groundwater from aquifers relied upon by landowners for their stock and homes, you deprive them of the water by drying up wells and springs. The final environmental impact statement predicts methane drilling will lower the water table by 600 feet across the Powder River Basin. That will cause a sustained groundwater drought in an area where everyone relies on the groundwater to get by. No one really knows how long it'll take to recharge these aquifers. But, it's not hard to imagine the hardship imposed on farm and ranch families when the water goes dry.
- Second, once at the surface, the water's a nuisance because it's too salty to be used for irrigation and will ruin the soil when applied.

- We believe that the solution to the methane water problem that makes the most sense is to put the water back where possible so that it's available for future generations. If that's not possible, then we think the companies ought to clean the water before discharging it into our rivers and streams so that it doesn't harm our irrigation water.
- Working with a coalition of farm and ranch interests in our part of the state, we've put together a proposal called Water Beyond Methane that would do just that. It would also let landowners use the water where they can with a valid water right. Water Beyond Methane addresses the massive volumes of water that are above and beyond the water that can be put to good use by farmers and ranchers. We don't think this water should be wasted through evaporation or by being sent to the Gulf of Mexico. It needs to be treated like the valuable resource that it is and safeguarded in the ground for future generations.
- The Montana Board of Environmental Review voted to initiate rulemaking on our proposed rule. We're really hopeful that the Board will adopt our common sense proposal so that we can make sure we have water the methane is gone.

Landowner Rights

- Another issue we're really concerned with is protection of private property rights.
- About half of the coal bed methane resource in our state is owned by the federal government and is located under private farms and ranches. Another 40% is owned by private parties – often different parties than those who own the surface. 10% is owned by the state.
- If you own your land but not all of the minerals, then you're in what's called a "split estate" situation. You're also in good company – the checkerboard pattern of mineral and land ownership in Montana puts most landowners in a split estate situation.
- Current laws give methane companies the right to enter private land, build roads, dig pits, and otherwise do everything necessary to get the methane out without the landowner's permission. Methane companies are not even required to consult with landowners as to the course of development on their land. A company need only give a landowner 10 days' notice before entering his private land.
- In the last legislative session, Northern Plains backed a bill that would have increased notice times and required oil and gas companies to enter into good faith negotiations with landowners to reach agreement as to the placement of road and other infrastructure etc. While our bill didn't pass, lawmakers directed the Environmental Quality Council to study the issue, along with reclamation and bonding laws, and make recommendations for the 2007 session. We're working with this process to advocate for reforms to better protect landowners' rights, and to reform our reclamation and bonding laws so that companies post bonds that are sufficient to cover the true costs of development.

Bonding and Reclamation

That brings us to the final issue: bonding and reclamation. Under current laws, a methane company can post a statewide bond of \$50,000 for all of the methane wells in the state of Montana. Meanwhile, reclamation of just one methane well can cost that much. Northern Plains hired a respected mining engineer with years' of experience dealing with wastewater reclamation and other impacts to calculate reclamation costs of the only producing coal bed methane field in Montana. Jim Kuipers of Kuipers and Associates examined FEPCO's Tongue River project in southeastern Montana.

The field:

- Involves 571 coal bed methane wells;
- 60 new and existing storage impoundment for water pumped from coal seam aquifers;
- 82 miles of two-track roads and 29 miles of improved roads;
- 206 miles of underground gas lines, water lines, and power lines; and
- a proposed 660 acre land application discharge area.
- Total disturbed land is 1,775 acres.

In the case of FEPCO's Tongue River Project, the cost to reclaim the 1,775 acres of land disturbed by development is conservatively estimated at over \$7 million. Meanwhile, FEPCO has posted a total of \$420,000 in bonds, comprised of a \$150,000 blanket federal bond, seven individual \$10,000 federal bonds, and a \$200,000 blanket bond to the state of Montana.

FEPCO's bond is thus \$6.8 million short of liability faced by taxpayers and neighboring landowners. If FEPCO were to go bankrupt or abandon the project, responsibility for cleaning up the field would be born by taxpayers and landowners who live in the area.

- Northern Plains is currently advocating for bond amounts that reflect actual reclamation costs – that way we can be assured that taxpayers won't be left footing the bill for clean-up of coal bed methane development should a single company go bankrupt.
- Now, the industry will tell you that they always clean up their messes, and that bonds aren't supposed to cover true reclamation costs, but are merely a symbol of the company's intent to clean up. We don't think that's good enough. Montana has a long history of companies defaulting on their bonds. Bonds are intended to guard against bad actors. Good, responsible companies should have no problem with the bonds. It's essentially an insurance policy for the people of this state and is a matter of good public policy.

Conclusion

That was a lot to cover in just 15 minutes. I hope I haven't overwhelmed you. I would just close by saying that at Northern Plains, we don't pretend to have all of the answers. But, we are working really hard to figuring out solutions. We think that Montana's energy future needs to focus on responsible development of our valuable methane gas. We'd like to see methane used for home heating, and don't support using it to produce electricity. By burning methane for electricity, we take that resource away from homeowners. And, if your home is heated with natural gas, you can't easily turn to another source of energy – you're just stuck with high home heating bills.

We'd like to see a lot more investment in wind energy for electricity – we think that makes more sense for the future – and we want to see a lot more attention paid to bio-diesel and small scale solar. And, of course, we all can do little things to reduce consumption and improve efficiency. Northern Plains is renovating an old grocery store in Billings to be our home office – because of the energy efficiency and renewable energy measures we're adopting, we'll use half of the energy a building of the same size would use, including natural gas. We think that's what the future will bring – responsible energy development, smart energy use, and more development of renewable energy sources that bring broad prosperity to our rural communities, including small scale solar, wind, and biodiesel. Thanks.