

## **Drilling Holes in the Tax Code: The Impacts of Coalbed Methane Development**

### **SUMMARY**

Buoyed by congressional and administration supporters, coalbed methane development in the Rocky Mountain West is poised to be a huge winner in the ongoing energy debate. With environmental regulatory relief, rollbacks on federal land protections and more taxpayer funded tax breaks this once “unconventional” energy source is now becoming a primary energy source.

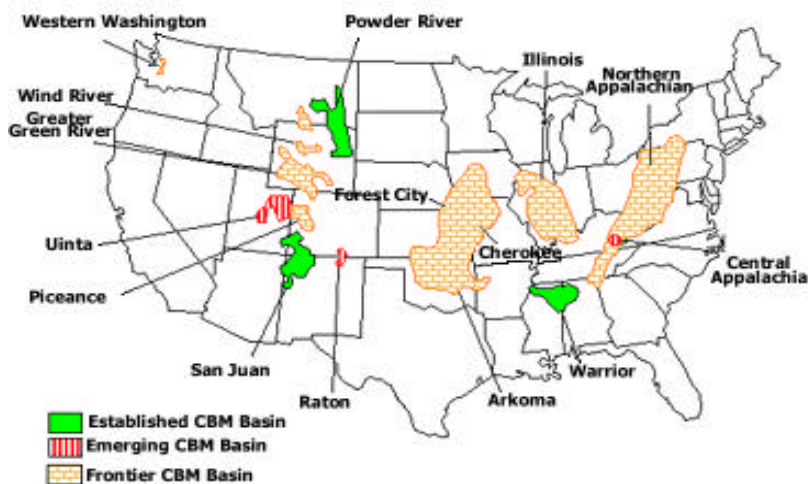
### **BACKGROUND**

Coalbed methane is a type of natural gas that is trapped within coal seams. The natural gas is formed when organic compounds associated with coal decompose or are exposed to intense heat or pressure. The gas is trapped in the porous surfaces of the coal seams by water pressure from groundwater above the coal seam.

According to the United States Geological Service (USGS), coalbed methane can be found in basins across the United States, and represents more than 700 trillion cubic feet of natural gas, of which 100 trillion cubic feet is economically recoverable. Areas of the country currently producing natural gas from coalbed methane wells include the San Juan Basin in Colorado and the Powder River Basin Wyoming and Montana.

The first commercial coalbed methane wells were drilled in Alabama’s Black Warrior Basin beginning in the 1980s. Since that time, coalbed methane production ballooned from a few dozen wells to more than 14,000 wells in 2000. Coalbed methane production has increased from 100 million cubic feet in 1980 to more than 1.4 trillion cubic feet in 2000. This spectacular growth has come at a great cost to the environment.

### **Major Coalbed Methane Basins**



Source: Energy Information Administration, Office of Integrated Analysis and Forecasting

### **ENVIRONMENTAL IMPACTS Aquifer Depletion**

Many of the long-term environmental impacts of coalbed methane are still unknown, but some of the immediate impacts are clear.

Coalbed methane production involves withdrawing massive volumes of groundwater from coal seam aquifers. The USGS estimates that an average well in Montana withdraws 11.6 gallons of water per minute (gpm), or over 16,000 gallons a day. At 10 gpm, a mid-range estimate of the 24,000 producing wells would pump out 345 million gallons of water per day from

underground water reserves. Most of this groundwater is discharged into rivers, streams, and dry creek beds, or held in unlined impoundments, where it can seep into rivers and streams.

The Powder River Basin is projected to grow to 30,000 to 50,000 wells. Well operators could pump out and discharge one billion gallons of groundwater each day for the next 10 to 20 years.

The water that is pumped out of these wells has a high concentration of dissolved minerals, which makes it unfit to mix with river and drinking water. Even treated, the influx of high volumes of groundwater into rivers and streams could change stream temperature and hydrology, adversely affecting fisheries. Likewise, the increased erosion and sedimentation from discharges can plug irrigation canals and destroy spawning grounds for fish.

### Threats to Wildlife

The access roads, drill pads, pipelines, power lines, transmission stations, compressors and increased traffic that accompany coalbed methane development can chop up wildlife habitat and disrupt home range, winter range and migration routes. State and federal agencies estimate that each coalbed methane well disturbs three to four acres of land, and results in the construction of a quarter to a third of a mile of new roads. With up to 39,000 methane wells predicted in the next ten years, methane production could disturb tens of thousands of acres of critical wildlife habitat.

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Congressional Research Service for the Committee on the Budget of the United States (S. Prt. 106-65)

## PRIVATE PROPERTY RIGHTS

In the Western United States, the rights of property owners are running headlong into the rights of companies drilling for coalbed methane natural gas. Most western lands operate on the doctrine of “split estates.” A split estate exists when the owners of the surface rights are different from the owners of the subsurface mineral rights. The way the doctrine is written the subsurface minerals rights are supreme to the surface rights.

Ranchers, farmers and property owners often oppose coalbed methane development because the wells can decrease property values, as well as detrimentally impact water sources used by cattle and for crop irrigation. In some instances, coalbed methane producers have given little or no notice to landowners before they drill the wells and have inadequately reclaimed the sites when they leave.

## SECTION 29 TAX CREDIT

Perhaps the greatest influence on the coalbed methane market has been the “Section 29” tax credit for “unconventional” fuels. The tax credit, which passed as part of the Crude Oil Windfall Profit Tax Act of 1980, grants a \$3.00 per barrel or \$.50 per thousand cubic feet tax credit on oil and gas resources deemed “uneconomical” for commercial development. Unconventional resources included oil and gas from tar sands, tight gas formations and coalbed methane.

The tax credit was originally designed to phase-in and -out as oil prices rose from \$23.50 to \$29.50 per a barrel in 1979. Because of congressional failure to re-index the tax break to inflation, oil prices would have to reach \$47 to \$59 for the credit to phase-out. The failure to re-index the credit

has increased the value of the credit to nearly \$6 per a barrel of oil or \$1.00 per thousand feet of natural gas. According to the Department of Energy's Energy Information Administration, "The credit averaged \$1.02 per thousand cubic feet for the decade and added 53 percent to the effective price received for eligible production based on the U.S. wellhead price."

Section 29 will cost taxpayers more than \$3.6 billion over the next five years, with a majority of the credit going to coalbed methane producers.

### **Has the Credit Worked?**

If the original purpose of Section 29 was to augment petroleum imports, than the credit has utterly failed. According to the Congressional Research Service, "Virtually all of the added gas output has substituted for domestic conventional natural gas rather than imported petroleum, meaning that the credit has basically not achieved its underlining energy policy objective of enhancing energy security."

The development of much of the current growth in the natural gas markets can be attributable to companies that are receiving the Section 29 tax credit. The Department of Energy's Energy Information Agency reports that companies receiving the tax credit increased natural gas production by 26 percent between the periods of 1990 and 1999, while non-Section 29 companies saw a decrease of 14 percent.

### **COALBED METHANE POLITICS**

Coalbed methane development is receiving key support from members of Congress and the administration. In September of 2002, Reps. Tom Trancredo (R-Colo.) and Barbara Cubin (R-Wyo.) founded the Coalbed Methane Congressional Caucus with the goal of creating a formal congressional

constituency for coalbed development. Energy bills passed last year by the House of Representatives and the Senate contained tax provisions that would have allowed new coalbed methane wells to utilize the Section 29 tax credit. Provisions in the House bill would have eliminated or streamlined environmental regulations developed to ensure that the environmental impacts of development are considered before drilling a new well.

The Bush administration's *National Energy Policy* also contains proposals to "expedite" oil and gas drilling on public lands by changing stipulations. The vast majority of federally managed lands are already open to oil and gas development. Despite this, industry has argued that there are "too many stipulations" placed on these public lands. Stipulations are lease conditions designed to protect other resources, especially wildlife. For example, seasonal stipulations prevent oil and gas operations during certain times of the year in order to prevent harming wildlife at critical times. The Bush recommendation seems to specifically target these protective stipulations.

### **Administration Appointees**

Perhaps the greatest threat to environmental protections on public lands comes from political appointees in the Department of the Interior (DOI). DOI is responsible for managing oil and gas leases on federal lands, as well as land use decisions for 507 million acres.

Many former coalbed methane lobbyists are now top officials at DOI. Lobbyists that once worked to eliminate environmental protections that prevented oil and gas development are now in positions that oversee the enforcement of environmental laws on public lands. In fact, the strong ties of two DOI officials, Deputy Secretary J. Steven Griles and Assistant Secretary of

Land and Minerals Management, Rebecca Watson, forced them to recuse themselves from working on a coalbed methane project in the Powder River Basin of Wyoming due to conflicts of interest.

In May 2002, *The Washington Post* exposed a serious conflict of interest involving Griles. Even though he has recused himself, Griles had apparently violated his ethics agreement by involving himself in the decision-making process about a coalbed methane project in the Powder River Basin.

Other officials with strong ties to coalbed methane developers and/or oil and gas interests include:

- Holly Hopkins, Special Assistant to the Deputy Secretary of the Interior. Hopkins had previously served as Griles' assistant when he was a lobbyist on behalf of coalbed methane projects and other mining interests. She is now Griles' assistant at DOI.
- William Myers, Solicitor for Department of the Interior. Before his appointment to DOI, Myers was an attorney for the law firm Holland and Hart, based in Boise, Idaho. While at Holland and Hart, Myers represented several coalbed methane companies, including: Arch Coal, Lehman Brothers (a subsidiary of Peabody Coal) and Rio Tinto (a subsidiary of Kennecott Energy Corporation).
- Thomas Sansonetti, Assistant Attorney General, Environment and Natural Resources, Department of Justice. Sansonetti is responsible for defending U.S. environmental laws and defending legal challenges to the government's environmental programs and activities. Sansonetti often defends DOI when it is involved in lawsuits. Mr. Myers,

Sanonetti was an attorney at Holland and Hart and represented several coalbed methane companies.

Through his political appointments, President Bush has made clear his intention to promote coalbed methane production. These political appointees have the authority to dramatically impact coalbed methane production for years to come.

## CONCLUSION

Despite known ecological problems and property rights concerns, industry lobbyists now occupying key positions in the Department of the Interior are pushing ahead with more coalbed methane development. Making matters worse, Congress is considering expanding the Section 29 tax break, giving potentially billions of dollars to coalbed methane producers and essentially funding further destruction of our public lands. Unless stopped, these policies will forever scar the Western landscape and other places coalbed methane is found.

## FOR MORE INFORMATION:

**Erich Pica**, (202) 783-7400 ext. 229, e-mail: [epica@foe.org](mailto:epica@foe.org) or

**Kristen Sykes**, (202) 783-7400 ext. 100, e-mail: [ksykes@foe.org](mailto:ksykes@foe.org)

**Friends of the Earth**, 1025 Vermont Avenue, NW, Suite 300, Washington, D.C. 20005 -- (202) 783-7400

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