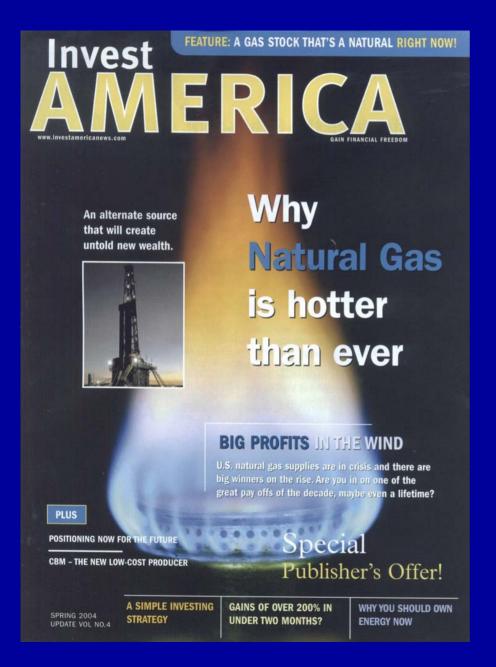


Easy Money, Hidden Costs: Precautionary Economic Analysis of Coalbed Methane Development in the Powder River Basin \*\*\*

Skov & Myers

Precautionary Tools

Chapter 14



- 7-10,000 new jobs
- \$5 billion economic benefits to states

## Precautionary economic analysis

- Value human health and environment.
- Take uncertainty into account.
- Describe full costs, risks, and harms.
- Describe distribution of costs and benefits.
- Examine alternatives.

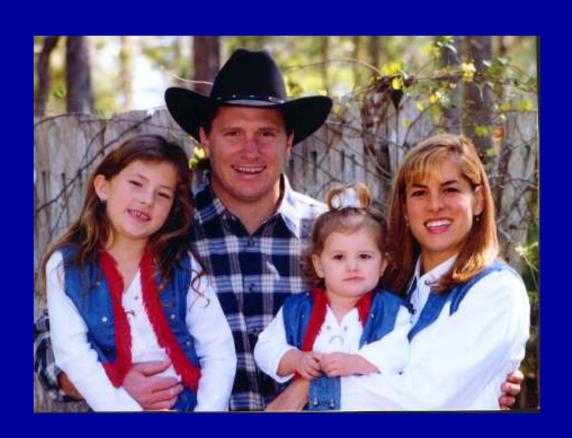
#### Benefits are short term

- Extraction for 20 years
- One year's worth of US natural gas supply

### Costs are public

- Subsidies--\$700 million-\$1.7 billion over next 5 years
- "Lost water"--\$2-10 billion over 20 years

# Lost water: \$84 - \$400 per year for every man, woman and child in Montana and Wyoming



Public benefits to states: \$5 billion

Public costs to states: \$2-10 billion for water PLUS...



- 77,000 wells=5 per square mile
- 25,000 miles of unpaved roads
- 47,000 miles of pipelines and power lines

BENEFITS	2017	2017-2060	2060
Energy companies	Value of CBM	None	None
Owners with damage ag.	Compensation	None	None
Owners without ag.	Compensation if approved	None	None
Local taxpayers	CBM taxes, some jobs	None	None
US taxpayers	1 year of natural gas	None	None

COSTS & RISKS	2017	2017-2060	2060
Energy companies	Extraction & damages \$\$	None	None
Owners with damage ag.	Disruption, contamination	Water table, soil, land value	Residual problems?
Owners without ag.	Same + legal fees	Water table, soil, land value	Residual problems?
WY, MT residents	Water, beauty, recreation	Water, etc. or remediation \$\$	Remediation \$ or value loss
US residents	Tax \$\$	Tax \$\$, water, remediation \$\$	Remediation \$, water?

#### Benefits

- Immediate and near future
- Concentrated with energy companies, spilling over to public
- Natural gas--a valuable resource

#### Costs

- Will occur over several generations
- Significant public \$\$
- Water--a valuable resource

#### Recommendations

- 1. Eliminate subsidies for CBM.
- 2. Institute environmental bonding—developer pays.

#### Recommendations

3. Develop costeffective energy strategies. Conservation and renewables could save consumers \$100 billion and reduce natural gas use 31% by 2020.

