THE WILDERNESS SOCIETY

OIL AND GAS ON PUBLIC LANDS: AN OVERVIEW

We are sacrificing the long-term health of our last wild lands and our traditional Western communities for the oil and gas industry's economic gain.

The Bush administration's short-sighted "solution" to America's energy challenges emphasizes production of fossil fuels from the Arctic National Wildlife Refuge and public lands in the Rocky Mountain states. The administration and industry's arguments, however, are based on false assumptions about oil and resources in the West.

The vast majority of publicly-owned oil and gas resources in the Overthrust Belt states of Montana, Colorado, New Mexico, Utah, and Wyoming are already available for oil and gas leasing and development.[i] There are now more than 74,000 producing oil and gas wells on the public lands, with thousands more in the permitting process and tens of thousands more planned by the Bush Administration.[ii] Approximately 35 *million* acres of public lands are under lease for oil and gas development.

Despite the vast acreage of land available for leasing -- and growing concern among residents, Western Governors and the Government Accountability Office that an unchecked oil and gas industry is damaging the region's environment – the oil and gas industry, their friends in Congress, and the Bush administration have ratcheted up oil and gas drilling while relaxing environmental protections.

Balanced protections needed

Our public lands managed by the Bureau of Land Management and our National Forests harbor a multitude of environmental, ecological, and mineral values. Current laws generally provide that these lands – more than 460 million acres -- be managed to protect their environmental values (such as wilderness attributes, water quality, wildlife habitat, and cultural and archeological resources) while also providing for the extraction of energy minerals, such as oil, gas, coal, and geothermal steam.

Instead of dismantling the safeguards that exist to protect the environmental values on the last vestiges of America's wild land heritage, we should protect those places that are "too wild to drill."

The Federal Land Policy and Management Act (FLPMA), the Mineral Leasing Act, and other statutes provide the Interior Secretary with broad authority to take action to protect environmental values on these lands, and allow for the extraction of commodities such as oil and gas from them. The 191-million-acre National Forest System harbors similar values, and current law also allows for the extraction of oil, gas and coal from these lands.

This document refutes many of the myths associated with oil and gas development on public lands and demonstrates that the oil and gas industry already has access to the vast majority of oil and gas deposits on the federal lands. Instead of dismantling the safeguards that exist to protect the environmental values on the last vestiges of America's wild land heritage, we should protect those places that are "too wild to drill." At the same time we should be promoting such long-term solutions as energy conservation, efficiency, and renewable energy.

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MYTHS & FACTS ABOUT WESTERN OIL & GAS

The facts behind the West's oil and gas boom make it hard to understand why the BLM continues to issue leases on environmentally sensitive lands and the industry continues to lobby for exemptions from environmental laws that protect sensitive lands from damage from oil and gas activities.

MYTH – "Too much federal land in the West is off-limits to oil and gas development."

FACT -- Most oil and gas resources on public lands in the five Rocky Mountain States are available for leasing and development

The Bush Administration's 2003 "EPCA" report, prepared by the BLM, indicates that 85 percent of oil resources, and 88 percent of natural gas resources -- 122.6 trillion cubic feet (TCF)-- occurring on federal lands in Colorado, New Mexico, Montana, Utah and Wyoming were available for leasing and development. Only 12 percent of federal natural gas resources were off-limits to leasing.[iii] (An additional 87.6 TCF of natural gas resources is available from non-federal lands in the region.)

Three-quarters of leased federal lands are not in production and the BLM has issued thousands more drilling permits than the industry can actually drill.

MYTH – "More western federal land should be made available for development to meet increasing natural gas and oil demands."

FACT – More than 35 million acres of federal public lands were under lease for oil and gas in 2004.[iv]

However, only 11,671,000 acres under lease were in production.[v]

MYTH – BLM and industry are now conducting their drilling operations in a much more environmentally benign manner.

FACT – In July 2005, the Government Accountability Office said that the BLM is so focused on issuing permits for oil and gas drilling that it is neglecting its responsibility to protect the land, air, water, fish, and wildlife damaged by the drilling. The report found that half of the BLM field offices have even failed to develop any resource monitoring plans. [vi]

MYTH – "Environmental litigation and appeals under the National Environmental Policy Act are hindering development of federal oil and gas resources."

FACT -- In FY 2004, the BLM issued a record number of drilling permits on federal lands– 6,052, thousands more permits than the oil and gas industry used.[vii]

The industry drilled only 2,702 new wells on those permits.[viii]

MYTH -- "Too many 'restrictions and impediments' hinder natural gas production on federal
lands."

FACT -- Natural gas production from onshore federal lands has more than doubled since 1992, to an all-time high in 2004.

Between 2003 and 2004, production increased from 2.226 TCF to 3.133 TCF – a 42% increase in one year. [ix]

THE FACTS ABOUT NATURAL GAS IN THE ROCKIES

-- Remaining Gas is Expensive and Not the Solution

Fact 1: **Drilling and Gas production in the Rockies is booming**

Natural gas production from onshore federal lands has more than doubled since 1992 and increased 41 percent in 2004. In the Rocky Mountain region, industry already has access to vast drilling potential. Last year the BLM issued a record number of drilling permits for federal lands: more than 6,000. And the Department of the Interior has predicted that 10,000 drilling permit applications will be received in the next fiscal year.[x]

Fact 2: **The environmental damage from drilling for gas is substantial**

Gas drilling causes air and water pollution and fragments wildlife habitat, threatening the region's natural environment, which one hundred economists called in 2004 (in a letter to President Bush) the West's "greatest, long-run economic strength." Drilling in the Rockies requires more wells, pipelines, waste pits and compressor engines per square mile than conventional gas, and the damage to aquifers and private lands from coal-bed methane extraction have been well publicized. Soaring production in the Rockies is threatening the air quality in our National Parks and other special areas.[xi]

It is difficult to bring down average gas prices by drilling for above-average cost gas

Fact 3: **The undiscovered gas in the Rockies is very expensive to produce**

Ninety percent of the gas on federal land in the Rockies is "unconventional" gas, primarily gas trapped in tight sandstone formations. As a result of low flow rates, extracting the tight sands gas requires drilling wells every 10 acres – compared to one well per 160 acres for conventional gas. The low flow rates, higher drilling, pipeline and compressor costs, when combined with the added cost of hydraulic fracturing, make gas in the Rockies very expensive to produce.[xii] In fact, much of this gas cannot be brought to market unless prices are high. The high costs of drilling and fracturing the earth to extract this gas helps explains why, even though production in the Rockies is soaring, gas prices have not come down: It is difficult to bring down average gas prices by drilling for above-average cost gas.[xiii] **There is a better way to lower energy costs.**

Fact 4: **Conservation and efficiency are cost effective strategies for reducing energy bills for businesses and families**

When combined with competition from renewable energy, these clean energy solutions reduce the demand for oil and natural gas – resulting in lower prices and heating bills for consumers.

ENVIRONMENTAL SAFEGUARDS NOT MUCH OF AN OBSTACLE TO DRILLING, BLM DATA SHOWS

"Wildlife Stipulations" Usually Waived for Oil & Gas Projects

The oil and gas industry frequently complains that environmental safeguards included in federal onshore oil and gas leases are burdensome, restrictive, and represent "impediments" to oil and gas activities on public lands. An analysis of Wyoming Bureau of Land Management (BLM) data, however, indicates that, to accommodate industry demands, the agency frequently waives protective "stipulations" (lease conditions usually designed to protect wildlife) on federal oil and gas leases. No where else in the West have seasonal stipulations been more used and tested than in Wyoming, especially in the booming Pinedale Field Office area, since it has both significant oil and gas reserves and huge big game and sage grouse populations. Yet, even here industry wins exemptions most times it seeks them.

Data shows that, to accommodate industry demands, the agency frequently waives protective stipulations

- For example, data published by the BLM's Pinedale Resource Area (Wyoming) for October, 2004 through September 26, 2005 indicates that **97 out of 113** requests from oil and gas operators to waive stipulations designed to protect raptors were granted.
- Similarly, the BLM granted **103 of 116** requests from operators to waive wildlife winter range protections.
- And the BLM granted **119 out of 170** requests to waive stipulations to protect sage grouse, a species in rapid decline throughout the West.

The Pinedale BLM has twice granted permanent waivers to winter drilling stipulations after industry agreed to additional mitigation measures. Neither time did environmentalists appeal these decisions, which went through environmental reviews without delaying industry plans. Given the flexibility industry has enjoyed working around winter wildlife-protection measures, these stipulations are hardly the barrier to oil and gas development on public lands claimed by industry and its allies.

"Historically, seasonal wildlife stipulations have protected Wyoming's highly valued wildlife resources during those times when they are most vulnerable. Consider, for example, that wintering wildlife face numerous obstacles, including a diet consisting of dried, low nutritional value forage and adverse climatic conditions of cold, wind and crusted snow. To add the pressures and stress of industrial development in these sparse winter habitats, identified by wildlife experts as crucial to the survival of the state's big game herds and other wildlife species, in an unfettered fashion does not seem sound."

Wyoming Gov. Dave Freudenthal
Oct. 4, 2005 letter to members of Congress

FACTS & FIGURES: WHAT WE STAND TO LOSE

- Wildlife recreation in America -- which includes hunting, fishing, and viewing -- is a $108 billion industry worth 1.1 percent of national GDP (U.S. Fish & Wildlife Service, 2001).

- More than 82 million Americans participate in some form of wildlife recreation (U.S. Fish & Wildlife Service, 2001).

- In 2000, combined total expenditures by hunters, anglers and trappers in the State of Wyoming came to nearly $1 billion (2001 Wyoming Game and Fish Department annual report).

- Colorado's hunting and fishing industry generated $2 billion in economic activity in 2001 (U.S. Fish & Wildlife Service).

- Utah's hunting and fishing industry generates nearly $1 billion annually (U.S. Fish & Wildlife Service, 2001)

- In 1996, the last year for which data is available, Montana saw $720 million in wildlife-related economic activity (U.S. Fish and Wildlife study, Montana 1996).

The bottom line: Stipulations are necessary to protect big game, other wildlife, the environment, and valuable economic resources on our public lands. If Congress is serious about expediting drilling on public lands, it should devote more funds to BLM for monitoring and enforcement to address staffing shortfalls revealed in a recent report by the Government Accountability Office.

THE ROLE OF CONSERVATION AND EFFICIENCY

As heating bills climb, American families can expect to spend on average an additional $350-$400 to heat their homes this winter. Instead of drilling more wells, a more common sense approach for reducing heating bills is to reduce demand. Lowering thermostats, using the energy saving settings on household appliances, washing clothes in cold water, lowering the water heater temperature, unplugging an extra fridge, and turning off unneeded lights together can save families nearly $400 each year. If 1 million households replace just six lightbulbs with compact flourescent bulbs, we can avoid the air and water pollution and damage to wildlife habitat that come from drilling 1,000 gas wells.

ENERGY DEVELOPMENT'S HEAVY FOOTPRINT

Devastating Impacts for Wildlife and Habitat

Habitat fragmentation that extends far beyond the physical structure of the oil fields is one of the hidden costs that need to be factored into responsible, science-based public land management decisions.

Habitat fragmentation extends far beyond the physical structure of the oil field

A 2002 Wilderness Society analysis, *Fragmenting Our Lands: The Ecological Footprint from Oil and Gas Development,* uses as a case study the Big Piney-LaBarge oil and gas field in the Upper Green River Basin of Wyoming. More than 3,000 oil and gas wells have been drilled in this world-class wildlife area, which is managed primarily by the Bureau of Land Management. In addition, BLM has authorized some 4,500 permits for new wells.

The overall area of oil and gas infrastructure--such as roads, pipelines, pads, and waste pits—at Big Piney-LaBarge consumes 7 square miles of habitat But the Wilderness Society scientists found that the effect of that infrastructure is much greater. The entire 166-square-mile landscape of the field is within one-half mile of a road, pipeline corridor, well head, retention pond, building, parking lot, or other component of the infrastructure. One hundred and sixty square miles, or 97 percent of the landscape, fall within one-quarter mile of the infrastructure.

The effect of this development on wildlife is devastating. There is no place in the Big Piney-LaBarge field where the greater sage-grouse, a potential candidate for the threatened and endangered species list, would not suffer from the effects of oil and gas extraction. In addition, the vast majority of the study area has road densities greater than two miles per square mile, a level estimated to have adverse impacts on elk populations.

Whether it's the Green River Basin or the Rocky Mountain Front or the Roan Plateau, the impact of oil and gas drilling on habitats, watersheds, cultural sites, and tourism areas must be adequately factored into land management decisions.

WESTERN NATURAL GAS PRODUCERS REPORT RECORD PROFITS AND INCREASED PRODUCTION

The oil and gas industry is lobbying Congress to weaken various environmental requirements that apply to their operations on federal lands. Company shareholder reports and promotional publications indicate, however, that record profits have been posted during the past several years by companies operating on federal public lands in the Rocky Mountain West, and that drilling projects and production of natural gas from the public lands has markedly increased, despite industry complaints that there are too many "restrictions and impediments" to federal natural gas resources. ***The following information is drawn from third-quarter 2005 investor reports.***

Western Gas Resources reported that for the quarter ending September 30, 2005, it had net income of $67.7 million, *up 92.9% from $35.1 million for the same period in 2004*. The company further reported: "Western currently plans to participate in 850 to 875 gross wells in the Powder River Basin in 2005, of which approximately 700 wells have been drilled…[we have] received 100 percent of the required federal drilling permits and water discharge permits for its 2005 drilling program" (www.westerngas.com).

Chesapeake Energy Corporation, reported $176.9 million in net income for the third quarter of 2005 alone, *up 82.7% from the same quarter in 2004.* For the second quarter, they reported $193.8 million in net income, *up 99.5% from the same quarter a year prior*. The company reported: "Daily production for the 2005 third quarter averaged 1.308 bcfe, an increase of …27.7% over the 1.024 bcfe produced per day in the 2004 third quarter and an increase of…5.1% over the 1.244 bcfe produced per day in the 2005 second quarter…The 2005 third quarter was Chesapeake's 17th consecutive quarter of production growth. During these 17 quarters, *Chesapeake's U.S. production has increased 234%*, for an average compound quarterly growth rate of 7.4% and an average compound annual growth rate of 33% (emphasis added)" (www.chkenergy.com).

Questar, an independent natural gas producer based in Salt Lake, recently reported that "net income rose 78% in the third quarter of 2005 compared to the year-earlier period. Questar earned $65.8 million…in the 2005 quarter compared to $36.9 million…in the 2004 quarter. The increase was driven by higher production and higher realized prices for natural gas, oil and natural gas liquids (NGL), and increased volumes and improved margins in gas gathering and processing." "Questar E&P grew natural gas and oil-equivalent production 16% in the third quarter compared to a year ago,' said Keith O. Rattie, chairman, president and CEO. 'We're on track to grow production about 10% this year – and our growth is organic, with the drill bit, not acquisitions" (www.questar.com).

Ultra Petroleum, an operator on federal lands in Wyoming's Upper Green River Basin, reported for the third quarter of 2005: "Achieves record earnings of $60.9 million, up 118 percent from the same quarter in 2004; Accomplishes record cash flow of $108.3 million, up 110 percent from the same period in 2004; Attains record production of 18.7 Bcfe, up 44 percent over third quarter 2004 levels." "Our record earnings and cash flow mirror our growth rates in excess of 100 percent. Once again we have established a new production record which I am confident will be exceeded by fourth quarter results,' commented Mike Watford, Chairman, President and CEO.

‘We remain enthusiastic about the preliminary results from the deep test well and our work on eventual down spacing in the Pinedale Field continues” (www.ultrapetroleum.com).

Devon Energy Corporation reported third quarter 2005 earnings of $744 million, or *44% above the same quarter in 2004.* “We had record earnings in the third quarter despite the disruptions caused by the Gulf hurricanes,’ said J. Larry Nichols, chairman and chief executive officer. ‘Devon's strong financial results are allowing us to expand our search for new oil and gas reserves in the United States, Canada and abroad. Through the first nine months of 2005 we have invested a record $2.6 billion, enabling us to drill 1,837 wells. This was 20 percent more wells than we drilled in the first nine months of 2004" (www.devonenergy.com).

November 2005

End Notes

[i] BLM, “EPCA Inventory Fact Sheet,” 1/15/03, p. 3.
[ii] Statement of Kathleen Clarke, Director, Bureau of Land Management, U.S. Department of the Interior Before the Senate Appropriations Committee, Interior Subcommittee, October 25, 2005.
[iii] BLM, “EPCA Inventory Fact Sheet,” 1/15/03, p. 3.
[iv] BLM, “Total Number of Acres Leased” (unpublished table, January31, 2005)
[v] BLM, “Number of Producible Acres on Federal Lands” (unpublished table, January 31, 2005)
[vi]"Oil and Gas Development: Increased Permitting Activity Has Lessened BLM's Ability to Meet It's Environmental Protection Responsibilities," U.S. Government Accountability Office, June 2005.
[vii] BLM, “Number of APDs approved by Year on Federal Lands” (unpublished table, January 31, 2005)
[v] BLM, “Number of Wells Spud During the Year on Federal Lands” (unpublished table, January 31, 2005)
[ix] MMS, “Federal Onshore Commodities Gas Calendar Years 1920-2000” (table), and personal communication, Patrick Etchart, MMS, February 7, 2005.
[x] Statement of Kathleen Clarke, Director, Bureau of Land Management, U.S. Department of the Interior Before the Senate Appropriations Committee, Interior Subcommittee, October 25, 2005.
[xi] Blurred horizon: Residents near Wyoming's Jonah Field see air pollution rise and visibility fall with the arrival of oil and gas wells, joining other Western energy-boom regions grappling with eroding air quality. Denver Post, November 7, 2005.
[xii] Unconventional gas (tight sands gas and coal-bed methane) require more wells, more pipelines, and more compressor engines per square mile than conventional gas. With coal bed methane, the de-watering phase not only represents a costly liability, but delays the gas production and hence cash flow -- lowering the net present value from the initial investment and resulting in higher cost gas. Both tight sands and coal bed methane require hydraulic fracturing and other forms of stimulation to release the gas, which results in additional production costs as well as environmental risks.
[xiii] Oil, gas permits to hit new highs But 39% hike won't necessarily result in lower energy prices. Rocky Mountain News, October 26, 2005.