

# “Doing it Right” in the Upper Green

## *A Responsible Energy Development Proposal for the Pinedale BLM<sup>1</sup>*

### **National Treasure or Industrial Sacrifice Zone?**

Wyoming’s Upper Green River Valley represents the intersection of two great resources at the contentious heart of public-land management in the interior West. Owned by all Americans are the valley’s wildlife--roaming herds of prized big game, disappearing sage grouse and wild trout—and the sea of natural gas underneath this sagebrush-covered basin hemmed by the Wyoming, Gros Ventre and Wind River ranges. For the past decade, the publicly owned land in the valley has been administered by the Bureau of Land Management (BLM) primarily for the convenience of the energy industry, which extracted more than \$2 billion worth of natural gas from the area in 2003. Today, more than 90 percent of BLM’s Pinedale resource area is under lease with the agency expecting 7,000 to 10,000 new wells--three times the current number--to be drilled in the next 15 years. Additionally, up to 100,000 acres of adjacent land on the Bridger-Teton National Forest are expected to be offered for lease in October 2004.



### **A Better Way:**

The BLM is revising the document that guides all uses of federal land in its 1.2 million-acre Pinedale management area, presenting an opportunity to restore a more balanced approach to land-use decisions affecting the valley. To that end, the Upper Green River Valley Coalition is urging BLM to adopt this *Responsible Energy Development Proposal* in its Resource Management Plan (RMP) revision. This coalition of organizations and local individuals seeks to protect the wildlife, vistas, air and water quality that make the Upper Green a national treasure. **We do not advocate eliminating energy development, but rather promote “doing it right.” Federal land managers should incorporate best management practices that will soften industry’s ecological “footprint,” lessen the potential to displace wildlife and keep drill rigs and infrastructure out of highly sensitive areas.** Such measures are not “impediments” to development, but should be considered a reasonable cost of exploiting this rich energy resource.

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<sup>1</sup> This summary is condensed from a 30-plus-page proposal submitted to the BLM in April 2004 to help guide its revision of its Resource Management Plan. For more information, contact Upper Green River Valley Coalition’s Linda Baker at (307)367-3670, [lindab@wyoming.com](mailto:lindab@wyoming.com), or Lauren McKeever at (307)367-8472, [sweetsage@wyoming.com](mailto:sweetsage@wyoming.com). Or log on to [www.uppergreen.org](http://www.uppergreen.org)

# **Background**

## **1. Legendary Game Movements and Habitat**

The Upper Green River Valley provides critical habitat and migration corridors for Wyoming's treasured big game, fish and birds. Our public lands here comprise the largest winter range for free-roaming herds in the Greater Yellowstone Ecosystem, the 18 million-acre region surrounding the world's first national park and comprising the largest intact temperate-zone ecosystems left on earth. In total, more than 100,000 pronghorn, mule deer, bighorn sheep, elk and moose winter in the Upper Green. Also found here are the longest big-game migration routes in the lower 48 states and one of the largest remaining populations of sage grouse.

Pinedale, founded exactly a century ago by ranchers, once boasted of being farther away from a railroad than any other town in America. That isolation persists, but the Upper Green's agricultural heritage is rapidly giving way to energy exploration and production and a second-home construction wave that has made Sublette County the state's fastest growing. The still abundant deer and antelope are increasingly hemmed by rural subdivisions, drill pads and associated infrastructure. Pinedale is now less a cowtown than an energy boomtown. Such changes seem inevitable, but they must be managed properly if Sublette County is to preserve its agricultural legacy and Pinedale is to continue thriving after the last gas field is abandoned.

## **2. Economic Considerations: Cost vs. Benefits of Energy Development**

We recognize energy extraction has brought jobs and local revenue to a historically underdeveloped corner of the West. Oil and gas development currently accounts for 10 percent, or 450, of Sublette County's jobs. But it has also brought problems associated with boom-and-bust development: crime, traffic, drug use, housing shortages and social instability. The valley's natural attributes, meanwhile, help support 1,600 jobs in fields such as tourism, outfitting and ranching. With natural gas prices surging and more and more wells going on line, it is clear energy development will play a major role in the region's economic future. The industry should be carefully regulated so that this "prosperity" does not come at the sacrifice of the valley's scenic, wildlife and agricultural values and Pinedale's exceptional rural quality of life. These are sustainable assets, while the energy boom is not expected to last more than a generation or two.

The valley's wildlife resource, meanwhile, provides a tangible economic benefit. For example, wildlife-based recreation generates \$634 million in expenditures each year in Wyoming, comprising the second leading source of income to the state's economy. For the Pinedale area, that economic shot amounts to \$72 million, according to calculations by the state Game and Fish Department. The agency contends that energy extraction poses a serious challenge to Wyoming's hunting heritage. "Expansive deposits of coal, oil and natural gas that underlie crucial habitats constitute one of the greatest contemporary challenges to conservation of western wildlife," the agency reported in its April 2004 strategy statement. Further, an ongoing multi-year drought has stressed range conditions to the point that big-game mortality rates are soaring.

## Impacts From Oil and Gas Development

To see how energy development can monopolize a landscape, look no further than the Jonah gas field, 35 miles southwest of Pinedale. Riddled with bore holes, roads and pipelines, this patch of the Upper Green's public land is rapidly becoming a single-use sacrifice zone. Industrialization here has left little room for wildlife habitat, peaceful recreation, livestock grazing, clear skies or clean water. Here's a summary of just some of the major impacts that can come with such "full field" energy development:

- **Wildlife habitat:** Oil and gas development could chew up winter range and block migration routes, particularly at narrow spots biologists call "bottlenecks." BLM concedes drilling on the Pinedale Anticline will have significant impacts on the deer and pronghorn that use the Mesa for winter forage. "The quality of crucial winter range would be degraded and the functional value of the habitat would diminish even at a well density of four well pads/square mile." (Pinedale Anticline EIS). Sage grouse are in decline because a variety of human disturbances have ruined habitat for this ground nester famous for its puffed-chest mating ritual. Scientific studies show that drilling can cause acute habitat and disturbance impacts.
- **Air quality:** The region's historically pristine air quality now suffers from oil and gas activities, now the single largest source of air pollution in the valley. Production emissions include nitrogen oxides, sulfur oxides, particulate and hazardous substances, such as benzene. Air quality in the Upper Green River Valley is particularly important, because air pollution can lead to acid rain, with the potential to poison the granite-basin lakes of the Wind River Range, which are trophy trout fisheries.
- **Water quality:** The main stem of the Green River above the New Fork confluence is a Class I watershed and a candidate for designation as a Wild and Scenic River. Wyoming Game and Fish Department has designated the LaBarge Creek watershed as a top priority for protection of Colorado River cutthroat. There are other streams that host conservation populations of this native game fish. Industrial threats to water and the fisheries include sedimentation from roads and wellpads, drilling fluids and groundwater discharged onto the surface from production wells.
- **Agriculture and livestock:** The construction of roads, well pads, compressor stations, pipelines and other industrial infrastructure consumes forage once available for livestock. Energy development can diminish the value of grazing allotments or even render them impractical to use. Forage is lost or degraded by road dust. Contact with toxic substances in wastewater pits and drilling muds kills livestock. Noise from drilling operations stresses cattle and can cause calving losses.
- **Private property rights:** Because much of the Upper Green's ranch lands are "split estate," surface owners who don't own their mineral rights have little control over how the energy resources under their land are exploited. Industrial activities diminish these owners' property values and threaten their way of life.
- **Scenic and recreational:** Degraded habitat can diminish outfitting and guiding businesses as hunting success declines. Angling could also suffer from increased sedimentation in streambeds where fish need clean gravel to spawn. Some outdoor clients and other recreation seekers may venture elsewhere if the area's scenic quality is tarnished.

# “Doing It Right”

The Upper Green’s natural gas reserves can be developed responsibly with only a few sacrifices on the part of industry and strong planning on the part of BLM. We believe energy development has a place here, but to “do it right” and carefully balance it with the valley’s non-energy resources will require: 1) Implementation of “best management practices,” 2) Designation of select areas for no leasing and “no surface occupancy,” and 3) Adhering to key principles.

## **1) Best Management Practices (BMPs):**

- ***Clustered development and directional drilling.*** Directional drilling accommodates numerous wells on a single pad and recovers gas under sensitive areas without disturbing them. This technology also lends itself to clustering infrastructure, which dramatically decreases the amount of land disturbed and truck traffic at minimal cost to industry.
- ***Phased-in development.*** Staged leasing, in which some blocks are leased while others are withdrawn until a later date, would lessen environmental and social impacts while promoting economic benefits. Because the resource area has already been permitted for heavy development, no new gas fields should be authorized until existing ones have been fully drained and reclaimed.
- ***Private property rights.*** Industry must negotiate with surface owners over the placement of roads, wells, pipelines and compressor stations. Operators should restore water and soil they damage and BLM should give property owners 60 days advance notice of leasing and exploration of the mineral estate under their land.
- ***Surface protection.*** The BLM should limit post-drilling well-pad size to less than 2 acres, require half-mile setbacks from houses, require reclamation and proper disposal of wastewater. Closed-loop drilling systems, especially those using water-based fluids, minimize the possibility of groundwater contamination. Reclamation should begin within six months of a well’s abandonment with the use of native seed.
- ***Air Quality and noise standards.*** Best available control technology (BACT) should be applied to all gas-well operations. Stringent dust-control measures should be pursued, along with industrial processes that reduce emissions of hazardous pollutants.
- ***Wildlife and habitat protection.*** Remote well monitoring would reduce human intrusions into sensitive areas. Utility lines should be buried, preferably along roads, rather than cross country. Wastewater pits should be covered and fenced to prevent toxic exposures.
- ***Watershed protection.*** No development should take place in aquifer recharge zones, on grades exceeding 25 percent, within 500 feet of riparian areas, or when soil is saturated.
- ***Monitoring.*** Stations to monitor ambient air quality should be established in each gas field. BLM should also establish a water-quality monitoring network around the entire resource area and help fund ongoing wildlife studies.
- ***Waivers and exceptions.*** Drilling stipulations, such as seasonal closures and buffer zones around sensitive habitat, will only protect wildlife if they are enforced. These rules should be waived only under rare circumstances and only after industry provides compelling scientific evidence that the waiver is necessary and will not harm wildlife.

## **2) Proposed Areas For No Leasing & No Surface Occupancy**

Some places deserve the BLM designation of “Areas of Critical Environmental Concern” (ACEC) to prevent irreparable damage to important historical, cultural, wildlife, or scenic resources. Wildlife “bottlenecks,” places where migration corridors are constricted, should be set aside as ACECs. Specific areas worthy of no-drilling/no leasing protection include:

- **Fremont Lake:** Housing developments and an elk feed ground have narrowed this bottleneck east of Pinedale to one-half mile.
- **Trappers Point and Cora Butte:** Thousands of mule deer and pronghorn pass through the Trappers Point bottleneck, located 6 miles west of Pinedale, on their way to and from crucial winter range on the Pinedale Anticline. Game animals congregate around Cora Butte in fall and spring before moving through this half-mile gauntlet.
- **LaBarge Creek:** This elk winter range, about 20 miles southwest of Big Piney, is one of the last remaining area where elk do not rely on feed grounds.
- **Green River Crossing:** This 1,000-acre area straddles a 2.5-mile stretch of the Green upstream of Warren Bridge where migrating deer and pronghorn ford the river.

### **No Surface Occupancy Stipulations (NSOs)**

The BLM should prohibit surface occupancy in critical migration corridors, crucial winter range, raptor nesting sites, sage grouse nesting sites, riparian areas and steep slopes. Any gas in these sensitive areas must be tapped via directional drilling from adjacent areas. Specific areas include:

- **Wind River Front:** Some 220,000 acres of the foothills along the flank of the Wind River Range were temporarily withdrawn from leasing in 2001 because of its scenic qualities and importance to big game. This moratorium should become permanent.
- **Wyoming Range Front:** Beaver Ridge, Bench Corral, Ryegrass Draw and Cottonwood Creek are key big-game habitat areas and migration routes.
- **Crucial winter range and fawning areas:** With significant gas drilling already occurring in winter range crucial to both pronghorn and mule deer, remaining winter range should be protected with NSO stipulations.
- **Crucial sage grouse leks and nesting areas:** Most of the Upper Green is considered primary grouse habitat, but BLM has yet to determine crucial winter range for this game bird. So NSO should cover 2-mile buffer zones around the Resource Area’s 176 known leks.

## **3) Principles Behind Responsible Energy Development:**

1. Observe the mandates of multiple use and sustained yield.
2. Protect key areas by designating them “areas of critical environmental concern.”
3. Weigh long-term benefits to the public against short-term gains to industry.
4. Consider the cumulative effects of drilling in the region, taking into consideration development on adjacent lands.
5. Sensitive state-of-art practices should be required to protect air, water and wildlife.

## **Conclusion**

Responsible energy development balances the needs of industry with those of the community and environmental protection. Thoughtfully paced and placed gas extraction is better for local citizens and their economy by providing a steady number of jobs and reliable revenue stream over the long haul without destroying other valuable assets. Our vision for the revised Pinedale RMP accommodates development while protecting the Upper Green’s water, wildlife, air quality, private property, agricultural heritage -- and a quality of life for our children to continue to enjoy.