For a Week's Worth of Gas

The Bush energy plan has opened some of the West's last best places to oil and gas drilling. The wildlife of Wyoming's Upper Green River Valley will never be the same.

By Ted Williams

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On May 18, 2001, a day after unveiling an "energy plan" hatched in secret with the energy industry, President Bush signed Executive Order 13212. Following a nearly identical proposal offered by the American Gas Association, he directed federal agencies to "expedite their review of permits or take other actions as necessary to accelerate the completion of [energy-related] projects." The Bureau of Land Management (BLM) hopped to it, fast-tracking gas-drilling permits across the Rocky Mountain West and developing an official policy to overcome "impediments" to energy development.

The benefits in terms of increased gas production have been modest. The costs in wildlife, fish, livestock, air quality, water quality, and the last best wildland south of Alaska have been horrendous. Yet perhaps because the administration has backed away from its dream of turning the gas and oil industry loose in the Alaska National Wildlife Refuge, environmentalists haven't made a lot of noise—until recently.

The land being sacrificed—In Colorado, New Mexico, Wyoming, Montana, and Utah—Is just as beautiful as any in Alaska, and no less valuable to wildlife. Take the 7-million-acre Upper Green River Valley in western Wyoming. The mountains may not be quite so stark as those of the Alaska range, but they are high and jagged, with permanent snowfields and glaciers. Forested slopes of lodgepole pine and subalpine fir give way to aspen-clad foothills and rolling sagebrush steppes that have the spongy look of muskeg, but two shades lighter.

I saw it for the first time in mid-May. Even at 9 a.m. the snow-covered Wind River Mountains were still in shadow. To the north rose the Gros Ventres and Hobacks, to the west the Wyoming range. As in Alaska, this is the home of wolves, grizzlies, moose, and mountain sheep (in this case bighorns). The Upper Green River Valley sustains North America's largest sage grouse population and some of the last pure strains of Colorado River cutthroat trout; and it provides critical winter range for elk and mule deer. There is no more spectacular or productive wildlife habitat in America. It's a national treasure as precious as Yellowstone National Park, whose ecosystem it is part of.

Above the greening cottonwoods that shaded the New Fork and Green rivers—headwaters of the Colorado—the wings of a dozen white pelicans flashed as they turned into the sun, and at that instant the flared tail of an adult bald eagle, previously invisible, flashed under them. Magpies, streaming tails fluttering in the wind, patrolled the roadsides. Horned larks buzzed up around me; and ravens, showing only as ink dots on an azure sky, croaked so loudly I first looked for them on telephone poles. Bands of pronghorns (also known, incorrectly, as "antelopes") trotted south on their spring migration toward the Red Desert, some from as far away as Grand Teton National Park. It was a scene to gladden the heart of any person who loves wild things and wild places.

Retired Air Force pilot Jim McLellan showed me more of the valley's vastness and beauty from his Cessna 172. From New Fork Lake, we followed a rugged canyon cut by a ribbon of meltwater hurrying down from the icebound Continental Divide toward the Sea of Cortez. With frozen peaks of the Wind River Range level with our wingtips, we could make out the Grand Tetons through distant mist. We banked to the southeast toward Gannett Peak, the highest point in Wyoming, then dipped down over the Pinedale Anticline, a fragile mesa where winds blast snow off the grass and sage that sustain deer, moose, and elk through winter. Migrating pronghorns looked like suede, fleece-lined slippers kicked onto a green rug.

An "anticline" is a buckling up of strata. In this case, natural gas, rising to the highest point, got trapped at the apex. But the gas here is contained in tight sand formations, which makes extraction problematic, so until three years ago the anticline was as untouched as the rest of the valley, which is also rich in gas and oil. Then Halliburton Company applied "fracing" technology, by which water and fluids that may contain toxic chemicals are injected into wells at tremendous pressure so that they fracture formations. When the liquids, which pick up additional toxins such as benzene, are pumped out again, sand remains, propping open the cracks and freeing up gas.

According to the Los Angeles Times, information on fracing and its dangers to public health was deleted from the White House National Energy Policy. At the same time, the EPA was drafting a report that said fracing could poison aquifers when used in coal-bed methane wells. The EPA later revised that report, citing only "feedback" from industry, to state that fracing didn't contaminate groundwater. In last year's energy bill, which stalled on the Senate floor, fracing fluids were exempted from the Safe Drinking Water Act. The administration's energy policy and the bill were crafted largely by Vice President Dick Cheney, who used to run Halliburton and who reported taking a bonus from the company in 2001 of \$1,451,398 and deferred payments of \$205,298 and \$162,392 in 2001 and 2002, respectively. (Figures for 2003 were not available.) Such is fast-track, impediment-free gas leasing in action.

On the 200,000-acre Pinedale Anticline there are already 166 gas and oil well pads—four-to eightacre, rectangular ulcers connected with a tangle of raw-dirt roads. In this parched landscape pads and roads heal slowly or not at all, and they are conduits for Russian thistle and other invasive aliens that replace native forage needed by wildlife. BLM's Pinedale field office is permitting 210 more wells. Currently there are about 2,500 in the entire 1.2-million-acre Pinedale Resource Area, and 7,000 to 10,000 new ones are planned.

The 30,000-acre Jonah Field, 30 miles south of the anticline, looks even worse. There are 601 wells, and in the eastern half they're spaced 40 acres apart. When new ones go in, spacing is expected to decrease to 10 acres. Scum-encrusted water, contaminated with fracing fluids and hydrocarbons, festers in plastic-lined ponds. Three orange ribbons, stretching across each pond, are supposed to discourage waterfowl from landing. A compressor station the size of a small factory moves gas through a pipeline that wanders west under a dirt swath 15 times wider than the roads.

There are places in the valley where natural features create migration "bottlenecks" for wildlife, and they're being pinched tighter by human development. If BLM allows gas development to close them or even if it doesn't and allows drilling at the current pace—most of the valley's wildlife will be lost. Nothing is more imperiled than pronghorns. Grand Teton National Park's population, for example, is thought to have declined 60 percent in the last decade.

Dr. Joel Berger, a biologist with the Wildlife Conservation Society, is studying how pronghorns move through the valley. "Americans should appreciate this spectacular migration," he told me, noting that it's the second longest in the Western Hemisphere after the caribou's in Alaska and Canada. "If the corridors aren't protected and development continues at the current pace, extinction in the park will be ensured. Is it acceptable to let a species go extinct in a national park? I think not."

The pronghorn is more closely allied to deer than old-world antelopes. It is uniquely American, existing on no other continent, and it is the only wild ungulate that evolved in what is now the United States. All others (save the peccary, which came up from the south) crossed from Eurasia on the Bering land bridge. Among the planet's land mammals only the cheetah is faster; and it is the cheetah—once native to North America—that appears to have given the pronghorn its swiftness by chasing it. Like all animals built for speed, pronghorns lack substantial fat reserves and therefore can least tolerate winter stress from the noise and activity of seismic testing, fracing, trucks, and drilling rigs.

Early in the 20th century Americans almost lost their pronghorns to uncontrolled market hunting. Now they may lose them to uncontrolled development of public land. A century ago we didn't understand the cost; now we do. The ongoing sacrifice of pronghorns is a purposeful act of government. It is also illegal.

By law, BLM must manage the public's land for "multiple use." But under the Bush administration, energy extraction has become a dominant use that precludes others such as hiking, fishing, hunting, bird-watching, and even livestock grazing. At least one BLM state director (in Utah) has issued a written directive that facilitating gas-drilling applications is the "No. 1 priority." For the past four years the Pinedale field office has done virtually nothing but facilitate drilling applications. Yet when I met with the field office's manager, Prill Mecham, she denied that this was so, explaining that, while BLM manages for gas in some places, it manages for things like wilderness in others.

True, but there is no designated wilderness in the Pinedale Resource Area. What's more, the Bush administration has decreed (unlawfully, say environmental groups) that there will be no more land protected as wilderness anywhere, even in Alaska. For now the pronghorns are safe if, on their fall migration, they make it to the relatively snowless Red Desert. But even before the administration's ban on new wilderness, BLM successfully opposed efforts to save the gas-rich Red Desert with wilderness or other designations. Wildlife doesn't appear to be very high on Mecham's priority list. When I asked her if her agency, the state, or the gas companies were studying how traffic, seismic testing, fracing, drilling din, and lights affect the physical condition of ungulates trying to survive the already stressful winter of this high, cold desert, she said she thought they were. They are not.

BLM had known about the dangers of pinching off bottlenecks, and Mecham had even said publicly that gas companies should stay out of them. Yet in the summer of 2002, her office offered 2,660 acres for lease in and around Trappers' Point, the most critical bottleneck. After strenuous protest from the public and the Wyoming Game and Fish Department, BLM rescinded the leases. When I asked Mecham if BLM would protect bottlenecks, she said she "couldn't speculate on that."

In Pinedale I interviewed Gordon Johnston, chairman of the Sublette county commission, a retired Marine Corps lieutenant colonel with a chiseled face and eyes the color of worn rifle bluing. Even in Wyoming you can't get much more conservative than Johnston. He is standing by his man, George W. Bush, and he appreciates the wealth the gas companies have brought the valley. But he also appreciates (in fact, adores) wildlife. So he consistently casts unpopular and losing votes—against subdividing agricultural land in migration corridors, for example. "As a young man I cowboyed out in the Jonah Field," he told me. "It was a fun place to live and work, and it saddens me to see it the way it is now.... The opinion of a lot of folks was screw the antelope; they'll find a way around the bottlenecks. Well, they won't and they don't. When you squeeze them, the population decreases."

The agency's flouting of its multiple-use mandate is as bad or worse elsewhere in the Rocky Mountain West. Consider the Powder River Basin in Montana and Wyoming—nearly as important to wildlife and fish as the Upper Green River Valley and no less blighted by unregulated gas development. The drilling method here is new—basically an experiment on nature in which methane is released from coal seams by pumping out groundwater. Already there are 10,000 coal-bed methane wells in the basin, and now the Bush administration is proposing 65,000 new ones, 26,000 miles of new roads, 52,000 miles of new pipelines, and 1,000 new compressors. Rivers, springs, and aquifers are drying up as water is sucked from the earth. The "produced" water, as it's called, is contaminated with poisons that are sterilizing the landscape, wiping out plants on which livestock and wildlife depend, and killing fish and other aquatic life.

It's not just environmentalists who are exercised about the abandonment of "multiple use" and the sacrifice of public land and water. Powder River Basin ranchers have formed an alliance with environmentalists; together, they're suing the feds. Also lining up with environmentalists are sportsmen—generally a conservative lot, easily seduced by politicians who dress in camo and flounce around at photo ops with borrowed shotguns and fishing rods. They voted overwhelmingly for Bush

after he'd gone bass fishing and dove hunting and after his campaign had told them Gore would take away their guns. But now they're having second thoughts.

Avid sportsman Stoney Burk of Friends of the Rocky Mountain Front—a coalition of hunters, anglers, ranchers, and business owners trying to control the gas rush across wild country in northwest Montana—told me this: "God knows how many deer and antelope drink from these toxic water pits and run off and die. Look at the network of roads that disturb habitat and break migratory patterns, and put that together with the potential to destroy the whole fish population; I consider the administration's behavior criminal.

"I'm angry about this," Burk continued. "The public is being cut out. I voted for Bush. Now I'm ashamed I did. They have betrayed the confidence of millions of people.... We're talking about an invasion of our last remaining wildlands, destruction of our last remaining fish and wildlife habitat. For what? At the very most a week's worth of gas."

"Are drastically altered and industrialized landscapes places we want to hunt and fish?" asks Trout Unlimited's David Stalling.

Field & Stream—one of the oldest, largest, and most conservative hook-and-bullet publications in the nation—used to devote oceans of ink to the alleged threats of "anti-hunters" and gun-control advocates. Now it warns its readers about the Bush administration's assault on fish and wildlife habitat. In the March 2004 issue, for example, Ted Kerasote blasted the administration for issuing gas-drilling permits before planning and public comment. "With deep ties to the oil and gas industry," wrote Kerasote, "Bush and Cheney have unleashed a national energy plan that has begun to destroy hunting and fishing on millions of federal acres throughout the West, setting back effective wildlife management for decades."

I saw what Kerasote is complaining about when, on my way to observe gas drilling in New Mexico last December, I stopped to check out the "gold medal" trout section of the Animas River, a stretch I had long wanted to fish. As I neared the bank I was clobbered by the stench of rotten eggs—hydrogen sulfide venting from gas wells. But rotten eggs is what you want to smell in gas fields. The human nose reacts differently to hydrogen sulfide in higher concentrations—so if you smell frying honey, hold your breath, hit the dirt, and crawl away fast or, with the next breath, you're dead.

In New Mexico's part of the San Juan Basin there are already 18,000 operating gas wells just on federal land. At pad after pad I found major violations—broken fencing around evaporation ponds, sediments bleeding into trout streams, inadequate or nonexistent replanting, junipers and pinyons burned during gas flaring and killed with coal dust. Because BLM lacks the staff for adequate enforcement, a local public interest outfit called the San Juan Citizens Alliance decided to produce a guide to help the public identify violations. BLM officials expressed grave reservations. Such information, they explained, might encourage hikers, anglers, hunters, birders, and the like to venture onto their land, where they might be exposed to deadly fumes leaking from all the gas wells.

Rancher Chris Velasquez of Blanco, New Mexico, showed me gas wells on his BLM grazing allotment, where pumps, extracting groundwater to aid gas flow, were leaking antifreeze. In this arid landscape, standing liquid is swilled by wildlife and livestock. Deer and small mammals travel a few hundred yards before they die, but cattle often don't even make it off the drill pad. Velasquez lost eight cows in seven days.

Tweeti Blancett of Aztec, New Mexico, loses cattle, too. "This whole county is a disaster area," she told me. "Our water is polluted, our air is polluted, our ground is polluted. They've ruined our ranch." Blancett, northern New Mexico's campaign coordinator for George W. Bush in the last election, isn't about to stump for him again. She used to fight with environmentalists. Now she speaks at Sierra Club meetings and has joined the San Juan Citizens Alliance. What industry and the administration call "impediments" to energy extraction others call environmental regulations. For example, for almost two decades BLM's Pinedale field office has forbidden gas drilling during times of critical stress for big game, sage grouse, and raptors. Seeking relief, companies request "exceptions," and under the Bush administration they are rarely disappointed. During 2003 and up through June 29, 2004, the office acted on 120 requests for sage grouse exceptions, denying 8 and granting 112; it acted on 78 requests for mule deer, pronghorn, elk, and moose exceptions, denying 10 and granting 68; and it acted on 52 raptor requests, denying 5 and granting 47.

Pauline Schuette, one of three agency biologists who monitor the resource area's wildlife habitat, explained to me that only if a consulting biologist hired by a company finds no active leks (courtshipdisplay areas) within a quarter mile of the drilling site are exceptions for sage grouse granted. Still, Schuette allowed that she was concerned about sage grouse. "There's not a lot of data collected about them," she declared. Even with limited data, BLM was aware—as it stated in its 1999 draft environmental impact statement for gas development on the anticline—that "of leks with at least one well within a 0.25-mile radius, four times as many are inactive than active."

Sage grouse are declining so quickly they're being considered for listing under the Endangered Species Act. Already they've been extirpated from at least four states and one Canadian province. Leading sage grouse authority Dr. Clait Braun, director of the Tucson-based Grouse Inc., calls the quarter-mile restriction "a prescription for population extinction," which seems "to have been created to justify existing practices and [is] not based on any reputable science." Exceptions beget more exceptions. As companies are permitted to increase activity, sage grouse and other wildlife die off. Therefore, when consulting biologists look for wildlife, they don't find it, and companies are eligible for more exceptions.

So far, BLM's Pinedale field office has leased about 850,000 of the 928,000 acres it is responsible for. In other words, the public can't use its land because it is reserved for the energy industry. On May 11, 2001, BLM ordered state directors not to issue gas leases until the planning process was complete and the public had had a chance to comment. But three months later it reversed itself.

Then, on June 8, 2004, the Pinedale field office offered about 14,000 additional acres for lease. At this point Wyoming governor Dave Freudenthal became the third Western governor in less than a year to protest the Bush administration's policy of unregulated gas extraction. Auctioning off these leases before environmental review "will only serve to further jeopardize sage grouse habitat, [big game] migration corridors, crucial habitat and other important resources," Governor Freudenthal wrote.

On my last day in Wyoming, local conservationist Linda Baker, of the Upper Green River Valley Coalition, met me outside her Pinedale office at 5 a.m. She knew a lek on the anticline where the sage grouse were still strutting. But they quit when the sun comes up, so she drove fast, spilling coffee on her dungarees. "When I first came to this valley 23 years ago the night was dark and full of stars," she said. "Now it's lit up like the Denver skyline." I saw what she meant. Drilling towers blazed in all directions. Two Questar Corporation rigs, amid a cluster of black tanks and house trailers, ground loudly into the anticline. Questar is drilling for gas in the middle of the most critical big-game winter range in the valley, where regulations forbid such operations from November 15 through April 30. But for the last two winters BLM has granted the company season-long exceptions. Supposedly, the payback is that Questar is underwriting a study of how the large mammals it disturbs use (or don't use) the surrounding habitat. To protect wildlife BLM forbids the public to drive on the anticline's biggame winter range from January 15 to May 1, but it has no qualms about allowing gas-company traffic.

"Wait a minute," said Baker. "This road wasn't here before." It was new, like so many other roads in the valley. "I think we need to be more west." So we took another new road.

When we got to the lek I saw a male and female sage grouse, but there was no mating display. Still, I was delighted to add the species to my life list. Baker was brooding. "Well, I'll show you their droppings," she muttered.

"Neat," I said. The droppings looked like those left by my New England ruffed grouse, but white instead of gray-brown.

"Wait a minute," said Baker. "There aren't enough. This can't be the lek." So we drove farther west, over yet another new road. And there they were—two dozen birds, almost the size of wild turkeys, the males strutting, fanning their spiked tails, puffing their white breast feathers, showing their bright yellow air sacs, booming, butting each other with their chests. It was one of the most stirring scenes I had ever seen in nature.

When the sun topped the white spires of the Wind River Range, the birds wandered off, vanishing into the high sage.