

Burning Down the House to Keep Warm

Only a fool would support expanded domestic exploration — offshore or elsewhere — under the Bush administration's dysfunctional energy policies. Here's how those policies need to change for America to responsibly find the energy it needs.

By Hal Herring



Antelope at a Shell natural drilling site in Pinedale, Wyo.

During the first weeks of June, a barrage of editorials appeared in newspapers across the U.S., all with a theme: It is time to develop America's domestic energy resources, too long shut away by bans or restrictions. Gasoline prices hovered around \$4 per gallon, which seemed to be the proverbial tipping point where concern turned to fear. Whirlwinds of information and misinformation swept the land, along with dust devils of blame.

George Will penned a column for The Washington Post titled "The Gas Prices We Deserve," denouncing anyone who questioned the need for more domestic drilling. Like many of my neighbors in Augusta, Mont., I received a petition called "Drill Here, Drill Now, Pay Less" from a group called American Solutions for Winning the Future. The literature accompanying the petition featured former House Speaker Newt Gingrich, who wrote that members of Congress who opposed increased development "won't accept the idea that 21st century energy technology can protect the environment." Actor Chuck Norris appeared in one ad, seeming exasperated as he filled a big pickup truck with gas and told viewers to sign the American Solutions petition to Congress.

Along the way, President Bush lifted a White House ban on most offshore drilling, and Republican presidential candidate John McCain pushed Congress to legislate an end to its 1981 drilling moratorium. Even some advisers to Democratic candidate Barack Obama were saying Republicans had scored political points by advocating for more domestic exploration during the gasoline price crunch.

But in this case, the politics of the moment are based on utter delusion. The recent record of the energy industry and the federal government in regard to domestic production is so poor — the system for balancing the need for energy with environmental protection and economic common sense has become so utterly dysfunctional — that until the system is fixed, no rational person with knowledge of it could in good conscience support expanded exploration.

So far, the major effects of this dysfunction have been hidden away

in the relatively empty spaces of the American West, on the austere sagebrush steppes of Wyoming, in the foothills of some of the less visited parts of the Colorado Rockies, amid the deserts of New Mexico. But the Bush administration's many counterproductive gifts to industry — the exemptions from the Clean Water Act and the Safe Drinking Water Act, the mandates to ignore protections for wildlife and public lands, the insistence that the energy industry have priority over every other use of every last bit of public land — have been absolutely poisonous. The fouling of streams, rivers and groundwater and the destruction of land and the wildlife that depends on it have raised an outcry, even in the Interior West, that conservative, politically quiescent land of utilitarianism and natural resource economies.

Until now, it's been, literally, a protest in the wilderness.

But if those calling for expanded domestic energy exploration have their way, the dysfunction of U.S. energy policy will come not only to the Florida and California coastlines but also to new gas fields in Pennsylvania, West Virginia, Kentucky and Alabama. And when the unchecked exploitation that is the norm in the West arrives in the rest of the country, there will be a storm of outrage, an environmental disaster or both. The current policies — which maximize waste and environmental destruction while minimizing benefit for everyone except energy companies — will simply not be tolerated. We might as well change them now, without wasting time, and get on with developing our domestic resources in a sensible manner that could be, but is not now, supported by federal policy or the debased culture of the executive

branch agencies that carry it out.

Although the energy industry regularly decries the supposed restrictions it faces on the production of domestic energy, a variety of authoritative sources note that about 88 percent of all federal lands are open to oil and gas leasing, with 63 percent available for lease without restriction. Just 12 percent of public land is unavailable for energy exploration, mostly because it is in national parks or designated wilderness areas.

According to a report from U.S. Rep. Nick Rahall, D-W.Va., who chairs the House Committee on Natural Resources, 47.5 million acres of onshore public lands had been leased to energy companies by early 2008. Some 13 million acres of those leases, almost all of them in the Rocky Mountain West, are now under development, with 65,591 producing wells on public land. Colorado's natural gas production alone has increased by 500 percent since 1990. For nine years in a row, Wyoming has increased its natural gas production, producing a record-setting 2.11 trillion cubic feet of gas in 2006. (The entire U.S. production equaled 18.47 trillion cubic feet; the nation consumes about 21.65 trillion cubic feet annually.)

During all this time of vastly increasing production in the Rocky Mountain states, the price of natural gas has also increased by about 500 percent. This situation has been called the "natural gas treadmill" by some analysts, because even as industry develops new ways to extract gas, overall production in big producing states like Louisiana is declining.

The "treadmill" is powered by factors other than falling production from older gas fields: One is a U.S. energy grid that operates at

extraordinarily primitive levels of efficiency. One-third of all natural gas used in the country is burned to generate electrical power, but according to Colorado energy analyst Randy Udall, the most advanced natural-gas-fired power plants in the U.S. operate at only 55 percent efficiency. Most gas power plants waste two-thirds of the gas that goes into them.

Meanwhile, the history of efficiency standards for appliances like air conditioners, clothes dryers, furnaces and boilers makes tedious and frustrating reading. Approved by Congress in 1987, the standards are supported by almost everyone from The Dow Chemical Company, which uses tremendous amounts of natural gas in its business, to manufacturers of appliances, who worry that states will eventually have to take over regulating the standards themselves, creating a dreaded collage of conflicting regulations.

But through three different presidential administrations, the Department of Energy, which has final say in enforcing the efficiency standards, has fallen down on the job. Under President George W. Bush, the DOE has held the line at a standard of 80 percent efficiency for natural-gas-fired home furnaces, even as consumers faced with record power bills flock to purchase new models that burn 90 percent or more of the gas that goes into them. The only efficiency standard the Bush administration DOE has enacted is one affecting air conditioners, and the one it chose mandates a 20 percent increase in efficiency rather than the Clinton-era demand for 30 percent (which was never put into place). The difference between those efficiency levels is the amount of electrical power that would be produced by 12 new 400-megawatt

power plants. And this is just air conditioners.

In effect, the U.S. has engaged in a crash program to lease the public lands of the West, limit or eliminate regulations on drilling them and bring as much natural gas to market as quickly as possible – only to squander any advantage the additional production might have brought. "By very narrowly focusing on drilling," Udall says, "we are making a choice of using energy instead of ingenuity."

Hunting guide, cattle rancher and former Chevrolet dealership owner Alan Lackey of Roy, N.M., who has been a leader in fighting for the protection of wild lands in the face of unrestricted drilling, puts it this way: "This is a giveaway of public resources at the cost of every other value we hold. The whole plan is like burning down your house to keep warm for one night."

In the late summer of 2003, the White House told employees of the Bureau of Land Management and other federal land agencies to institute new policies aimed at "reducing or eliminating impediments to oil and gas leasing." Among those impediments were protections for wildlife on public lands, which, the orders said, "should be the least restrictive necessary." Given that the BLM is responsible for 258 million acres of federal land, the new mandates were extraordinarily wide-ranging. At first, though, most people in the West thought that there were enough checks in the system to prevent serious problems. The laws to protect wildlife still existed, for instance, and the BLM was still staffed, supposedly, by professional land managers.

In Wyoming's Green River Valley, some of the most famous and healthiest wildlife country left on

the planet, the BLM took the new energy mandates to heart, to an extent that residents — mostly hunters and fishermen, ranchers with grazing leases or others with interests on the land — could not have imagined. According to an analysis by the nonpartisan Wildlife Management Institute, the Pinedale, Wyo., field office of the BLM quickly began granting energy companies exemptions to long-standing rules to protect the enormous wildlife resources of the area, which serves as the winter range for as many as 6,000 mule deer and 3,000 pronghorn antelope. The greater sage grouse, already extinct over much of its range and severely threatened in most of the rest, maintained a stronghold here, with as many as 4,000 birds gathering each spring for the extravagant courtship displays that led the Shoshone to name the Green River Seeds-kee-dee-Agie (“the river of the prairie grouse”) and that have fascinated almost every white traveler in the region since Lewis and Clark.

In 2003, the Pinedale office granted 80 percent of the requests by industry to drill the rich natural gas resources in the designated “critical winter range” of what locals call “the Mesa” and the energy industry calls “the Pinedale Anticline.” Even though the sage grouse was widely recognized to be in severe decline across the West, every request for exemption from rules designed to protect sage grouse was granted. By the end of 2005, biologists counted 11,000 vehicle trips in one month on the roads built to service the growing matrix of wells on the Mesa, where there had been no roads and access was severely restricted to protect wintering wildlife.

The results were predictable. By 2006, a five-year study conducted

by biologist Hall Sawyer and partly funded by energy companies concluded that the mule deer herds on the Mesa had declined by 46 percent during the course of the development. Pronghorn antelope studies faltered; all the animals had disappeared.

By 2006, biologist Matt Holloran concluded his research in the Pinedale area and found that the development made it impossible for the sage grouse to survive. “Energy development and sage grouse just don’t mix,” Holloran says. “The sage grouse is not one of these iconic Western species, I know, but it is the ultimate sagebrush obligate. As the grouse goes, so goes the sagebrush [ecological] community, and that includes all your big-game species and the predators they support.”

About 4,000 more wells are planned for the Mesa.

Unless you live in the West, you are probably unaware of the boom there in the harvesting of coal bed methane, which involves the high-pressure injection of “fracking fluids” into subterranean coal seams. This process fractures the seam so underground water, which often contains high levels of salt and other minerals, can be pumped out, freeing valuable gas formerly trapped in the seam. The gas is then collected on the surface.

This technique was developed by the Halliburton Company in 1949, and Halliburton remains one of the top three companies involved in hydraulic fracturing technologies. According to a comprehensive 2004 story by Tom Hamburger and Alan Miller in the Los Angeles Times, Halliburton’s original fracking fluids were a mixture of napalm, gasoline, crude oil and sand. Since then, various substances have been employed to fracture the coal

seams, but diesel fuel mixed with water and sand (which sticks in the fractures, keeping them open so gas will flow) has often been used. According to the New Mexico-based Oil and Gas Accountability Project, a citizens’ group based in Durango, Colo., EPA investigators have found a more exotic brew of chemicals — including benzene, naphthalene and fluorines — in the fluids. The EPA says its studies show that about half the time, these chemicals entered groundwater following the fracking procedure.

Nevertheless, the EPA issued a decision in 2004 holding that the process posed no threat to drinking water supplies. This decision led to a whistleblower complaint from senior engineer Weston Wilson in the Denver offices of the EPA. Wilson wrote that the EPA had not proven that the fracturing technique used in 90 percent of oil and gas wells did not affect drinking water supplies; he also claimed that the agency was aware that the fluids used in the process sometimes contained hazardous chemicals. In 2004, Wilson wrote a report outlining his concerns to Colorado’s congressional delegates; it was titled “EPA Allows Hazardous Fluids to Be Injected Into Groundwater.” A storm of controversy resulted, but no changes were made in policy, because the Energy Policy Act of 2005 specifically exempted hydraulic fracturing from regulation under the Safe Drinking Water Act.

The new Energy Policy Act also addressed the problem of the enormous volumes of salty, mineral-laden “produced water” being pumped to free methane trapped in coal seams. The new act defined this saline groundwater as nonpolluting and exempt from regulation under the Clean Water Act, allowing it to be dumped into waste pits or sim-

ply poured into rivers and streams. Rural Westerners, many of them actively hostile to agencies like the EPA and the whole concept of environmentalism, began to understand that there was an entirely new regulatory order on public lands, and it did not include them.

The BLM has estimated that during the course of coal bed methane production in the Powder River Basin of Montana and Wyoming, industry will need to pump about 4 trillion gallons of water, much of it saline, from coal seams. Methane drillers in Wyoming have dumped produced water into the Tongue and Powder rivers, which flow north into Montana, where they provide the source for irrigated agriculture, which could be destroyed by salt.

In 2003, a ranchers' group, the Northern Plains Resource Council, took Montana's Department of Environmental Quality to state court over its failure to list wastewater from methane wells as a pollutant subject to regulation. The ranchers won, with the result that energy producers in Montana are supposed to reinject the water deep underground or treat it to remove salts before dumping it. Industry raised an outcry that was immediately — and strangely — joined by the U.S. Department of Energy, which claimed that the ruling would affect national security by shutting down the coal bed methane industry, even though it is widely believed that, with the price of gas at record highs, the wastewater could be treated or reinjected with little loss of profit.

The energy industry and the state of Wyoming have now brought a federal lawsuit against the Montana DEQ for enforcing standards that they claim will hinder energy production. In 2008, the case was made more complicated when the

EPA approved Montana's regulations, saying that they were in clear accordance with the Clean Water Act. But of course, energy development has already been exempted from many provisions of the Clean Water Act.

The conflict continues as I write this article.

Thirty-two miles south of Pinedale, the Jonah Field sprawls over 30 square miles of north-central Wyoming, just 100 miles south of Grand Teton National Park. The Jonah Field is a roaring industrial zone that just six years ago was isolated grazing and wildlife land. About 450 miles of roads cover the land now like a spider web. In January 2007, a well-service truck struck and killed 21 antelope — in a single collision! Smog levels on some winter days in Pinedale, once a scenic ranching supply town that is now surrounded by nearly 5,000 gas wells (with thousands more approved), match those of Los Angeles.

The BLM has now decided to grant new permits, allowing industry to place one well on every 10 acres of the Jonah Field; in some places, well densities may fall to as low as a well to every 2.5 acres, which, since the bulldozed area for a well pad is almost 2 acres, means that the developed sites will almost touch — for miles. Ex-BLM biologist Steve Belinda, who quit the agency in protest against the reckless development of public lands in the Green River, says that the Jonah Field and the Pinedale Anticline are disturbing not just in themselves but for their implications. "They are using what is happening here as a prototype," Belinda says, "and it does not work here at all."

This prototype is not necessarily the most efficient way to develop

natural gas resources; it is simply the cheapest for industry. Public land managers have always walked a fine line in balancing the uses of federal lands among wildlife and recreation, leases for livestock grazing, mining and energy development. But now the line is clearer: Energy development is the top priority. "Every suggestion we made as land managers or biologists had to be based on what the energy industry would accept," Belinda says, and for those who objected to the new focus, there was not much to do. For top BLM officials, "The intention of the BLM is for the process not to function" and for that dysfunction to be institutionalized so energy development can continue unquestioned. "The BLM has brought in a lot of new blood," Belinda says, "all of them on probation, where they can be let go in a moment for any reason. They are indoctrinating these new people to say that there's no need for environmental impact statements. The older land managers don't want to deal with this climate. There is a lot of bitterness, and a lot of them are quitting or retiring."

"What this means is that we will be dealing with completely dysfunctional management for years to come."

Enormous sums of money are being made off the new BLM attitude. The natural gas under the Jonah Field alone is estimated to be worth between \$42 billion and \$65 billion, with the cost to drill and extract it only about \$6 billion.

In late May, the latest BLM director, Jim Caswell, announced the release of a new study that, he said, "represents the first truly national assessment of the restrictions and impediments to oil and gas exploration and development." To almost no one's surprise, the study found

that too many resources were off limits due to restrictions to protect wildlife and resources.

In a subsequent news conference, Caswell repeated the new energy-exploration mantra: Sensitive new technologies have reduced the impact of oil and gas development to an extent that restrictions to protect wildlife and other resources are no longer necessary. When asked where a person could go to view these new technologies, Caswell said that they were in use in the Jonah Field.

Indeed, new technologies that lessen the impacts of energy development do exist. In the hands of hyper-skilled drillers, ingenious directional-drilling techniques can now access multiple pockets of gas from a single two-acre well pad, replacing, in some cases, 16 individual wells and the roads that connect them, the multiple compressors that pump the gas from them, the pipelines that carry the gas away and the service traffic that is deadly to wildlife, from snakes to pronghorn antelope. The potential of these technologies to protect the land and wildlife from damage is enormous. It has been estimated that directional drilling adds only an extra \$200,000 to the average \$1.8 million cost of drilling a natural gas well.

But under current regulations, the use of such technologies is voluntary. Some energy companies that started using them in 2004 have since abandoned them because of the expense. Nowhere in the West are low-impact drilling technologies the norm. When asked what percentage of the planned development on BLM lands will use the lower-impact techniques or what percentage of the development is using them now, BLM officials say they do not know.

When the increased volume of energy leasing began to concern Western ranchers, hunters and other users of public lands, the BLM created a set of guidelines, so-called best management practices. The guidelines addressed energy industry standards in regard to the spread of invasive and noxious weeds, impacts on wildlife and livestock grazing and the protection of rivers and streams.

The best management practices are voluntary, too.

Though exploration standards that would protect public land and the wildlife, ranchers, hunters, fishermen and outdoorsmen who use it have remained voluntary and minimal, energy development has spread like wildfire. How much of this development, exactly, is under way across the West?

Here is a quick rundown on the 47.5 million acres of public land now leased by energy companies: Wyoming's Red Desert is slated for 20,000 new wells. The Piceance Basin of Colorado will have 13,000 wells, including extensive development of the unique and pristine Roan Plateau, in Garfield County near Rifle, one of the most controversial leases in the U.S. Analyst Randy Udall predicts about 100,000 natural gas and coal bed methane wells across Colorado by midcentury. (This does not include the new push for oil shale developments in this region, which, under current regulations, could lead to the largest energy-development project the world has ever seen, with the largest strip mines ever created, a series of coal-fired power plants to extract the oil from the shale and new towns to house workers.) The Powder River Basin in Montana and Wyoming will have 82,000 wells, 26,000 miles of new roads and 53,000 miles

of pipelines. New Mexico currently has 110,000 wells producing, with thousands more planned on over 4 million acres of leased public land.

Reasonably planned and implemented, such a level of development would be a windfall for states, the federal government, energy companies and the energy consumers of the U.S. But the entire Western energy boom — which could be so welcome — has turned into a low-grade war, with the states and a variety of public interest groups on one side and the federal government and energy companies on the other.

Announcing a lawsuit against the BLM over drilling on the pristine Otero Mesa in April 2005, New Mexico Gov. Bill Richardson said, "This lawsuit is the result of the Bureau of Land Management's willful disregard for the state of New Mexico's interests." Critics have noted that gas reserves in the Otero Mesa equal about 30 hours' worth of U.S. national consumption. Richardson's Attorney General, Patricia Madrid, explained: "By filing this lawsuit, we seek to protect one of the most biologically diverse and endangered ecosystems. The Bush administration has chosen special interests, namely the oil and gas industry, over their duty to protect this land for generations to come."

The Theodore Roosevelt Conservation Partnership has so far filed two lawsuits against the BLM for what it says are multiple violations of federal law. The first, filed in 2007, was in response to the permitting of 2,000 new wells on public lands in a part of south-central Wyoming revered by big-game hunters, a development that, according to the BLM's own studies, would transform the land into "an industrial area." The hunting and conservation group stated that

the BLM was acting on behalf of a “single user group, the energy industry.” The second lawsuit came in 2008. The conservation group’s vice president, Tom Franklin, says it has been forced to intervene because “our inaction would enable the continued mismanagement of Western lands and the loss of our outdoor heritage.”

As the U.S. Forest Service, led by former timber lobbyist and Bush appointee Mark Rey, prepared to issue new drilling leases in some of the most valued hunting country in Wyoming along the ramparts of the Wyoming Range, billboards appeared along the interstates, put up by a group called Sportsmen for the Wyoming Range. The signs read, “We’re Mother Nature’s bodyguards. And yes, we’re heavily armed.”

In December, U.S. District Judge B. Lynn Winmill of Boise, Idaho, ordered the U.S. Fish and Wildlife Service to re-evaluate a 2006 decision that the greater sage grouse was not in need of further protection under the Endangered Species Act. That Fish and Wildlife decision, Winmill wrote, “... was tainted by the inexcusable conduct of one of its own executives. Julie MacDonald, a deputy assistant secretary who was neither a scientist nor a sage-grouse expert, had a well-documented history of intervening in the listing process to ensure that the ‘best science’ supported a decision not to list the species. Her tactics included everything from editing scientific conclusions to intimidating FWS staffers. Her extensive involvement in the sage-grouse listing decision process taints the FWS’s decision and requires a reconsideration without her involvement.”

The sage grouse issue was only one of many problems with Mac-

Donald’s brief tenure. She resigned from the Department of the Interior in May 2007, amid charges that she rewrote scientific documents, leaked information to industry, intimidated scientists and undermined wildlife protections in many ways.

McDonald is not the only problem, of course.

In 2001, Steven J. Griles was a lobbyist, working for, among other clients, Yates Petroleum, for which he advocated energy development on the Otero Mesa of New Mexico, and Devon Energy, which he represented on matters pertaining to the development of the Powder River Basin. Later that year, Griles was appointed deputy secretary of the Interior Department and worked on many of the same issues. He resigned from the Interior Department in 2004, amid multiple charges of conflict of interest, and pled guilty in March 2007 to obstruction-of-justice charges related to the Jack Abramoff lobbying scandal.

Rebecca Watson, an assistant secretary of the Interior Department during President Bush’s first term, said in a 2004 interview that big game animals “go somewhere else” during energy development operations; she now works for a Denver law firm where she represents clients from the energy industry.

Her former boss, Secretary of Interior Gale Norton, is an attorney employed by Royal Dutch Shell, PLC.

The men and women who wrote and carried out the nation’s energy policies over the past seven years were extremists. For them, it must have seemed that the fortunes of the energy industry were the fortunes of the nation, that if one prospered, so must the other. It is not a new mistake, but it is a serious one.

It is not in the national interest

to plunder our lands and wildlife, extract the very finite resources of oil, coal and gas, and then squander them by dumping them into a power and transportation grid that would be the laughingstock of any efficiency analyst. Immediate profits might be astronomical, but they are based on the losses and tribulations of generations living and unborn. The current policies also ensure conflict and gridlock, at a time when real and responsible energy development is critical to the national interest.

What would responsible domestic energy development look like? There is no reason to reinvent the regulatory wheel. The U.S. was once among the world’s visionaries in environmental protection, and many of those protections came into being under the Republican administration of Richard Nixon. Nothing is gained by exempting energy development from the Clean Air Act, the Clean Water Act or the Safe Drinking Water Act. These exemptions have reduced innovation by energy companies and resulted in a rising tide of fury among the residents of America’s energy heartland. When the Marcellus shale of the east becomes the next methane bonanza, there will be rebellion. All of the public relations money on Earth will not be enough to compensate for lost drinking water supplies or the efforts to remedy contamination.

If presented with proper incentives, the energy industry would take its record profits and use the environment-protecting technologies that it claims to use already. Wherever possible, directional drilling should be required so that one well pad to a section of land — that is, to 640 acres — is the norm. Reclamation bonds must be changed to reflect the modern costs of restoring drilled lands so they can support

wildlife and livestock grazing once energy production is complete. Energy development must be phased, not conducted in a rush, so that biologists and land managers can try to mitigate the damage and loss of other resources. And impacts on wildlife can and must be a part of the decision whether or not to permit energy development.

If these common-sense regulations slow domestic energy development to some degree, what exactly is lost? The grid can be modernized and made more efficient in the meantime; the market, responding to higher energy prices, will help boost efficiency all the more. Can anyone argue that natural gas and oil will be less valuable in years to come than they are right now?

With common-sense regulation in place, unconventional gas can be harvested in the East without fear that drinking water supplies will be forever poisoned. The Powder River Basin can surrender its gas supplies to heat the homes of millions without salting the farmlands of Montana. Sage grouse can drum and dance on their breeding grounds in Wyoming, as they have since the days when men hunted them with throwing sticks. And then, exploration on our coastlines can be pursued without the surety of disaster.