

Drill, Baby, Drill!

The inside story of Ed Rendell's plot to pillage Pennsylvania's forests, consequences be damned.

by Isaiah Thompson

Published: February 17, 2010



Matthew Smith

ON MARCH 27, 2009, MICHAEL DIBERARDINIS, SECRETARY OF PENNSYLVANIA'S DEPARTMENT OF Conservation and Natural Resources (DCNR), dispatched an unusual memo to his boss, Gov. Ed Rendell.

Though only two pages long, the note was, for career bureaucrat DiBerardinis, uncharacteristically impassioned in its plea that Rendell reconsider his request to lease an additional 40,000 acres of state forest to be drilled for natural gas.

"Wholesale leasing will damage our state forest landscape," DiBerardinis cautioned. "It would scar the economic, scenic, ecological, and recreational values of the forest — especially the most wild and remote areas of our state." This "rush to drill," he continued, threatened to further overburden an already frayed DCNR staff, which would struggle to keep up with its oversight obligations: "Our ability to sustainably manage our state forests is threatened by unplanned, excessive leasing activity."

ADVERTISEMENT

"Finally, and perhaps most importantly of all, is the environmental legacy you want to leave," the secretary concluded. "One hundred years ago, the land that would become the state's forests was a denuded landscape that was scarred by rampant resource extraction. Our state forest system ... grew from a visionary effort to reclaim this landscape and restore

Pennsylvania's citizens their natural birthright. A rush to drill places the state forest and all its benefits at great risk."

One week later, after nearly 15 years of working for Rendell, DiBerardinis resigned as DCNR secretary. Whether Rendell's plan to expand drilling led to DiBerardinis' departure is unclear; DiBerardinis, who now heads Philadelphia's Parks and Recreation Department, declined to comment.

Rendell didn't withdraw his request to lease the forest land. In fact, within a few weeks, he doubled it, to 80,000 acres. And, last week, his office confirmed to *City Paper* that Rendell intends to lease even more land for drilling this year — some \$120 million worth of it. The governor has the authority to do so, with or without the legislature's consent; he could act in a matter of months, if not sooner.

Rendell's enthusiasm for drilling has a simple explanation: The state's forests have suddenly become exponentially more valuable than at any time in recent history. Across Pennsylvania, a boom is under way — a gold rush, but not for gold.

The Marcellus Shale, a geologic formation that sits beneath much of Pennsylvania, has over the course of just a few years changed the economic, political and, with thousands of wells popping up, even physical landscape of the state. That's because the shale contains natural gas — billions, maybe trillions, of dollars worth of it. And the state has been eyeing that pot of gold for some time. Like casino gambling, it's a way to plug budget holes without raising taxes.

Since most of the current shale drilling takes place on privately owned land, there are only two ways to cash in: The state could tax gas production, as most gas-rich states do. In fact, the budget Rendell proposed last week includes just such a tax. However, the gas lobby is strong, generous with political contributions and, it so happens, averse to taxation. Thus, the eventual passage of Rendell's tax is anything but assured. But there is another way: 60 percent of state-owned forestland, about 1.5 million acres, sits atop the Marcellus Shale. To money-hungry state officials, this fact means there's the potential for billions of dollars in land leases to natural gas drillers — drillers who see the forest, and the shale beneath it, as ripe for exploitation.

Where the powers-that-be and their industry acolytes see dollar signs, however, environmentalists see calamity. Across the state, activists are raising alarms over hazardous drilling practices, insufficient regulation and scores of documented cases of toxic groundwater contamination. These issues, they say, should make Rendell reconsider his designs on the state's forests.

For his part, the governor has made his position crystal clear:

Drill, baby, drill.

Care Be Taken

Once upon a time, Pennsylvania's forests were as rich and beautiful as any in the world. Their trees were enormous, some rising 150 feet tall, creating in turn a thick canopy and dense woods inhabited by beaver and elk, and even wolves and panthers. The forests' 83,000 miles of streams and rivers teemed with trout, shad and sturgeon.

So abundant were the forests' resources that it was little time before white settlers began ravaging them. William Penn himself saw this coming: In his 1681 *Charter of Rights*, he recommended that "in clearing the ground, care be taken to leave one acre of trees for every five acres cleared."

His recommendations were roundly ignored.

The trees were cut wholesale for timber; the elk and beaver were hunted almost to extinction. But even more valuable than the forest itself was what lay beneath — coal, iron, oil, gas. By the end of the 19th century, entire rivers were ruined by pollution; vast stretches of soil were depleted and contaminated with chemicals and heavy metals. And virtually every single tree of Pennsylvania's virgin timber had been cut.

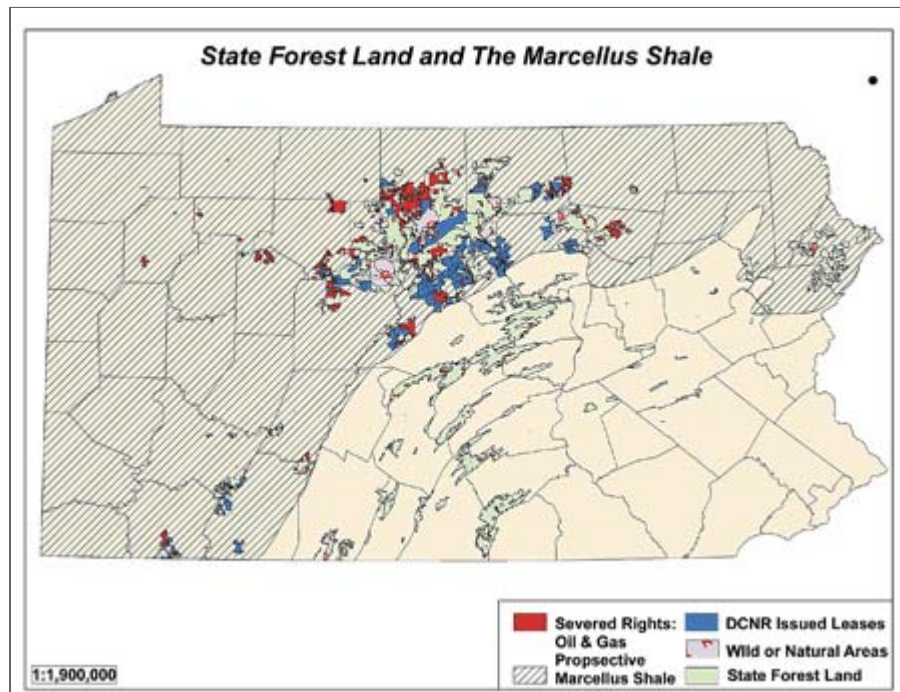
The story of the restoration of that forest is an inspiring one, punctuated by the contributions of a few dedicated Pennsylvanians, chief among them an ex-Army man named Maurice Goddard who, like many an American crank-cum-hero, had a penchant for writing opinionated letters to public officials. In 1955, he wrote to then-Gov. George M. Leader outlining his ideas for how the state should conduct forestry. In turn, Leader appointed Goddard head of the Department of Forests and Waters (now the DCNR).

Immediately, Goddard urged the governor to address gas and oil drilling. In his first year, he masterminded one of the most significant laws in the history of Pennsylvania's forests: the Oil and Gas Lease Fund Act, which directed that any proceeds from oil and gas activities on state forest land be deposited directly into the Oil and Gas Lease Fund, which could be used only for conservation. Every dollar made from extracting resources from the forests had to be spent making the state forest system better.

The turnaround over the ensuing half-century was remarkable: From a devastated, post-industrial landscape, Pennsylvania's forests came back. They now represent the largest stretch of publicly owned land east of the Mississippi River. They are one of just a small handful of forests certified by the Forest Stewardship Council as "sustainably managed." The Lease Fund has paid for trails, dams and some or all of 27 state parks. When the state slashed the DCNR's budget last year, only this fund kept state parks open and hundreds of employees in work.

There's always been pressure from private industry to exploit the forests' resources. And, indeed, the DCNR has leased forestland for oil and gas exploration over the decades, but until recently, those operations didn't involve the Marcellus Shale, and yielded relatively small dividends. More importantly, the Oil and Gas Act served as a check on Harrisburg. Whatever money the DCNR made from the leases was its to keep. The governor could pressure the department to lease forest land, but he couldn't put the money toward his pet projects. For more than 50 years, this balance allowed Pennsylvania's forests to thrive.

Until, that is, last October, when Rendell and the state legislature finally cracked open that pot, and commenced grabbing.



Pennsylvania DCNR

RIPE FOR EXPLOITATION: One-third of the state's forestland has already been leased for natural gas exploration.

The Perfect Storm

The Marcellus Shale is, essentially, an enormous sheet of rock, situated about a mile beneath the Earth's surface, extending along the Appalachian Basin up into northern New York. Geologists and the oil industry have long known that, contained within that 400-million-year-old sedimentary rock, is an abundance of natural gas. But drilling for it only recently become financially feasible — thanks largely to technological advances in a drilling method called hydraulic fracturing, or fracing, pioneered by oil giant Halliburton in 1949.

Perhaps more importantly, the need for natural gas is skyrocketing. In Pennsylvania, natural gas prices quadrupled

between 2002 and 2008. This surge is driven largely by the fact that the energy sources that powered the last two centuries — oil and coal — are running out. Not to mention, they are both primary contributors to climate change. Among the fuel sources often discussed as short-term alternatives, natural gas has a special allure. It's a fossil fuel, yes, but it's cleaner than coal, immediately available (unlike solar and wind), and we don't have to buy it from the Middle East. In 2008, billionaire oil magnate T. Boone Pickens made headlines with his so-called "Pickens Plan" to move the U.S. off foreign oil, which relied upon natural gas as the "energy bridge" to the future.

ADVERTISEMENT

The Marcellus Shale holds enough of it to power an energy bonanza that could rival the California Gold Rush.

The mighty gas-drilling industry — powered by the even-mightier oil industry — proclaims the shale a godsend. Its gas will create jobs, generate tax revenues and spur growth. The shale, drilling proponents say, is the magic carpet that will carry the United States to the future of energy independence.

But to its critics, the shale is the opposite: a catastrophe of opportunity. They point to the alleged dangers of fracking, which then-Vice President Dick Cheney managed to get exempted from the federal Safe Drinking Water Act, thus stripping the Environmental Protection Agency of the ability to regulate it. (U.S. Sen. Bob Casey Jr., D-Pennsylvania, has proposed legislation that would remove this exemption.) Environmentalists point to numerous reports of various kinds of contamination associated with fracking — particularly an ongoing investigative series by the nonprofit journalism group *ProPublica*, which has catalogued such troubling episodes as the April 2009 incident in which 16 cows in Louisiana dropped dead after drinking "a mysterious fluid adjacent to a natural gas drilling rig," as well as the time, in September 2009, that nearly 8,000 gallons of fracking fluid leaked from a gas-drilling pipe system into a freshwater stream in Dimock, Pa., a small town near the New York border.

Love it or hate it, fracking has arrived in Pennsylvania. The state has permitted some 2,765 wells since 2005; in 2010 alone, that number stands to double. The pressure to lease state-owned forestland for Marcellus Shale drilling has been building for years. The development of new technology, coupled with the ever-growing need, made for the perfect storm. By 2008, memos and e-mails obtained by *City Paper* show, then-DCNR Secretary DiBerardinis saw the writing on the wall.

He warned Rendell that two members of the state legislature — state Rep. Scott Hutchinson (R-Butler County) and state Sen. Mary Jo White (R-21st District), who heads the Senate Environmental Resources & Energy Committee — had proposed legislation that would force DCNR to lease any and all land that had been "nominated" more than once by the drillers. Any piece of land, in other words, in which any two drilling companies had ever expressed any interest.

"Both bills," DiBerardinis wrote in a February 2008 memo to Rendell, "would in effect require us to lease the entire state forest."

Worried that industry-backed legislators would simply rob the DCNR of its authority to decide gas leases on forestland on its own, DiBerardinis sought a middle road. He proposed that the department lease a limited amount of land for Marcellus Shale drilling. Rendell agreed.

On Sept. 3, 2008, the DCNR held its first land auction in six years, with 74,000 acres up for grabs. The proceeds, \$168 million, were more than the Oil and Gas Lease Fund had spent on conservation in the entire 53 years of its existence. By law, that money had to be used for conservation.

Rendell, though, had other plans for it. So, in his 2009 budget proposal, Rendell included a plan to transfer almost all of the money in the Oil and Gas Lease Fund to the state's general fund. For this, he would need legislative approval. Most lawmakers, it turned out, were happy to oblige: Legislative leaders introduced a plan for \$240 million in *additional* forest leasing, \$60 million in 2009 and \$180 million in 2010.

In September 2009, Rendell startled his closest allies — and further incensed environmentalists — by dropping the proposal he'd made just a few months earlier, in his 2009 budget, to tax gas production. Industry lobbyists, the governor explained, had convinced him that such a move would hamper the nascent industry's growth. (Weeks later, Rendell's top aide for drilling issues, K. Scott Roy, left to consult for a drilling company.)

By blasting open a gaping hole in what was by then an already long-delayed budget, Rendell in effect put the screws to the so-called Green Dogs, the small but stubborn cadre of House Democrats who had refused to go along with his drilling plans. According to Green Dog state Rep. Greg Vitali (D-Delaware), party leaders offered them a deal: If they signed off on a budget that transferred the money the DCNR had taken in from the land it leased in 2008 to the state's general fund,

and acquiesced to \$60 million in additional forestland leases proposed for the 2009 budget, the legislature wouldn't seek the \$180 million in leases in 2010.

Rendell's office says there was no such deal; last week, it confirmed to *City Paper* that the governor is considering ordering the DCNR to lease another \$112 million worth of state forest this year. (These leases typically allow for indefinite drilling rights, until the gas runs out.) Once again, he'll have to get the legislature to override the Oil and Gas Act to transfer that money into the state's general fund. The governor, apparently, plans to do just that — much to the dismay of the Green Dogs. "We thought we had a deal," says Vitali, who has proposed a moratorium on new gas-drilling leases.

But even as lawmakers quibbled over how much land to lease, behind the scenes, Rendell's own forest officials were warning him about the dangers of leasing any more forest. In April 2009, less than a week after DiBerardinis' departure, Rendell asked his replacement, acting secretary John Quigley, to double the amount of land the DCNR would lease that year, from 40,000 to 80,000 acres.

"I want to be very explicit about the situation this will place us in," Quigley wrote in a May 2009 memo. "These would likely be the last gas lease sales on state forest land that we could manage within the context of our sustainable certification for the foreseeable future. ... DCNR remains very apprehensive about the leasing of additional state forest land."

But, per Rendell's direction, the department leased the land anyway. Those 80,000 acres proved very profitable: State officials expected those leases to bring in about \$60 million. Instead, they generated \$128 million.

Still, Quigley publicly voiced caution: "Fully one-third of the state forest is now leased for gas exploration," he told *The Philadelphia Inquirer* in an unusually candid interview in January. "I think that raises some important questions. How much is too much?"



Constance Merriman, Citizens for PennFuture

POND SCUM: Drill-site ponds, like the one pictured above, often contain wastewater. At least once in Pennsylvania, the contents seeped into nearby groundwater.

Smashing Skulls

According to state and industry officials, this rapid expansion of natural gas drilling is entirely safe. Rendell's office insists that state agencies will take every precaution to make sure the drilling sites don't harm the environment. And the gas industry — while touting drilling's purported economic benefits — assures the public that fracing leaves a minimal environmental footprint. Indeed, the Web site of the Marcellus Coalition (pamarcellus.com), an industry trade group,

depicts tidy wells in small, tree-ringed clearings. The point is clear: Gone are the days of denuded forests and barren landscapes.

But the coalition's presentation omits a few points. The wells themselves are small, but they make up just a small portion of an entire drilling project. Many sites around Pennsylvania, for example, include massive ponds of water — often wastewater — that are used in the fracing process.

And then there are the trucks. According to the Marcellus Coalition itself, each well necessitates as many as 400 truck visits (the DCNR estimates 800). Within the next decade, the state forest will likely host as many as 1,000 gas-drilling wells, which means that land originally acquired for hunting and hiking will see hundreds of thousands of truck visits. The DCNR says it will "encourage" drilling companies to use existing roads, but concedes that additional roads will have to be built. And while a November 2009 DCNR report says that existing forest roads can handle drilling truck traffic, that report addressed only the land that's already been leased — land chosen partly based on accessibility. Newly leased lands won't be as accessible.

But the greater concern, perhaps, is the potential for contamination — especially of groundwater, which, by its nature, flows: into streams, into rivers and into drinking supplies. Besides water and sand, fracing utilizes a chemical concoction, developed by Halliburton, that is mixed into the fracing water and injected into the natural gas wells. Some of these chemicals are toxic: Indeed, some of the chemicals that seeped into the groundwater in Dimock, Pa., according to *ProPublica*, are potentially carcinogenic. Because this chemical formula is proprietary, however, the exact proportions are shielded from public disclosure — even though, when it comes to toxicity, proportion is everything. Also, water injected into the wells can become further toxified by mixing with various minerals and toxins already present deep in the soil —including naturally occurring radioactive minerals.

Still, the drilling industry says that Marcellus Shale fracing does not, and will not, contaminate groundwater. The shale, it points out, is located well below the water table. What's more, the water that is injected is pumped back out, stored and treated before it mixes with Pennsylvania's water supply. The industry sums up these points and others in one comprehensive claim: Hydraulic fracturing itself has never contaminated groundwater, anywhere, ever. Period. As ExxonMobil CEO Rex Tillerson told a U.S. House committee in January, "There have been a million wells fraced and no documented cases of contamination of groundwater from hydraulic fracturing."

That's not the whole story. Fracing water may not mingle with groundwater *during* the drilling process, but it does have to be pumped up after drilling, then stored and transported. And that's when contaminated water can spill. In fact, spills happen regularly. In 2008 and 2009, the Pennsylvania Department of Environmental Protection (DEP) recorded 56 illegal discharges of industrial waste by shale drillers, nine of those into streams. Also, according to DEP regulations, the ponds in which drillers store wastewater for reuse or later disposal have to be lined to prevent the water from seeping into the soil. But those liners can rupture. In January, *ProPublica* reported, the DEP cited drilling company Atlas Resources for a discharge of fracing fluids that resulted from a "compromised pit liner."

None of these problems stem from the drilling itself, but they do come from drilling-related activities. For those concerned about water supplies and wildlife, that distinction gives little comfort. "They'll say that, well, the contamination occurred because of the storing of stuff on-site, the actual fracing process was not the source of the contaminant," says Deborah Nardone of Trout Unlimited, a group that aims to preserve cold-water fisheries. "But if the storage process required to *do* the fracing is the source of the contamination ... it's kind of a word game."

Marcellus Shale drilling doesn't just worry activists in Pennsylvania. In December, New York City Department of Environmental Protection Commissioner Steven W. Lawitts called for a prohibition on drilling within that city's watershed — a watershed that, to a large degree, is shared by Philadelphia.

John Hanger, Pennsylvania's DEP secretary, does not share Lawitts' concern. In fact, he's an enthusiastic drilling proponent: "You are talking about a resource, if developed, that is so large it could literally power this country for the next 10 to 15 years. It could close down every other gas well in the United States," he says. "Before people say put a moratorium on this, or regulate the hell out of it, so that what could be done in 20 years takes 200 years — people need to know what they're giving up."



Cafe Nola | Hollywood
Tans: \$50 for \$25 | Mango
Moon | Firefly
Photography | Academy of
Natural Sciences: Family
Four-Pack of Tickets |
Swanky Bubbles | Swanky
Bubbles: \$50 for \$25 |
Hot Hands Studio: \$50 for
\$25 Massage, Skin Care &
Body Treatments | Curves
| Montgomery Theater

HALF OFF DEPOT
Why live life at full price?

Still, the department has responded to some of the activists' concerns: It raised permitting fees, supported the tax on drilling and, in 2009, hired 37 staffers to oversee Marcellus drilling. Recently, Rendell approved the department's request to hire an additional 68 people — all moves welcomed by environmental watchdogs.

But those same advocates worry that no matter how thorough the DEP tries to be, the massive expansion of Marcellus Shale gas drilling is outpacing efforts to control it. And while Hanger emphasizes that the DEP has strengthened regulations, not every policy change has gone in that direction: In the spring of 2009, the DEP implemented a new "expedited permitting review process" for Marcellus Shale drillers, allowing a quicker turnaround for some permits — just 14 business days. To accomplish this, the DEP stripped county conservation districts — local bodies that inspected erosion and sediment control plans — of authority. Instead, the DEP ruled that, as long as permit applications were signed by a licensed engineer, surveyor, geologist or landscape architect, they would no longer require a detailed "technical" review, but rather an "administrative" review that ensures that necessary documents have been submitted and signed. In so many words, the DEP decided to take the drillers at their word.

This expedited process, critics argue, is prone to errors. In August, Matt Royer, staff attorney for the Chesapeake Bay Foundation, an environmental group, traveled to DEP headquarters in Williamsport, and reviewed about 15 permit applications filed since the DEP instituted expedited reviews.

Royer is the first to point out that he's not an expert. But, as it turned out, he didn't need to be to notice some of the applications' glaring problems. One application, for instance, showed a pipeline running through an environmentally sensitive wetland, and next to a tributary to a wild trout stream. "But none of that showed up in the permit application," Royer says.

Of the 15 permits he reviewed at random, Royer says, he selected three to appeal. Following his appeals, the DEP revoked all three permits.

This would seem damning: Three appeals — drawn from a small, rushed search by a layman — resulted in the revocation of three permits DEP officials had already approved. Hanger, however, denies that Royer's inquiry reveals a hole in the DEP's oversight: "I hope you realize what we did there. We issued a huge message to that industry. ... We have companies that said, 'Oh my, we better go back and check some permits.' This isn't a cuddling of the industry. That is a smashing of some skulls."

But what if drillers took away a different lesson? What if they learned that the odds that any wrongdoing will be caught, at least without an army of busybodies looking over the DEP's shoulder, seem incredibly low?

The Marcellus Coalition declined to comment for this story.



By: Matthew Smith

City Slicker

One of the three permits the DEP revoked was for a well site in Tioga State Forest. Royer's review of that permit, issued to Fortuna Energy (now Talisman Energy), revealed that, while the permit application contained the required stormwater calculations and native species surveys, the nature of the project had changed radically since the state approved the permit. Fortuna, which the DEP had fined in June 2009 for discharging fracking fluids into a freshwater creek-bound drainage ditch, had made 13 amendments to its permit — including nine additional wells and an expansion of the drilling site's area of disturbance from nine to 105 acres. In some cases, the expanded plans included no calculations for stormwater runoff, wetlands surveys or studies of impacted species. It very much appeared to be a classic bait-and-switch. And yet, the DEP had approved every single one of those amendments without hesitation — in some cases, within four business days.

And if there's reason to worry about the DEP's oversight capabilities, there's even more reason to question whether the DCNR can handle its duties — especially if, as Rendell intends, the state leases more forest land for shale drilling this year. In an e-mail, a DCNR spokeswoman tells *City Paper* that as many as 60 staffers are "directly" involved in overseeing gas drilling operations. Directly, perhaps, but not exclusively: Planners, foresters and other staffers may help keep an eye on drilling, but the only DCNR office specifically dedicated to oil and gas activities — its Minerals Section — consists of three people, according to the DCNR's Web site.

Rendell has pledged to hire 12 new staffers to oversee drilling at the DCNR. It will be a welcome addition to a department that saw its budget cut by nearly 20 percent, or \$21 million, last year, and which may see its budget cut by another \$1 million this year.

ADVERTISEMENT

"That's the battle going forward, as this money comes in," says David Masur of the watchdog group PennEnvironment. "Is the forest just going to become a cash cow for the legislature?"

On Feb. 11, Rendell unveiled his 2010 budget. Perhaps as a nod to environmentalists or budget hawks, it proposes a tax on the production of natural gas, which the governor's office estimates will bring in \$107 million in the upcoming budget year. But the budget also includes plans to raise \$120 million from DCNR drilling leases.

It's a relatively small amount of money next to the likely revenues the state can expect from royalties on gas produced in the already-leased forest. But that money may take a few years to start coming in. Leasing new land, on the other hand, means instant cash, although Rendell will once again have to persuade lawmakers to raid the Lease Fund.

The Green Dogs, for their part, say they won't be fooled again.

"I have been [Rendell's] legislative ally on every major tax policy ... but the governor is dead wrong on this," says state Rep. David Levdansky (D-Allegheny/Washington counties). "It just demonstrates that he's a city slicker. He doesn't understand that this century-old state forest system is a treasure of the commonwealth, and that we are charged as public officials to protect it."

(isaiah.thompson@citypaper.net)

© Philadelphia City Paper