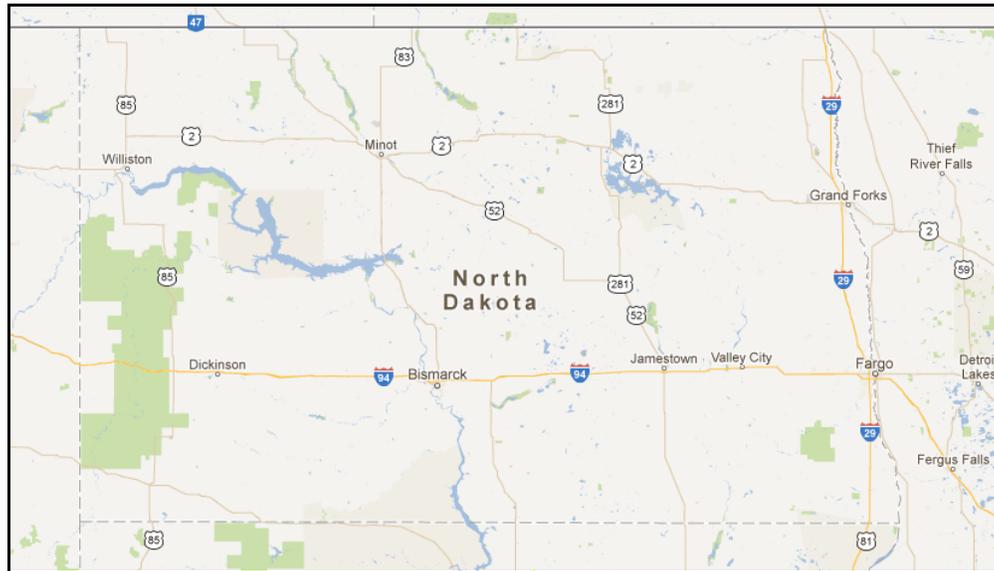


# North Dakota Went Boom

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By CHIP BROWN

Long before the full frenzy of the boom, you could see its harbingers at the Mountrail County courthouse in Stanley, N.D. Geologists had pored over core samples and log signatures and had made their educated guesses, and now it was the hour of the "landmen," the men and women whose job was to dig through courthouse books for the often-tangled history of mineral title and surface rights.

Apart from a few fanatics who sometimes turned up at midnight, the landmen would begin arriving at the courthouse around 6 a.m. In the dead of winter, it would still be dark and often 20 or 30 below zero, and because the courthouse didn't open until 7:30, the landmen would leave their briefcases outside the entrance, on the steps, in the order they arrived. And then they would go back to their cars and trucks to wait with the engines running, their faces wreathed in coffee steam. Sometimes there were more than 20 briefcases filed on the courthouse steps. The

former landman who told me this - Brent Brannan, now director of the North Dakota Oil and Gas Research Program - said he sometimes thought he could see the whole boom in that one image, briefcases waiting for the day to start, and it killed him a little that he never took a picture.

For many years North Dakota has been a frontier - not the classic 19th-century kind based on American avarice and the lure of opportunity in unsettled lands, but the kind that comes afterward, when a place has been stripped bare or just forgotten because it was a hard garden that no one wanted too much to begin with, and now it has reverted to the wilderness that widens around dying towns. In a way, of course, this kind of frontier is as much a state of mind as an actual place, a melancholy mood you can't shake as you drive all day in a raw spring rain with nothing but fence posts and featureless cattle range for company thinking, *Is this all there is?* until finally you get out at some windswept intersection and gratefully fall on the fellowship

of a dog-faced bar with a jukebox of songs about people on their way to somewhere else.

All of which may explain the shock of coming around a bend and suddenly finding a derrick illuminated at night, or a gas flare framed by stars, or dozens of neatly ranked trailers in a "man camp," or a vast yard of drill pipe, or a herd of water trucks, or tracts of almost-finished single-family homes with Tyvek paper flapping in the wind of what just yesterday was a wheat field. North Dakota has had oil booms before but never one so big, never one that rivaled the land rush precipitated more than a century ago by the transcontinental railroads, never one that so radically changed the subtext of the Dakota frontier from the Bitter Past That Was to the Better Future That May Yet Be.

It's hard to think of what oil hasn't done to life in the small communities of western North Dakota, good and bad. It has minted millionaires, paid off mortgages, created businesses; it has raised rents, stressed roads, vexed planners and overwhelmed schools; it has polluted streams, spoiled fields and boosted crime. It has confounded kids running lemonade stands: 50 cents a cup but your customer has only hundreds in his payday wallet. Oil has financed multimillion-dollar recreation centers and new hospital wings. It has fitted highways with passing lanes and rumble strips. It has forced McDonald's to offer bonuses and brought job seekers from all over the country - truck drivers, frack hands, pipe fitters, teachers, manicurists, strippers. It has ginned up an unreleased reality show called "Boomtown Girls," which follows the lives of "five bold and brave sisters" in the formerly drowsy farm center of Williston, N.D. Williston, whose population has tripled in the past 10 years, lies in the middle of the 150,000-square-mile Williston Basin, a depression in the crust of the earth that geologists now believe contains one of the largest oil fields in the world.

In the fall of 2011 in Crosby, N.D., Continental Resources, the oil company with the most acreage leased in the basin, erected a self-congratulatory granite monument celebrating its work in the so-called Bakken Formation, the

Williston Basin rocks that, as Continental put it, ushered in "a new era in the American oil industry." The number of rigs drilling new wells in North Dakota's part of the basin reached a record 218 last May. It has now leveled off at around 200, as thousands of wells have been completed under deadline pressure to secure expiring mineral leases. Many thousands more will be spudded in the next two years as the boom moves from discovery to production and crews drill "infill" wells, complete pipelines, fortify roads, enlarge refineries and build natural-gas pumping stations and oil-loading train yards.

North Dakota's last oil boom, 30 years ago, collapsed so quickly when prices crashed that workers in the small city of Dickinson left the coffee in their cups when they quit their trailers. Apostles of "Bakken gold" insist that what's different this time is that this time is different, the history of frontier avarice notwithstanding. This is the boom that is going to change everything without the remorse and misgivings that have marked the aftermath of so many past orgies of resource extraction. This is the boom that won't leave the land trashed, won't destroy communities, won't afflict the state with the so-called Dutch Disease in which natural-resource development and the sugar rush of fast cash paradoxically make other parts of the economy less competitive and more difficult to sustain. This is the boom being managed by local people certain they know how to look after their interests and safeguard the land they live on. This is the Big One that North Dakota has been waiting for for more than a century.

"This is our time," Clay S. Jenkinson told me one morning over coffee at a Bismarck Starbucks, where he often goes to write. Jenkinson, a humanities professor, is a North Dakota author and columnist best known for his impersonation of Thomas Jefferson on public radio. "It's our gold rush, our Silicon Valley. It reverses decades of anxiety about out-migration and rural decline and death. Suddenly the state that never had anything is in the middle of an oil boom that is larger than anybody could have predicted. We aren't going to do anything to

jeopardize it. People aren't interested in stepping back."

You won't find a better ambassador of what the oil industry calls "the play" in western North Dakota than Loren Kopseng. Kopseng - 65, a deer hunter, a Bud Light drinker, a profane churchgoer with four kids and two ex-wives - refers to himself as a "petro-preneur." The oil company he started almost 30 years ago is headquartered in Bismarck, but the thrilling part of his billion-dollar business is based 100 miles northwest in the Williston Basin. Kopseng is a conservative Republican, and like many North Dakotans, he includes government regulation in the same category of pleasant experiences as droughts, floods, grasshoppers and prairie fires. But he's honest enough to concede (with an anguished moan) that his private-enterprise principles aren't hypocrisy-free, given that his own bacon has been saved "many times" by the state-owned Bank of North Dakota, which became prominent when North Dakota was a bastion of radical agrarian populism in the 1930s.

It was with a touch of truant glee that Kopseng skipped out of his office to fly me around the oil fields on a windy morning last spring. He pulled on a green Fighting Sioux sweatshirt and climbed into the cockpit of his Aviat Husky, a maroon-and-yellow single-engine plane with two seats, one behind the other.

And then we were off, banking over the low-slung rooftops that ring the state's Capitol, an 18-story stone-and-concrete landmark built in 1934. North Dakotans are as proud of their Capitol as they are of their boom-based unemployment rate (3.2 percent, lowest in the nation), and many were stung when a Minnesota state legislator last spring compared it to the headquarters of an insurance company.

We crossed the Missouri River, the plane beating on above a sea of grass. Infinity nagged at the scale of things. It was almost possible to imagine the land as it appeared to Lewis and Clark when the Corps of Discovery came up the Missouri in 1804 - but only if you looked past

the toy-size trucks crawling west on Interstate 94 with drill pipe and water tanks; and the locomotives lumbering east with hundred-unit trains of black oil-tanker cars in tow. The westward march of American industry was written in the quarters of plowed earth and section line roads, in the power-transmission towers and smoke-signal steam puffs drifting from a Tesoro refinery; it was visible even on the far horizon, at the edge of a fretted but still bracing emptiness, in the shape of giant windmills and the silhouette of a coal gasification plant. Each and all were contemporary manifestations of an economic imperative that dates back to the triumph of the treaty breakers who usurped the Native Americans and commodified the land, and to the waves that came in their wake, the great white hunters who cleaned out the buffalo, the agents of the bone boom that followed who sent trainloads of buffalo skeletons back East to be used to refine sugar, the iron-horse magnates, the immigrant farmers and pioneer ranchers ruined by the "dirty '30s," and later the first oil and lignite coal barons and the government dam builders who tamed the Missouri.

"Keep an eye out for radio towers," Kopseng said over the headset.

Flying was Kopseng's dream job before he got the idea of building an oil company. He began studying for his pilot's license as a freshman in college. When he graduated (sidetracked for a year and a half by a stint in the Army that included seven months in Vietnam), one of his first jobs was flying a small plane for a highway contractor. He always worked - he helped his parents run apartment buildings in Bismarck, and for six summers starting at age 12, he fed the chickens and pigs and bucked hay and branded cattle at his grandparents' ranch in Slope County in the western part of the state.

Kopseng first came down with oil fever in the late 1970s, when fortunes were being made domestically in the wake of the OPEC oil embargo. He struggled for five years, learning expensive lessons. "I had a lot of lemonade wells," he sighed. He went broke twice, maxed

out his credit cards and even borrowed money from his mother - loans that came with sharp remarks about his clothes and hair. After he married and started a family, it was his wife's friends who looked at him sideways. While they were buying houses and investing in mutual funds, he was in debt-work-out negotiations with Halliburton.

"I embarrassed myself," he said.

In 1984, at a particularly low ebb, he met Don Russell, a merchant from Mandan, who'd done well in the not-obviously-related businesses of peddling tires and packing meat. Russell, who died in 2011, also wanted to get into oil and gas. The timing might not have seemed auspicious; companies were quitting the Williston Basin, unable to sell their product for more than it cost to produce. But with Russell handling the financial end, Kopseng began accumulating distressed oil and gas wells. He brokered oil-field equipment; he bought and sold leases; he jumped into the natural-gas market just as it was being deregulated. In 1997 he and Russell consolidated various energy-related businesses into the privately held United Energy Corporation.

U.E.C. hasn't drilled a well of its own since 1998, but today it holds a nonoperating interest in close to 2,000 oil and gas wells. It transports by rail 82,000 barrels of oil a day to refineries. In 2012 the company earned a net profit of \$44.8 million on revenues of \$5.7 billion. Best of all, in a state where until recently young people often had to leave to find work, his two sons - Ryan, an oilman, and Sander, a lawyer - joined the company and built successful careers down the hall.

As the Husky droned west, the land began to change, growing drier, farms giving way to ranches. Below was the country of the Missouri Slope, where homesteaders discovered the fallacy that rain followed the plow.

And then suddenly there were oil wells. Well after well, 6,000 or more. Many were production wells - weathered pump jacks pulling up oil (or

natural gas and natural-gas liquids) from holes drilled over the years. New or freshly painted pump jacks were nodding over recent discoveries. At that moment, 209 rigs were drilling fresh holes. Wells being hydraulically fractured were ringed by 20 or more water tanks spread out on square mounds of brick-red "scoria" - a clay sintered by underground coal fires and used for drill pads and roads in North Dakota. Some well sites were tucked in the lee of ravines or perched on bluffs or strung out along the line of a county road, one per mile, like square coasters on a bar.

North of the Missouri River, around the town of Parshall in Mountrail County, the wells started almost on a line that coincided roughly with the 102nd meridian. South of the river, the boundary was marked by Highway 49.

"That's the line of death," Kopseng said. "The edge of the thermally mature part of the oil field. If you drill to the east of that, you're dead."

He banked the Husky over a pennant of flare gas fire, and from the size of the flame estimated the well was producing 1,500 barrels of oil per day. More than a third of the gas that comes out of the oil wells in the basin was being flared off, but that percentage is declining as pipelines and facilities to process it come online. Night satellite photographs that were once pitch-black now show a massive gas flare luminance in the northwest corner of the state. In July the World Bank reported that flared gas from the Williston Basin was the main reason the United States has jumped to 5th from 14th (behind Russia, Nigeria, Iran and Iraq) on the list of gas-flaring nations. This practice raises the atmospheric levels of carbon dioxide, the gas primarily responsible for global warming.

Yet in the midst of so much empty, untrammelled land, the roaring fires and messy drill pads didn't evoke images of industrial blight like the apocalyptic black wastes of the Alberta tar-sands operations or the eaten-off mountaintops of West Virginia coal country, or for that matter, the landscape of New Jersey around the port of Newark. From the Husky, it was easy to

overlook environmental issues and fathom the appeal of oil development - easy to see the allure of a derrick dressed up in lights and looming 10 stories over a desolate landscape where the leading academic solution to social and economic stagnation had been to surrender and let the land lapse into buffalo commons.

We circled around the southern end of the basin above Dickinson, then flew west and north above the willows in the ravines and coulees of the Little Missouri River. Green junipers blazed on the broken rainbow clay and sandstone cliffs of the North Dakota Badlands, where 26-year-old Theodore Roosevelt came in 1884 to recuperate after the deaths of his wife and his mother on the same day. The two ranches he acquired are now part of Theodore Roosevelt National Park.

We skimmed along the Montana border, then banked east over the confluence of the Yellowstone and Missouri Rivers. Kopseng took pictures - he'd done all the aerial photography for U.E.C.'s annual report. Rodeo winds were bucking the Husky all over the sky, but nothing could dampen his enthusiasm for the sights of the basin - nothing save my stomach. There was undisguised horror in Kopseng's voice when he realized I had been obliged to open an airsickness bag in the back seat.

We put down at the Williston airport and hiked across a dirt lot full of mud-caked water trucks. Two dozen horn-handed men were bent over their lunches in an airport-motel restaurant; the only women in the place were the waitresses.

"People asked me why I don't gamble," Kopseng said, digging into his lunch. "I don't need to gamble because the oil and gas business is gambling. But it's also geology, chemistry, business. Every day is different."

After the plane was replenished with \$147 worth of aviation gas, we headed east toward Bismarck. Down below, dust clouds were boiling around a convoy of trucks hauling frack water and equipment on a county road. A decade ago you could have spread a picnic blanket on a

lot of back roads in western North Dakota and safely taken a nap.

They have been through this before, the people of North Dakota, first in the '60s, a decade after oil was discovered in the state. And then again in the late '70s, when the boom was driven by rising oil prices. Monthly oil production, which peaked in 1984 at 4.6 million barrels, fell to half and then went sideways for nearly a quarter-century. By February 1999, there wasn't a single rig drilling new wells in the state, and oil development looked to be yet another cautionary tale in the familiar boom-and-bust history of the region - no better than previous resource bonanzas at stemming the exodus of young people, or at halting the decline of prairie towns, or at doing much of anything to ameliorate the image of a place where the Legislature brooded over the icy connotations of the word "North" and twice entertained the idea of simply calling the state "Dakota."

And then around seven years ago - driven by technological refinements that have made North Dakota a premier laboratory for coaxing oil from stingy rocks - the state's Bakken boom began in Mountrail County. At the time, North Dakota was ranked ninth among U.S. oil-producing states. By 2010 it had climbed to fourth. In July 2012, monthly oil output reached 20.97 million barrels, and North Dakota was the largest oil producer in the country after Texas.

Viewed in the global market, the state's oil output isn't huge - Saudi Arabia produces about 10 million barrels a *day* - but North Dakota's oil boom now accounts for 11 percent of U.S. oil production, and it is the main reason the state government currently has a \$3.8 billion surplus.

What may be even more remarkable than the growth of the past two years is the extent to which the oil comes from one group of rocks. Of the 20 oil-producing geological formations in the Williston Basin - including some like the Madison that have yielded large volumes of oil for decades - the Bakken Formation now accounts for 91 percent of North Dakota's oil production.

None of the Bakken rocks are visible on the surface - at their deepest they lie more than two miles underground - but outcrops of the brand can be seen everywhere in restaurants like Bakken Buffet, Bakken Residence Suites and a plague of Rockin' the Bakken bumper stickers. The formation, named for Henry O. Bakken, a farmer who leased his land for an early well, consists of three layers, sandwiched, in a commonly used analogy, like an Oreo cookie. The Middle Bakken layer, a band of grayish dolomitic sandstone and siltstone from 30 to 70 feet thick, sits between the Upper and Lower Bakken intervals, carbon-rich beds of black shale between 20 and 50 feet thick.

Petroleum geologists have known the cookie was full of light, sulfur-free oil since 1953, but they didn't know exactly how much or how to extract it economically. Most of the Bakken oil is "tight." The rocks are not porous and permeable enough for the oil to flow on its own. If you hold a piece of Middle Bakken, it's hard to believe it contains oil at all, or that it could function as a "reservoir" for oil migrating under pressure from the carbon-rich shale around it. It feels as hard as a flagstone terrace. But under ultraviolet light, you can see telltale "oil shows," and it has a faint smell of diesel fuel.

Significant amounts of Bakken oil were produced from conventional vertical wells beginning in 1961, but for many years the formation was considered problematic: you had to be lucky or skillful enough to find an area of the shale that was naturally fractured. Generally the formation was too thin to provide a worthwhile pay zone for a vertical well.

What made people rethink the viability of the Bakken was horizontal drilling. The first horizontal well in the Bakken was spudded by Meridian Oil in 1987, long before the current boom. Meridian engineers went down more than 10,000 feet and then burrowed sideways into a bed of Upper Bakken shale that was only eight feet thick. Later, as improved instruments gave drillers a more precise sense of where they were and what kind of rock they were in, they were able to steer drill bits between the black halves

of the Oreo. The sandstone of the Middle Bakken retained the shape of the drill bore better than the Bakken shale. Approached from the side with a horizontal shaft, the reservoir rock could be contacted for thousands of feet rather than for the hundred or so feet a vertical well would afford. The Bakken today contains some of the longest horizontal wells in the world, "laterals" that extend as far as three miles from the drill pad to otherwise unreachable oil under Lake Sakakawea or beneath the Williston airport.

Impressive as it is to execute a 90-degree turn in a well bore thousands of feet underground, horizontal drilling alone was not enough to tap the tight oil in the Bakken. About 95 percent of the Bakken won't yield its oil unless millions of gallons of pressurized water full of sand and various chemicals are pumped down the well to crack open hairline channels. (The sand, or proppant, props the channels open.) The first areas of the Bakken to be hydraulically fractured were on the Montana side of the Williston Basin in the Elm Coulee Field, where oil was discovered in 2000. Early treatments there were called "Hail Mary fracks" because geologists and engineers would just drill a well, pump in frack fluid and pray for a robust result. The technique is more exact now. Certain grades of sand or sometimes proppant made of ceramic beads are matched to certain kinds of rock, and the wells are fracked in stages, as many as 40 stages per well.

Just how much oil is in the Bakken is still unknown. Estimates have been continuously revised upward since a 1974 figure of 10 billion barrels. Leigh Price, a United States Geological Survey geochemist, was initially greeted with skepticism when, about 13 years ago, he came to the conclusion that the Bakken might hold as much as 503 billion barrels of oil. Now people don't think that number is as crazy as it seemed.

"Right now our best guess is there are 169 billion barrels of oil in the Bakken, and that's undoubtedly wrong," says Ed Murphy, state geologist at the North Dakota Geological

Survey. "There's no way to be right. It's like guessing how many jelly beans are in a jar."

The current recovery rates for Bakken reserves typically range from 1 to 6 percent, but recovery rates are a function of both technology and market prices. "With the best technology, we can recover 4 to 8 out of every 100 barrels of oil in the Bakken," says Ron Ness, president of the North Dakota Petroleum Council. "Every 1 percent increase in the rate of recovery means another billion barrels."

As long as prices stay above \$60 a barrel or so, oil will be a mainstay of the North Dakota economy for a generation or more. After drilling companies finish securing leased acreage, it will take 20 years to develop the 35,000 to 40,000 production wells needed to fully exploit the "thermally mature" part of the Bakken shale, an area about the size of West Virginia. Production from a typical Bakken well declines rapidly but on average produces modest amounts of oil for 45 years and earns a profit of \$20 million. But as the volume of oil in the Bakken shale is still a moving target, and recovery techniques are increasingly sophisticated, some estimates put the life of the Bakken play, and the attendant upheaval it is causing in North Dakota, at upward of a hundred years.

One rainy May morning, I headed out to see the oil patch by car, driving north from Bismarck 110 miles to Minot, then west on Route 2. Some of the most tangible effects of the boom have been tattooed into the roads. Officials calculate that each well in western North Dakota requires about 2,000 truck trips in its first year of operation. Multiply that by hundreds of annual new wells, and it's clear why county and state highway departments are engaged in an epic struggle against potholes, rutting, asphalt shoving, alligator cracking and other pavement maladies. The biggest danger on many dirt and gravel roads is blinding plumes of dust. Many potions have been concocted to suppress the stuff. The dust busters in Williams County discovered that spraying a soy-based oil works well, but it isn't practical because it makes the

roads taste so good that cows come out of the fields and try to eat them.

Traffic used to be so scarce that drivers would wave as they passed an oncoming car; now there are record numbers of accidents. To assess the impact, the state highway department has a special van that drives around with an onboard computer, an infrared detector and six cameras and produces a ride rating for every mile of the region's highways; the higher the number, the worse the ride. "I said I was just going to coast into retirement, and then all hell broke loose," says Walt Peterson, the Williston district engineer for the highway department.

The rain lifted outside Stanley at the junction of Route 2 and Highway 8 - stretches of which had the worst road ratings in the state. I stopped for gas at a Cenex convenience store called Bakken Central, where help was wanted for all days, all shifts. Water trucks in the parking lot wore petticoats of mud. Inside, sooty-faced roughnecks with pale circles around their eyes and dazed expressions wandered through the aisles with armloads of beef jerky and 20-ounce cans of malt liquor. The store was selling showers: a half-hour of hot water for 10 bucks; \$15 for a couple. Across the highway, workers were pouring concrete for a new Fuel Force gas station and rolling out sod on a fresh tract of homes.

Seventy-two miles beyond Stanley, I pulled into Williston, which proudly advertises itself as the boyhood home of the N.B.A. coach Phil Jackson. It's all but impossible to find a place to stay in Williston, but on weekends many oil workers clear out, and I was lucky to get a motel room with a cracked plastic bathtub that had been cleverly patched with duct tape. Pickup trucks were waiting in long lines for drive-through dinners at Hardee's.

One morning, Ward Koeser, president of the Williston City Commission, offered to show me around. Koeser, a 63-year-old former math teacher whose grandfather came to North Dakota to farm in 1901, started a communications company that sold field radios

during the oil boom of the early '80s. He was elected to the Board of Commissioners in 1994 and returned to office five times.

"We had 12,500 people in the 2000 census, and we wanted to grow beyond that," he said, heading to the northern edge of town. "We tried to diversify our economy and create more permanent jobs. We brought in a plant to split and polish peas. We hosted events for developers and growers - farmers in the area grow lentils and potatoes and durum wheat - but we couldn't get beyond 12,500. The downtown area was struggling for 25 years. Young people were leaving and not coming back, and farmers were moving to town and retiring. We were a graying community. Now. . . ."

He seemed stunned by the pace of change; or maybe just exhausted. The twice-a-month town-commissioner meetings that used to take 45 minutes can now run from 6 p.m. to midnight. "We have 800 to 900 new houses coming onto the city tax rolls by the end of the summer," Koeser told me as we drove around some of the embryonic neighborhoods. They had names like Bakken Heights and Harvest Hills. The city had to be careful, he said, because during the last boom, Williston got stuck with \$28 million in debt after putting in streets and sewers for housing developers who bailed when oil prices collapsed. But now, land near the airport that was \$500 an acre a decade ago was selling for as much as \$180,000 an acre; the airport itself was slated for relocation. The town bought a 20-room apartment complex so that new city workers could have a place to live and was obliged to offer prospective police officers a housing allowance of \$350 a month. Williston has hired nine cops in the last two years, trying to keep up with the crime rate, which was booming along with everything else. (Aggravated assaults in the oil patch doubled in four years.)

Koeser pulled over in the middle of a neighborhood that was nothing but curbs and driveways and empty lots.

"This whole area was a field two years ago," he said. "By this fall every one of these lots will have a house. I love construction and new buildings. It's new life, new families moving in. But it's just happening too fast. Every master plan the city has prepared is obsolete by the time it's printed. You'd like to have more time to think things through, but everybody is in such a rush."

One of the more curious aspects of oil development in North Dakota is that the people making arguments against rampant growth, environmental degradation and the messy business of extracting oil are somewhat few and far between, proverbial voices in the wilderness. Probably the loudest of these is John Heiser, a fourth-generation North Dakotan rancher and part-time park ranger who lives near Grassy Butte, and who has been railing against the pace of the boom from the start. Last February he wrote in *The Bismarck Tribune* that the state's politicians were not hearing what "everyday people out here are saying - that is, stop the oil madness wreaking havoc with the land, wildlife and Western heritage we've long cherished." Not long before, the *Crosby Journal* editor Cecile Krimm called the region an "economic disaster area," citing swamped sewage systems, crumbling roads, dizzy rents and labor shortages as reasons that officials ought to be trying to brake a runaway train.

But oil development, and fracking in particular, raises little of the hue and cry it does in Eastern states sitting above the natural gas in the Marcellus shale. Even a well-publicized investigation by the news Web site ProPublica that reported that there were more than "1,000 accidental releases of oil, drilling wastewater and other fluids" in North Dakota in 2011 passed without much fuss.

A more typical attitude is represented by Harold Hamm, chief executive of Continental Resources. "Why do [critics] always start talking about the challenges?" Hamm said in a speech he gave at Williston Basin Petroleum Conference in Bismarck in May. "What challenges? Spending all the money?" Hamm,

who is known as the Baron of the Bakken by virtue of having more than a million acres leased for drilling, led Mitt Romney's energy committee, which proposed giving states control of oil leases on federal lands.

One reason for the lack of dissent may be that there just aren't that many people in North Dakota - the state has a population density of less than 10 per square mile; Pennsylvania has 284, New York 411 - and the people who are there appear to have weighed the benefits against the costs. And perhaps, given the state's history of hardship, they don't feel entitled to qualms about social and environmental costs; maybe ambivalence about fat years seems self-indulgent, a failure to appreciate how lean life on the frontier once was and could well be again.

It may also be that the lack of dissent reflects the way North Dakotans idealize themselves as more inclined to endure than to complain, certain it takes a special temperament to live in such forbidding country, where winters are brutal and culture is thin. North Dakotans are among the most prudent people in North America - even amid record surpluses, the electorate last year rejected a proposal to abolish property taxes - and their history tells them that after the tumult of a boom, the landscape, in the words of former Gov. Arthur A. Link, will "be quiet again."

Link, who died in 2010, was a popular, plain-spoken Democrat who was born in the tiny town of Alexander in the heart of the Williston Basin - a town that once opposed a bypass fearing it would dry up and die if Highway 85 were routed around it, and now is on the verge of choking to death on boom-truck traffic. Nearly 40 years ago, when the boom of the moment was lignite coal, not oil, Link gave a speech at an annual meeting of the North Dakota Rural Electric Association. It's been called "North Dakota's Gettysburg Address."

"We do not want to halt progress," the governor said. "We do not plan to be selfish and say, 'North Dakota will not share its energy

resources.' . . . We simply want to ensure the most efficient and environmentally sound method of utilizing our precious coal and water resources for the benefit of the broadest number of people possible. And when we are through with that and the landscape is quiet again, when the draglines, the blasting rigs, the power shovels and the huge gondolas cease to rip and roar. . . . when the last bulldozer has pushed the last spoil pile into place, and the last patch of barren earth has been seeded to grass or grain, let those who follow and repopulate the land be able to say, our grandparents did their job well. The land is as good and, in some cases, better than before."

It's hard to say whether the hope and grandeur of that vision are deeper than its delusions. In truth, it seems less an assessment of what humanity can expect when it is done devouring the earth's nonrenewable resources than a prayer that reflects a faith unique to the place where Link was born, faith that all those caved-in cabins, withered towns and stillborn dreams - and whatever is left when the oil is gone - can be redeemed.

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