

National Parks and Hydraulic Fracturing

BALANCING ENERGY NEEDS, NATURE, AND AMERICA'S NATIONAL HERITAGE



Theodore Roosevelt National Park, North Dakota



Fracking operations could threaten wildlife such as America's iconic bison. ©Tom & Pat Leeson

Theodore Roosevelt National Park sits in the middle of a modern-day oil boom. Visitors to the park look out over unsightly drill pads, well rigging, and roads that mar the surrounding Badlands, while noise from transport trucks and air compressors intrude on the natural soundscape. The vast amount of oil projected to exist in western North Dakota, coupled with the productivity of existing wells, suggests that pressure to extract oil from the underlying Bakken shale will only increase in the future. The upswing promises consequences for wildlife, air quality, and water purity.

What's At Stake

Theodore Roosevelt National Park honors the 26th President of the United States (1901-1909) and preserves the landscape and ranch that so strongly influenced the young Theodore Roosevelt. In 1883, Roosevelt came to hunt bison in the Dakota Territory and, through his experiences,

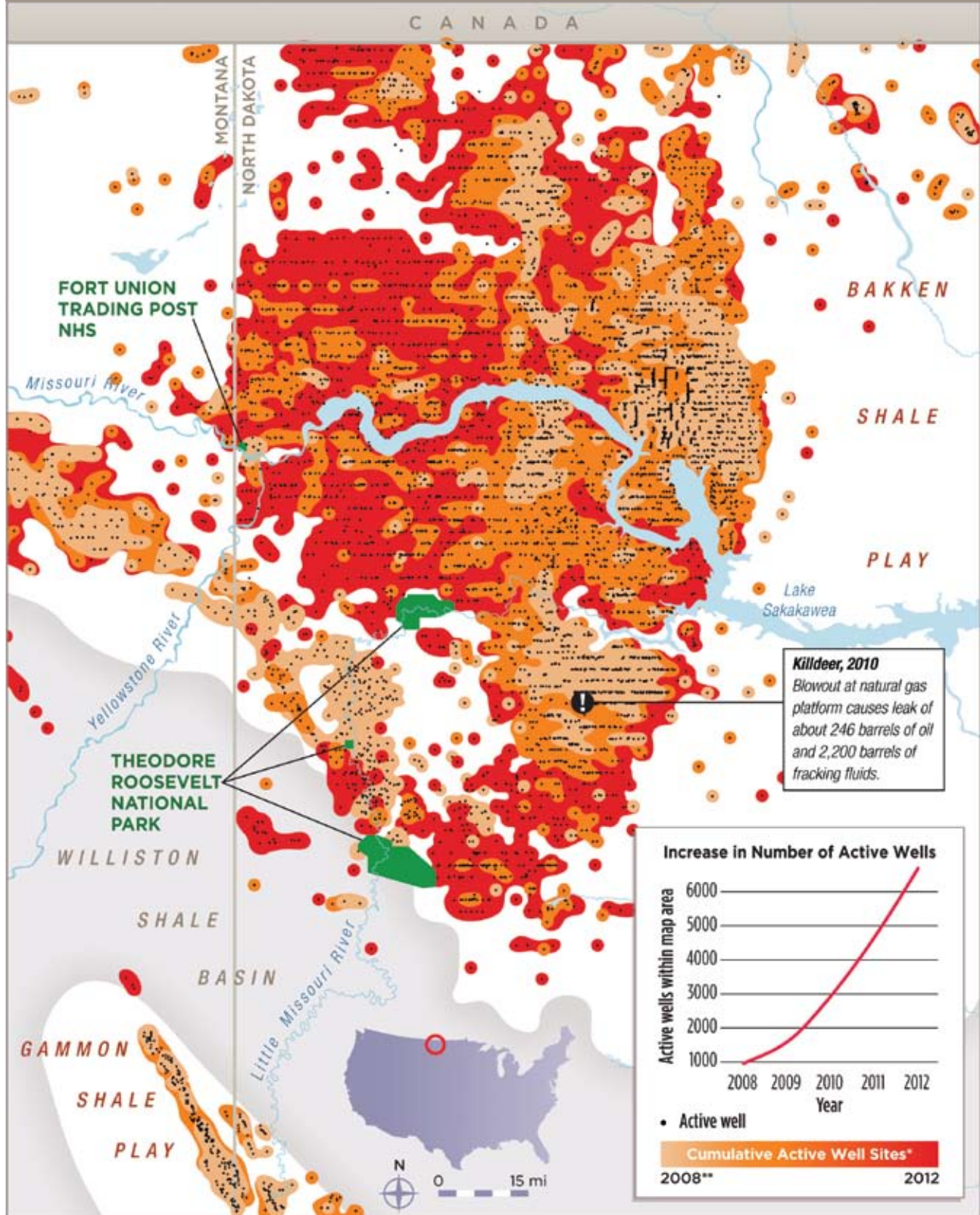
developed a strong conservation ethic that still influences American thinking and policy today.

Theodore Roosevelt National Park is comprised of three distinct units: the South Unit (46,159 acres, 23 percent designated wilderness), the North Unit (24,070 acres, 81 percent designated

wilderness), and the Elkhorn Ranch Unit (218 acres).

The geology of this park fascinated Roosevelt in the same way it continues to intrigue visitors today. In fact, Roosevelt said: "The Bad Lands grade all the way from those that are almost rolling in character to those that are

Fracking Near Theodore Roosevelt National Park (ND)



** some active well sites displayed in Elkhorn Ranch Unit area may have pre-2008 ground-breaking dates

Sources: EIA; ND Department of Mineral Resources; NPS

so fantastically broken in form and so bizarre in color as to seem hardly properly to belong to this earth".¹ The park also protects significant fossil deposits, and the landscape is home to bison, mule deer, elk, bighorn sheep, pronghorn antelope, and wild horses.

Average annual recreational visits between 2008 and 2012 reached 586,289, with many visitors coming to observe the park's wildlife and to enjoy the striking scenery on foot or by horseback.

Fracking and Park Resources

The oil boom taking place today in the Bakken shale of North Dakota has the potential to change the oil import/export dynamic in the United States. As recently as 2005, America imported more than 60 percent of the oil it consumed; by 2011 that percentage had shrunk below 50 percent, due in large part to the unconventional oil drilling occurring in western North Dakota. According to the North Dakota Oil and Gas Division, there are 192 active drilling rigs at the time of this writing,² with more than 7,000 wells producing nearly 20 million barrels of oil per month.³ The northwestern corner of the state is the epicenter for most of the drilling pressure, but the activity is migrating southward, closer to Theodore Roosevelt National Park.

Some of fracking's impacts on the park are immediate and obvious. Oil rigs are visible from several parts of the park. Natural gas "flaring" from drill sites punctuates the evening sky—which

was once one of the darkest, most star-filled nighttime vistas in the entire Park System. Noise from heavy truck traffic already permeates parts of the park. Along the South Unit boundary, signs warn motorists and visitors of the dangerous hydrogen sulfide gases known to pollute the air around the wells.

With an estimated 45,000 wells due at "full build-out" in western North Dakota, other impacts are coming. The din of air compressors (used to pump fracking fluids into the ground) can travel great distances and will impair future visitors' enjoyment of the park. And the growing infrastructure needed to support the oil boom will compete with the park's mandate to protect its undeveloped lands and wildlife. Pipelines, power lines, gas plants, oil loading facilities (one is currently being developed outside the South Unit), improved roads, and new bridges are on the drawing board as ways to efficiently and economically transport the oil from North Dakota to refineries. Although these will not be built within Theodore Roosevelt National Park, as they are developed adjacent to the park this infrastructure will fragment habitat, impede wildlife movement, and further isolate the park from its surrounding landscape. Mule deer and pronghorn antelope are already known to be affected by extensive oil and gas field development in Wyoming, keeping their distance from drilling pads. Similar impacts can be expected from North Dakota's oil boom, since many of the large-bodied wildlife currently found in the park move throughout large areas.

Another potential casualty of proposed road and bridge building would be the quiet solitude and historic views associated with Elkhorn Ranch, Roosevelt's home ranch along the Little Missouri River. One proposal would build a bridge within sight of the ranch site and would bring a new wave of well-drilling to this historic property.⁴ Concern for the future of Elkhorn Ranch prompted the National Trust for Historic Preservation to list Elkhorn Ranch as one of its 11 Most Endangered Historic Places. In a positive move, a proposal to list Elkhorn Ranch and the Greater Elkhorn Ranchlands Historic District on the National Register of Historic Places was approved.⁵ While this designation does not prohibit actions such as the proposed bridge, it does create obstacles that might prompt an alternative proposal.

Air quality issues are also likely to emerge from the extensive and intensive development of the underground oil resources in western North Dakota. During the oil boom, up to 60,000 wells are projected for the state. This level of concentrated development has been associated with local and regional air quality issues in Colorado, Wyoming, and Utah. Also, the Little Missouri River stands as a prominent natural feature of all Theodore Roosevelt's park units, and any surface water pollution that results from fracturing activity could directly affect park aquatic life and other wildlife that rely on the river. Groundwater contamination could affect the park's seeps and spring habitats, consequently affecting the plants and animals that rely on them.

1. <http://www.nps.gov/thro/naturescience/geologicformations.htm>, accessed 7//27/2012

2. <https://www.dmr.nd.gov/oilgas/stats/statisticsvw.asp>, accessed 8/31/12

3. <https://www.dmr.nd.gov/oilgas/stats/2012monthlystats.pdf>, accessed 8/31/12

4. <http://www.nationalparkstraveler.com/2012/07/oil-and-gas-exploration-threatens-setting-gave-teddy-roosevelt-his-conservation-ethos10108>, accessed 10/26/2012

5. <http://www.savingplaces.org/treasures/theodore-roosevelts-elkhorn-ranch>, accessed 10/26/2012



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