



# Theodore Roosevelt

North Dakota projects that natural visibility will be achieved at this national park in...

# 2158

## Haze is Damaging.

Haze pollution limits views of our most valued national parks and wilderness areas, affecting not just how far we can see, but also the color, sharpness, and quality of the view. It also makes the air unhealthy for people, wildlife and natural resources.



View With Pollution: 41 miles



View Without Pollution: 111 miles

## Theodore Roosevelt Visibility

North Dakota estimates that it will take until 2158 to reach natural visibility at Theodore Roosevelt at projected pollution cleanup rates.<sup>1</sup> When skies at the park are most polluted, visitors are unable to see 70 miles of landscape that would be visible under natural conditions. To restore the skies, the law requires industries to clean up if their pollution is harming the parks.

## Want Cleaner Air?

A few immediate opportunities stand out for reducing human-made haze pollution in the park's airshed. First, effective, modern pollution controls at two older, nearby coal-fired power plants, Leland Olds and M.R. Young must be installed. NPCA has challenged the Environmental Protection Agency's decision to exempt these power plants from the best pollution controls.

## This Haze Isn't Natural.

Some haze is natural, but much of what's seen today is not. Natural fires, wind-blow dust, and vegetation can result in "natural" haze, and precipitation can also obscure the view naturally. Clean air laws only require reductions from controllable sources of pollution, like power plants and other industrial sources. Cost effective, efficient reductions in human-caused pollution are routinely accomplished with the use of modern technologies.

Second, reasonable pollution controls measures must be taken to limit emissions from growing oil and gas activity. In recent years, North Dakota has experienced a huge "boom" in oil and gas production, much of it within the park's airshed. Reducing emissions from these sources is imperative to restoring clean, clear skies to the park.

## Controllable Sources of Haze at Theodore Roosevelt

The primary human-made causes of haze are sulfates and nitrates, formed in the atmosphere from emissions of sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>). Pollutants impacting Theodore Roosevelt originate from a variety of places, with the highest state contributions from North Dakota and Montana.

SO<sub>2</sub> impacting Theodore Roosevelt is primarily released from large industrial sources like coal-fired power plants. NO<sub>x</sub> is predominately from industrial sources and vehicles, with contributions from smaller but more widespread area sources like oil and gas development.

## Getting to Clear Skies?

Theodore Roosevelt is one of the few protected places where visibility has not gotten better in the last decade.<sup>2</sup>



Badlands at Theodore Roosevelt. NPS.

## What is the Status of the Haze Cleanup Plan for Theodore Roosevelt?

The Environmental Protection Agency approved the majority of North Dakota's plan, but found parts of the state's plan lacking. Unfortunately, the Agency's minimal replacement plan still does not require appropriate emission controls for haze-causing NO<sub>x</sub> from several power plants, including M.R. Young and Leland Olds, or from increasing oil and gas development. NPCA has challenged the Agency's decision.

**9,071**

Active oil wells in North Dakota. 25% are in the same two counties as Theodore Roosevelt, with more than 75% nearby.<sup>3</sup>

**640,000**

Visitors per year<sup>4</sup>

**\$30 million**

Visitor Spending, 2010<sup>5</sup>

**1978**

First afforded federal protection in 1935, Theodore Roosevelt was officially established as a National Park in 1978.

Sources: 1. Visibility and haze source information derived from North Dakota's February 2010 and other regional haze submissions to EPA (see <http://www.ndhealth.gov/AQ/RegionalHaze/>), along with EPA's proposed and final actions on North Dakota's plan (76 Fed. Reg. 58580, 77 Fed. Reg. 20894). 2. IMPROVE Monitoring Network. 3. North Dakota Department of Mineral Resources Monthly Oil and Gas Production Report, June 2013 4. NPS. 5. Headwaters Economics.