# Badlands

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

**2265**

## 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: 46 miles

**View Without Pollution: 109 miles**

## Badlands Visibility

South Dakota estimates that it will take until 2265 to reach natural visibility at Badlands at projected pollution cleanup rates.[1] When skies at the park are most polluted, visitors are unable to see 63 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.

## 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.


## Want Cleaner Air?

A few immediate opportunities stand out for reducing human-made haze pollution at Badlands.

Across the border in Nebraska, the Gerald Gentleman power plant is known to diminish visibility at Badlands. Cost effective, efficient pollution controls should be required, but EPA has exempted Gerald Gentleman from pollution controls, thereby failing to effectively limit its pollution.

Several power plants in Wyoming must also be cleaned up to restore clean, clear skies to Badlands. The Environmental Protection Agency has proposed modern pollution controls for these plants, but its plan has been challenged.

777 6th Street, NW, Suite 700 | Washington, DC 20001-3723 | P 202.223.6722 | F 202.872.0960 | npca.org

## Controllable Sources of Haze at Badlands

The primary human-made causes of haze are sulfates and nitrates, formed in the atmosphere from emissions of sulfur dioxide ($SO_2$) and nitrogen oxides (NOx).

Originating mostly from neighboring midwestern and western states, $SO_2$ impacting Badlands is primarily released from stationary sources like coal-fired power plants. NOx is emitted from a mix of sources, including vehicles and industrial sources like power plants, with the highest state contributions from Wyoming and South Dakota.

## Getting to Clear Skies?

Badlands' visibility has improved somewhat in the last decade. While all progress is important to acknowledge, at the current rate, visibility at Badlands will not be restored to natural conditions in this century. [2]

Layered haze at Badlands. IMPROVE Monitoring Network.

**$24 million**
Visitor Spending, 2010[3]

**880,000**
Visitors per year[4]

**1978**
Established as a national monument in 1939, Badlands became a National Park in 1978.

**43,700**
Direct South Dakota jobs generated by outdoor recreation.[5]

**64,144**
Acres of the park (25%) set aside as the nation's largest prairie wilderness in 1976.[4]

## What is the Status of the Haze Cleanup Plan for Badlands?

The Environmental Protection Agency approved South Dakota's haze cleanup plan, but many emissions of concern come from out of state. The Agency has also approved Nebraska's haze plan, which unfortunately allows the Gerald Gentleman power plant to continue to pollute Badlands for the foreseeable future. NPCA has challenged this decision in court.

The Agency has proposed, but not yet finalized, a plan requiring modern pollution controls on several power plants in Wyoming. NPCA supports significant emission reductions from these and other Wyoming coal plants.

Sources: 1. Visibility and haze source information derived from South Dakota's August 2011 and other regional haze submissions to EPA (see http://denr.sd.gov/des/aq/aqnews/RegionalHaze.aspx), along with EPA's proposed and final actions on South Dakota's plan (76 Fed. Reg. 76664, 77 Fed. Reg. 24845), Nebraska's plan (77 Fed. Reg. 12770, 77 Fed. Reg. 40149), and Wyoming's plan (77 Fed. Reg. 33022, 78 Fed. Reg. 34737). 2. IMPROVE Monitoring Network. 3. Headwaters Economics. 4. NPS. 5. Outdoor Industry Association, 2013.

777 6th Street, NW, Suite 700 | Washington, DC 20001-3723 | P 202.223.6722 | F 202.872.0960 | npca.org