



Joshua Tree

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

2106

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: 45 miles

View Without Pollution: 118 miles

Joshua Tree Visibility

California estimates that it will take until 2106 to reach natural visibility at Joshua Tree at projected pollution cleanup rates.¹ When skies at the park are most polluted, visitors are unable to see 74 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 at Joshua Tree, known for having some of the worst air pollution problems of our national parks. California's geography and wind patterns mean that pollution from nearby development and urban areas like Los Angeles has disproportionately high impacts, and must be reduced for Joshua Tree's air to clear.

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.

In particular, vehicle emissions have a major impact on Joshua Tree's air quality. Stronger emissions controls for passenger cars and trucks, known as Tier 3 standards, have been proposed nationally. Finalizing these standards – or stronger ones – is imperative to restoring clean, clear skies at Joshua Tree.

Controllable Sources of Haze at Joshua Tree

The primary human-made cause of haze at Joshua Tree is nitrates, formed in the atmosphere from emissions of nitrogen oxides (NOx). Originating almost entirely from within California, NOx emissions are primarily released from vehicles, with contributions from industrial sources and more widespread sources like agriculture.

Sulfates, formed from sulfur dioxide (SO₂), also add to haze at Joshua Tree. SO₂ comes from a variety of places, with the highest state contributions from California, and from a mix of sources.

Getting to Clear Skies?

Joshua Tree's visibility has improved in the last decade. While all improvements are important to acknowledge, significant improvement is needed to reach natural conditions.²

\$39 million

Visitor Spending, 2010³

1,396,000

Visitors per year⁴

152

Days above the national ozone standard at three locations in the park, 2011-July 2013.⁴

732,100

Direct California jobs generated by outdoor recreation.⁵

1994

First afforded federal protection in 1936, Joshua Tree was established as a National Park in 1994.

What is the Status of the Haze Cleanup Plan for Joshua Tree?

The Environmental Protection Agency approved California's haze cleanup plan in May 2011. California's progress report is due to the Agency in March 2014. NPCA supports inclusion of additional emissions reductions to protect Joshua Tree.

Poor visibility at Joshua Tree. NPS.

Sources: 1. Visibility and haze source information derived from California's January 2009 and other regional haze submissions to EPA (see <http://www.arb.ca.gov/planning/reghaze/reghaze.htm>), along with EPA's proposed and final actions on California's plan (76 Fed. Reg. 13951, 76 Fed. Reg. 34608). 2. IMPROVE Monitoring Network. 3. Headwaters Economics. 4. NPS. 5. Outdoor Industry Association, 2013.