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OPINION

## Opinion: California has the most polluted national parks in the country. That's unacceptable



The Rim fire burns near Yosemite National Park in 2013. Wildfires have helped increase ground-level ozone and particulate pollution, or smog, in the national parks of California. (U.S. Forest Service)

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Yosemite and most of the other national parks in California suffer from a malaise that would have sickened legendary conservationist John Muir, who reveled in Yosemite's awe-inspiring views, among many other pleasures. ["Another glorious day,"](#) he wrote in 1911, "the air as delicious to the lungs as nectar to the tongue."

More than a century later, California has nine national parks — the most of any state — spread across 6 million acres. From the foggy redwoods in the north

to the desert Joshua trees in the south, these parks have long stood apart: Their air pollution levels are the worst in the national park system.

Almost all of the national parks in the U.S. have “significant” air pollution issues that include unhealthful air, hazy skies, harm to nature and effects of climate change (such as drought, reduced snowpack and an increase in wildfires), according to a [2019 report](#) from the National Parks Conservation Assn. But most of the California national parks, whether forested or arid, have to deal with all four issues.

California may have the most polluted national parks, but its environmental leadership may make it the best-equipped state to deal with the issue, since it has historically supported stringent air-quality standards. The Environmental Protection Agency’s regional haze rule requires states to improve visibility and air quality in parks by 2064. This improvement can only be realized by reducing emissions of harmful pollutants, particularly as the Earth continues to warm.

Yet smog, including ground-level ozone and particulate pollution, remains an insidious bane.

Ground-level ozone, unlike ozone found naturally in the stratosphere, is an invisible secondary pollutant that results from reactions among chemicals emitted by vehicles and power plants and present in paints and gasoline. These reactions are accelerated by heat, so smog levels routinely build up during summer afternoons. Wildfires also increase smog. Smog causes health problems that include coughing, throat and chest irritation, and it can aggravate existing respiratory conditions.

Smog drifts into California’s national parks from the L.A. Basin and the San Joaquin Valley. The parks’ air quality is exacerbated because L.A. is one of the most polluted places in the nation. Sequoia, Kings Canyon and Joshua Tree national parks have [long topped the list](#) for the most unhealthful air to breathe during more than two months of the year.

On a clear winter day in the desert at Joshua Tree National Park, visitors perched on Keys View on the crest of the Little San Bernardino Mountains can see as far as the Mexican border 100 miles away. But on many summer and fall days they can barely spot mountains 50 miles away.

According to Sequoia and Kings Canyon national parks, increased ground-level ozone has already caused [“widespread and severe injury to Ponderosa and Jeffrey pines,”](#) particularly in the western edges of these parks, where the normally green pine needles have begun yellowing. Research has also shown that high ground levels of ozone injure giant sequoia seedlings.

Biologists say they believe Joshua Tree and three other California national parks have exceeded their “critical load” — the amount of pollution above which harmful changes in sensitive ecosystems occur. For instance, desert plants that adapted in formerly low-nitrogen soils must now compete with invasive grasses and other nonnative plant species that thrive in nitrogen-enriched soil created by raised ozone levels. In turn, the loss of plant life can be devastating to birds and grazing mammals, which rely upon plants for food, nests and shelter.

While the challenge of fighting air pollution remains significant, strides have been made over the last several decades. Since the Clean Air Act was implemented in 1970, ground-ozone levels have dropped 18% nationwide. As air quality in cities and industrial areas improved, the air also began to clear in the parks. In 1977 and 1990, amendments to the act required further reduction in air pollution, which led to cleaner air and clearer vistas in the parks.

However, the Trump administration is rolling back national auto emissions standards and disassembling the EPA. The administration eliminated the Clean Power Plan that set limits on pollution from power plants and replaced it with an industry-friendly Affordable Clean Energy rule. And under Trump, the U.S. plans to withdraw from the Paris Agreement, a global pact among nations that would reduce emissions of harmful pollutants.

Part of the mission of the National Park Service is to conserve scenery and all park resources [“unimpaired for the enjoyment of future generations.”](#) Public access to parks brimming with natural wonders is a noble democratic ideal. According to a recent UC Berkeley study, national parks are more fragile and susceptible to climate change, warming at [“twice the rate as the rest of the nation.”](#)

Regardless of the political winds, as a society we need to urge Congress to help protect our national parks. We need to hold ourselves accountable for the healthfulness of the air we breathe. Through its implementation of the regional haze rule and stricter emissions standards, California is trying to hold itself accountable — and could end up as a model for ensuring air quality in national parks across the country.