



March 22, 2016

The Honorable Jim Bridenstine
Chairman
House Committee on Science, Space, and Technology
Subcommittee on Environment
2321 Rayburn House Office Building
Washington, DC 20515

The Honorable Suzanne Bonamici
Ranking Member
Subcommittee on Environment
2321 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Bridenstine and Ranking Member Bonamici

Since 1919, the National Parks Conservation Association (NPCA) has been the leading voice of the American people in protecting and enhancing our National Park System. NPCA advocates for protection of the natural environment, including air quality, in and around national parks. On behalf of our more than one million members and supporters nationwide, NPCA submits this letter to the committee in regards to the March 23, 2016 hearing titled, “Examining EPA’s Regional Haze Program: Regulations Without Visible Benefits.”

For 100 years, the United States has honored a legal and moral obligation to protect America’s National Parks striving to leave them unimpaired for future generations. In what has been lauded as “America’s best idea,” Congress first set aside national parks and wilderness areas in the nineteenth century to preserve some of the nation’s most spectacular scenery and wildlife habitat.¹ Today, many of these iconic areas are marred by air pollution. Much of the air pollution in national parks stems from sources including power plants, agriculture, vehicles, and the oil and gas industry. These and other sources emit pollutants including sulfur dioxide, nitrogen oxides and particulate matter, which react in the atmosphere to form “haze” pollution that can extend many miles downwind of the source.

I. Addressing Impaired National Park and Wilderness Air Quality through the Clean Air Act Visibility Protection Mandate

¹ John Copeland Nagle, *The Scenic Protections of the Clean Air Act*, 88 N.D. L. Rev. 571, 576 (2011).

Nearly four decades ago, a bipartisan group of lawmakers recognized the impact air pollution was having on iconic national parks, wilderness areas, and the local economies that depend upon them. “Certain areas of the United States are dependent upon their intrinsic beauty and historical and archeological treasures as a means of promoting their economic viability.” H.R. Rep. No. 95-294, at 203-07 (1977).

Air pollution is among the most significant threats to public lands, disrupting ecosystems and scenic views alike. To reduce the harm from air pollution at Class I areas – 156 of the country’s largest and most iconic national parks and wilderness areas – Congress set a national goal of restoring natural air quality to these places by preventing all visibility impairment caused by human activities. As a result, regulations developed by the U.S. Environmental Protection Agency (EPA) aim to achieve the objective, originally set in 1977, by 2064.

To achieve Congress’s national goal, Section 169 of the Clean Air Act requires each state to develop an implementation plan to reduce, and ultimately eliminate, air pollution from sources within its borders that causes or contributes to visibility impairment in any Class I area. While the Congress of 1977 instructed EPA to develop visibility improving regulations, it was more than 20 years until such regulations were finally adopted, and a decade more before EPA began to implement them in earnest. Fortunately, over the past five years, states and EPA have advanced some important pollutant reduction plans benefiting the air quality at public lands.

Over the years, implementation of various Clean Air Act programs, including the National Ambient Air Quality Standards, the Transport Rule and the Regional Haze Rule, has resulted in important air quality improvements. Continued enforcement of these plans will result in cleaner air at Class I areas and the many communities that share their air. Yet, not a single Class I designated area has achieved the statutorily mandated natural air quality goal. Today, on average, a national park visitor misses out on 50 miles of scenery due to haze pollution, a distance equivalent to the length of Rhode Island.

Where emission reductions have been required, park visitors experience a visible difference in scenic views, but the job is not done. For instance, at Great Smoky Mountains National Park, in the 1990s the average visibility at the park was 25 miles. In the last decade, reduced pollution in the surrounding area—most notably from closing or retrofitting Tennessee Valley Authority power plants—improved air quality considerably. As a result, visitors can now see 46 miles away on average. While this is a significant change, it is still less than half of natural visibility conditions. Without pollution, vistas would stretch out for roughly 112 miles through the rolling southern Appalachian Mountains. This reality demonstrates the persistence of the problem and need for measures to continue to achieve reasonable progress towards the national natural visibility objective.

II. Visibility and Public Health Benefits of Reduced Park Pollution

Gains through implementation of the Regional Haze Rule extend from benefits to Class I area visitors to tourism based local economies to public health. Emission reductions required through state regional haze plans will produce critical visibility results as they are implemented. For example, the combination of control requirements and unit shutdowns at Four Corners power plant will result in vast visibility improvements at Mesa Verde National Park and at least seventeen other national parks and wildernesses in the region. Controls on Hayden Unit 1 in Colorado will result in clearer skies at Rocky Mountain National Park and other parks in the southwest. The installation of scrubbers at Sooner Units 1 and 2 in Oklahoma will improve visibility at Class I areas including Wichita Mountains. These are but few of the examples that

demonstrate the successful impact the Regional Haze Rule is or will have on Class I areas across the country.

The same pollutants that contribute to visibility impairment also harm public health. Nitrogen oxides are precursors to ground level ozone, which is associated with respiratory diseases, asthma attacks, and decreased lung function. Similarly, sulfur dioxide increases asthma symptoms, and can form particulates that aggravate respiratory and heart diseases and cause premature death. Both nitrogen oxides and sulfur dioxide react with ammonia, moisture, and other compounds to form fine particulate matter that can cause and worsen respiratory diseases, aggravate heart disease, and lead to premature death. Particulate matter can penetrate deep into the lungs and cause a host of health problems, such as aggravated asthma, chronic bronchitis, and heart attacks.

In 2005, EPA found that under its medium emission reduction scenario, the Regional Haze Rule would result in approximately \$240 million in improved visibility benefits each year. EPA also projected that in 2015, the Regional Haze Rule will provide nationwide health benefits valued at \$8.4 – \$9.8 billion annually—preventing 1,600 premature deaths, 2,200 non-fatal heart attacks, 960 hospital admissions, and over 1 million lost school and work days every year.

More recent analysis shows that the benefits EPA projected in 2005 were underestimated. For example, in a health study of the recently finalized Texas/Oklahoma regional haze plan alone, Dr. George Thurston, Professor of Environmental Medicine at the New York University School of Medicine and expert on the evaluation of the human health effects of air pollution, estimates that EPA's required sulfur dioxide pollution reductions for the 15 coal-fired power plants in Texas will save at least 316 lives *each year*, and prevent thousands of asthma-related or cardiovascular events and hospitalizations every year. This study conservatively estimates that the total public health-based economic benefits associated with these reductions will be at least \$3 billion each year. These are *annual* benefits, meaning that “ten years from the compliance date, the health benefits and valuations of the [] controls will be roughly ten times” that estimate, before adjustment for a discount rate, as appropriate.”

III. The Economic Importance of National Parks and Value of Clean, Clear Air

In 2014, the National Park Service reported a record 293 million National Park visitors. Those visitors spent \$15.7 billion in gateway communities around each park, generating \$29.7 billion benefit to the U.S. economy and supporting 277,000 jobs nationwide. In turn, this tourism sustains over 22,000 national park employees.

In a 2012 a Hart Research Associates and North Star Opinion Research poll found that 95 percent of voters want the federal government to ensure national parks are protected for the future. Parks marred by haze pollution lack such protection. The National Park Service research referenced below shows that parks obscured by haze pollution will not draw the same numbers of visitor stays.

A 1983 National Park Service study demonstrated that visitors are able to perceive different degrees of visibility. In the same report, visitors to Grand Canyon and Mesa Verde national parks who said the park was hazy also reported enjoying the park less. “Clean, clear air” is consistently one of the top four features visitors at every park mention as a reason for their trip. Any amount of visible pollution undermines the experience.

Many Americans say they would be willing to pay more for clean air. Maryland-based non-partisan Abt Associates, Inc. (“Abt”) quantified just how much in their 2000 report, “Out of Sight: The Science and Economics of Visibility Impairment.” Using a contingent valuation study, which measures how much visitors say they would pay for something, Abt researchers found many Americans would pay “substantial sums for improved visibility” at the national parks.

That commitment extends beyond nearby parks. The National Parks Visibility Values Study in 1990 found that park visitors want to protect park air, even if they do not live anywhere near the park in question. California respondents to one poll said they would pay on average \$73.93 more a year in park entrance fees for specific pollution controls at parks in their region. Those surveyed stated that they would pay another \$50.56 on average for improved air quality at parks outside their region.

At the same time, park gateway communities would benefit financially from improved park air quality. If visibility improvements increased a single park’s visitation by 25 percent, Abt researchers said, the annual benefit to a park and its local community ranged from \$13 million and 390 new jobs at Indiana Dunes National Lakeshore to \$320 million and 4,188 new jobs at Great Smoky Mountains. In the spirit of the centennial anniversary of the National Park Service, we hope that today’s members of Congress will work in unison to advance the important national park air quality

objectives, much as they did in 1977. National Park. Park concessionaires nationwide also would benefit, with a \$160 million sales boost nationwide.

Many park visitors, however, say they will change their travel plans if the park they plan to visit is hazy. The 1983 National Park Service survey found that if visibility at a vista in either Grand Canyon or Mesa Verde National park diminished from “average” to “poor,” 61 percent of visitors said they would spend less time at the viewpoint and 80 percent said they would spend less time overall in the park. Most said they would cut their trip by 13 hours—the average park visit is 14 hours.

Most recently, a comprehensive 2013 NPS report, “National Park Service Visitor Values & Perceptions of Clean Air, Scenic Views & Dark Night Skies” looked across 64 studied surveys conducted between 1988-2011 in 49 National Park System units regarding the importance of 19 national park resources ranging from native plants to dark skies and cultural sites to clean air. The surveys collected responses from a total of 30,319 individuals and found that 88 percent of park visitors found clean air to be extremely important or very important, ranking clean air as one of the five most important attributes meriting protection.

In a separate study focusing on the connection between visibility and visitors at Great Smoky Mountains National Park, Poudyal et al. in “Estimating the impact of impaired visibility on the demand for visits to national parks” finds that just a 5 percent increase in visibility range (2.75 km) would result in an approximate increase of half a million annual visits. An improvement of 15 percent could result in approximately one and half million increased visitors.

IV. Conclusion

There is no question, Americans value their national parks and recognize how important clean air is to visitors and National Park Service employees’ health as well as wildlife, water and plant resources. Steady reduction in haze-causing pollution is precisely what is required under the

Regional Haze Rule to safeguard our iconic landscapes, support local communities, and protect the health of all.

In the spirit of the centennial anniversary of the National Park Service, we hope that today's members of Congress will work in unison to advance the important national park air quality objectives, much as they did in 1977. Our national parks and wildernesses, and the millions of people that value them deserve a clean air future.

Thank you for your consideration of these comments. Please contact me at skodish@npca.org or 865.329.2424 if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'SKODISH', with a stylized, cursive flourish at the end.

Stephanie Kodish
Senior Director and Counsel, Clean Air Program
National Parks Conservation Association