

Photo of Glen Canyon National Recreation Area courtesy of Michael Melford/National Geographic

# Dark Horizons

**10 National Parks Most Threatened by New Coal-Fired Power Plants**



**National Parks Conservation Association®**  
*Protecting Our National Parks for Future Generations®*

## Dark Horizons: Introduction

Already, one in three national park sites has air pollution levels that exceed health standards set by the U.S. Environmental Protection Agency (EPA). Most of the air pollution now marring the parks' scenic views, harming plants, and risking the health of wildlife and visitors, results from the burning of fossil fuels, especially by coal-fired power plants. Worse yet, more than 100 new coal-fired power plants are in various stages of planning and development across the country, putting national parks at risk.

Alarming, the Administration is responding to this growing threat to our national parks by seeking to weaken and rewrite the very laws that protect national park air quality. Over the objections of its own scientists, and those at the National Park Service, the EPA has proposed regulatory changes that will make it easier to build new, polluting coal-fired power plants near national parks.

Americans expect and deserve clean air when they visit our national parks. Instead of weakening clean air protections for national parks such as Shenandoah, Great Basin, and Zion, the Administration should be working to ensure that America's national treasures are preserved for our children and grandchildren.

This report highlights the 10 national parks most at risk from air pollution from new coal-fired power plants, and calls for immediate and appropriate action to protect and preserve our national parks.

### **10 national parks most threatened by new coal-fired power plants, in alphabetical order:**

- Badlands (South Dakota)
- Capitol Reef (Utah)
- Great Basin (Nevada)
- Great Smoky Mountains (Tennessee and North Carolina)
- Mammoth Cave (Kentucky)
- Mesa Verde (Colorado)
- Shenandoah (Virginia)
- Theodore Roosevelt (North Dakota)
- Wind Cave (South Dakota)
- Zion (Utah)

## Fast Facts

- Of the 391 national park sites in the U.S. National Park System, **1 in 3** already suffers from the harmful effects of air pollution
- Nationwide, **more than 100** new coal-fired power plants are in various stages of planning and development
- **28** new coal-fired power plants are proposed for development within the air sheds of the ten national parks highlighted in this report

## **Dark Horizons: Executive Summary**

National parks and historical sites provide Americans with some of the most memorable summer vacations anywhere – hiking high mountain trails, paddling down clear rivers, driving or biking scenic parkways. Unfortunately, the vacation season can also bring an unwelcome visitor to our national parks that spoils healthy outdoor fun – air pollution.

As detailed in this report, generations of families may suffer air pollution in our national parks if the Bush Administration succeeds in its plan to weaken park air protection laws. The Administration's plan would make it easier for coal-fired power plants and other big polluters to circumvent laws intended to keep the air in our national parks clean.

If we fail to stop this plan, our children and grandchildren will inherit national parks with sick and dying trees, parks with fish so laden with mercury that they are unsafe to eat, and parks where visitors cannot hike without risking an asthma attack. It's not too late to leave a cleaner and brighter national park legacy to tomorrow's families.

### **National parks already polluted**

One in three of our national parks and historic sites have air pollution levels that exceed health standards set by the U.S. Environmental Protection Agency (EPA). Pollution levels usually spike in the summer months, just when our families seek out the parks.

Dirty air in a national park can be merely inconvenient, such as when visitors can't see more than a few miles due to sooty air. Or it can be dangerous and frightening, such as when a child has an asthma attack because of excessive levels of ozone pollution. Over the long term, air pollution can even damage and kill wildlife in the parks.

Most of the air pollution affecting the national parks results from the burning of fossil fuels, especially by coal-fired power plants. They account for an enormous amount of pollution that causes breathing problems, acid rain-damaged forests, smoggy skies, poisoned streams, and global warming. Some of the most remote national parks like Great Basin in Nevada have largely been spared dirty air until now. But as development and energy needs grow, they too are now vulnerable.

### **New power plants pose threat to national parks**

Currently throughout the country, more than 100 new coal-fired power plants are in various stages of planning and development. In many cases, state and federal regulators are not requiring that these plants use the best pollution control technologies available today that could protect parks, wildlife, and other natural treasures from the most serious harm.

The Clean Air Act is supposed to prevent major polluters like coal plants from degrading park air quality. Under the Act, EPA and the National Park Service are empowered to prevent states from permitting new plants that would exceed park air pollution limits, cause unsightly haze, or harm park wildlife. Air quality experts from these agencies have raised the alarm about numerous coal plants that would degrade our national parks.

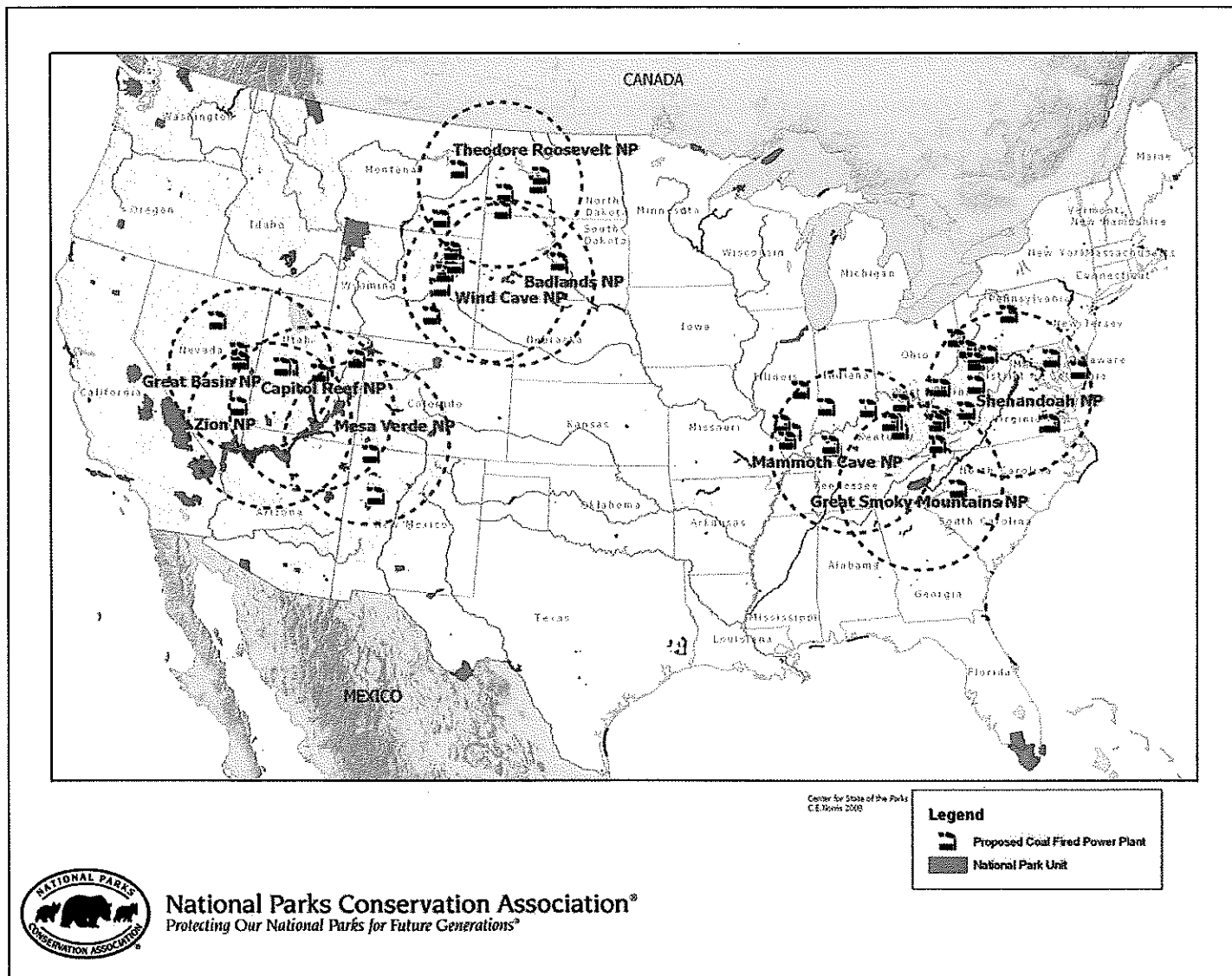
## Plan to weaken park air laws

Alarmingly, the Administration is responding to this growing threat to park air quality by seeking to undermine the very laws that protect park air quality. The EPA has proposed regulatory changes that will make it easier to build new coal-fired power plants close to the national parks. The National Park Service has said that one of the changes sought by EPA "provides the lowest possible degree of protection" of air pollution limits designed to protect park air quality.

The Administration is now finalizing these changes in spite of the unanimous opposition of EPA's own regional offices, strong objections by the National Park Service, and an active Congressional investigation. For more information about these regulatory changes, see NPCA's fact sheet at [www.npca.org/darkhorizons](http://www.npca.org/darkhorizons)

## Ten national parks most at risk from new coal-fired power plants

As this year's park vacation season gets underway, NPCA has highlighted ten national parks most threatened by pollution from proposed coal-fired power plants: Badlands (SD), Capitol Reef (Utah), Great Basin (NV), Great Smoky Mountains (Tenn., NC), Mammoth Cave (Ky.), Mesa Verde (Colo.), Shenandoah (Va.), Theodore Roosevelt (ND), Wind Cave (SD), and Zion (Utah).



Twenty-eight coal-fired power plants are proposed within the air sheds of these ten national parks. For the purpose of this report, the air shed is defined as a radius of 300 kilometers (186 miles) around each park. The National Park Service generally reviews all major new emissions sources within a 300-kilometer radius of a protected national park. All of the proposed coal-fired power plants documented in this report have undergone some level of review by the National Park Service, and all have been found to have some degree of adverse impact on national park air quality.

Each and every year, for at least 50 years, these 28 new coal-fired power plants would emit a combined total of 122 million tons of carbon dioxide, 79 thousand tons of sulfur dioxide, 52 thousand tons of nitrogen oxides, and 4 thousand pounds of toxic mercury into the air sheds of these ten national parks. These new coal-fired power plants will make the skies over our national parks hazy, will add dangerous chemicals to their soils and waters, and will make the air unhealthy for today's visitors, as well as for their children and grandchildren.

Americans should see these ten national parks now. If the Administration succeeds in weakening the parks' clean air laws, these parks could have hazier skies and unhealthy air in coming summers.

### **Bush Administration is risking its national park legacy**

The Bush Administration has staked a significant part of its environmental legacy on its stewardship of our national parks. The Administration has steadfastly supported increased funding for the parks, and has proposed an ambitious National Park Centennial Initiative that would bring major new financial support to the National Park System by its 100th anniversary in 2016. NPCA applauds the Administration for these efforts on behalf of our national parks.

But even the best-funded national parks will not be the showplaces the Administration hopes to create if they suffer from unsightly haze, acid rain-damaged forests, unhealthy air, and mercury-poisoned streams. If the Administration hopes to secure a meaningful legacy for the parks, it must also help them achieve clear skies, healthy air, and thriving wildlife.

By seeking to weaken park air protection laws in its final year in office, the Administration risks obliterating its national parks legacy altogether. It's not too late for the Administration to stop this ill-conceived change to park air quality laws so that our children and grandchildren can enjoy national parks that are both well funded and on the path toward cleaner, healthier air.

## **Dark Horizons: Key Recommendations**

### **For the current Administration: Enforce national park clean air laws, don't weaken them**

The federal Clean Air Act prohibits major new pollution sources like power plants from harming national park air quality. The National Park Service is required by law to object when state agencies seek to permit power plants or other facilities that would damage parks. National Park Service air quality officials are doing their job, but state officials all too often ignore National Park Service findings and approve bad permits. The Administration has allowed the states to flaunt National Park Service authority. The Administration must enforce park air quality protection laws.

Unfortunately, the Administration is not simply refusing to enforce park air quality protections – it is also trying to weaken them. A proposed EPA rule would allow industries seeking to locate near protected national parks to circumvent pollution limits established by Congress to restore and maintain clean air. The proposed rule would change the way new air pollution is calculated, allowing for greater manipulation by industries seeking pollution permits, and would ultimately undermine strict pollution limits that are intended to keep park air from getting dirtier. Every EPA Regional Office in the country, as well as the National Park Service, has objected to this rulemaking, but the Administration shows no signs of backing away from weakening the law. For more information, see NPCA's technical information fact sheet, [www.npca.org/darkhorizons](http://www.npca.org/darkhorizons).

*OUTCOME: If the Administration enforced park clean air laws rather than trying to weaken them, all of the power plants featured in this report would either (a) be made to use more effective pollution control technology or use cleaner fuels, (b) be located further from the parks, or (c) not be built.*

### **For the next Administration: Clean up older coal-fired power plants**

Throughout the country hundreds of ancient coal-fired power plants operate without modern pollution control technology. Some are more than 50 years old and would not be unfamiliar to Thomas Edison, who built the first coal-fired electric power plant in 1882. Many of these plants inflict severe pollution damage on the national parks (for more information, see NPCA's 2006 report on air pollution in the parks *Turning Point*, [www.npca.org/turningpoint](http://www.npca.org/turningpoint)). The federal Clean Air Act requires that these outdated plants install the best available retrofit technology or "BART" to reduce emissions to levels that protect the national parks from harm. Unfortunately, Bush Administration regulations issued in 2006 exempt hundreds of outdated power plants from upgrading their pollution controls.

The next Administration must require upgraded emissions control systems on every outdated power plant. The good news is that new laws are not needed. The next Administration can simply improve the flawed regulations issued by the Bush Administration to ensure that these ancient polluters reduce their harmful emissions as Congress intended.

*OUTCOME: Cleaning up all of the outdated coal-fired power plants that harm national parks would dramatically improve the clarity of park scenic vistas, significantly reduce acid rain damage to parks, eliminate large amounts of toxic mercury contaminating park fish and animals, and provide healthier air for individuals and families seeking recreation in our parks.*

### **For Congress: Reduce greenhouse gas emissions contributing to global warming**

Coal-fired power plants are the largest source of greenhouse gas emissions contributing to global warming. Global warming is causing severe and potentially irreversible damage to our national parks. Glaciers are rapidly disappearing from Glacier National Park, and Joshua trees may no longer exist in Joshua Tree

National Park. The story of America from its earliest days, told in the historic forts and settlements of the Atlantic and Gulf coasts, may soon be obliterated by sea level rise and more powerful storms. Wildfires and pest infestations are on the rise in the West, decimating huge swaths of forestland in our national parks. Climate conditions in Alaska are changing so fast that some species that live in our parks, such as polar bears, may have no time to adapt to global warming, and may be forever lost. For more information on climate change and our national parks, see NPCA's 2007 report *Unnatural Disaster*, [www.npca.org/globalwarming](http://www.npca.org/globalwarming).

Many state governments, private companies and individuals are acting now to reduce greenhouse gas emissions, and Congress needs to do the same. Congress made an important down payment on reducing global warming pollution in the 2007 energy bill, which raised auto fuel economy standards and provided new support for renewable energy. As the next step, Congress should put in place a comprehensive system to reduce greenhouse gas emissions to safe levels and to help businesses, communities and parks adjust to climate changes already underway.

NPCA supports the America's Climate Security Act, S.2191, sponsored in chief by Senators Joe Lieberman (I-CT) and John Warner (R-VA). The bill, which passed the Senate Environment and Public Works Committee in late 2007, recognizes that climate change is an ever-increasing threat to America's natural resources. It reduces global warming pollution and provides funding to help the fish, wildlife, and plants of America's national parks adapt to and survive the effects of global warming.

*OUTCOME: If Congress acts quickly to reduce U.S. greenhouse gas emissions to safe levels, and works with the Administration to ensure other nations follow suite, it may not be too late to avert the worst climate change impacts on our national parks. In addition, if Congress provides meaningful new funding to help fish and wildlife survive climate changes already underway, our national parks stand a better chance of retaining ecologically diverse and healthy ecosystems.*

### **For state governments: Replace coal with energy efficiency and renewable energy**

Throughout the country there are more than 100 proposed new coal-fired power plants under development. Many are within the air sheds of national parks. If all of these plants are built they will significantly increase air pollution and global warming, and cause irreversible damage to the national parks.

There are many alternatives to coal that can meet our growing energy demands without sacrificing our national parks, including solar, wind and geothermal energy. In many cases, new power plants are not needed at all. Enormous energy savings can be gained when states, electric utilities and electricity providers work with customers to use energy more efficiently. In addition, electricity-generation technologies available and in use today can allow coal to be used in ways that drastically reduce air pollutants and virtually eliminate greenhouse gas emissions. Before permitting any new coal plants, state regulators should examine these cleaner solutions to meeting their energy needs.

*OUTCOME: If state regulators chose the cleanest options for new electricity generation not only would the air be cleaner, but also they will help create new opportunities for economic growth centered around clean energy industries within their states.*

### **For individuals: Make smart energy choices**

Americans rely on coal-fired power plants for more than half of our electricity. These plants generate the majority of pollution linked to acid rain, hazy skies, mercury-laden streams, breathing problems and global warming. Fortunately, many electricity providers are now offering consumers alternatives to coal power, including wind, solar, and geothermal energy.

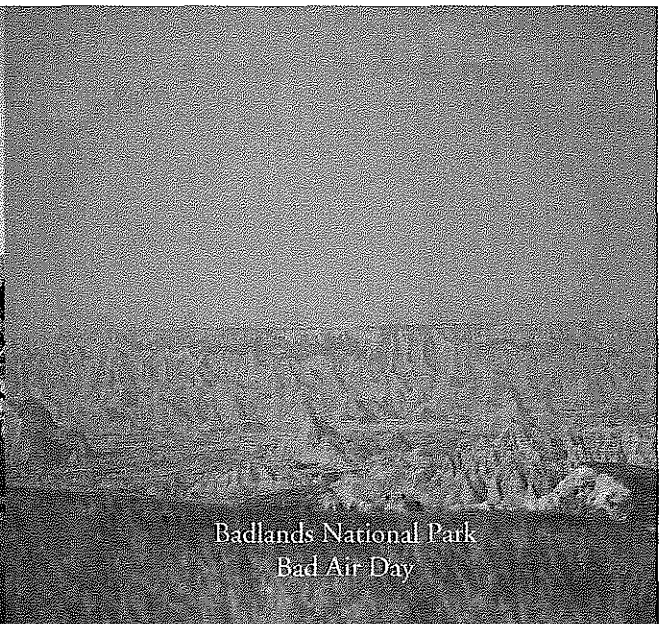
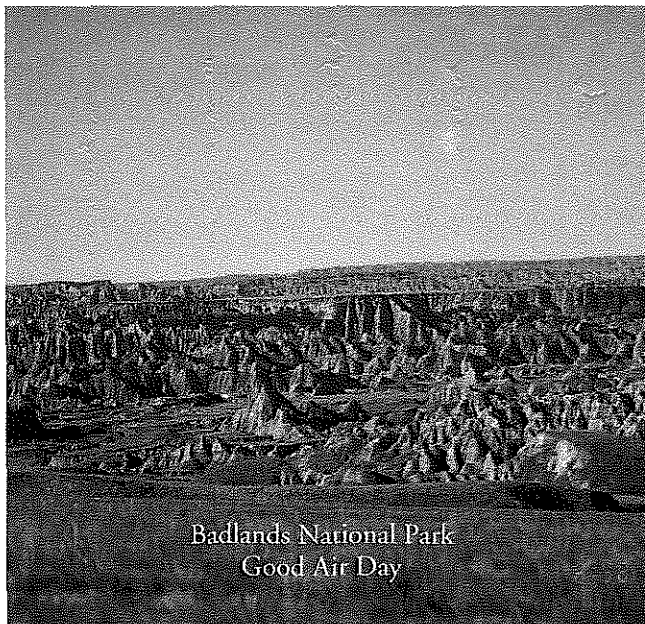
At home, we can use electricity and gas more efficiently to help reduce fossil fuel emissions. EPA's Energy Star® program offers numerous examples of ways to save money on utilities and cut pollution at the same time. Visit [www.energystar.gov](http://www.energystar.gov) to find out about high efficiency air conditioners, furnaces, and other home appliances.

If you are thinking of buying a new vehicle, EPA and the U.S. Department of Energy can help you choose one with low emissions and high gas mileage. Or, they can advise you how to operate your current vehicle more cleanly and efficiently. Check out their website at [www.fueleconomy.gov](http://www.fueleconomy.gov).

Within the national parks, you can help cut pollution by riding shuttles, where available, instead of driving. Each park offers information to help you plan your trip. An alphabetical listing of all national park web pages is available at [www.nps.gov/applications/parksearch/atoz.cfm](http://www.nps.gov/applications/parksearch/atoz.cfm).

*OUTCOME: If all Americans made a few small changes in our lives, such as replacing old light bulbs with energy efficient ones, improving the efficiency of our home heating and cooling systems, driving less and recycling more, we could dramatically cut the need for new power plants and thus reduce the air pollution and greenhouse gas emissions that now harm our national parks.*





Photos courtesy of Air Resource Specialists, Inc.

## Badlands National Park: Air Quality at Risk

### Park highlights

- Located in southwestern South Dakota, Badlands National Park consists of 244,000 acres of sharply eroded rocky buttes, pinnacles and spires, blended with the largest protected mixed grass prairie in the United States.
- Visitors can enjoy park trails with views of the White River Valley and unique Badlands rock formations.
- The park contains some of the world's richest fossil beds, dating 23 to 25 million years old.

### Current air quality

- Although visitors should normally see 151 miles, haze in Badlands National Park has reduced the average view to 78 miles, and to 48 miles during the days with the worst haze pollution.
- Ozone and particle pollution account for most haze observed in the park on poor visibility days. These same pollutants can also cause breathing problems, asthma attacks and heart damage.
- Field surveys and controlled studies by the National Park Service show that ozone pollution damages some types of vegetation in the park.

### New coal-fired power plants

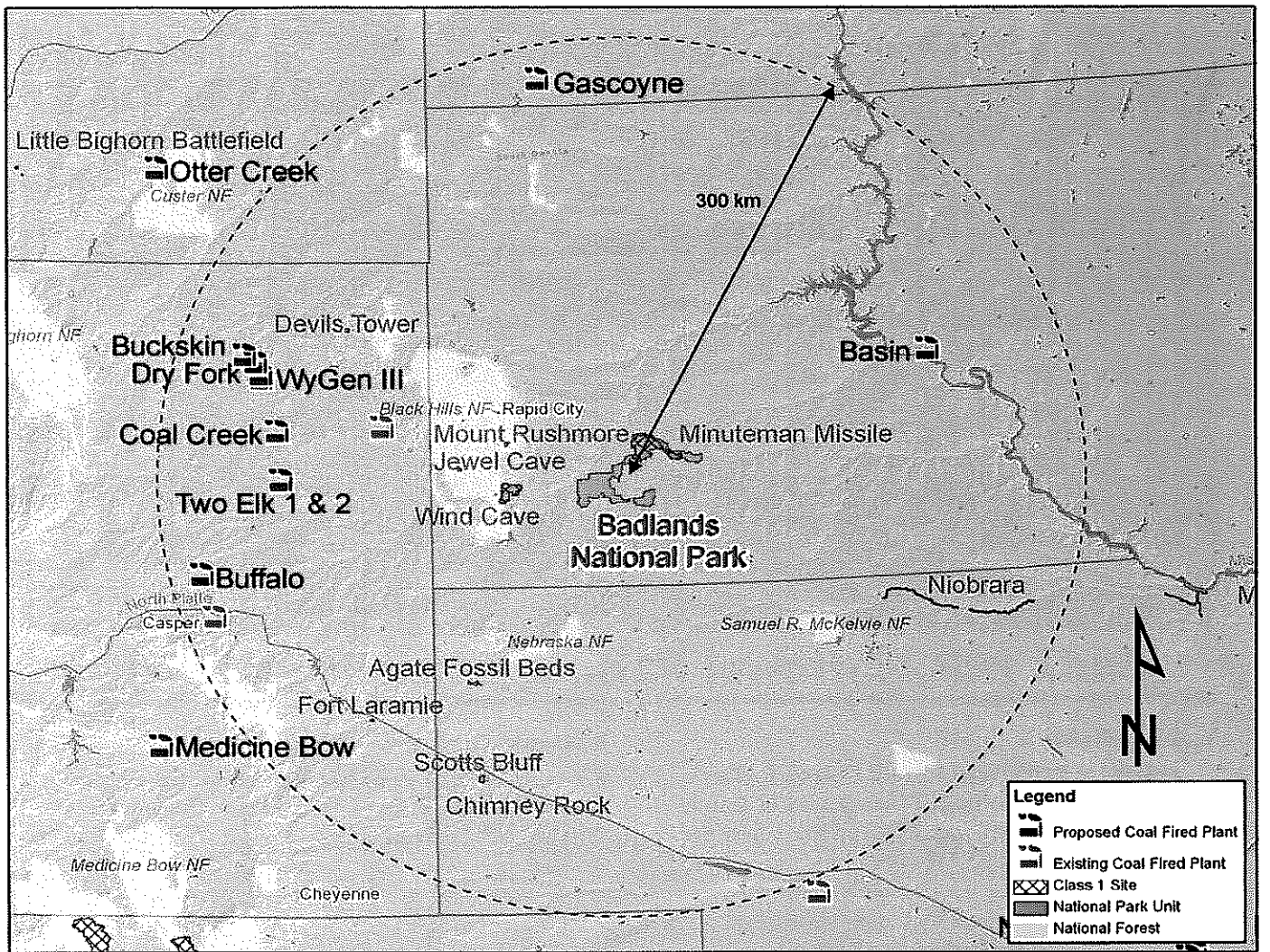
- Seven new coal-fired power plants are under active development within 186 miles (300 km) of Badlands National Park.
- Each year, these new plants would emit into the Badlands area air shed more than 17 million tons of carbon dioxide, 9,193 tons of sulfur dioxide, 7,843 tons of nitrogen oxides, and 1,501 pounds of toxic mercury. This new pollution will mean more hazy days, increased health risks to visitors, and more damage to park plants and animals.

### National Park Service findings

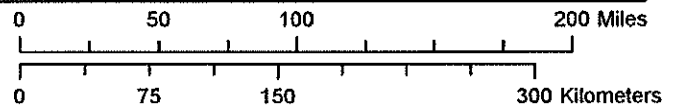
- "Technical analysis shows that lower emissions [from WYGEN2] could now be achieved by converting the project to a [cleaner type of coal technology], and/or by improving the efficiencies of the chosen emission control technologies."



National Parks Conservation Association®  
Protecting Our National Parks for Future Generations®



## Badlands: Proposed Coal Fired Power Plants



**Power plants that have received permits or are in active permit process**

Plant	Location	Owner	Size (MW)	Distance from park	CO2 tons/yr	SO2 tons/yr	NOx tons/yr	Hg lbs/yr	Permit Status
Dry Fork Station	Campbell County, WY	Basin Electric Power Cooperative	385	220 km	2,437,500	1,165	833	327	Final air permit issued October 2007
WYGEN 2	Campbell County, WY	Black Hills Corp.	100	213 km	2,510,178	569	399	141	Final air permit issued July 2005
WYGEN 3	Campbell County, WY	Black Hills Corp.	100	213 km	2,510,178	512	285	80	Final air permit issued February 2007
Two Elk Energy Park Unit 1	Campbell County, WY	North American Power Group	280	190 km	2,112,500	1,711	1,167	49	Final air permit re-issued May 2003
Two Elk Energy Park Unit 2	Campbell County, WY	North American Power Group	750	190 km	6,239,818	2,753	2,202	164	Application received September 2006
Gascoyne 500	Bowman County, ND	Westmoreland Power	500	260 km	3,250,000	1524	2286	660	Draft air permit issued May 2007
Evergreen Coal Creek	Campbell County, WY	<b>Evergreen Energy Inc</b>	NA	195 km	NA	959	671	80	Application received November 2006
<b>Total New Pollution into Badlands Area Airshed</b>					<b>17,695,356</b>	<b>9,193</b>	<b>7,843</b>	<b>1,501</b>	

For more information contact: Stephanie Kodish, 865.329.2424 ext. 28, [skodish@npca.org](mailto:skodish@npca.org)

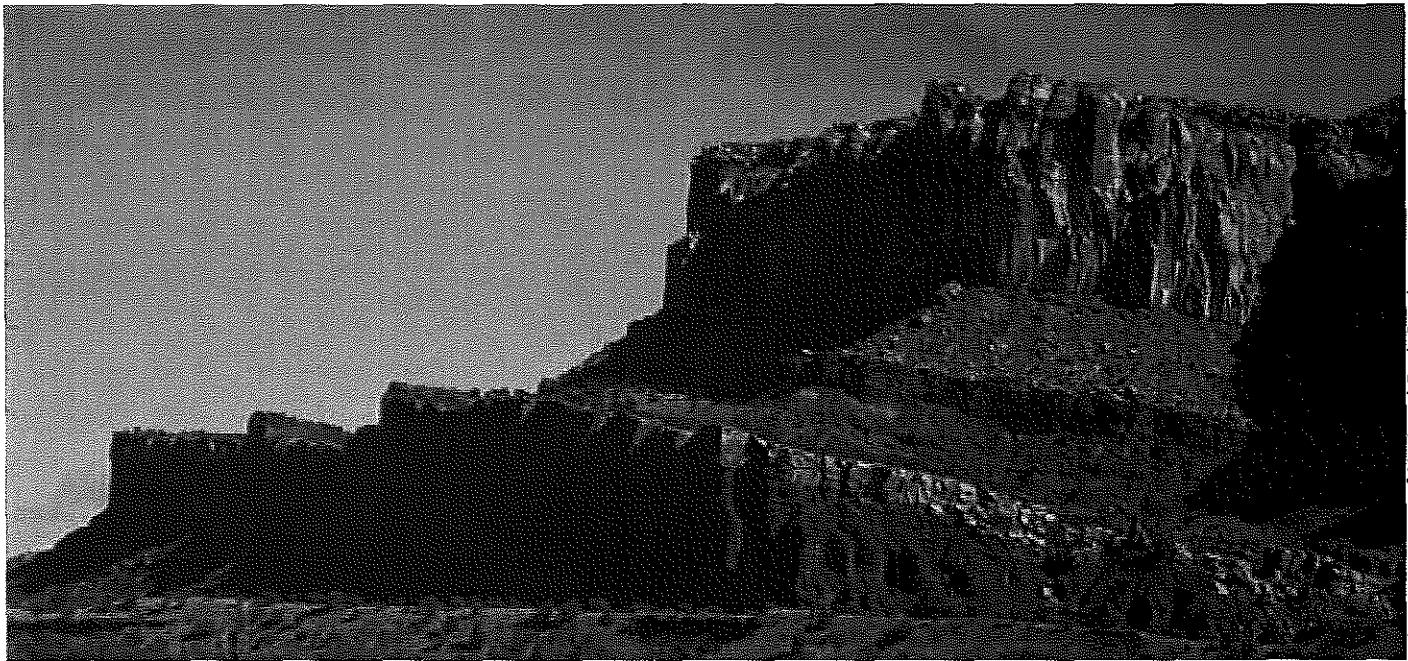


Photo courtesy of National Park Service

## Capitol Reef National Park: Air Quality at Risk

### Park highlights

- Located in Utah, Capitol Reef National Park was established to protect the grand and colorful geologic feature, the Waterpocket Fold, a nearly 100-mile long warp in the Earth's crust.
- The most scenic portion of the Fold, found near the Fremont River, is known as Capitol Reef: *capitol* for the white domes of Navajo sandstone that resemble building domes, and *reef* for the rocky cliffs which are a barrier to travel.
- The park's historic Fruita orchards are the largest within the National Park System, with 2,600 fruit and nut trees.

### Current air quality

- Large pollution sources near Capitol Reef National Park include power plants, refineries, and lime kilns in Arizona and Nevada. Pollutants also travel greater distances to the park from sources throughout the Southwest.
- Visibility in the park is often impaired by haze caused by these facilities.
- Nitrogen and sulfur pollution in the park are above natural conditions. These pollutants damage American Indian artifacts, threaten local plants and animals, and put visitors' health at risk.

### New coal-fired power plants

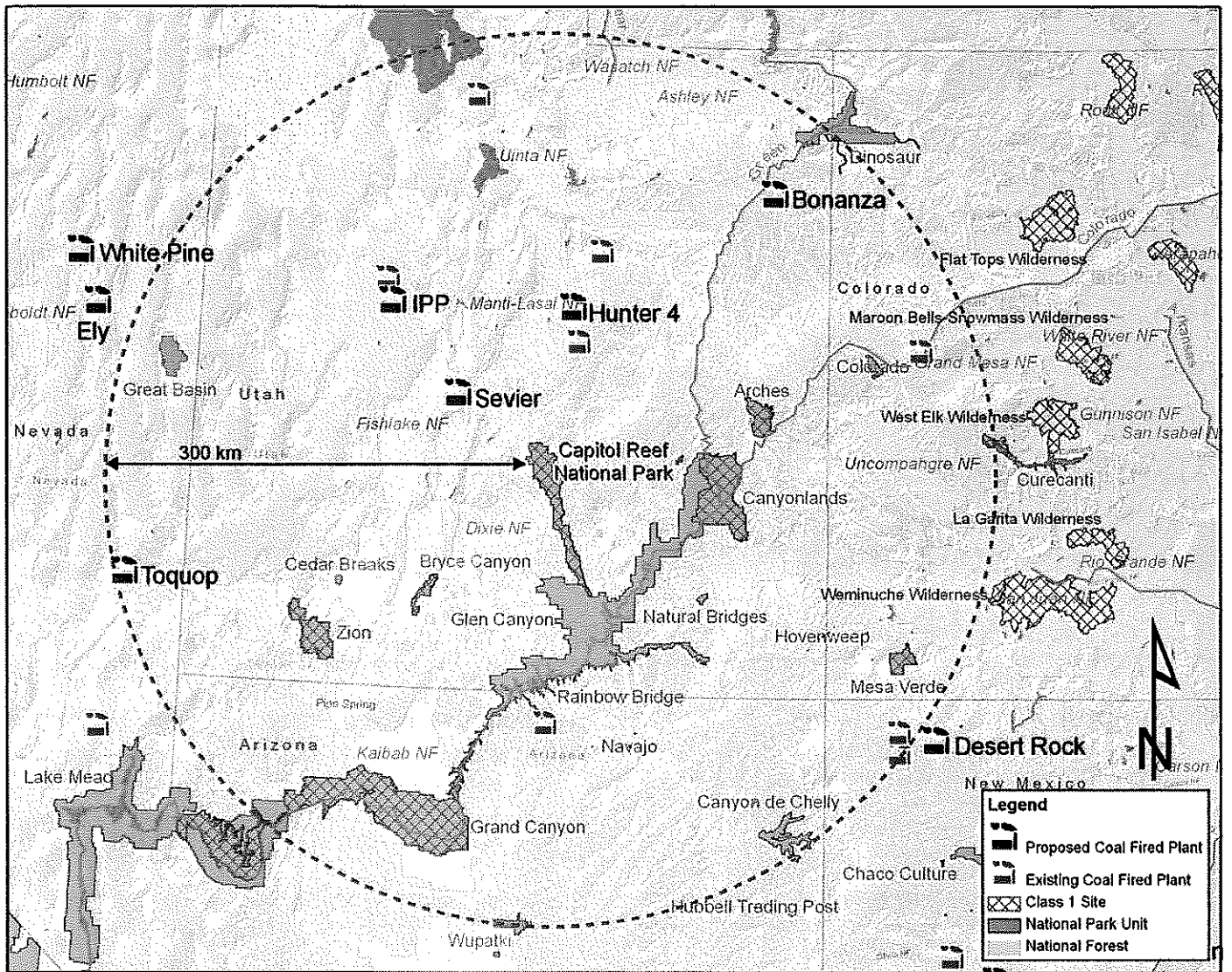
- Five new coal-fired power plants are under active development within 186 miles (300 kilometers) of Capitol Reef National Park, in a region that already has five coal-fired power plants; three others are proposed just beyond that distance.
- Each year, these five plants would emit into the Capitol Reef area air shed more than 26 million tons of carbon dioxide, 8,821 tons of sulfur dioxide, 9,338 tons of nitrogen oxides, and 501 pounds of toxic mercury. As a result, there will be fewer clear days in the park, more damage to archaeological sites, and a higher health risk to park visitors.

### National Park Service findings

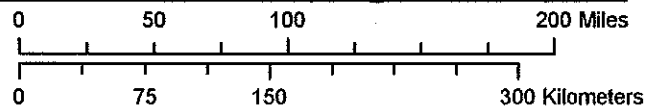
- "We are concerned with the large increase in air pollution emissions in the area of the five Utah [national] parks from several recently proposed power plants. These five national parks have some of the most pristine air in the NPS system, and the NEVCO site is located upwind from the parks in this "clean air corridor."
- "...We remain concerned about potential cumulative impacts on visibility, especially at Capitol Reef NP."



National Parks Conservation Association®  
Protecting Our National Parks for Future Generations®



## Capitol Reef: Proposed Coal Fired Power Plants



**Power plants that have received permits or are in active permit process**

Plant	Location	Owner	Size (MW)	Distance from Park	CO2 tons/yr	SO2 tons/yr	NOx tons/yr	Hg lbs/yr	Permit Status
Sevier Power Company Project	Sevier County, Utah	Sevier Power Company - NEVCO Energy Company	270 MW	60 km	1,755,000	234	1,067	9	Final air permit issued October 2004
Intermountain Power Plant	Millard County, UT	Intermountain Power Agency	950 MW	149 km	9,922,200	3,568	2,775	83	Final air permit issued October 2004
Toquop Energy Project	Lincoln County NV	Sithe Global Energy	750 MW	295 km	4,875,000	1,352	1,614	131	Draft permit issued December 2007
Desert Rock Energy Project	San Juan County, NM	Sithe Global Energy/Dine Power Authority	1500 MW	240 km	8,921,928	3,319	3,325	263	Draft air permit issued July 2006
Bonanza Power Plant	Uintah County, UT	Deseret Power Electric Coop.	110 MW	250 km	715,000	348	557	15	Final permit August 2007
<b>Total New Pollution into Capitol Reef National Park Area Airshed</b>					<b>26,189,128</b>	<b>8,821</b>	<b>9,338</b>	<b>501</b>	

For more information contact: Karen Hevel-Mingo, 801.521.0785, [khevel-mingo@npca.org](mailto:khevel-mingo@npca.org)





## Great Basin National Park: Air Quality at Risk

### Park highlights

- Great Basin National Park in Nevada preserves over 77,000 acres of the Great Basin of the Western United States, a 200,000 square mile area. From the sagebrush at its base to the 13,063-foot summit of Wheeler Peak, the park includes streams, lakes, and numerous limestone caverns, including beautiful Lehman Caves.
- At Great Basin, hot desert valleys meet mountain ranges. Its diverse ecosystem, includes prickly pear cactus, sagebrush, aspen, fragile alpine wildflowers and ancient bristlecone pines, the world's oldest living things. Mountain lions, Clark's nutcrackers, snakes, and jackrabbits roam the park.

### Current air quality

- Visibility in Great Basin National Park declines after periods of sustained northeasterly winds, when a brown-yellow haze appears in Snake Valley, obscuring the mountains east of the park.
- The National Park Service is closely monitoring visibility, nitrogen deposition and ozone in the park, all of which show signs of growing worse.

### New coal-fired power plants

- Six large, new coal-fired power plants are under active development within 186 miles (300 km) of Great Basin.

This area already has four operating coal-fired power plants; two others operate just beyond that distance.

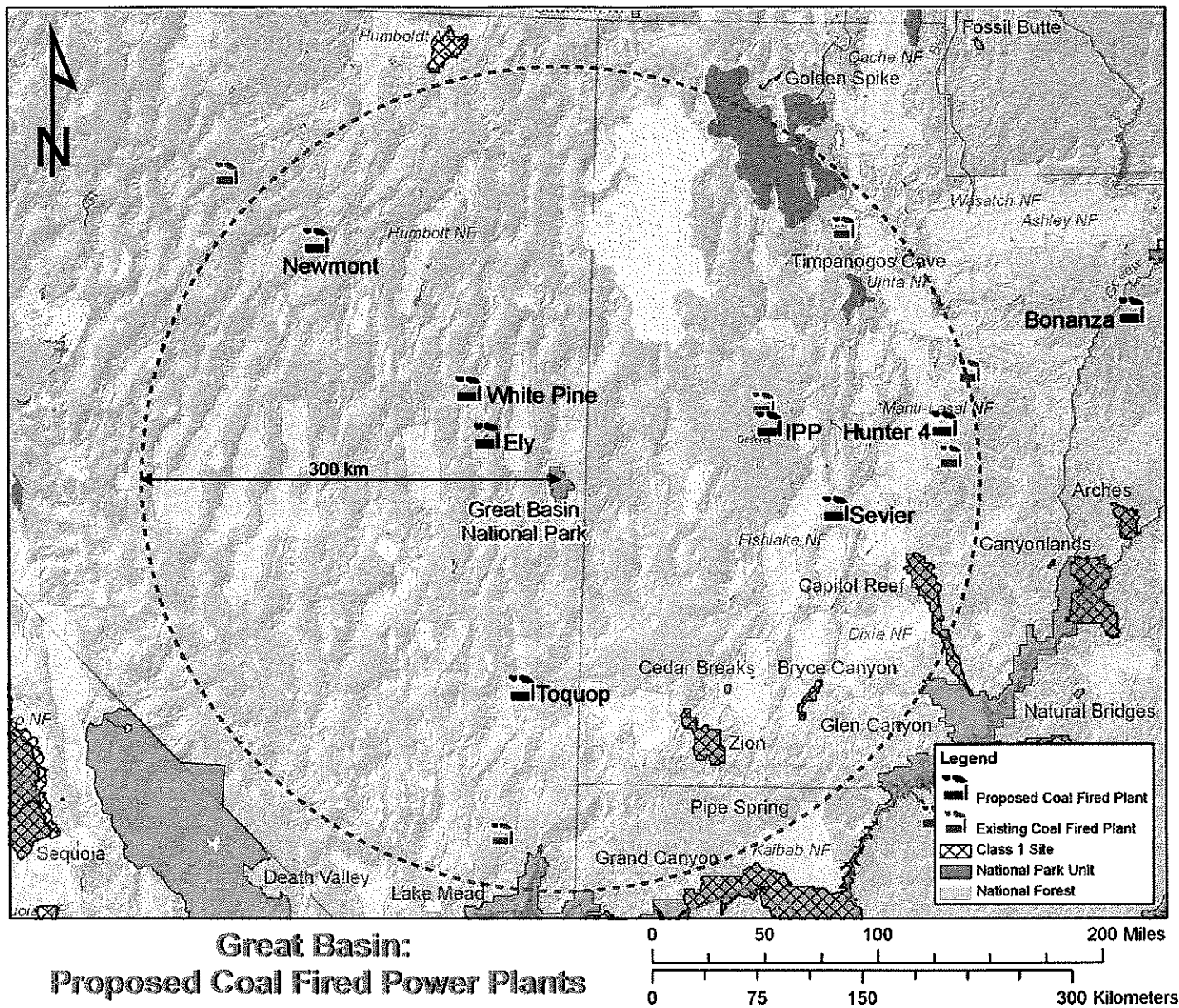
- Each year, these six new plants would emit into the Great Basin area air shed more than 46 million tons of carbon dioxide, 16,656 tons of sulfur dioxide, 15,494 tons of nitrogen oxides, and 800 pounds of toxic mercury. This new pollution will cause hazy skies to be the norm rather than the exception at Great Basin. It will also massively increase acidic pollution in the park, which over time will cause the abundance and diversity of fish, plants, and other wildlife to decline.

### National Park Service findings

- "The issuance of the permit proposed by the Ely Energy Center would compromise the [Great Basin National Park's] air quality, water quality and viewsheds and dark night skies."
- "The Park Service's analysis has found that the proposed levels of emissions [from Ely Energy Center] will result in a significant reduction in visibility at [Great Basin National Park] and to the surrounding area... Proposed sulfur, nitrogen and mercury [pollution] rates associated with the Ely Energy Center could potentially impact the pristine water quality of the park's lakes and streams as well as affecting the wildlife and fish dependent upon them."



National Parks Conservation Association®  
Protecting Our National Parks for Future Generations®

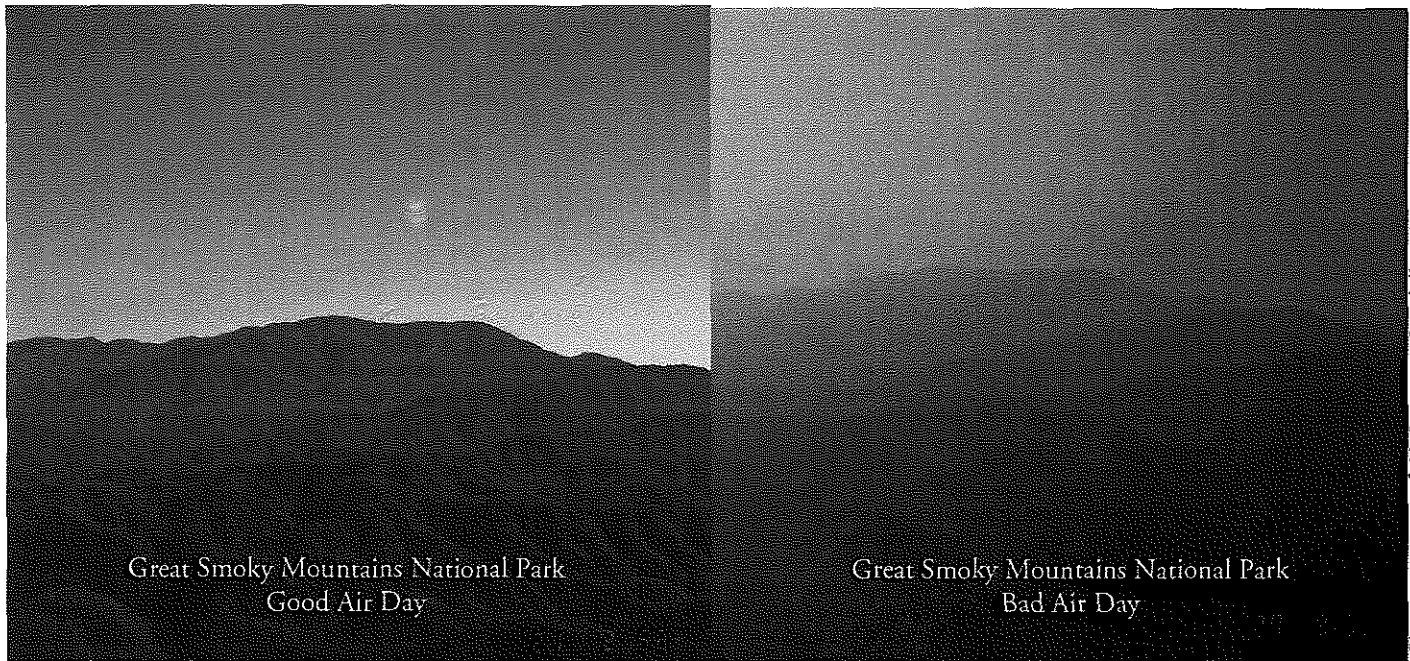


**Great Basin:  
Proposed Coal Fired Power Plants**

**Power plants that have received permits or are in active permit process**

Plant	Location	Owner	Size (MW)	Distance from Park	CO2 tons/yr	SO2 tons/yr	NOx tons/yr	Hg lbs/yr	Permit Status
White Pine Energy Station Project	White Pine County, NV	White Pine Energy Assoc.-Dynergy/LS Power Assoc.	1,590 MW	85 km	12,600,000	6,071	4,814	279	Draft air permit issued December 2006
Ely Energy Center	White Pine County, NV	Nevada Power Co. and Sierra Pacific Power Co.	1500 MW	60 km	16,000,000	4,853	4,628	263	Draft air permit issued December 2007
Newmont	Eureka County, NV	Newmont Mining Corporation	200 MW	270 km	1,224,791	578	596	35	Final air permit issued July 2007
Toiyabe Energy Project	Lincoln County NV	Sithe Global Energy	750 MW	210 km	4,875,000	1,352	1,614	131	Draft air permit issued December 2007
Sevier Power Co. Project	Sevier County, UT	Sevier Power Co. NEVCO Energy Co.	270 MW	190 km	1,755,000	234	1,067	9	Final air permit issued October 2004
Intermountain Power Plant	Millard County, UT	Intermountain Power Agency	950 MW	150 km	9,922,200	3,568	2,775	83	Final air permit issued October 2004
<b>Total New Pollution into Great Basin Area Airshed</b>					<b>46,376,991</b>	<b>16,656</b>	<b>15,494</b>	<b>800</b>	

For more information contact: Lynn Davis, 702.281.7380, [ldavis@npca.org](mailto:ldavis@npca.org)



Great Smoky Mountains National Park  
Good Air Day

Great Smoky Mountains National Park  
Bad Air Day

Photos courtesy of Air Resource Specialists, Inc.

## Great Smoky Mountains National Park: Air Quality at Risk

### Park highlights

- Great Smoky Mountains National Park, America's most visited national park encompassing more than 800 square miles of the Southern Appalachians in Tennessee and North Carolina, contains half of the remaining old-growth forest in the East, more than 2,000 miles of streams, and 850 miles of trails.
- The park supports an astonishing array of plant and animal life. Over 10,000 species have been documented in the park; scientists believe an additional 90,000 species may live there. Because of its great biodiversity, the park has been designated an International Biosphere Reserve.

### Current air quality

- Great Smoky Mountains National Park has the highest rates of nitrogen and sulfur pollution of any monitored location in North America, resulting in park rainfall that is 5 to 10 times more acidic than normal. Many trees in the park are dead or dying, and the water is too acidic to support some native fish.
- The park also suffers from among the highest levels of ozone (a lung-searing gas) in the Eastern U.S.; since 1990, ozone health limits have been exceeded on more than 300 days. High ozone pollution can cause visitors to experience breathing problems and asthma attacks.
- Average visibility in the park has been cut by about 40 percent in winter and 80 percent in summer, and sometimes less than one mile, meaning visitors may not even see surrounding mountains.

### New coal-fired power plants

- Three new coal-fired power plants are under active development within 186 miles (300 km) of Great Smoky Mountains National Park, an area that already contains dozens of polluting coal-fired power plants, which are seriously polluting the park.
- Each year, these new plants would emit into the Smokies area air shed more than 16 million tons of carbon dioxide, 9,335 tons of sulfur dioxide, 5,604 tons of nitrogen oxides, and 560 pounds of toxic mercury. These pollutants will contribute to more hazy air, more unhealthy air days, greater stress to park trees, and increased mercury contamination of the park's streams.

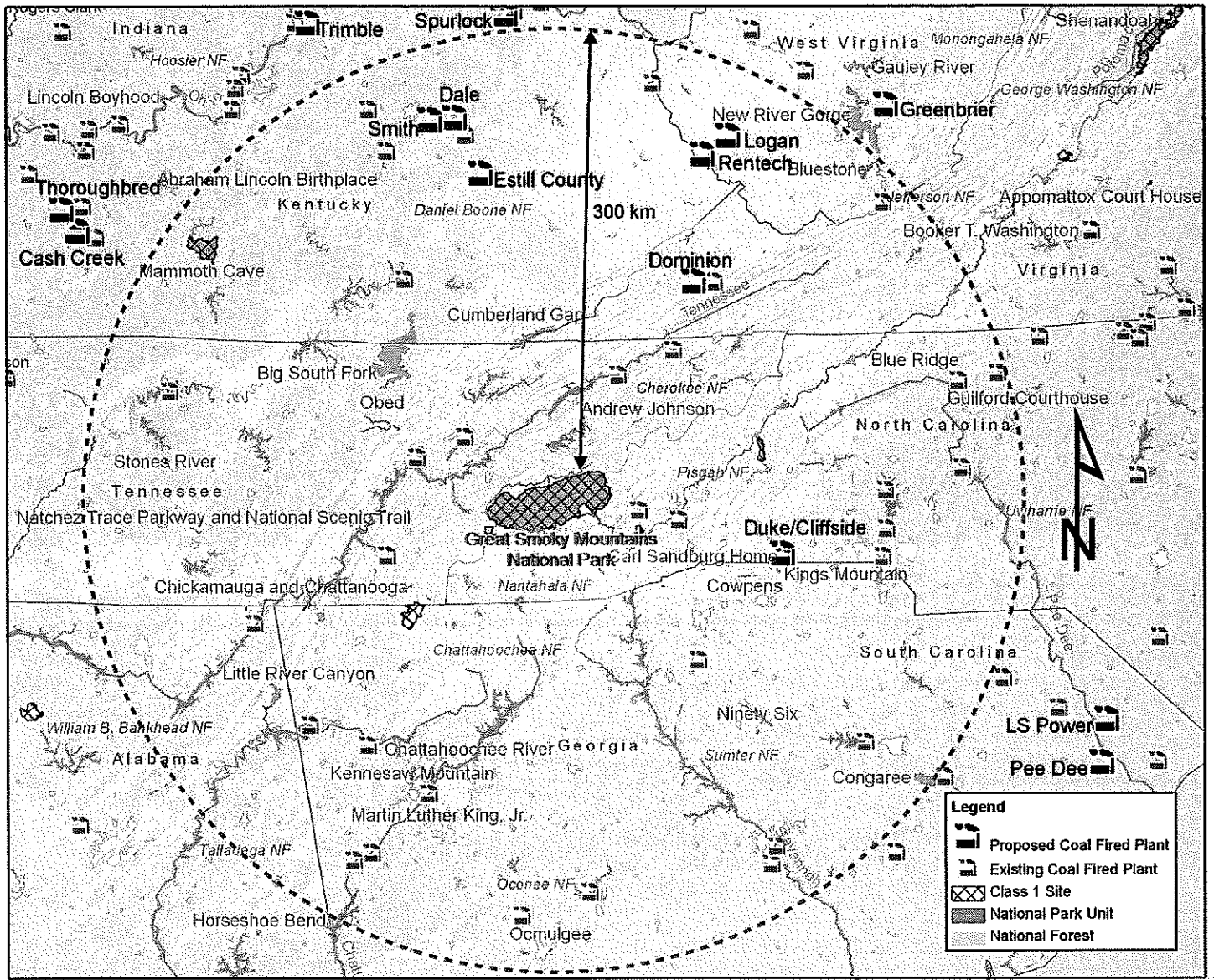
### National Park Service findings

- "[T]he real-world effect of [Duke Energy's coal-fired power plant] by itself would be severe impacts upon air quality and air quality related values at Great Smoky Mountains National Park."
- The Duke plant's "increase in mercury [pollution] coupled with the predicted increase in sulfur [pollution] could impact park resources, including threatened and endangered species."
- Dominion's Wise County, Va., coal-fired power plant "would have a significant impact" on sulfur dioxide pollution at Great Smoky Mountains National Park.
- "Dominion has not justified the need for [pollution limits] that are higher than [other comparable power plant projects]. Lower emission limits would result in less impact on park resources."

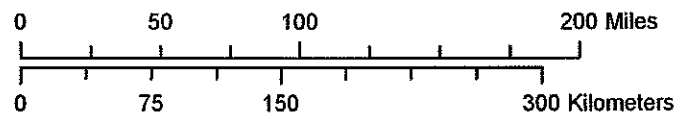


National Parks Conservation Association®  
Protecting Our National Parks for Future Generations®





**Great Smoky Mountains:  
Proposed Coal Fired Power Plants**



**Power plants that have received permits or are in active permit process**

Plant	Location	Owner	Size (MW)	Distance from Park	CO2 tons/yr	SO2 tons/yr	NOx tons/yr	Hg lbs/yr	Permit Status
Cliffside Power Plant	Rutherford County, NC	Duke Energy Carolinas	800 MW	130 km	9,608,567	4,126	2,407	463	Air permit issued January 2008
Virginia City Hybrid Energy Center	Wise County, VA	Virginia Electric & Power Co.- Dominion subsd.	668 MW	142 km	5,064,989	3,369	1,971	42	Draft air permit issued January 2008
Spurlock Generating Station (unit 4)	Mason County, KY	East Kentucky Power Cooperative	300 MW	250 km	1,864,267	1,840	1,226	55	Final air permit re-issued April 2008
<b>Total New Pollution into Great Smoky Mountain National Park Area Airshed</b>					<b>16,537,823</b>	<b>9,335</b>	<b>5,604</b>	<b>560</b>	

For more information contact: Bart Melton, 865.329.2424 ext. 24, [bmelton@nppca.org](mailto:bmelton@nppca.org)





Photos courtesy of Air Resource Specialists, Inc.

## Mammoth Cave National Park: Air Quality at Risk

### Park highlights

- Located in central Kentucky, Mammoth Cave National Park protects the world's longest known cave system, which includes five levels of subterranean rooms, narrow passageways, deep shafts, and underground rivers.
- The park, with more than 52,000 acres of land with rivers, rolling hills and scenic bluffs, is also home to 1,200 species of flowering plants, 84 species of trees, and 70 threatened or endangered species.

### Current air quality

- One of the greatest threats to Mammoth Cave National Park is mercury contamination caused by emissions from coal-fired power plants. Nationwide, coal-fired power plants contribute to more than 40 percent of mercury emissions.
- Mercury is a potent neurotoxin that is passed up the food chain. The park's endangered Indiana bat has been found to have mercury at ten times the level considered safe for people.
- Ozone pollution in the park consistently exceed levels known to harm plants.
- The National Park Service says that hazy skies are a significant concern at the park.

### New coal-fired power plants

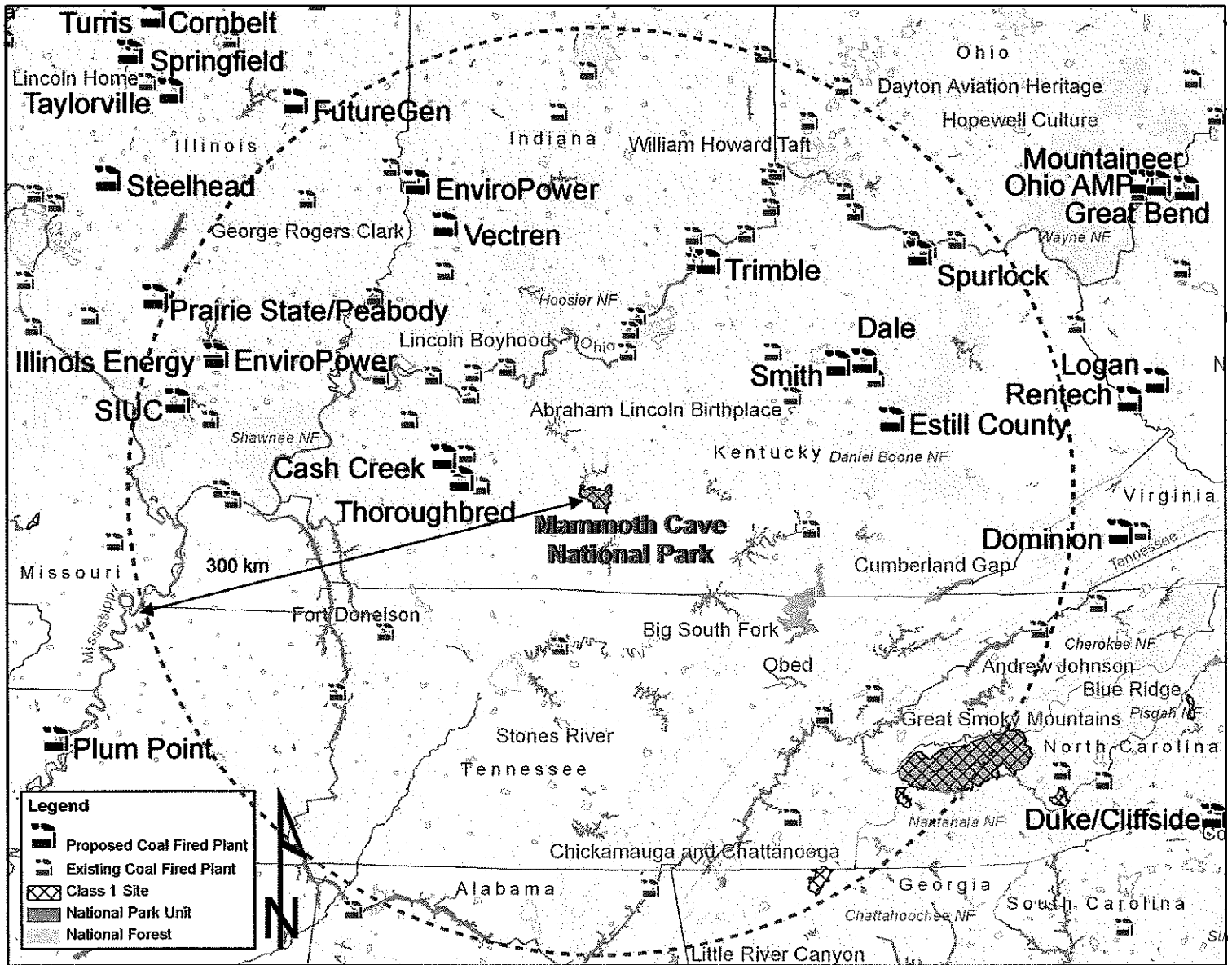
- Three new coal-fired power plants are under active development within 186 miles (300 kilometers) of Mammoth Cave, an area that already contains roughly 40 operating coal-fired power plants.
- Each year, these new plants would emit into the Mammoth Cave area air shed more than 12 million tons of carbon dioxide, 14,724 tons of sulfur dioxide, 7,650 tons of nitrogen, and 606 pounds of toxic mercury, further endangering park wildlife and the health of park visitors.

### National Park Service findings

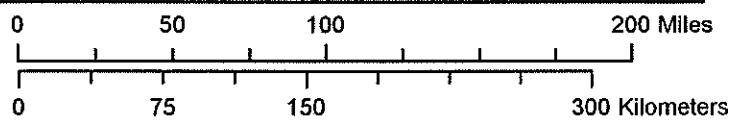
- "[W]e believe that these proposed emissions [from Thoroughbred Generating Station] would have an adverse impact on visibility and could potentially affect federally listed threatened and endangered species at Mammoth Cave National Park... We ask that [Kentucky] not issue the final [air] permit until these technical issues are resolved and our concerns are adequately addressed."
- "We ask that [Thoroughbred Generating Station] consider stricter controls on their emissions so as to lessen the impacts at Mammoth Cave NP."



**National Parks Conservation Association®**  
*Protecting Our National Parks for Future Generations®*



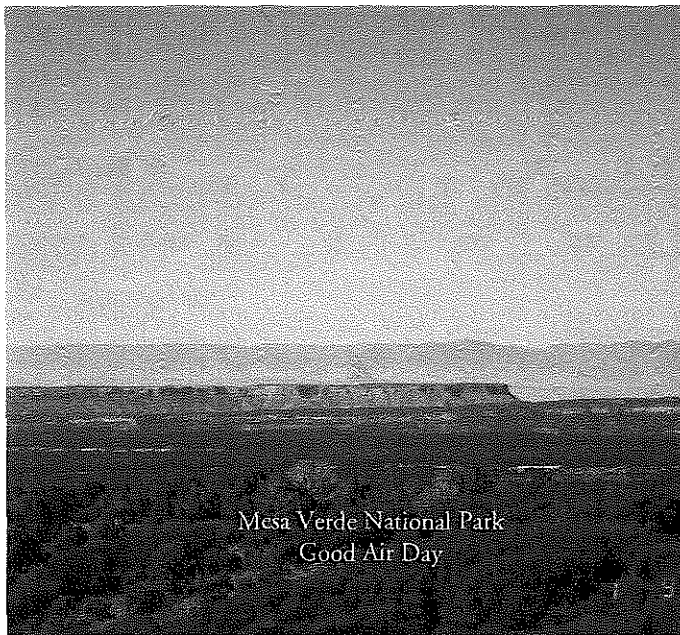
**Mammoth Cave:  
Proposed Coal Fired Power Plants**



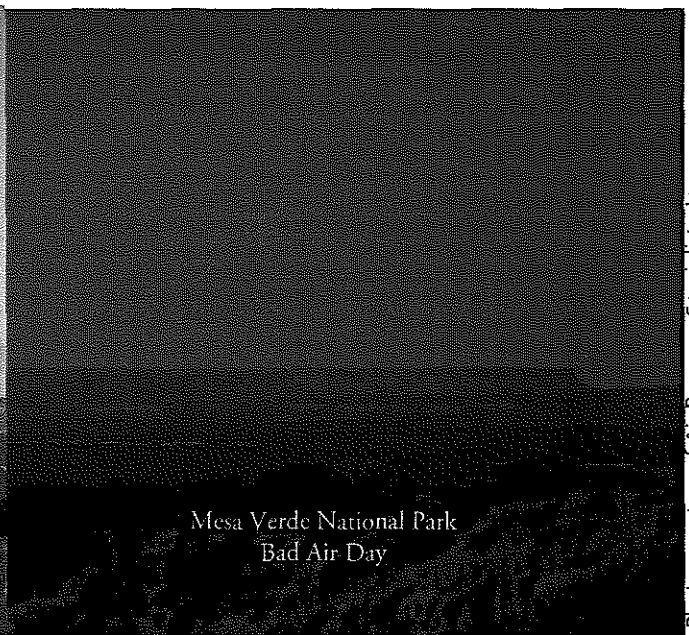
**Power plants that have received permits or are in active permit process**

Plant	Location	Owner	Size (MW)	Distance from Park	CO2 Tons/yr	SO2 Tons/yr	NOx Tons/yr	Hg lbs/yr	Permit Status
Thoroughbred Generating Station	Muhlenberg County, KY	Peabody Energy	1500 MW	74 km	8,921,928	10,893	4,566	276	Final air permit issued May 2006
JK Smith Electric Generating Station (units 1&2)	Clark County, KY	East Kentucky Power Cooperative	556 MW	185 km	1,807,000	1,991	1,858	275	Permit application submitted April 2008
Spurlock Generating Station – (unit 4)	Mason County, KY	East Kentucky Power Cooperative	300 MW	250km	1,864,267	1,840	1,226	55	Final air permit re-issued April 2008
<b>Total New Pollution into Mammoth Cave Area Airshed</b>					<b>12,593,195</b>	<b>14,724</b>	<b>7,650</b>	<b>606</b>	

For more information contact: Bart Melton, 865.329.2424 ext. 24, [bmelton@npca.org](mailto:bmelton@npca.org)



Mesa Verde National Park  
Good Air Day



Mesa Verde National Park  
Bad Air Day

Photos courtesy of Air Resource Specialists, Inc.

## Mesa Verde National Park: Air Quality at Risk

### Park highlights

- Mesa Verde National Park offers a spectacular look into the lives of Ancestral Pueblo people who lived in the area for more than 700 years.
- Located in Colorado, the park protects over 4,000 known archaeological sites, including 600 cliff dwellings – some of the most notable and best preserved in the United States.
- Visitors may hike to mesa top sites and cliff dwelling overlooks or enjoy observing birds and wildlife, and cross-country skiing.

### Current air quality

- Coal-fired power plants in New Mexico and Arizona are the largest sources of air pollutants, including sulfur dioxide and nitrogen oxides, in Mesa Verde National Park. These pollutants bring hazy skies to the park and harm the park's ancient Pueblo structures.
- National Park Service monitoring shows a trend of increasing ozone levels in the park in recent years, and rates nitrogen deposition as a significant concern. These pollutants can cause unhealthy air for visitors and harm park wildlife.
- Park visibility is degrading significantly on the worst visibility days.

### New coal-fired power plants

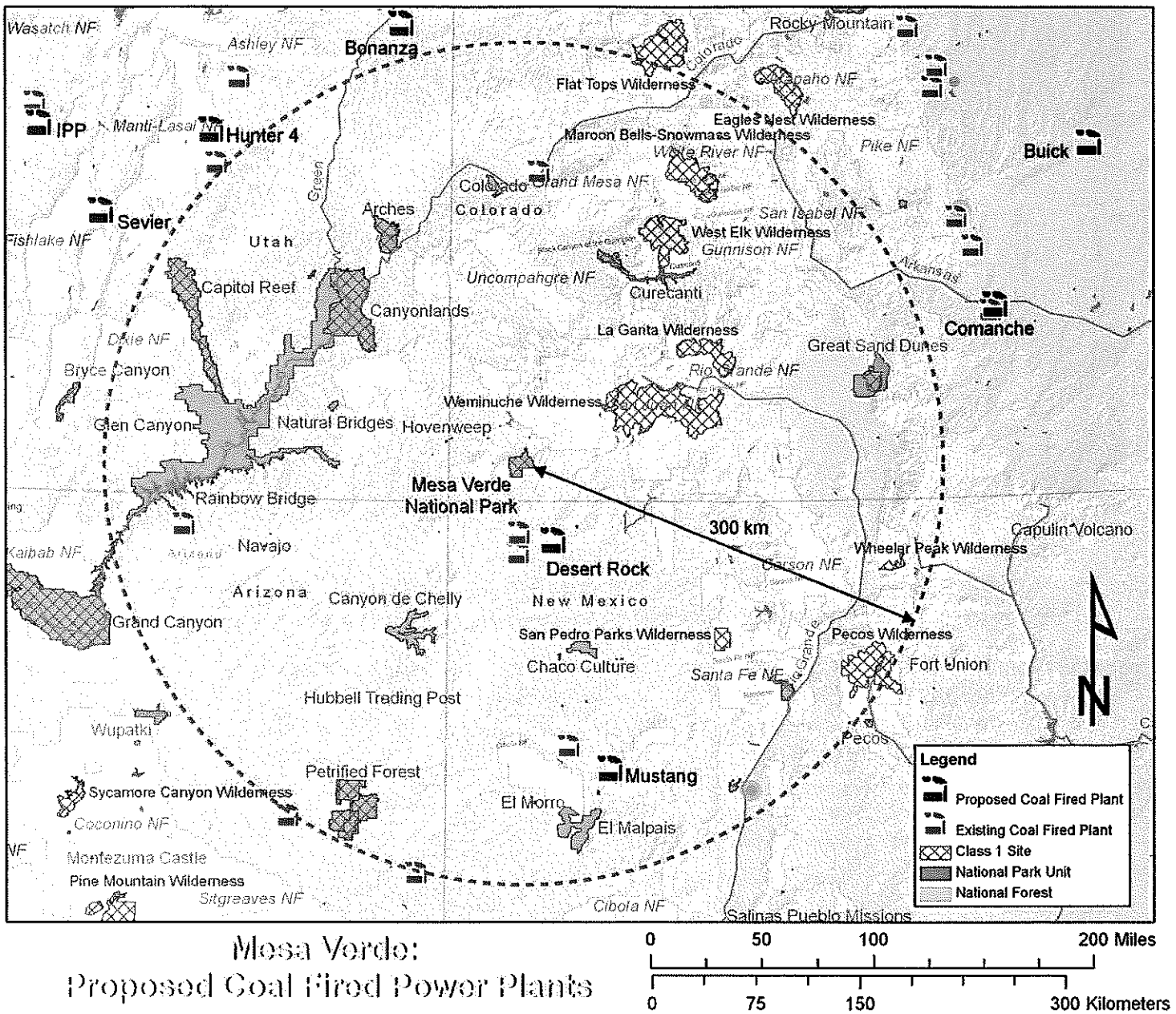
- A huge, 1500-megawatt coal-fired power plant is under active development just 46 miles (75 km) from Mesa Verde National Park. Seven coal-fired power plants currently operate within 186 miles (300 km) of the park, while three others are proposed for just beyond that distance.
- Each year, this massive coal-fired power plant would emit into the Mesa Verde area air shed nearly 9 million tons of carbon dioxide, 3,319 tons of sulfur dioxide, 3,325 tons of nitrogen oxides, and 263 pounds of toxic mercury. This new coal plant would rapidly accelerate the decline of park air quality.

### National Park Service findings

- "There are 27 units of the National Park System within 300 km of the proposed [Desert Rock] plant site; ... the proposed project may lead to adverse impacts to [Mesa Verde and other parks] in the absence of conditions and measures designed to mitigate these impacts."



National Parks Conservation Association®  
Protecting Our National Parks for Future Generations®

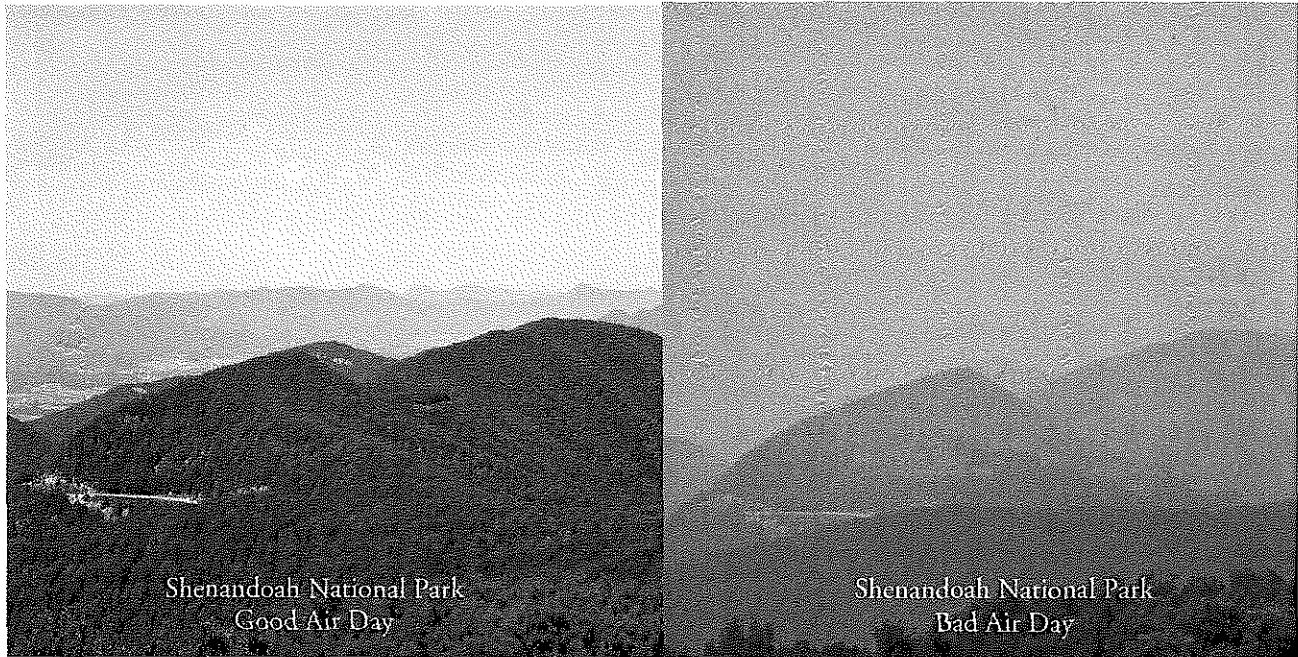


**Power plants that have received permits or are in active permit process**

Plant	Location	Owner	Size (MW)	Distance from Park	CO2 tons/yr	SO2 tons/yr	NOx tons/yr	Hg lbs/yr	Permit Status
Desert Rock Energy Project	San Juan County, NM	Sithe Global Energy/Dine Power Authority	1500 MW	75 km	8,921,928	3,319	3,325	263	Draft air permit issued July 2006
<b>Total New Pollution into Mesa Verde National Park Area Airshed</b>					<b>8,921,928</b>	<b>3,319</b>	<b>3,325</b>	<b>263</b>	

For more information contact: Karen Hevel-Mingo, 801.521.0785, [khevel-mingo@npca.org](mailto:khevel-mingo@npca.org)





Photos courtesy of Air Resource Specialists, Inc.

## Shenandoah National Park: Air Quality at Risk

### Park highlights

- Located within the Blue Ridge Mountains and containing headwaters of the Chesapeake Bay, Shenandoah National Park is heavily forested and is home to a large variety of wildlife and birds. In fact, this single park is believed to have more plant and animal species than now live in all of Europe.
- Close to large population centers in Maryland, Virginia, and Washington, DC, and with the 105-mile long Skyline Drive traversing its spine, the park is a major destination for hikers and bikers who escape the cities to enjoy more than 500 miles of trails, including 101 miles of the Appalachian Trail.

### Current air quality

- Natural views of 100 miles now extend only 24 miles on average, and less than one mile on the most polluted days. Park visitors can no longer reliably see the Washington Monument, some 70 miles distant. Some visitors today may not even see the next mountain ridge.
- The number and diversity of native fish are declining due to air pollution making park streams more acidic.

- Ozone, a lung-searing gas, can exceed EPA health standards during summer months, exposing visitors to breathing problems, including asthma attacks.

### New coal-fired power plants

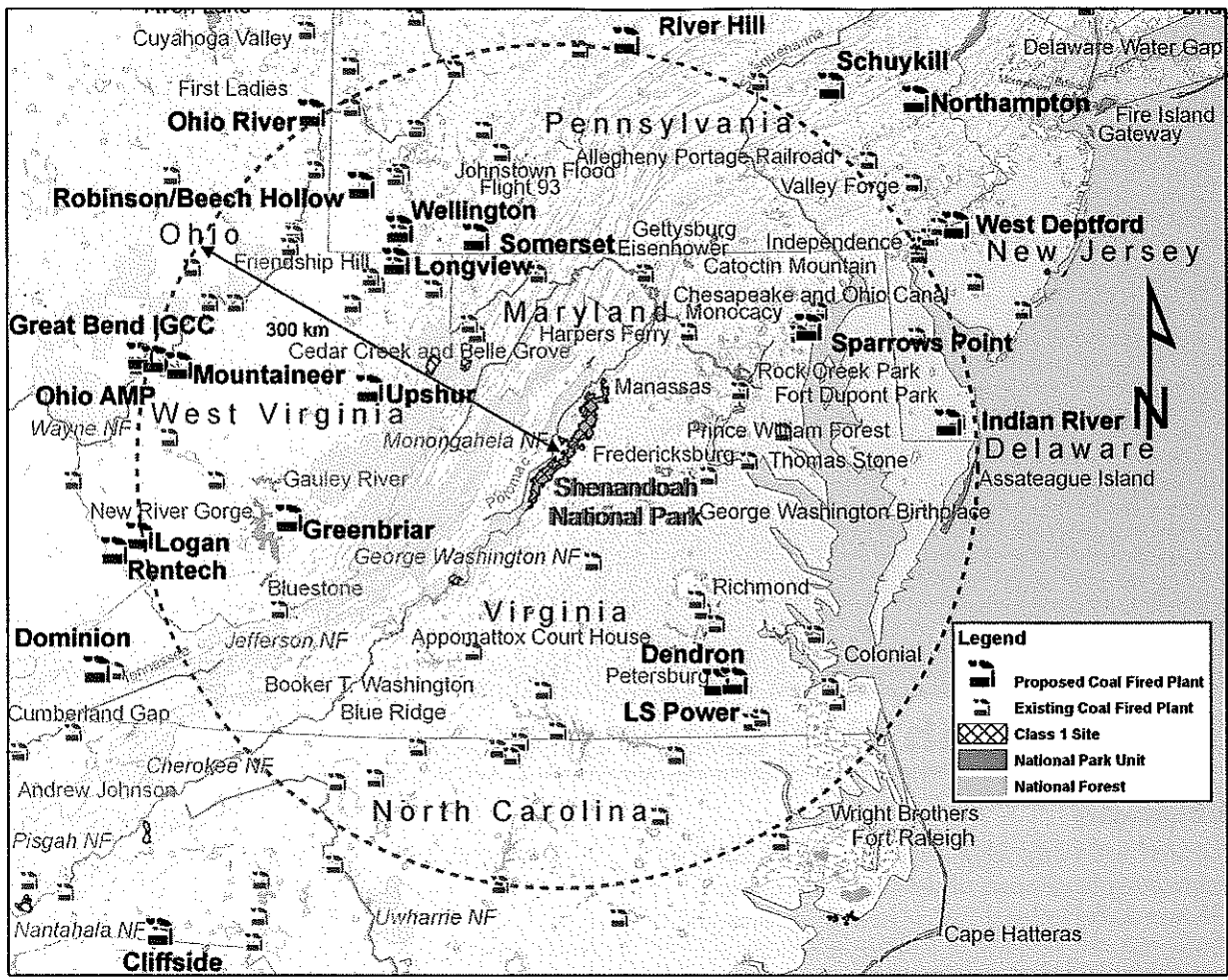
- Eight new coal-fired power plants are under active development within 186 miles (300 kilometers) of Shenandoah National Park, an area that already contains dozens of operating coal plants.
- Each year these new plants would emit into the Shenandoah area air shed more than 28 million tons of carbon dioxide, 28,250 tons of sulfur dioxide, 13,617 tons of nitrogen oxides, and 576 pounds of toxic mercury. Park skies will be hazier, waters more polluted, and air unhealthier.

### National Park Service findings

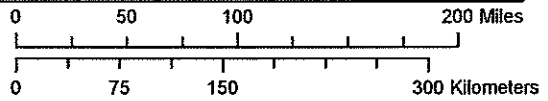
- Pollution from the Greene Energy coal-fired power plant will cause hazier skies at Shenandoah and will also harm fish and other aquatic life in the park.
- "The [Ohio] AMP project would significantly impact" pollution levels in Shenandoah National Park.



National Parks Conservation Association®  
Protecting Our National Parks for Future Generations®



Shenandoah: Proposed Coal Fired Power Plants



**Power plants that have received permits or are in active permit process**

Plant	Location	Owner	Size (MW)	Distance from Park	CO2 tons/yr	SO2 tons/yr	NOx tons/yr	Hg lbs/yr	Permit Status
*= waste coal									
Ohio American Municipal Power Generating Sta.	Meigs County, OH	Ohio American Municipal Power	960	280km	7,300,000	6,820	3,194	172	Final air permit issued February 2008
*Greene Energy Resource Recovery Project	Greene County, PA	Wellington Development	580	185 km	3,045,755	3,766	1,931	22	Final air permit issued April 2005
* Somerset Power	Somerset County, PA	Sithe Global Energy	300	140 km	1,950,000	2,146	924	27	Air permit application submitted December 2007
* River Hill Power	Clearfield County, PA	River Hill Power Company Inc., Sithe Global Power Co, LLC	290	246 km	1,717,078	2,515	880	53	Final air permit issued in July 2005
* Beech Hollow Waste Coal Plant	Washington County, PA	Robinson Power Company	250	240 km	1,773,492	3,154	976	3	Final air permit issued September 2006
Dendron	Sussex County, VA	Old Dominion Electric Cooperative	1500	200 km	9,750,000	6,000	3,000	~170	Preapplication; ~Hg est. based on best in class.
Longview Power Plant	Monongalia County, WV	Longview Power, LLC, GenPower LLC	600	173 km	1,800,000	3,217	2,183	128	Final air Permit issued March 2004
Western Greenbrier	Western Greenbrier County, WV	Western Greenbrier Co-Generation LLC.	85	180 km	948,029	632	529	1	Final air permit issued in April 2006
<b>Total New Pollution into Shenandoah Area Airshed</b>					<b>28,284,354</b>	<b>28,250</b>	<b>13,617</b>	<b>576</b>	

For more information contact: Catharine Gilliam, 540.460.5105, cgilliam@npca.org



Photo courtesy of National Park Service

## Theodore Roosevelt National Park: Air Quality at Risk

### Park highlights

- One of the few islands of designated wilderness in the Northern Great Plains, Theodore Roosevelt National Park protects 70,447 acres of the colorful and ecologically rich Little Missouri River Badlands in western North Dakota.
- The park is home to a variety of prairie plants and animals, including bison, elk, and wild horses.
- 100 miles of trails in the park provide visitors with many opportunities for outdoor recreation.

### Current air quality

- Theodore Roosevelt National Park is located in a rural area and now has relatively clean air.
- Even a little air pollution builds up over time, and park air quality suffers from the long-term cumulative effects of air pollution caused by oil and gas production and coal-fired power plants.

### New coal-fired power plants

- A new coal-fired power plant is under active development only 56 miles (90 km) from Theodore Roosevelt National Park, while three others are proposed for construction just beyond 186 miles (300 km).
- Each year, this enormous new plant would emit in the park area air shed more than 3 million tons of carbon dioxide, 1,524 tons of sulfur dioxide, 2,286 tons of

nitrogen oxides, and 660 pounds of toxic mercury.

Because park air is now relatively clear, this new pollution will have a dramatic and noticeable impact on park visibility and will add significantly to long-term pollution damage.

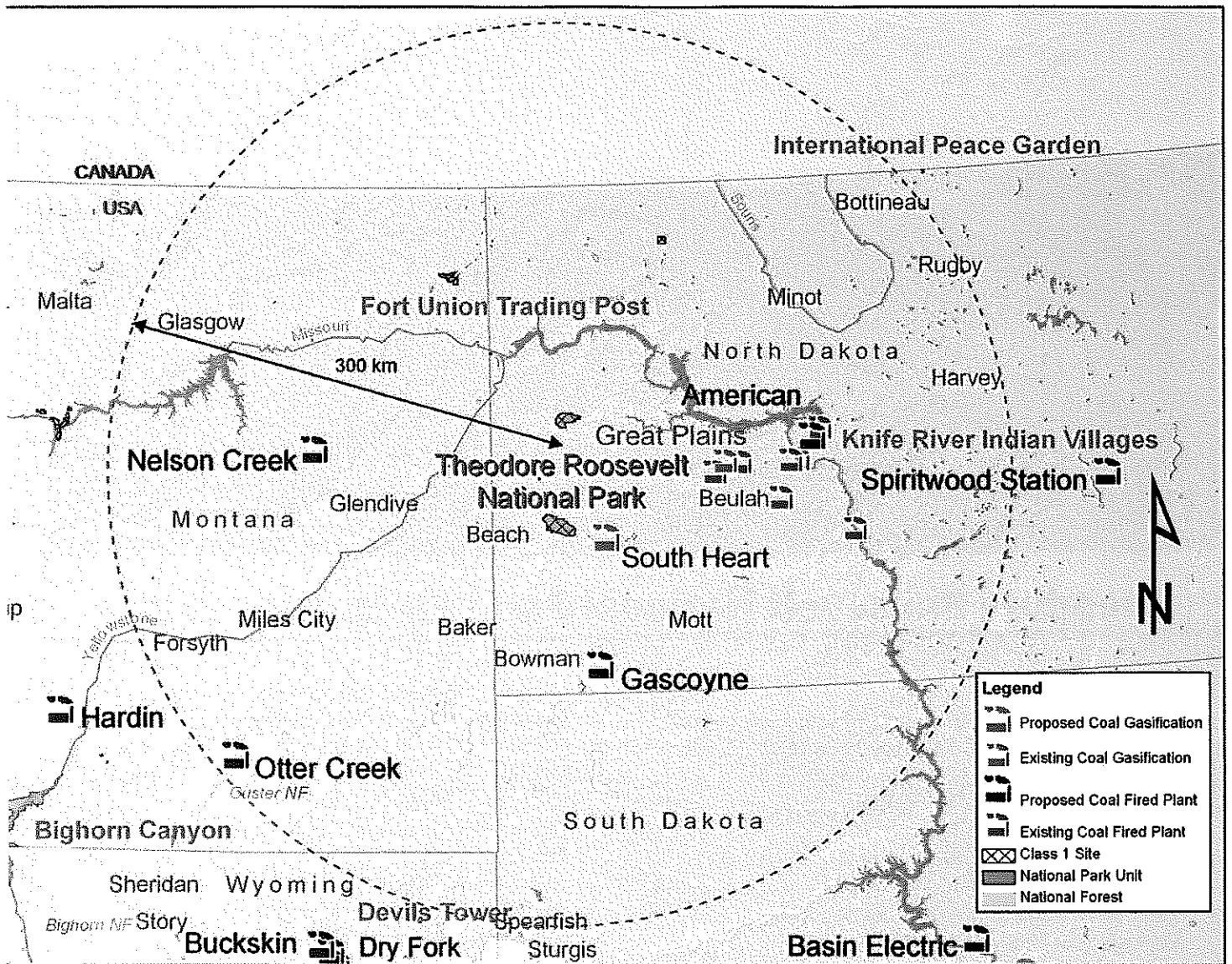
- This new coal plant will emit massive amounts of toxic mercury into the park ecosystem, threatening fish and other park wildlife. By way of comparison, the eight coal-fired power plants under development near Shenandoah National Park will, combined, emit less mercury than the one new plant proposed near Theodore Roosevelt National Park.

### National Park Service findings

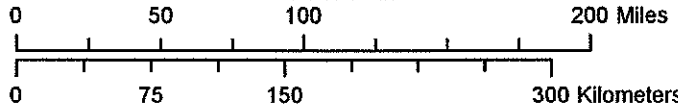
- “Based on the available information, [NPS] ha[s] determined that emissions from the proposed [Gascoyne] facility could adversely impact visibility at Theodore Roosevelt NP.”
- “[P]roposed emissions from the Gascoyne plant alone would result in perceptible [haze] at Theodore Roosevelt NP up to 19 days per year. We consider these impacts to visibility to be adverse because they would diminish the national significance of Theodore Roosevelt NP and potentially impair the quality of the visitor experience to that area.”



National Parks Conservation Association®  
Protecting Our National Parks for Future Generations®



Theodore Roosevelt:  
Proposed Coal Fired Power Plants



**Power plants that have received permits or are in active permit process**

Plant	Location	Owner	Size (MW)	Distance from Park	CO2 tons/yr	SO2 tons/yr	NOx tons/yr	Hg lbs/yr	Permit Status
Gascoyne Generating Station	Bowman County, ND	Westmoreland Power	500 MW	90 km	3,250,000	1,524	2,286	660	Draft air permit issued May 2007
<b>Total New Pollution into Theodore Roosevelt National Park Area Airshed</b>					<b>3,250,000</b>	<b>1,524</b>	<b>2,286</b>	<b>660</b>	

For more information contact: Stephanie Kodish, 865.329.2424, ext. 28, [skodish@npca.org](mailto:skodish@npca.org)





Photo courtesy of National Park Service

## Wind Cave National Park: Air Quality at Risk

### Park highlights

- Located in the Black Hills region of South Dakota, the park protects one of the world's longest and most complex caves, with an amazing amount of the rare formations called boxwork.
- The park also protects over 28,000 acres of one of the few remaining mixed-grass prairies, as well as ponderosa pine forest, and native wildlife such as bison, elk, pronghorn, mule deer, coyotes, and prairie dogs.

### Current air quality

- Wind Cave National Park is in a rural area with comparatively good air quality, but the park is nevertheless vulnerable to nearby and distant sources of air pollution.
- The National Park Service is carefully monitoring visibility in the park, which shows signs decline.

### New coal-fired power plants

- Seven new coal-fired power plants are under active development within 186 miles (300 km) of Wind Cave National Park.

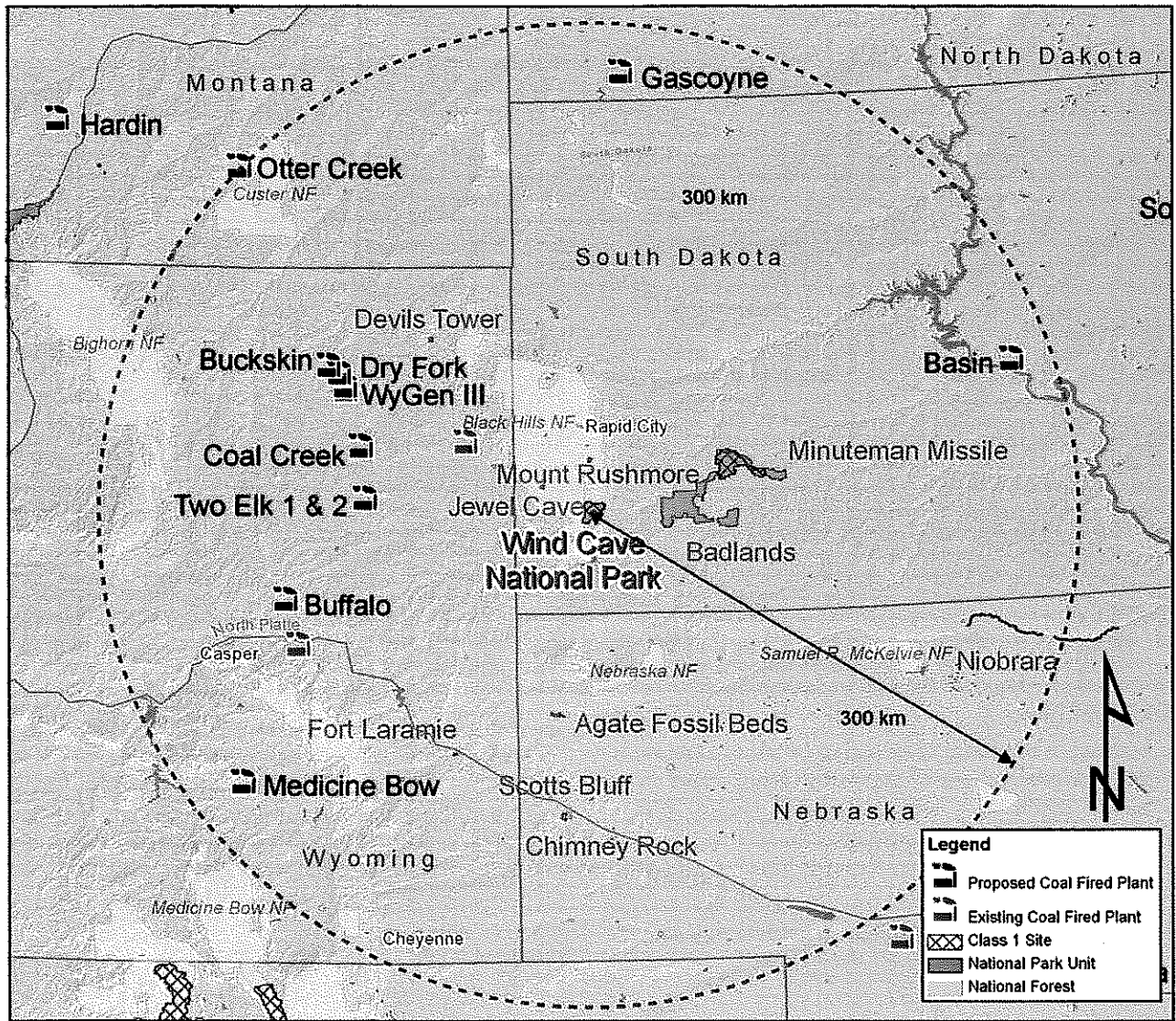
- Each year, these new plants would emit into the Badlands area air shed more than 17 million tons of carbon dioxide, 9,193 tons of sulfur dioxide, 7,843 tons of nitrogen oxides, and 1,501 pounds of toxic mercury. With new pollution from these seven plants, Wind Cave would no longer enjoy the distinction of having relatively clean and clear air.

### National Park Service findings

- "... Dry Fork [power plant] may have the potential to adversely impact visibility in Wind Cave National Park by itself."
- "We are especially concerned about the cumulative impacts upon visibility from the extensive development in the Powder River basin and around Wind Cave NP."
- "Dry Fork's contribution to sulfur deposition in the park triggers management concern and warrants further consideration.... An increase in [sulfur deposition], in particular (as they are the largest contributor to visibility degradation), impairs the ability to observe landscapes, vegetative types, geologic patterns, and even wildlife, not only at great distances, but even in the range of even yards."



National Parks Conservation Association®  
*Protecting Our National Parks for Future Generations®*



**Wind Cave:  
Proposed Coal Fired Power Plants**

**Power plants that have received permits or are in active permit process**

Plant	Location	Owner	Size (MW)	Distance from park	CO2 tons/yr	SO2 tons/yr	NOx tons/yr	Hg lbs/yr	Permit Status
Dry Fork Station	Campbell County, WY	Basin Electric Power Cooperative	385	180 km	2,461,818	1,165	833	327	Final air permit issued October 2007
WYGEN 2	Campbell County, WY	Black Hills Corp.	100	168 km	2,510,178	569	399	141	Final air permit issued July 2005
WYGEN 3	Campbell County, WY	Black Hills Corp.	100	168 km	2,510,178	512	285	80	Final air permit issued February 2007
Two Elk Energy Park Unit 1	Campbell County, WY	North American Power Group	280	140 km	2,112,500	1,711	1,167	49	Final air permit re-issued May 2003
Two Elk Energy Park Unit 2	Campbell County, WY	North American Power Group	750	140 km	6,239,461	2,753	2,202	164	Application received September 2006
Gascoyne 500	Bowman County, ND	Westmoreland Power	500	280 km	3,250,000	1524	2286	660	Draft air permit issued May 2007
Evergreen Coal Creek	Campbell County, WY	Evergreen Energy Inc	NA	143 km	NA	959	671	80	Application received November 2006
<b>Total New Pollution into Wind Cave Area Airshed</b>					<b>17,695,356</b>	<b>9,193</b>	<b>7,843</b>	<b>1,501</b>	

For more information contact: Stephanie Kodish, 865.329.2424 ext. 28, [skodish@npca.org](mailto:skodish@npca.org)

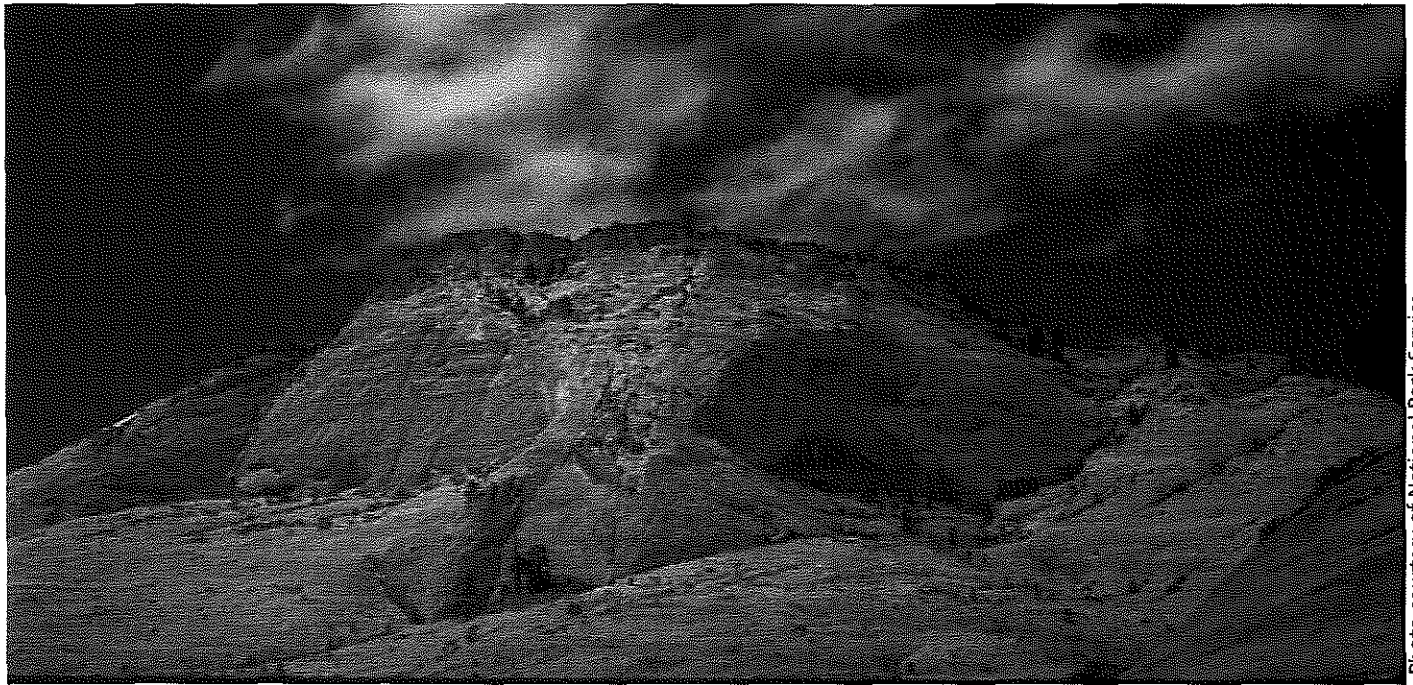


Photo courtesy of National Park Service

## Zion National Park: Air Quality at Risk

### Park highlights

- Zion National Park preserves 229 square miles of sculptured canyons and soaring cliffs amidst the diverse wilderness occurring at the junction of the Colorado Plateau, Great Basin, and the Mojave Desert.
- Visitors can travel into the park along the Pa'rus Trail and explore other hiking, biking, horse, and walking trails.
- Many hikers travel along the bottom of canyons such as Timber Creek, Pine Creek, and Zion Canyon, or enjoy spectacular overlooks of the canyons from above.

### Current air quality

- Hazy air, caused by fine particles of soot, is growing worse at Zion National Park.
- Several plant species that live in the park are known to be sensitive to ozone. National Park Service monitoring has found unhealthy ozone pollution and probable ozone injury to several plant species, including snowberry.
- Nearby sources of this pollution include power plants, refineries, and lime kilns.

### New coal-fired power plants

- Five large, new coal-fired power plant projects are under active development within 186 miles (300 km) of Zion National Park, in a region that already has three operating coal-fired power plants; two other coal-fired power plants operate just beyond that distance.
- Each year these five new plants would emit into the Zion area air shed more than 44 million tons of carbon dioxide, 16,708 tons of sulfur dioxide, 14,898 tons of nitrogen oxides, and 765 pounds of toxic mercury. This new pollution will accelerate the worsening haze problem at Zion, add additional stress to rare plants in the park, and raise the risk that park visitors will experience asthma attacks or other breathing problems.

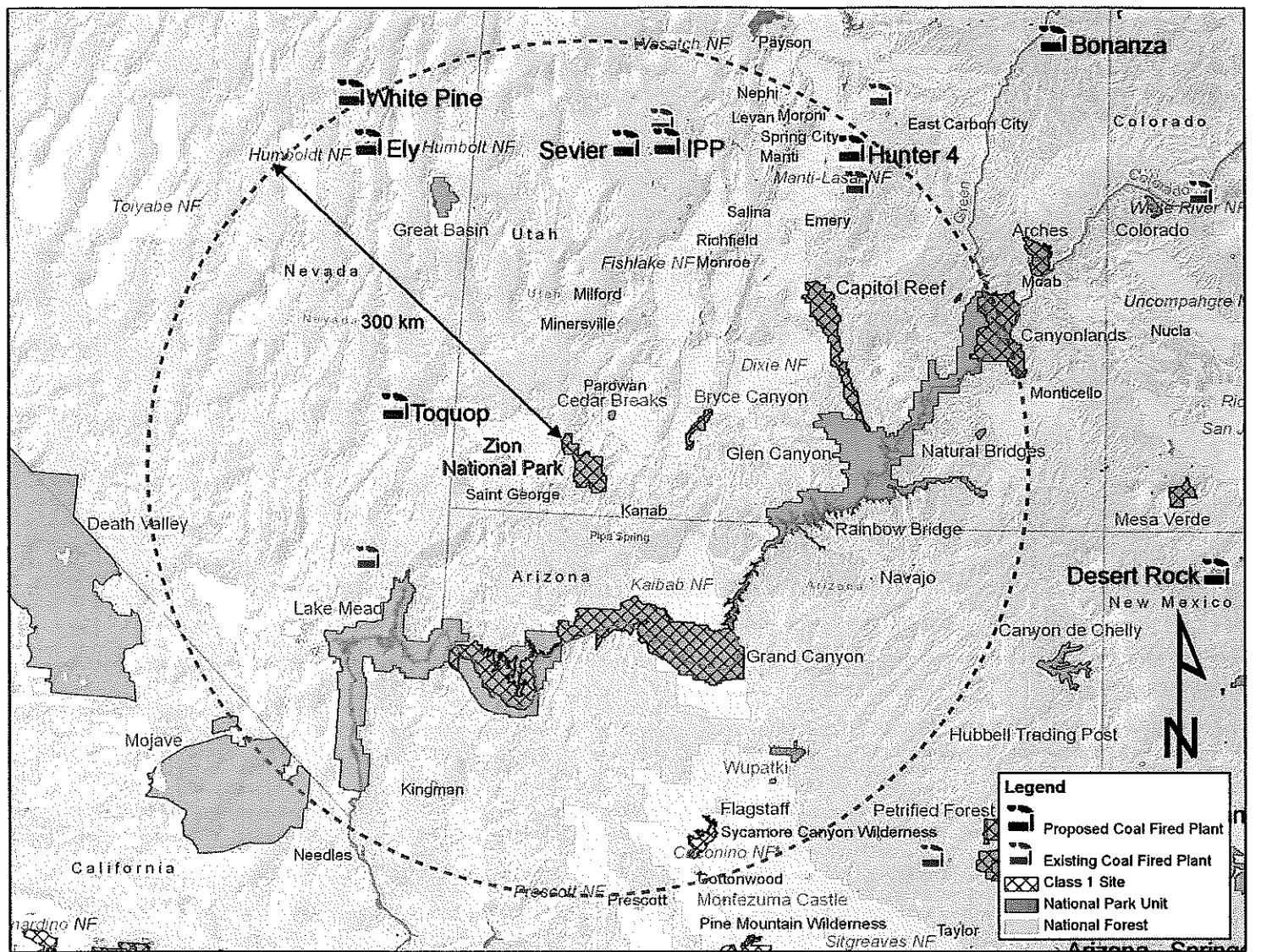
### National Park Service findings

- "...We still have several unresolved issues regarding" air pollution impacts from White Pine Energy Station on Zion National Park, including whether pollution caps would be exceeded, whether visibility would be degraded, and whether the facility would use the best emissions controls. "We are also concerned about the cumulative impacts" of White Pine and other coal plants in Utah and Nevada.

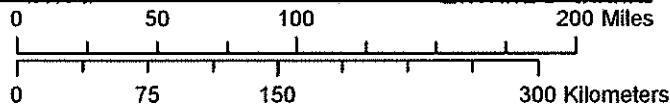


National Parks Conservation Association®  
Protecting Our National Parks for Future Generations®





### Zion: Proposed Coal Fired Power Plants



**Power plants that have received permits or are in active permit process**

Plant	Location	Owner	Size (MW)	Distance from Park	CO2 tons/yr	SO2 tons/yr	NOx tons/yr	Hg lbs/yr	Permit Status
White Pine Energy Station Project	White Pine County, NV	White Pine Energy Assoc.-Dynergy/LS Power Assoc.	1,590 MW	283 km	12,600,000	6,071	4,814	279	Draft air permit issued December 2006
Ely Energy Center	White Pine County, NV	Nevada Power Co. & Sierra Pacific Power	1500 MW	250 km	16,000,000	4,853	4,628	263	Draft air permit issued December 2007
Toquop Energy Project	Lincoln County, NV near Toquop Indian Reserv.	Sithe Global Energy	750 MW	108 km	4,339,799	1,352	1,614	131	Draft air permit issued December 2007
Sevier Power Company Project	Sevier County, Utah	Sevier Power Co NEVCO Energy Co.	270 MW	190 km	1,755,000	234	1,067	9	Final air permit issued October 2004
Intermountain Power Plant	Millard County, UT	Intermountain Power Agency	950 MW	230 km	9,922,200	3,568	2,775	83	Final air permit issued October 2004
<b>Total New Pollution into Zion Area Airshed</b>					<b>44,616,999</b>	<b>16,078</b>	<b>14,898</b>	<b>765</b>	

For more information contact: Karen Hevel-Mingo, 801.521.0785, [khevel-mingo@npca.org](mailto:khevel-mingo@npca.org)

## **Dark Horizons: Fact Sheet on Proposed EPA Rule**

The U.S. Environmental Protection Agency (EPA) is attempting to weaken air quality protections for America's treasured national parks and wilderness areas. The proposed EPA rule described below would allow industries seeking to locate near these protected areas to circumvent pollution limits established by Congress to restore and maintain clean air. As a result, there could be more power plants emitting more air pollution into our national parks.

### **Clean Air Act protects air quality in America's national parks and wilderness areas**

In 1977 Congress amended the Clean Air Act and designated certain national parks as class I areas, giving them the greatest level of protection under the Act. There are 158 class I areas, including 48 national parks, 21 Fish & Wildlife refuges, and 88 Forest Service wilderness areas.

To protect the air in class I areas, Congress created the prevention of significant deterioration or PSD program. PSD seeks to "preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special ... natural, recreational, scenic or historic value." *Clean Air Act Sec. 160.*

Under PSD, Congress established limits (known as increments) on additional amounts of pollution in class I areas over baseline conditions that existed in 1977 when PSD was enacted. Increments are in place for emissions of sulfur dioxide, particulate matter, and nitrogen oxides. Because Congress sought to protect air quality not just from long-term pollution increases, but also from fluctuations and "spikes" that occur at certain times of year (e.g., peak summer energy use), it created both annual and short-term (3 and 24 hours) increments for these pollutants.

Because Congress wants class I areas to have the cleanest air in the country, these parks and wilderness areas have the smallest increments, or allowable amounts of new pollution. Most other areas of the country are class II areas, and their new pollution increments are about 4-20 times higher. By creating more "room" for new pollution in class II areas, the law seeks to steer new pollution sources away from class I areas.

A major new pollution source like a power plant may not locate near a class I area if it would increase pollution over the class I increments. The plant must do a study (known as an increment analysis) to show how much pollution is already in the class I area and how much additional pollution it will add.

In very limited circumstances, a new pollution source may be granted a variance allowing it to exceed class I increments if its emissions will not adversely impact air quality in the class I area.

### **EPA's proposed rule change will allow more air pollution in national parks and wilderness areas**

The EPA is seeking to change the way increment analyses are conducted for class I areas. Four changes in particular will allow facilities seeking to locate near class I areas to manipulate the data to make it appear as if the air is cleaner than it actually is. These changes will open the door to new pollution in national parks and wilderness areas.

### **Proposed rule change hides a power plant's pollution spikes from regulators**

Pollution levels in class I areas can vary significantly over the course of a day, week, month and year. For instance higher pollution can occur during daytime when more commercial activities take place, and during summer months, when power plants increase operations to meet air conditioning energy demand. Congress created short-term pollution increments to protect class I areas from these periods of higher emissions. The

EPA's proposed rule would undermine short-term increments by turning them into annual average pollution limits. A facility looking to locate near a class I area could average the hourly and daily emissions of all area pollution sources over the course of a year, thus hiding pollution spikes that can cause real harm in class I areas or even exceed the short-term increment limits. This is analogous to the police excusing a driver caught going 90 mph in a 55 mph zone because, over the course of a year, the driver's *average* speed did not exceed 55 mph. Having created a false picture of actual pollution levels in the class I area, the new facility could then claim the right to emit far more pollution than otherwise would be allowed.

### **Ignores major polluters in class I areas**

Under current rules, a pollution source that has received a variance to exceed a class I increment will nonetheless still have its emissions counted when new sources are seeking to add pollution in the class I area. This makes sense because a variance source, by definition, is known to be a major contributor of pollution in the class I area. Under EPA's proposed rule, the emissions from any pollution source operating under a variance would not be included in an increment analysis. When calculating pollution levels in a class I area, a new facility could simply pretend that those sources don't exist. By ignoring these emissions, a new facility can claim there is more "room" for new pollution, thus degrading class I air quality to an even greater extent.

### **Allows phony pollution accounting**

Under current rules, emissions from existing facilities that impact a class I area are established by looking at the most recent two years of operating data. The proposed rule allows actual emissions to be computed based on any time period that is claimed to be "more representative" of normal source operations. The alternative time period could even be two non-consecutive 12-month periods picked from anytime in the past. This opens the door to phony pollution accounting by new facilities that have a vested interest in producing the lowest possible pollution estimates for class I areas they are seeking to locate near.

### **Opens the door to 50 different standards**

Air pollution does not respect state boundaries, and class I areas may be polluted by sources in many different states. It's therefore important that the methods for estimating class I pollution levels are the most accurate and are consistent from state to state. The EPA's proposal opens the door to 50 different standards for estimating class I pollution levels. Emissions "...shall be calculated based on information that, in the judgment of the reviewing authority, provides the most reliable, consistent and representative indication of the emissions from a unit or group of units in an increment consumption analysis..." Some states are likely to use methods that make the air in class I areas appear cleaner than it actually is, but EPA's rule provides no check against such practices.

### **Comments from EPA and National Park Service scientists on EPA proposed rule**

The National Park Service and every EPA regional office in the country oppose the changes sought by EPA management because they concluded that park air quality would worsen.

- The proposed EPA methodology "provides the lowest possible degree of protection of short-term increments and it is usually the 24-hour increment that is the most critical" for protecting air quality. -- National Park Service
- "The protection of short term PSD increments cannot be assured using annual average emission rates." -- National Park Service
- "The argument, in the preamble, that it is unlikely that multiple sources will experience maximum emissions on the same dates is specious [and] ignores reality..." -- EPA Region 3

- “The exclusion [from the baseline of certain sources that have received variances] gives a permanent ‘pass’ to sources that happen to obtain a variance regardless of subsequent events [or that are] granted based upon error or mischief.” -- EPA Region 3
- “The application of the concept of ‘normal operations’ to the PSD baseline concentration(s) does not appear appropriate as it makes PSD baseline concentration(s) up for interpretation by every applicant.” -- EPA Region 4
- “...in the case where hotspots are due to single sources, the use of average short-term rates will likely underestimate expected actual short-term concentration increases.” -- EPA Region 5
- “Dating back only to 2005, the EPA stated that use of annualized emission rates likely underestimates short-term impacts.” -- EPA Region 7
- “...this proposal... would jeopardize protection of PSD increments and limit the public’s ability to be involved contrary to the provisions of” the Clean Air Act. -- EPA Region 9
- “Because of this fundamental misunderstanding of the permit process and the lack of understanding of how variances work, this rulemaking misses the mark on the appropriate solution to the issue of increment consumption for sources with variances.” -- EPA Region 10

**Dark Horizons:  
10 National Parks Most Threatened by New Coal-Fired Power Plants**

**May 2008**

**Written by**

Tom Baxter  
Christa Cherava  
Stephanie Kodish  
Mark Wenzler

**Acknowledgements**

For providing edits and input: Tom Martin, NPCA regional staff  
For creating the maps: Cathy Norris, NPCA Center for State of the Parks  
For graphic design assistance: Sarah Rutherford and Nicole Yin  
For creating a witty title: Danielle Blank and Blake Selzer  
For an innovative online presentation: Felicia Carr and Bev Stanton

Please visit [www.npca.org/darkhorizons](http://www.npca.org/darkhorizons) for more information and a PDF version of this report.





**National Parks Conservation Association®**  
*Protecting Our National Parks for Future Generations®*

1300 19th Street NW • Suite 300 • Washington, DC 20036

202.223.NPCA(6722) • Fax 202.659.0650 • [npca@npca.org](mailto:n pca@npca.org) • [www.npca.org](http://www.npca.org)

PRINTED ON RECYCLED PAPER 

