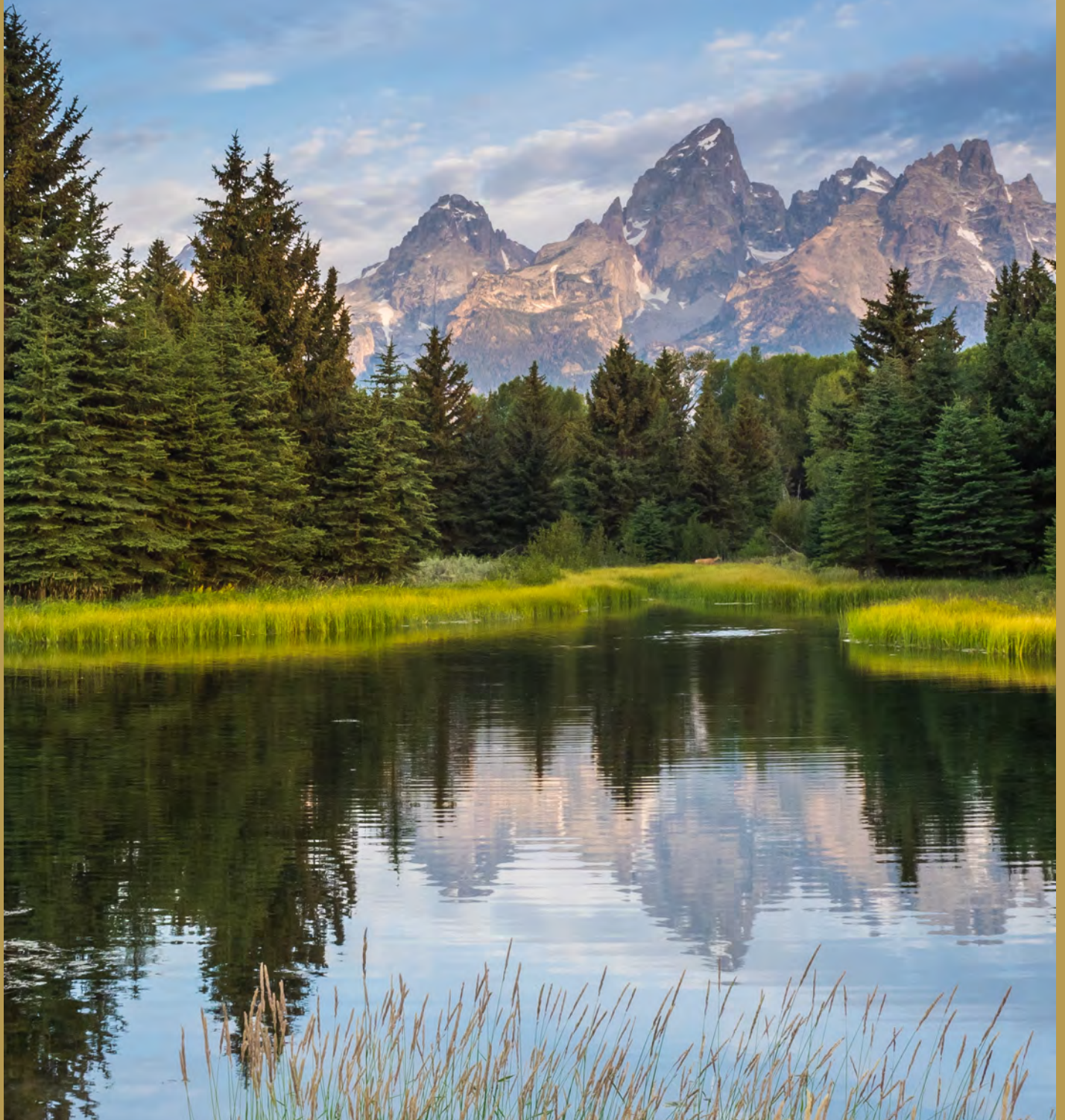




THE COALITION TO PROTECT  
AMERICA'S NATIONAL PARKS  
VOICES OF EXPERIENCE

## **ACTION NEEDED TO PROTECT NATIONAL PARKS FROM OIL AND GAS DEVELOPMENT**



# INTRODUCTION



Cover photo: Grand Teton National Park; photo Gary E. Davis. Above photos (left to right): Carlsbad Caverns National Park, Chaco Culture National Historic Park, Rocky Mountain National Park, Grand Teton National Park; photos Gary E. Davis.

America's national parks protect treasured landscapes and stories, and irreplaceable resources. However, oil and gas development on public lands near our national parks threatens the continued protection and preservation of these special places and their surrounding landscapes.

The impacts caused by oil and gas development on the doorsteps of national parks across the country has the potential to harm park resources, contaminate water, pollute the air, destroy habitat, threaten public health, impede the visitor experience, and exacerbate the already present impacts of climate change, which ultimately harms local communities and economies.

There are continued and concerning impacts on our national parks from current oil and gas development, which was ramped up [under the Trump administration](#). And while federal oil and gas leasing has slowed, it has not completely stopped. Last year, the Department of the Interior leased thousands of acres of public lands to the oil and gas industry and will propose to lease thousands more in 2023. However, the current leasing system is broken and outdated. This leasing has been mandated by the courts, but it is imperative that the Biden administration complete much needed reforms to the federal oil and gas program.

This report highlights the negative impacts of current oil and gas development near four of America's national parks and shows that much stronger action is needed from the Biden administration and Congress to better protect these extraordinary places from the impacts of oil and gas development.



## CARLSBAD CAVERNS NATIONAL PARK

Carlsbad Caverns National Park was first designated as a national monument in 1923. President Calvin Coolidge, who used the Antiquities Act to protect the site, stated that Carlsbad is a place [“of extraordinary proportions and of unusual beauty and variety of natural decoration,”](#) one that was [“equal, if not superior, in both scientific and popular interest to the better-known caves.”](#)

But the history of this magnificent park dates back far beyond President Coolidge’s involvement. Carlsbad Caverns is one of over 300 limestone cave systems in a fossil reef laid down by an inland sea 250 to 280 million years ago. The land that is now Carlsbad Caverns National Park was once home to Indigenous Peoples such as the Mescalero Apache and the Pueblo of Zuni. Evidence of their habitation – found in pictographs and cooking sites - can still be found in the park.

The region later became a focus of Spanish and European exploration. The caves were first explored in 1898 and tours began soon after. After the park’s initial designation as a national monument, it was redesignated as a national park in 1930.

Today, the park includes over 119 caves and historic and cultural resources that capture the history of human activities, including the stories of prehistoric and historic occupations by Indigenous peoples, European exploration and settlement, and tourism. The park is also a designated wilderness area as well as a UNESCO World Heritage Site.

Thanks in part to the wonders of Carlsbad Caverns, New Mexico is a thriving destination for visitors from all over the world who are drawn to the state’s stunning scenery, dark night skies, and fantastic outdoor recreational opportunities and cultural experiences. But the impacts of oil and gas development could jeopardize not just park resources but the visitor experience and the tourism industry.

Carlsbad Caverns sits at the convergence of the Delaware and Permian Basins, one of the country’s [most active and profitable oil and gas fields](#). As of December 2022, there were [350 oil rigs in the Permian Basin](#), and new permits to drill are being approved all the time.

This uptick in drilling is wreaking havoc on air quality, says Emily Wolf, New Mexico Program Coordinator for the National Parks Conservation Association (NPCA). Carlsbad Caverns National Park is a Class 1 airshed, meaning it has been granted special air quality protections [under the federal Clean Air Act](#). But the National Park Service has noted recently that the park’s air quality has been impacted by oil and gas activity, showing heightened ozone levels.



Carlsbad Caverns National Park; photo Gary E. Davis

## CARLSBAD CAVERNS NATIONAL PARK

The [\*Carlsbad Current-Argus\*](#) reported, “A multi-year study by the Park Service showed days when the National Ambient Air Quality Standard (NAAQS) of 70 parts per billion (ppb) of ozone was exceeded gradually increased from 67 in 2016 to 73 in 2020, as oil and gas operations also grew in the region.”

Above ground, haze can obscure park vistas, impacting the visitor experience by reducing visibility. The same particles in the air that reduce visibility can also impact health. [And air pollutants blown into the park can harm natural and scenic resources such as soils, surface waters, plants, and wildlife as well.](#)

Despite the potential impacts to air quality, resources, and health, the Environmental Protection Agency (EPA) is deferring on a proposal to declare the Permian Basin an ozone nonattainment area, a designation that would have “[spurred new pollution curbs and potentially deterred drilling in the world’s biggest oil field.](#)”

Oil and gas development threatens the resources below ground as well – oil and gas drilling poses risks to fragile cave and karst systems, and underlying aquifer resources.

At the Guadalupe Cave Resource Protection Area in the Lincoln National Forest, neighboring and connected with the caves of Carlsbad Caverns - the US Forest Service has requested a [withdrawal of over 28,000 acres from mineral exploration and development](#) (aka mining and oil & gas) to protect and preserve the caves.

Recently finalized state regulations that seek to reduce emissions produced through oil and gas activities, and an update to the BLM’s [methane rule](#), could help to further mitigate air quality impacts. Additionally, the Environmental Protection Agency (EPA) has [drafted methane rules](#) and the state is in the process of developing its Regional Haze Rule state implementation plan, all of which could further protect the air quality of the park, and surrounding communities and landscapes.

However, a thorough assessment of the cumulative risks posed by oil and gas drilling on the wide-reaching cavern system connected to Carlsbad Caverns, and similar protections put in place, is greatly needed to protect these irreplaceable resources.



*Carlsbad Caverns National Park; photo Gary E. Davis*



## CHACO CULTURE NATIONAL HISTORICAL PARK



Chaco Culture National Historical Park (NHP) is the location of approximately 4,000 prehistoric and historic archaeological sites, representing more than 12,000 years of human cultural history in Chaco Canyon. The park also protects plants and wildlife within the Colorado Plateau ecosystem and presents an important opportunity to safeguard the region's biodiversity and [monitor its environmental quality](#). It is an International Dark Sky Park and is a core component of a broader UNESCO World Heritage Site that encompasses a total of ten Chacoan cultural sites in northwestern New Mexico. To say Chaco Culture NHP is a special place is to put it mildly.

Chaco Canyon was a center of Pueblo culture between the 9th and 13th centuries. The Chacoan people built great houses and ceremonial buildings using a distinctive architectural style. While the people eventually migrated to new locations, the buildings remain. Chaco Culture NHP has sixteen buildings within the park, the largest, best preserved, and [most complex prehistoric architectural structures in North America](#).

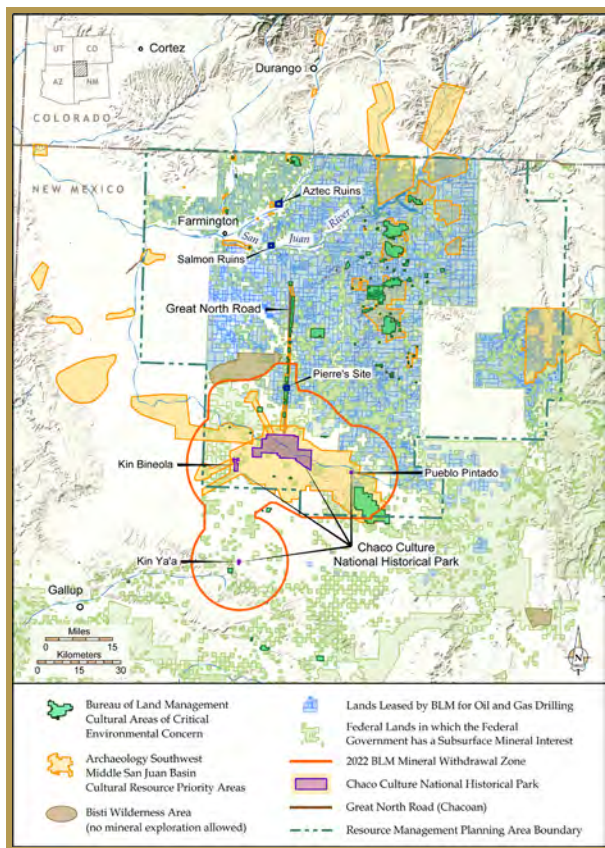
European and American exploration eventually followed, and the U.S. Army surveyed the site in 1849. Archaeological excavations commenced in the late 19th century and President Theodore Roosevelt designated Chaco Canyon National Monument in 1907. In 1980, it was re-designated as Chaco Culture National Historical Park.

While Chaco Canyon was once the center of a thriving ancient society, today, Chaco Canyon and the surrounding Greater Chaco Landscape remain a living cultural and ancestral landscape of great spiritual significance and traditional lifeways to the [Pueblo Tribes of New Mexico and the Navajo Nation](#).

The national park helps to protect the structures and stories of an ancient people whose descendants have deep spiritual and cultural ties to the landscape. Through interpretation, park staff can share the history of these incredible cultural resources and properties and make connections to the present. Visitors can also enjoy the quiet and peace found in the park's scenic vistas, sparkling night skies, and clean air.

Unfortunately, natural and cultural resources in the park and the surrounding Greater Chaco Landscape, the area's clean air and water, and public health are threatened by the continuing presence of oil and gas development in the region. BLM has already leased over 90% of the federal lands surrounding Chaco for drilling, and oil and gas companies have drilled more than 37,000 wells in the area and built a sprawling network of roads – 15,000 miles – [five times longer than the distance from Los Angeles to New York](#).

## CHACO CULTURE NATIONAL HISTORICAL PARK



Map courtesy of Paul Reed and Archaeology Southwest.

A 2016 NASA study documented the multiple compounding adverse effects of oil and gas development in the area, including the presence of a massive methane cloud positioned over the [Four Corners region of the United States, including northwestern New Mexico](#). The study explored the role of point sources of methane that supposedly drive the regional enhancement throughout the San Juan Basin in Four Corners, where over 20,000 oil and gas wells operate. The analysis detected more than 250 individual methane plumes from fossil fuel harvesting, processing, and distributing infrastructure. In addition to methane leaking from well drilling pads, other observed methane sources included gas processing facilities, storage tanks, and pipeline leaks.

Permanent protections and an assessment of the cumulative impact of oil and gas on health, culture, and climate are needed to ensure the resources and stories at Chaco Culture NHP and in the Greater Chaco Landscape are protected.

There is a push to reintroduce legislation that would establish critical permanent protections for the park and the Greater Chaco Landscape. In addition, the Department of the Interior has announced that the Bureau of Land Management (BLM) will consider a 20-year withdrawal of federal lands within a 10-mile radius around Chaco Culture National Historical Park, which would bar [new federal oil and gas leasing on those lands](#).

Jerome Lucero, the Vice Chairman of the All Pueblo Council of Governors, said [in a statement](#), “we’ve made progress, but now, it’s essential for DOI to finalize its proposal to protect Chaco and for our leaders in Congress to introduce legislation to ensure permanent protections of the sacred landscape.”

This 10-mile buffer zone is critical to resource protection. A recent archaeological survey and reconnaissance work – in addition to previous years of research - by Archaeology Southwest revealed more than 4,000 archaeological and historic sites in the northern portion of the proposed protective zone. And as less than 20 percent of the area enclosed by the [10-mile zone has been archaeologically surveyed, the actual site count is undoubtedly much higher](#). The 10-mile zone protects much of Chaco Culture NHP’s viewshed as well, meaning visitors will continue to view the historic and sensitive landscape without the encroachment of energy development.



## ROCKY MOUNTAIN NATIONAL PARK

Rocky Mountain National Park is well known for its striking alpine landscapes and the incredible flora and fauna that populate the mountains and meadows. The story of human habitation in this landscape is long, as Indigenous Peoples have been traveling through and living in the Rocky Mountains for over 11,000 years, and the Ute, Cheyenne, Arapaho, and several other Tribal nations hunted and formed communities in this region.

In 1803, the United States government acquired what is now known as Rocky Mountain National Park as part of the Louisiana Purchase. This act, which nearly doubled the size of the United States, came at a great human cost. [Tens of thousands of Native Americans were forcibly displaced from their ancestral lands.](#) And in the century that followed, as Indigenous Peoples suffered brutal treatment, explorers, fur trappers and gold miners passed through the landscape. Homesteaders began to settle the land in the mid-19<sup>th</sup> century. And eventually, the tourists followed.

The Estes Park Protective and Improvement Association, founded in the late 19<sup>th</sup> century, [promoted local conservation efforts to mitigate the effects of the increasing number of visitors to the area.](#) Naturalist and homesteader Enos Mills led the charge to establish a national park and with support from numerous clubs and organizations, President Woodrow Wilson signed into law the Rocky Mountain National Park Act in 1915.

When Rocky Mountain National Park was established, the focus was on the park's scenic and natural beauty. However, cultural resources like old trails, cattle ranches, and lodges, were also protected.



Rocky Mountain National Park; photo Gary E. Davis

## ROCKY MOUNTAIN NATIONAL PARK

Today, Rocky Mountain National Park consists of over 265,000 acres. There are historic structures and roads, wetlands, evergreen forests, mountain lakes, and an alpine tundra. There are nearly 60 species of mammals, 280 recorded bird species and amphibians, fish, insects, and more [who pass through, and live-in, the park](#). Visitors come from all over the world to enjoy over 300 miles of hiking trails, incredible wildlife viewing, camp, climb, ride, and fish. With over 4.5 million visitors every year, Rocky Mountain National Park is [one of the most visited parks within the National Park System](#).



Rocky Mountain National Park; photo Gary E. Davis

Despite being a source of pride for Coloradans and its millions of visitors each year, Rocky Mountain has been, and continues to be, adversely affected by air pollution largely due to a boom in oil and gas development nearby. In neighboring Weld County, and nearby Jackson County, there is a significant amount of oil and gas drilling and leasing. This activity impacts the park's fragile ecosystem, wildlife migration, visitor experience, surrounding communities, and air quality.

Research and monitoring have demonstrated that the park's air quality is affected by [air pollution coming from a variety of human made sources](#), including [vehicles, power plants, agriculture, fire, and the oil and gas industry](#). A report from the National Parks Conservation Association highlights the impact of oil and gas production in Weld County, east of Rocky Mountain National Park. The high levels of oil and gas production have contributed to severe levels of ozone, have been a leading factor in the [national park falling out of compliance](#)

[with the regional haze standards set under the Clean Air Act](#), and have contributed to nitrogen oxide in the park's soil, which exceeds 15 times the natural amount.

The oil and gas industry doesn't just contribute to air pollution in Rocky Mountain National Park, it drives climate change and threatens the delicate and diverse ecosystems protected by the park. [For example, the population of the pine bark beetle is thriving and killing millions of trees, thanks to warmer winters caused by climate change](#). Snowpacks are melting earlier, invasive grasses are spreading, and wildfires are on the rise.

Without additional planning and regulations to protect and improve air quality and manage the boom of oil and gas development near national parks, our climate and air remain at risk.

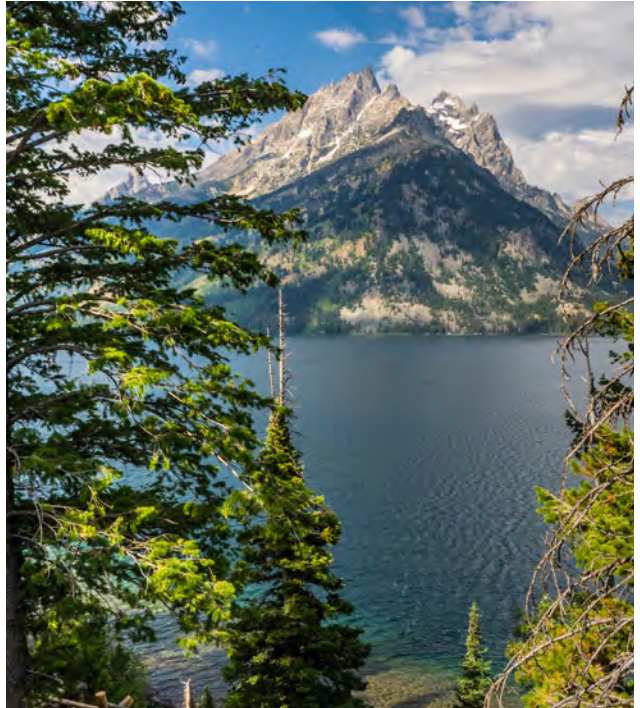


## GRAND TETON NATIONAL PARK

Grand Teton National Park protects incredible alpine and subalpine landscapes, rich in diversity and recreational opportunities. Visitors flock to the lakes, mountains, and trails to hike, fish, boat, climb, and enjoy wildlife viewing. Park terrain ranges from roughly 6,000 feet on the valley floor to over 13,000 feet at the summit of Grand Teton. In between are forests, lakes, stream, canyons, and meadows.

Nomadic Paleo-Indians first entered the Jackson Hole valley shortly after Pleistocene Ice Age glaciers retreated, [more than 11,000 years ago](#). In the centuries that followed, indigenous tribes such as the Shoshone, Bannock, Blackfoot, Crow, Flathead, Gros Ventre, and Nez Perce [were passing through, hunting and gathering in the area](#).

Explorers and fur trappers passed through what is now Grand Teton National Park, followed by homesteaders and ranchers. As the area became more developed, thoughts turned to preserving and protecting the wild landscape. John D. Rockefeller, Jr. toured the area in 1926 and became enamored, purchasing private land throughout the area. In 1929, President Franklin Roosevelt signed the national park into law. Fourteen years later, Roosevelt declared National Monument. John Rockefeller donated over 35,000 acres to the park in 1949. And in 1950, Congress combined the original park, the national monument, and the Rockefeller lands to establish present-day Grand Teton National Park.



*Grand Teton National Park; photo Gary E. Davis*



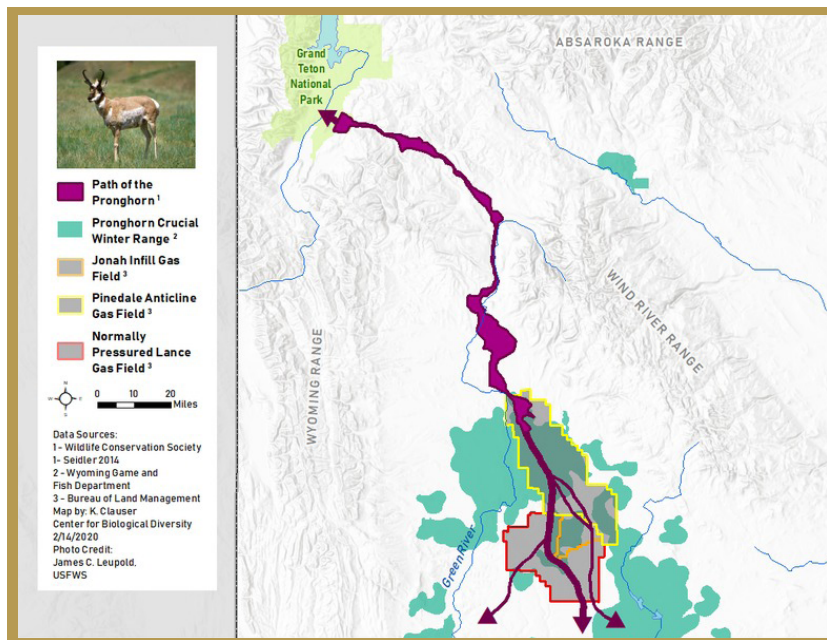
*Grand Teton National Park; photo Gary E. Davis*

Today, Grand Teton protects over 300,000 acres of mountain, valley, rivers, and lakes. There are archaeological sites and cultural resources that tell the stories of Paleo-Indian, American Indians, fur trappers, homesteaders, ranchers, and farmers. The park is situated in the heart of the [Greater Yellowstone Ecosystem](#), a region that is home to some of the [most diverse and abundant wildlife populations in existence](#). This diverse array of wildlife - including black and grizzly bears, moose, elk, mule deer, bison, pronghorn, numerous species of fish, reptiles, birds, and bats – all call the alpine, forest, sagebrush flats, or wetlands home.

## GRAND TETON NATIONAL PARK

However, continued oil and gas development in western Wyoming threatens critical wildlife migration corridor leading to Grand Teton National Park and unnecessarily places wildlife habitat at risk. For example, over the past decade, there has been a dramatic decline in the mule deer population in Wyoming because of habitat loss associated with [energy development](#), and recent estimates showed mule deer numbers 46% below the [Wyoming Game and Fish Department's recommendations for a healthy population](#).

On the Hoback — Red Desert migration corridor, [mule deer travel roughly 150 miles](#) one-way from the low-elevation winter ranges in the Red Desert to the high mountain slopes surrounding the Hoback Basin. This migration route is the longest mule deer migration ever recorded. The BLM [plans to lease up to 250,000 acres of public land](#) in Wyoming, including some parcels that could impact the Hoback-Red Desert migration corridor, as well as critical habitat for mule deer, pronghorn and other wildlife. Those areas should not be leased for oil and gas development, especially as there are already many active leases within the Hoback-Red Desert migration corridor.



Path of the Pronghorn and Wyoming gas fields. Kara Clauser/Center for Biological Diversity.

In addition, a herd of pronghorn that live inside Grand Teton National Park are threatened by a proposed 3,500-well gas project that could [“irrevocably alter the Path of the Pronghorn, a migration corridor that hundreds of pronghorns use to travel from summer ranges in Grand Teton National Park to winter ranges in the Green River Basin.”](#) Numerous conservation groups have argued that the massive gas-field would disrupt the Path of the Pronghorn by preventing access to the winter ranges that the animals need to survive. While the path’s northern stretch to Grand Teton National Park is federally

protected, its southern portion is not; and has been reduced in size by two neighboring gas fields. If any portion of the path is disrupted, [Grand Teton’s entire population of pronghorn could disappear](#).

The safety of wildlife and critical habitat is at risk. In order to ensure that the mule deer and pronghorn of Grand Teton remain protected, oil and gas development should remain far from national parks and migration paths.



## CONCLUSION

National Parks are meant to be conserved and protected to [“provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”](#)

The parks discussed in this report can be better protected in several ways:

- 1) Prohibit oil and gas development on lands near national parks through legislation such as the Chaco Cultural Heritage Protection Act
- 2) Protect wildlife and habitat by ensuring migration routes are not impeded by oil and gas development
- 3) Further protect the air quality of national parks and the surrounding communities by regulating emissions produced through oil and gas activities and developing strong Regional Haze Rule state implementation plans

National parks across the country will also benefit from swift implementation of the Inflation Reduction Act's (IRA) commonsense changes to the oil and gas leasing program. The IRA makes several key changes to the oil and gas leasing program that will benefit parks:

- 1) The IRA changes the royalty rate and other fiscal terms for drilling on public lands to more fairly compensate the American people for the use of these publicly owned resources. The 16.67% royalty rate along with increases in certain fees that haven't been updated in decades will help direct oil and gas development toward the most highly productive tracts and reduce speculative leasing that can hold back conservation efforts on public lands.
- 2) Another step toward ensuring oil and gas development and leasing is responsibly directed is the IRA's provision ending what is called 'non-competitive leasing,' whereby companies or financial speculators could acquire public land for only \$2 an acre if it received no bids at auction. In the past this resulted in hundreds of thousands of acres of public lands with little to no potential for oil and gas production becoming tied up in bureaucratic red tape, impeding conservation efforts.

In addition to these important reforms included in the IRA, other updates to federal leasing regulations are sorely needed to ensure oil and gas companies clean up after themselves once drilling concludes. Too often, oil and gas companies fail to fully pay for clean-up costs that result from drilling on public lands, which can pollute our air and water while leaving taxpayers to pick up the tab for cleaning up oil and gas companies' messes. Strengthening bonding regulations so companies have to put down the clean-up costs before they start drilling is essential to ensuring that companies can't abandon oil and gas wells on public lands.

To protect our irreplaceable natural and cultural resources, treasured landscapes, our climate, and public health, the Biden administration and Congress must take action to curb the adverse effects of energy extraction on parks, surrounding landscapes, gateway communities, park visitors, and national park resources.