



Worth More Wild

THE VALUE OF ARIZONA'S ROADLESS NATIONAL FORESTS

ENVIRONMENT ARIZONA RESEARCH & POLICY CENTER



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AUTHORED BY CHRISTINA GOLDFUSS

**FOR MORE INFO
CONTACT:**

**ENVIRONMENT ARIZONA
RESEARCH & POLICY CENTER**

One Renaissance Sq.
2 N. Central Ave., Ste. 170-486
Phoenix, AZ 85004
(602) 252-9225

www.environmentarizona.org

OR

CHRISTINA GOLDFUSS

Environment Arizona
Research & Policy Center
218 D Street, SE
Washington, DC 20003
(202) 546-9707

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executive summary

After decades of scientific inquiry, 600 public hearings, and a record 1.6 million comments from the American public, the Clinton administration issued the Roadless Area Conservation Rule in January 2001. The Roadless Rule, as it is commonly known, originally protected 58.5 million acres of wild national forest land from most commercial logging and road-building, and associated mining and drilling. Since then, the Bush administration has removed these protections from 9.5 million acres of roadless areas in the Tongass National Forest.

For the remaining 49 million acres of America's last wild national forests, the 2001 Roadless Rule ensures that they will continue to provide clean drinking water for millions of Americans, wildlife habitat, endless recreational opportunities, and other important values. The rule also compels the U.S. Forest Service to address the estimated \$10.3 billion backlog in needed maintenance for existing roads, instead of using taxpayer dollars to build new roads.

The American people have spoken in favor of protecting roadless areas within our national forests. Since 2000, Arizona residents have submitted 41,118 comments, with the overwhelming majority of them in favor of protecting the state's 1.2 million acres of roadless forests.

The strong public support for protecting roadless areas can be understood by looking at their economic and ecological values:

- Sixty million Americans rely on drinking water from national forests. Roadless areas, because of their pristine condition, provide some of the purest sources of these essential water supplies. In the Southwestern Forest Service Region, which includes Arizona, drinking water is worth \$205.1 million annually.

- Recreation in national forests has become more and more popular over time as Americans participate in activities from bicycling and hiking to fishing and hunting. In 2006, 1.2 million Arizona residents took part in hunting, fishing, and wildlife-watching; that same year, wildlife-related recreation contributed \$2.2 billion to the state economy.

- Some of the most unspoiled habitat for threatened, endangered, and declining species is found in roadless areas. Arizona's national forests are home to 27 at-risk species that could be harmed by destruction of roadless areas.

Despite the many benefits national forests provide, historically, their value has been measured solely by the timber products they produce. Through subsidies to the timber industry and road construction at taxpayers' expense, the Forest Service has sold timber from national forest land to timber companies at such a low price that the agency loses millions of dollars each year.

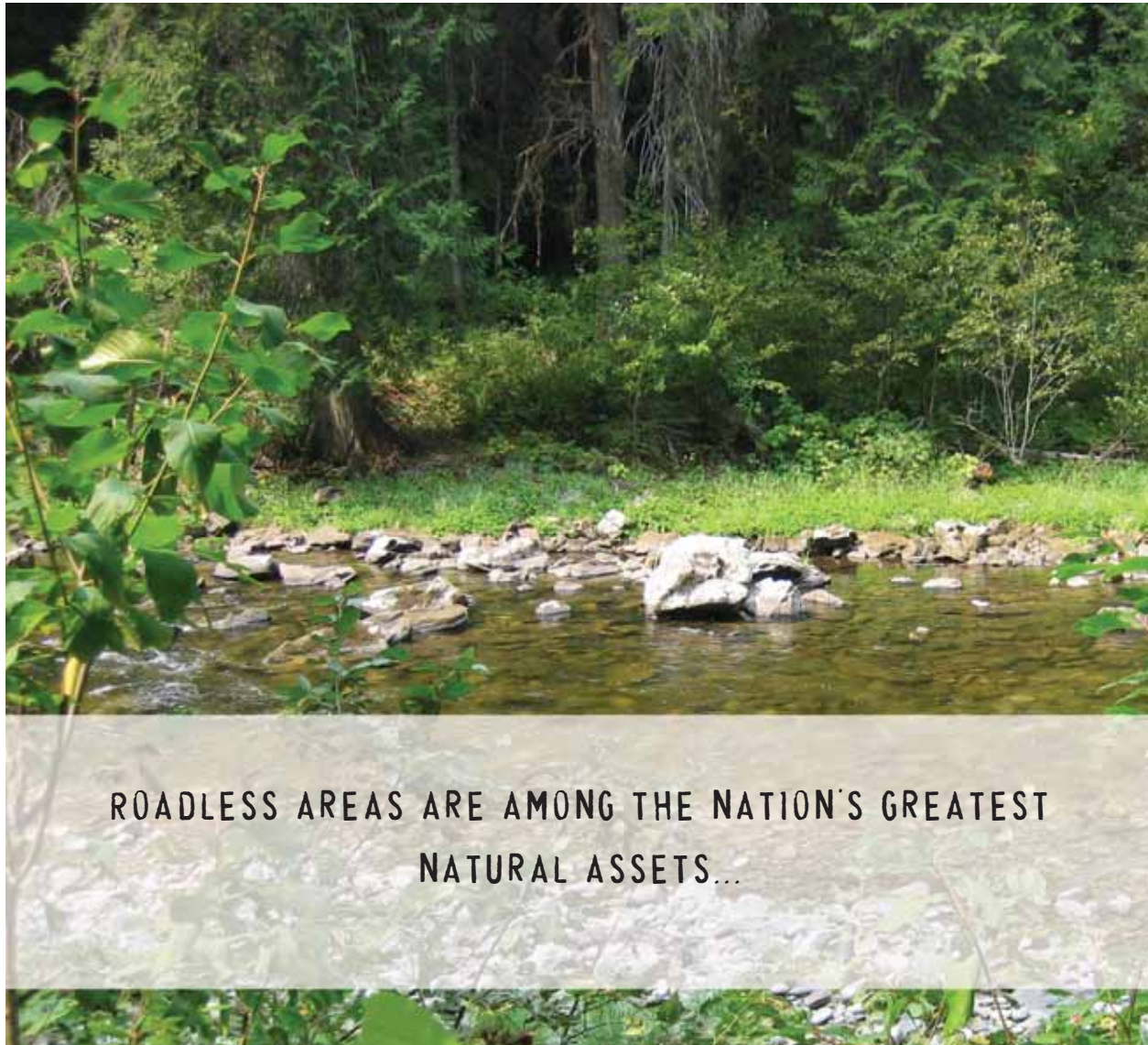
More recently, the Bush administration has fought to dismantle the 2001 Roadless Rule and to open these pristine lands to development. This threatens not only the ecological value of these lands but the revenue provided by those who participate in recreational activities in our last wild national forests. For hunters, hikers, and campers alike, the wild characteristics of these untouched lands are what draw them to our national forests. The 2001 Roadless Rule ensures that communities that rely on income from recreation in these last wild national forests will continue to have it for years to come. After all, national forest roadless areas belong to all Americans and deserve federal protection.

The Bush administration's attack on the Roadless Rule is in keeping with their other

numerous harmful policies, such as the so-called "Healthy Forests" initiative, which increases logging and removes environmental safeguards under the guise of preventing forest fires.

In the short term, the timber companies, mining companies, and energy companies that support the Bush administration's poli-

cies stand to benefit from attacks on protections for roadless forests, making millions at taxpayers' expense. However, it is the long term losses to the American public that we need to consider. Roadless areas are among the nation's greatest natural assets and their ecological and economic value is too great to sacrifice. Our last wild national forests should be protected once and for all.



ROADLESS AREAS ARE AMONG THE NATION'S GREATEST
NATURAL ASSETS...

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background

PUBLIC SUPPORT

From the rainforests of the Pacific Northwest to the hardwood groves of the Southern Appalachians, America's national forests are home to some of the most strikingly beautiful landscapes on earth. Arizona's 11.3 million acres of national forests provide so many benefits--clean water, recreation, and wildlife habitat--that one might assume they are already protected. The truth is that they are not. More than half of our national forests have already been subjected to decades of logging, mining, road-building, and other development activities. These and other new threats, such as oil and gas drilling, continue to endanger what is left.

The American people have been unwavering in their support for protecting roadless areas in our national forests. A look at public support for the 2001 Roadless Area Conservation Rule clearly paints the picture. When the Department of Agriculture proposed the Roadless Rule, it sought to protect 58.5 million acres of national forest lands from most commercial logging and road-building. In response to this proposal, the U.S. Forest Service, as part of the Department of Agriculture, received 1.6 million comments from the American public--far more than have ever been submitted for any federal rulemaking in history. More than 95 percent of those comments called for the complete protection of these wild forestlands. In 2004, citizens submitted another 1.8 million comments in response to a Bush administration proposal to repeal the rule and replace it with a voluntary state by state petition process. More than 95 percent of these comments opposed the repeal of the Roadless Rule. In the state of Arizona since 2000, 41,118 comments were submitted,¹ with the overwhelming majority of them in favor of protecting the state's 1.2 million acres of roadless forests.

FEDERAL ACTION

Despite the clear and repeated public support for protecting our last wild places, the Bush administration suspended the Roadless Rule almost immediately after taking office. Later, the administration refused to defend the Roadless Rule from legal challenges by the timber industry and other development interests. The Bush administration continued its attack on multiple fronts, hoping to dismantle roadless area protections piece by piece and open our natural heritage to more industrial activities. In a 2003 legal settlement, the administration and the State of Alaska agreed to exclude the Tongass National Forest, the earth's largest, intact temperate rainforest, from the Roadless Rule's protection. With 9.5 million acres of roadless areas, the Tongass National Forest has immeasurable ecological value, including ancient forests containing spruce, hemlock, and yellow and red cedar.

The Tongass National Forest's fate was only the beginning of the administration's efforts to remove protections for America's last wild forests.

THE COURTS

In 2003, the Bush administration failed to defend the Roadless Rule in another lawsuit, and a Wyoming court found the rule illegal, issuing a nationwide injunction against it. The administration did not appeal this decision, and the responsibility of defending the Roadless Rule fell on the shoulders of environmental attorneys, who appealed the injunction to the Tenth Circuit Court of Appeals.

On May 12, 2005, before a decision came in that appeal, the Bush administration repealed the Roadless Rule and replaced it with a new rule. The new rule required gover-

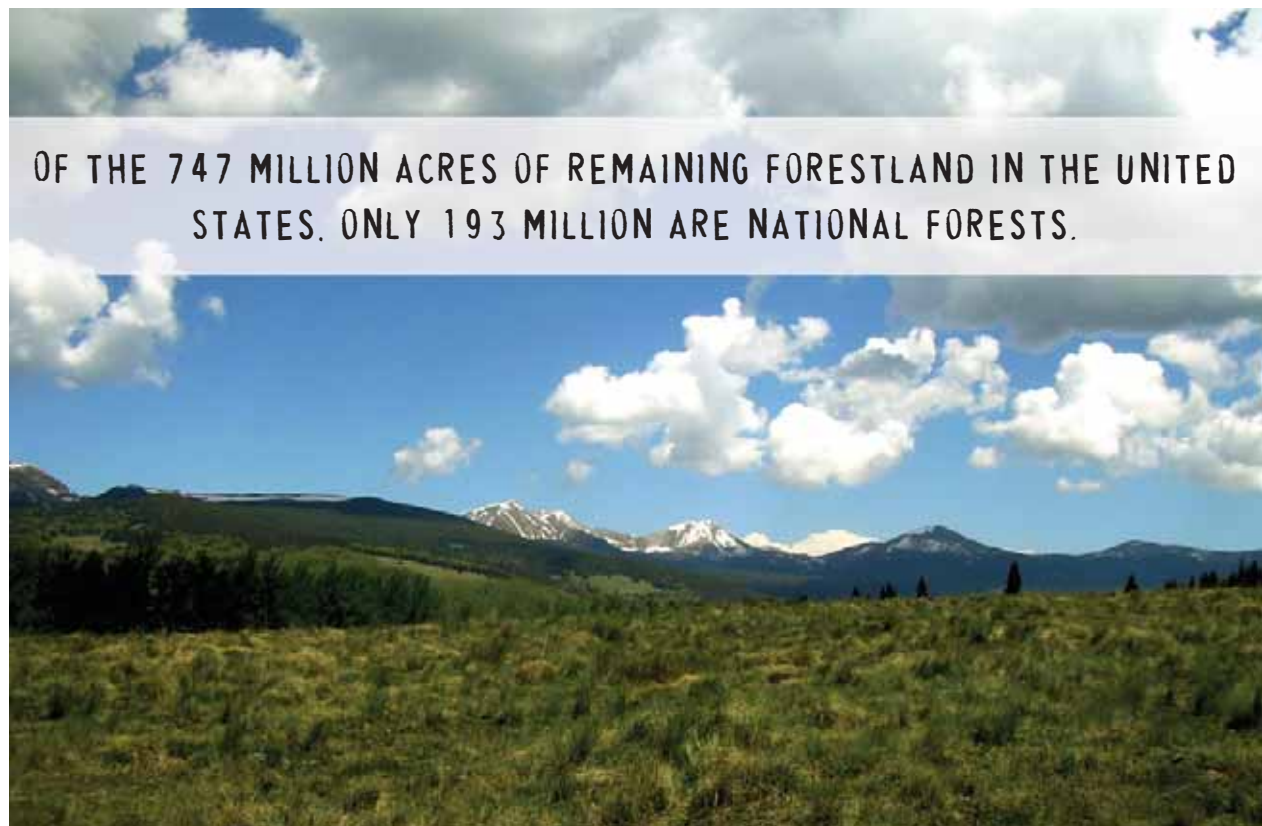
nors to file a petition with the federal government to protect roadless areas in their states. The petition process placed new burdens on governors while offering no guarantee of protection. Not surprisingly, the 2005 rule garnered great support from the logging and timber industries. Environmental organizations promptly took the battle to court.

That summer, the roadless fight heated up when the Attorneys General of California and New Mexico and the Governor of Oregon filed a suit challenging the Bush administration's state petition process. The State of Washington later joined this effort. The states' suit sought to reinstate the original Roadless Rule. Several months later, 20 conservation

groups filed a similar lawsuit.

STATE SUPPORT

While the battle for roadless protection continued to move through the courts, environmental groups coordinated efforts at the state level to use the Bush administration's rule to show support for roadless area protections. Governors from both parties submitted petitions through the Bush administration's process, asking for inventoried roadless areas in their states to have the same protections outlined in the 2001 Roadless Rule or greater. Now governors could add their names to the growing list of those who support protecting our last wild places.



OF THE 747 MILLION ACRES OF REMAINING FORESTLAND IN THE UNITED STATES, ONLY 193 MILLION ARE NATIONAL FORESTS.

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A RULING

In the fall of 2006, the federal district court in San Francisco ruled that the Bush administration's repeal of the 2001 Roadless Area Conservation Rule was illegal. The court found that the administration violated the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). As a result, the court reinstated the 2001 Roadless Rule as the law of the land, with the notable exception of the Tongass National Forest, which had been previously exempted by the Bush administration from the rule's protections.

Immediately after the reinstatement of the 2001 Roadless Rule, the Bush administration announced that it would still consider petitions, but it would then be under an existing law, the Administrative Procedure Act (APA). States were encouraged to submit petitions to start this process. New Mexico, Virginia, California, North Carolina and South Carolina had all previously submitted petitions for strong roadless protections through the Bush administration's 2005 state petition process. With the 2001 Roadless Rule back in place, these states did not resubmit those petitions under the APA, satisfied that the Roadless Rule sufficiently protected their states' last wild national forests.

STATE ACTION

After the administration began supporting the APA process, the state of Idaho filed a petition. The state had been a longtime supporter of the administration's attempts to weaken the provisions in the 2001 Roadless Rule.

Shortly afterward, the Bush administration filed an appeal of the California decision in the Ninth Circuit Court of Appeals, but this appeal will likely not be resolved for several years.

With the appeal pending and the district court in Wyoming again considering a challenge to the Roadless Rule, Colorado's Governor Ritter wanted an "insurance policy" to guarantee some protection for Colorado's roadless areas. In the spring of 2007, he submitted a state petition under the APA outlining management policy for 4.1 million acres of roadless areas. Governor Ritter specifically mentioned his support for the 2001 Roadless Rule when he submitted the petition and pointed to the questionable actions of the Bush administration as his reason for seeking a Colorado-specific Roadless Rule.

AFTER THE CHANGES

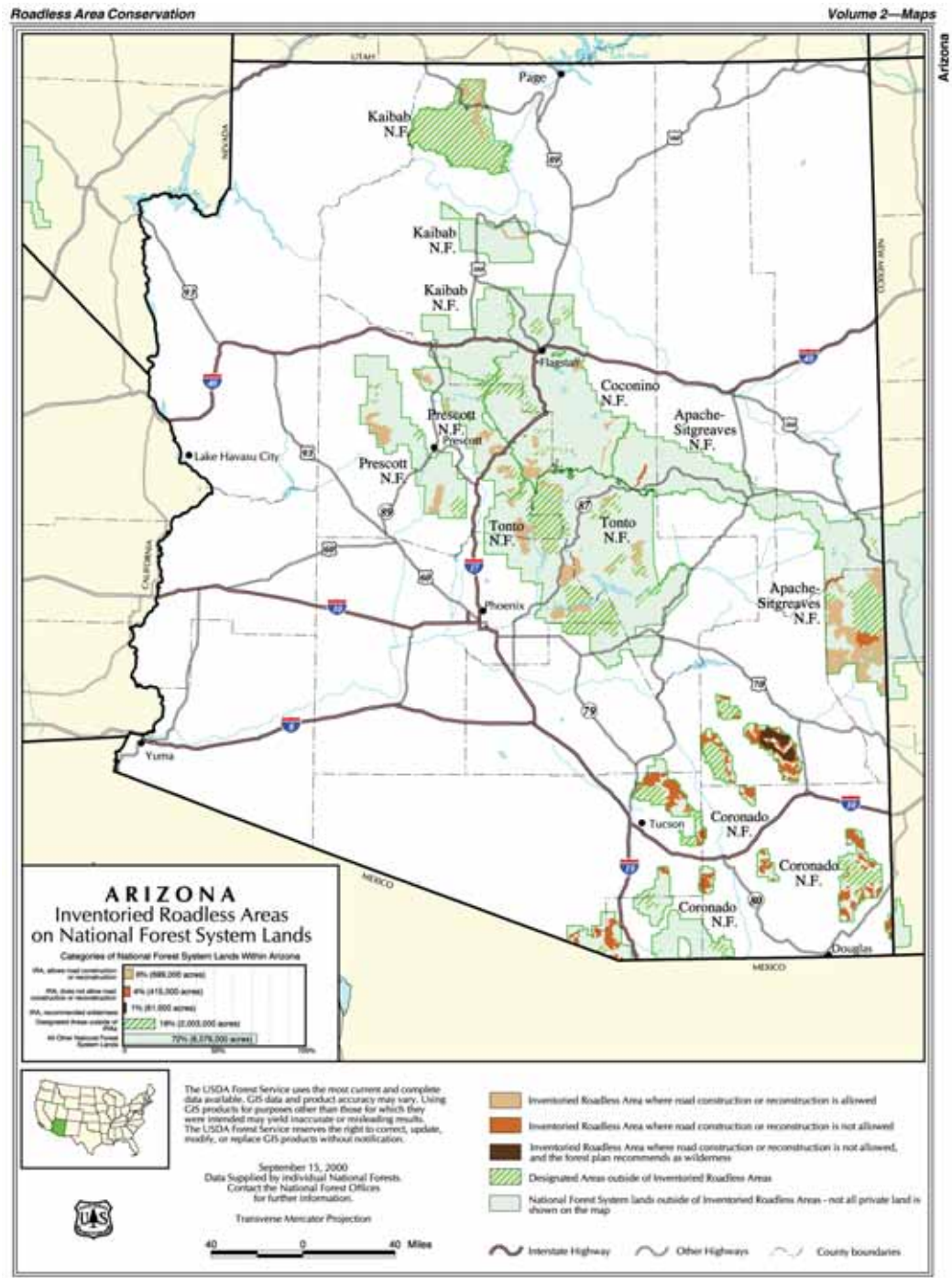
Why the constant changes to the Roadless Rule? The Forest Service falls within the Department of Agriculture, implying that the greatest value of the forests is realized by harvesting them like a crop. Approximately 49 percent of the landmass of the United States was forestland prior to European settlement;² today, only 33 percent is forested.³ While the overall rate of clearing has slowed, the trend in deforestation could pick up again, due to increasing threats from new sources, if we do not take measures to preserve these lands.

Of the 747 million acres of remaining forestland in the United States, only 193 million are national forests.⁴ National forests are far from protected—51 percent of these forests are open to commercial harvest. Fortunately, 18 percent are protected as wilderness areas,⁵ but the remaining 31 percent of our last wild forests have only the Roadless Rule to protect them.⁶

Many studies have shown that the ecological and economic benefits from the national forests outweigh those from timber sales, oil and gas drilling, and min-

ing. This report highlights the value of roadless areas for Arizona, where the most precious aspects of our forests are threatened by those

who want to develop them with miles and miles of new roads.



water resources

The first federally preserved forests were set aside in 1891 to protect the nation's water resources. Now, national forests are one of our greatest sources of clean drinking water.

In the United States, approximately 14 percent of the drinking water gathered from rain and snowfall comes from our national forests.⁷ More than 900 municipal watersheds are found on national forest lands,⁸ and more than 60 million Americans depend on drinking water from those watersheds.⁹ Road construction and other development can lead to runoff and greater contamination of these watersheds. The Roadless Rule keeps these untouched forests intact as filters for healthy drinking water.

By evaluating the public's willingness to pay for drinking water, economists have been able to place a monetary value on the water that comes from the national forests. Water can be managed in two ways: it can be used by irrigators or municipalities, or it can remain in-stream. Economists have estimated that water withdrawn for off-stream use is worth \$40 per acre-foot, and in-stream water is

worth \$17 per acre-foot in the West and \$8 per acre-foot in the East.¹⁰

Within the Southwestern Forest Service region, which encompasses Arizona, 7.4 million acre-feet of water remain in-stream and two million acre-feet are withdrawn for off-stream use.¹¹ Applying the value of the water for its respective use, the freshwater in the Southwestern region is worth \$205.1 million annually. With all Forest Service regions combined, water from our national forests is conservatively valued at \$3.7 billion per year.¹² This is a conservative estimate because the projected value of the water does not take into consideration a number of other benefits associated with water, including but not limited to navigational benefits, ecological services and aquatic habitat, and aesthetic and recreational values.

Research shows that forests play a critical role in safeguarding streams from contamination by processing organic matter and pollutants. When stream-side forests are cut down, both the water quality and the quantity within the ecosystem suffer.¹³

Roadless forests enhance water quality by naturally filtering pollutants through the soil. They increase water quantity by directing more water into groundwater reserves, and they slow surface runoff, reducing flooding and soil erosion.



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Americans use more water from underground aquifers than precipitation can replenish. Given that demand for water resources is likely to continue to increase in the coming years, the federal government should do whatever is necessary to ensure that our watersheds are protected. In fact, the Forest Service should not only protect our existing intact forests, but also restore and preserve forests that have been used commercially as a means of planning for the nation's future water needs.

recreation

Opportunities for recreation abound within the national forest system. The Seneca Rocks of West Virginia's Monongahela National Forest provide some of the best rock climbing formations on the East Coast. The Boundary Waters Canoe Area in Minnesota's Superior National Forest has been named one of National Geographic's 50 destinations of a lifetime for its breathtaking forested wilderness.

Taking advantage of the nation's diverse landscape, an estimated 87 million Americans participated in wildlife-related recreation--fishing, hunting, and wildlife watching--in 2006 alone.¹⁴ Those outdoor enthusiasts fed \$120.1 billion into the U.S. economy that year.¹⁵ These numbers are conservative, taking into account only fishing, hunting, and wildlife watching, but not other outdoor activities such as mountain biking, rock climbing, and skiing (see box for more state statistics).

Following the national trend, in Arizona outdoor recreation is an indispensable part of life, both culturally and economically. In 2006, 1.2 million Arizona residents--27 percent of the state's population--participated in fishing, hunting, and wildlife-watching.¹⁶ Through these three activities alone, trip expenses, equipment purchases, and other costs, recreationists spent \$2.2 billion in Arizona.¹⁷ In communities near recreation areas, money spent on food, lodging, transportation, outdoor equipment, and licenses helps sustain the local economy.

For many outdoor recreationists, the more pristine the land, the better the recreation experience. Recreation in wilderness areas, the most well-preserved lands in the country, has consistently increased over the years. It follows that protecting roadless areas will further increase the number of days that people visit the national forests.

Arizona Residents' Participation in Outdoor Activities		
Activity	% Involved*	# Involved*
Bicycling	27%	1,151,671
Camping	25%	1,067,921
Fishing	7%	339,417
Hunting	3%	116,977
Paddling	7%	320,680
Snow Sports	7%	284,229
Trail Sports	27%	1,164,256
Wildlife Viewing	24%	1,098,000

Source: Outdoor Industry Foundation, *State-Level Economic Contributions of Active Outdoor Recreation-Technical Report on Methods and Findings*, April 2007

* Do not add, there is overlap in participation in activities

Visits to roadless areas also generate significant economic benefits. Data from several studies that explore the value people place on recreation indicates that a recreation day in a roadless area is worth \$42.¹⁸ That is, recreationists would rather pay \$42 than forego a day of recreation in a roadless area.

As long as roadless areas remain intact through the Roadless Rule, they will continue to bolster local economies and allow visitors to enjoy the remarkable outdoor opportunities they provide. Without the Roadless Rule, America's last wild national forests are in danger of being developed, sending those who seek untouched lands for their recreation elsewhere.



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wildlife habitat

Across the United States, forestland, farmland, and other open spaces are rapidly vanishing. Urban development has quadrupled in the United States since 1954; by 1997, three million acres of land were developed each year. Due to poor planning, development has grown more quickly than the population. In most large metropolitan areas, urban land area increased more than twice as fast as population between 1950 and 1990.¹⁹

A serious consequence of development is the loss of wildlife habitat. National forests, which are home to 32 percent of the nation's proposed, threatened, and endangered species, provide some of these species' last remaining habitat.²⁰

Roads criss-crossing our national forests fragment species habitat, breaking large tracts into small uninhabitable pieces or "fragments". In Arizona, at least 27 of the state's proposed, threatened, and endangered species could be negatively affected by the destruction of roadless areas near their habitats.

The goal of the Endangered Species Act is to restore at-risk wildlife to self-sustaining levels. The Roadless Rule, in protecting nearly 50 million acres of wildlife habitat in the U.S., offers hope that sensitive species will be able to recover on those lands and that other species will be able to remain unthreatened. The logging, mining, and road-building that would follow the loss of roadless protections could reverse years of recovery efforts.²¹

If the Bush administration wants to demonstrate its commitment to America's natural heritage, it must do so by preserving habitat to help reverse these species' downward spiral. Habitat destruction will only hasten the decline of sensitive species and ensure their need for protection.

Wildlife Species in Arizona Affected by Changes to Roadless Areas		
Species	Group	Status*
Apache (Arizona) Trout	Fish	T
Arizona Cliffrose	Plant	E
Arizona Hedgehog Cactus	Plant	E
Chiricahua Leopard Frog	Amphibian	T
Colorado (=squawfish) Pikeminnow	Fish	E
Desert Tortoise (Sonoran pop.)	Reptile	T
Gila Chub**	Fish	E
Gila Topminnow	Fish	E
Gila Trout	Fish	E
Gray Wolf	Mammal	E
Huaachuca Water Umbel	Plant	E
Jaguar	Mammal	E
Lesser Long-nosed Bat	Mammal	E
Little Colorado Spinedace	Fish	T
Loach Minnow	Fish	T
Mexican Long-nosed Bat	Mammal	E
Mexican Spotted Owl	Bird	T
Mount Graham Red Squirrel	Mammal	E
New Mexico Ridgenose Rattlesnake	Reptile	T
Pima Pineapple Cactus	Plant	E
Razorback Sucker	Fish	E
San Francisco Peaks groundsel	Plant	T
Sonora Chub	Fish	T
Sonoran Tiger Salamander	Amphibian	E
Southwestern Willow Flycatcher	Bird	E
Spikedace	Fish	T
Yaqui Catfish	Fish	T
Yaqui Chub	Fish	E
*PT = Proposed Threatened; PE = Proposed Endangered; T = Threatened; E = Endangered		
** added since 2001 study, unknown if affected by changes to roadless areas		

Source: USDA Forest Service



ROADS CRISS-CROSSING OUR NATIONAL FORESTS FRAGMENT SPECIES
HABITAT. BREAKING LARGE TRACTS INTO SMALL UNINHABITABLE PIECES...



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threats

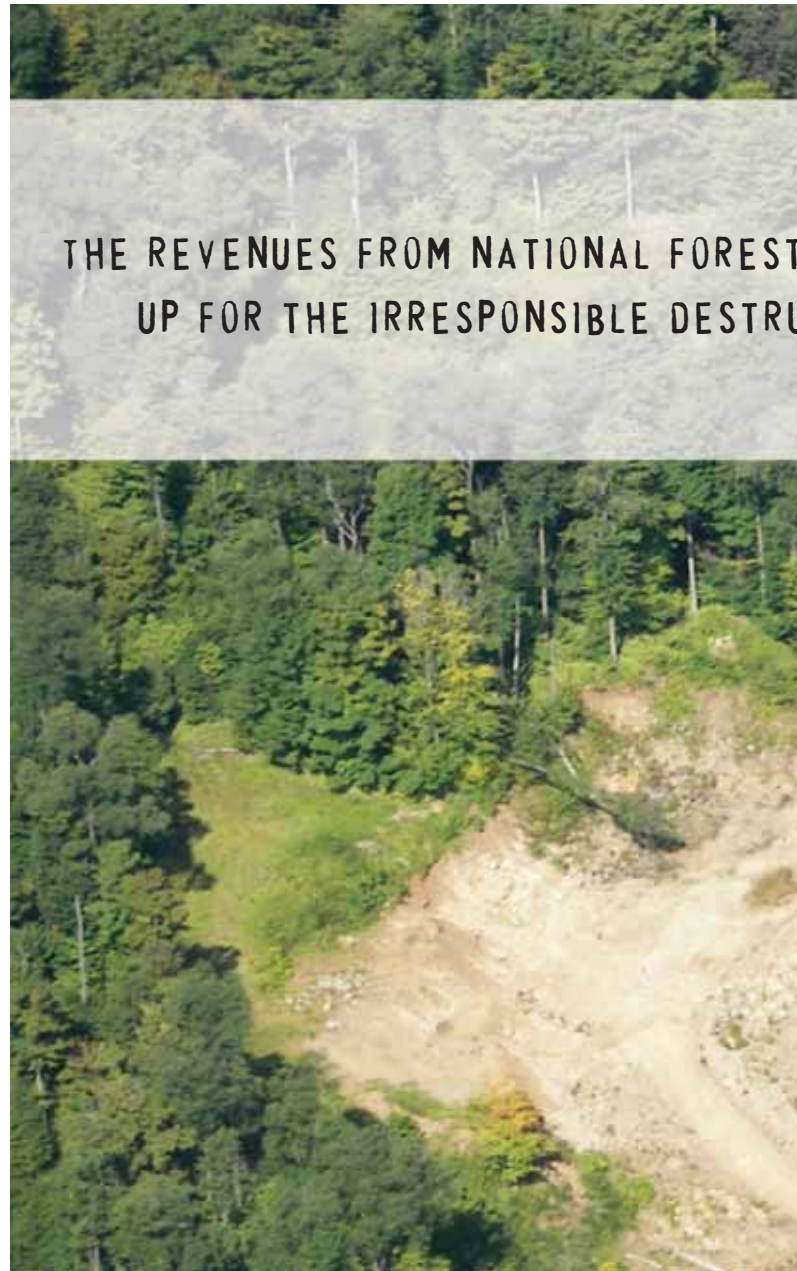
The 2001 Roadless Area Conservation Rule protected 58.5 million acres of national forest lands from most commercial logging activities and road-building associated with mining and energy development. Unfortunately, as the battle over the Roadless Rule wages on in the courts, roadless areas across the country face continued threats from the timber, mining, and oil and gas industries.

LOGGING

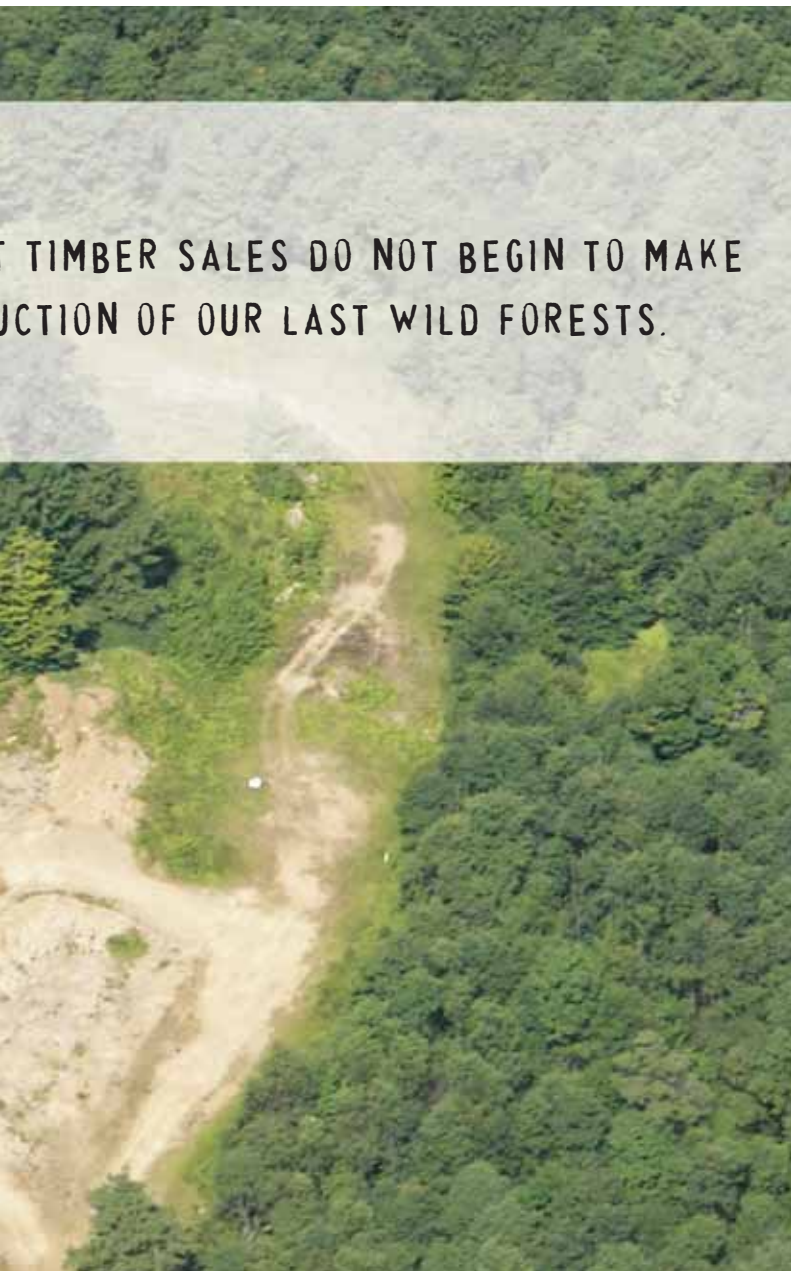
Timber companies are pushing to open up roadless areas in our national forests to clear-cut logging. This type of logging--and the road-building that comes along with it--fragments wildlife habitat, degrades water quality for fish, increases wildfire risk, and destroys recreational opportunities. Despite the 2001 Roadless Rule, our last wild forests continue to be threatened by this irresponsible industry activity. In 2004, for example, the Forest Service authorized logging in the North and South Kalmiopsis Roadless Areas of Oregon's Rogue River-Siskiyou National Forest. Logging interests also threaten to devastate the Salt Creek and Priest Mountain roadless areas in Colorado's Grand Mesa National Forest. The Sheep Flats timber sales in this area would log almost three square miles and 11 million board feet of timber from within these two roadless areas.²²

The revenues from national forest timber sales do not begin to make up for the irresponsible destruction of our last wild forests. The Forest Service sells acres of timber from our national forests to timber companies for prices well below market value. These low prices are meant to boost competition among bidders. However, bidding rarely lifts

the price to market value, since 70 percent of all timber sales receive just two or fewer bids. As a result, the Forest Service has lost millions of dollars on timber sales in past



years.²³ These unprofitable timber sales threaten to devastate our wild forests as certain logging interests set their sights on roadless areas.



TIMBER SALES DO NOT BEGIN TO MAKE
PROTECTION OF OUR LAST WILD FORESTS.

MINING

Mining and the road-building required to access minerals in remote areas destroys pristine forests and releases harmful toxic chemicals and heavy metals, such as mercury, arsenic, cadmium, chromium and lead, into soil and local waterways. This can pollute the drinking water supply for wildlife, degrade fish habitat, and poison groundwater used by nearby communities. For example, during the 2005 repeal of the 2001 Roadless Rule, the JR Simplot Company expanded its existing phosphate mining operations into the Sage Creek Roadless Area of Idaho's Caribou-Targhee National Forest. In October 2006, the Forest Service found that the company's mines had discharged significant concentrations of selenium and other hazardous substances into the environment.²⁴

OIL AND GAS DRILLING

Oil and gas drilling operations require large networks of roads and pipelines that fragment wildlife habitat and require large-scale clearing of forests. Drilling also contaminates groundwater and streams, which threatens fish that depend on the waterways for habitat and wildlife that need them to survive. In Colorado, for example, the federal government has leased 300 square miles of the White River and Grand Mesa, Uncompahgre and Gunnison (GMUG) National Forests to oil and gas companies. An August 2006 lease sale auctioned off almost 20,000 acres of roadless areas within the White River and GMUG National Forests to drilling companies.²⁵

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conclusion

The American people have voiced their opinion through the millions of comments they have sent to the federal government: the preservation of intact forests under the Roadless Area Conservation Rule makes sense for the nation and for Arizona. Roadless areas within our national forests are an indispensable resource, providing some of the cleanest drinking water in the country, recreation for millions of Americans, and habitat for some of the nation's most sensitive species.

The Bush administration's continued attack

on the Roadless Rule jeopardizes those significant economic and ecological values. At risk in Arizona is \$2.4 billion annually in clean water and recreation benefits and the survival of 27 species.

These are long term and recurring benefits that must be preserved for future generations, not sacrificed for short term corporate gain. Our last wild forests need strong and lasting protections that live up to those that the American people have demanded for years.



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endnotes / credits

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Report Designed by Elan and Jonathan Bogarin

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PHOENIX, AZ 85004
(602) 252-9225

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