

OUR NATURAL LEGACY:

THE VALUE OF AMERICA'S ROADLESS NATIONAL FORESTS



ENVIRONMENT COLORADO RESEARCH
& POLICY CENTER



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Environment Colorado Research & Policy Center

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EXECUTIVE SUMMARY



After decades of scientific inquiry, 600 public hearings, and a record 1.6 million comments, the Clinton administration enacted the Roadless Area Conservation Rule in January 2001 to protect 58.5 million acres of wild national forest land from most commercial logging and road-building. The Roadless Rule ensures that our national forests will continue to provide clean drinking water for millions of Americans, wildlife habitat, endless recreational opportunities, and other important values. The rule also allows the U.S. Forest Service to address the estimated \$10.3 billion backlog in needed roads maintenance instead of using taxpayer dollars to build new roads.

The American people have spoken in favor of protecting roadless areas within our national forests. If the volume of their voices could be measured by the comments already sent to the Clinton and Bush administrations, the roar would be deafening. Prior to the 2004 comment period, Colorado residents had submitted 36,331 comments in favor of protecting the state's 4.4 million acres of roadless land.

Fully understanding the public's dedication to protecting roadless areas requires looking at their myriad economic and ecological benefits:

- Sixty million Americans rely on drinking water from the national forests. Roadless areas, for their pristine and road-free condition, provide some of the purest of that water. In the Rocky Mountain Forest Service Region, which includes Colorado, drinking water is worth \$241.5 million annually.
- Non-motorized recreation has become more and more popular over time as Americans participate in everything from bicycling to hunting in roadless areas. In 2001, 1.5 million Colorado residents took part in hunting, fishing, and wildlife-watching, contributing \$2.0 billion to the state economy.
- America's wildlife has seen much of its habitat lost to development in recent decades. Some of the most unspoiled habitat for hundreds of threatened, endangered, and declining species is found in roadless areas. Colorado's national forests are home to 23 at-risk species that could be harmed by destruction of roadless areas.

Despite the enormous benefits of national forests, historically, their value has been pegged to the timber products they provide. The Forest Service, however, has sold national forest land to timber companies at such low cost that the agency loses millions of dollars each year.

National forests are federal lands that belong to all Americans and deserve federal protection. Unfortunately, the Bush administration has proposed repealing the Roadless Rule and replacing it with a meaningless process that allows governors to seek protections for roadless areas in their states – or seek logging, mining, and drilling for these pristine forests instead. Even if a governor seeks protections, the Forest Service could still refuse the proposal.

In addition to repealing the Roadless Rule, the Bush administration has proposed a dramatic change in the way all of our national forests are managed. At issue are new regulations for the National Forest Management Act, the law that requires each of the 155 national forests to have a management plan in place. The draft regulations the administration proposed in December 2002 would weaken environmental and wildlife protections and limit the public's ability to participate in decisions that affect our national forests. Moreover, the Bush administration has already pushed through numerous harmful policies, including the so-called Healthy Forests Restoration Act, which increases logging under the guise of fighting forest fires.

Before finalizing the proposal to repeal the Roadless Rule, the administration has two choices: it can continue pandering to timber companies, mining companies, and energy companies that stand to make millions in the short term at taxpayers' expense, or it can choose to heed public opinion and preserve roadless areas to ensure that generations to come enjoy the same benefits that we have.

The right decision seems clear. Without question, roadless areas are one of the nation's greatest natural assets; their ecological and economic value is too great to sacrifice.

INTRODUCTION

From the rainforests of the Pacific Northwest to the groves of the Southern Appalachians, America's national forests are home to some of the most striking beauty on earth. Colorado's 14.5 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 no longer qualify as wilderness as a result of decades of logging, mining, road-building, and other development activities.

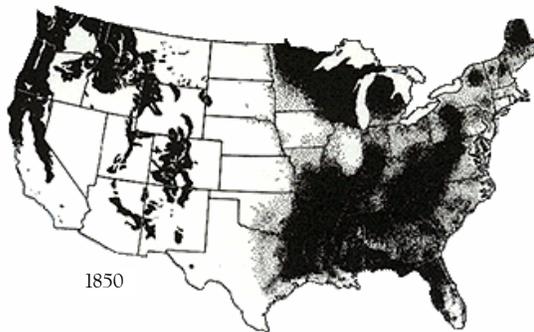
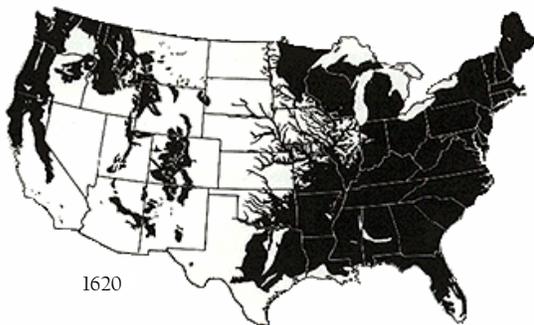
The American people have been unwavering in their support of the 2001 Roadless Area Conservation Rule, which protects 58.5 million acres of

national forest from most commercial logging and road-building. Prior to the Bush administration's proposal to repeal the Roadless Rule, the Forest Service had received 2.5 million comments—far more than have ever been submitted for any rule in federal rulemaking history—with the vast majority of comments in favor of the strongest possible protections for these wild forestlands.

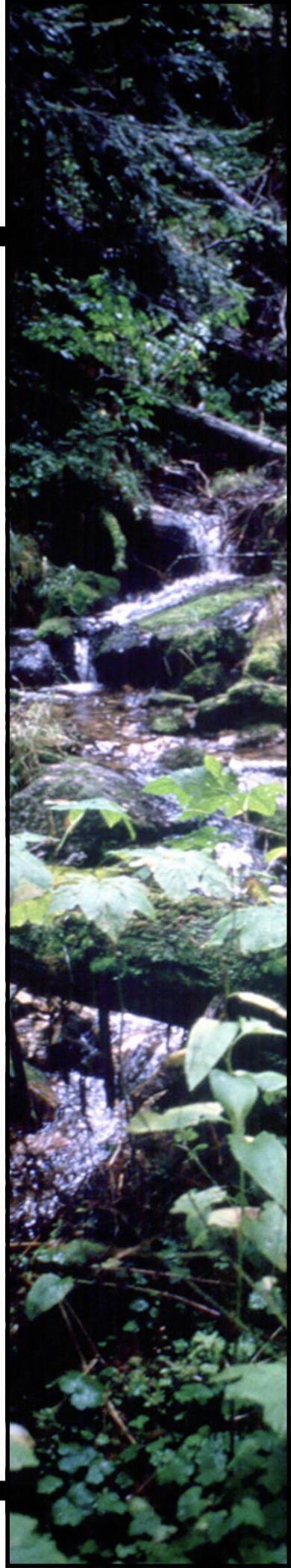
Despite that indisputable public support for protecting our last wild places, the Bush administration suspended the Roadless Rule almost immediately after taking office. Initially, it appeared that the president would overturn the rule altogether, but the administration pledged only minor changes under pressure from Congress and the public. Since making that promise, however, the Bush administration has proposed repealing the Roadless Rule.

In July 2004, the Bush administration announced a plan that would eliminate the Roadless Rule. The proposed rule that would replace it creates nothing more than a meaningless process that allows governors to seek protections for roadless areas in their states – or seek logging, mining, and drilling in these pristine forests instead. Although the Bush administration purports to provide a unique petition role for governors, the states already have the right to petition the Forest Service for changes in forest management. The proposal merely creates an additional petition process that places new burdens on governors while offering no guarantee of protection. Without certainty that the Forest Service would even accept the governors' request for protection, the bureaucracy involved in petitioning provides little incentive for governors to engage in the process. As a result, roadless areas are much better off under the Roadless Rule.

Furthermore, local forest plans allow road-building in about 59 percent of the 58.5 million acres of inventoried roadless areas.¹ Thus, if the administration's proposal is finalized, most roadless areas immediately would become vulnerable to new road construction for logging, mining, and oil and gas exploration, and the rest could be opened as forest management plans are revised.



Each dot represents 25,000 acres of old-growth forest. This does not represent total forest area, as forests regrown after clearing are not depicted. Source: William B. Greeley, "The Relation of Geography to Timber Supply", *Economic Geography*, 1925, vol. 1, p. 1-11.





Why these changes to the Roadless Rule? The Forest Service falls within the Department of Agriculture, implying that the greatest value of the forests is in their harvest. 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 if we do not take measures to preserve these lands.

Of the 747 million acres of remaining forestland in the United States, only 192 million are national forest. National forests are far from protected—51 percent of these forests are open to commercial harvest. Fortunately, 18 percent are protected as wilderness areas, but the remaining 31 percent are awaiting permanent protection under the Roadless Rule.⁴

If the Bush administration weakens important forest protections and finalizes its proposal to repeal the Roadless Rule, turning over millions of acres of roadless land to timber, energy, and mining companies, America will lose a significant part of its natural heritage.

Ecological and economic gains from the national forests outweigh the benefits from timber sales. This report highlights the value of roadless areas for Colorado, where the most precious aspects of our forests disappear with each new mile of road.



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. Take the example of New Mexico. In the state, the third most arid in the nation, fresh water is a highly coveted commodity. The Santa Fe watershed provides drinking water for approximately 40 percent of the city of Santa Fe;⁵ more than 15,000 acres of the watershed's 17,520 acres fall within the Santa Fe National Forest.⁶ Without the forest to direct precipitation toward drinkable sources and filter pollutants, Santa Fe would have less water of lower quality.

In the United States, approximately 14 percent of water captured from precipitation for drinking comes from the 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

By evaluating the public's willingness to pay for drinking water, economists have been able to place a monetary value on the water originating in the national forests. Water can be managed in two ways—it can be used by irrigators or municipalities off-stream, or it can remain in-stream. Forest water used off-stream garners a higher value than water that stays 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 eastern United States, economists have found that water is worth \$8 per acre-foot, whether it is used off-stream or remains in-stream.¹⁰

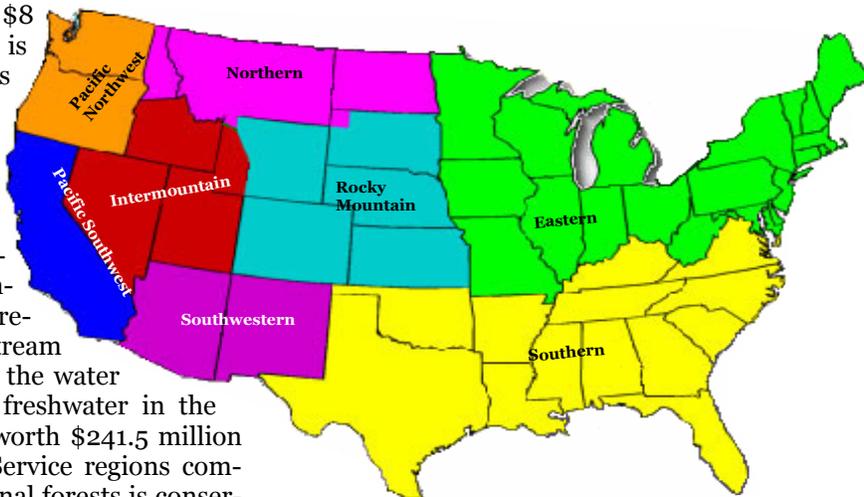
Within the Rocky Mountain Forest Service region, which encompasses Colorado, 9.1 million acre-feet of water remain in-stream and 2.2 million acre-feet are withdrawn for off-stream use.¹¹ Applying the value of the water for its respective use, the freshwater in the Rocky Mountain region is worth \$241.5 million annually. With all Forest Service regions combined, water from our national forests is conser-

vatively 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 within aquatic habitats, and existence 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, as would be allowed with the repeal of the Roadless Rule, both the water quality and the quantity within the ecosystem suffer.¹³

Undisturbed roadless areas provide some of the highest quality and greatest quantity of water that comes from national forests.¹⁴ 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.

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, it would be sensible for the Forest Service to actively 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 Monongahela National Forest's Seneca Rocks 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 wilderness.

Taking advantage of the nation's diverse landscape, 82 million Americans participated in wildlife-related recreation—fishing, hunting, and wildlife-watching (wildlife observation, feeding, and photography)—in 2001.¹⁵ Those outdoor enthusiasts fed \$108 billion into the economy that year.¹⁶ Both the number participating in and amount spent on fishing, hunting, and wildlife watching are conservative, for they do not take into account other outdoor activities, such as bicycling, rock climbing, skiing, and more (see box for more state statistics).

Following the national trend, in Colorado, outdoor recreation is an indispensable part of life, both culturally and economically. In 2001, 1.5 million Colorado residents—47 percent of the state's population—participated in fishing, hunting, and wildlife-watching.¹⁷ Through trip expenses, equipment purchases, and other costs, recreationists spent \$2.0 billion in Colorado.¹⁸ In communities near recreation areas, money spent on food, lodging, transportation, outing 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. In effect, preserving Colorado's 4.4 million acres of roadless forest would boost visitation to the area by 1.3 million visitor days.¹⁹

| Colorado Residents' Participation in Outdoor Activities | | |
|---|---------------|------------|
| | % Involved | # Involved |
| Backpacking | 16.3% | 541,560 |
| Bicycling (<i>Single Track</i>) | 22.0% | 730,940 |
| Bird Watching | 10.7% | 355,503 |
| Camping | 7.1% | 235,894 |
| Canoeing | 12.2% | 405,340 |
| Climbing (<i>Natural Rock</i>) | 4.1% | 136,221 |
| Climbing (<i>Ice</i>) | 4.1% | 136,221 |
| Fly Fishing | 10.6% | 352,180 |
| Hiking | 54.5% | 1,810,738 |
| Kayaking (<i>Recreational</i>) | 1.6% | 53,159 |
| Kayaking (<i>Touring</i>) | 4.1% | 136,221 |
| Kayaking (<i>Whitewater</i>) | 4.1% | 136,221 |
| Rafting | 15.4% | 511,658 |
| Skiing (<i>Cross-Country</i>) | 8.9% | 295,698 |
| Skiing (<i>Telemark</i>) | 1.6% | 53,159 |
| Snowshoeing | 6.5% | 215,960 |
| Trail Running | 25.2% | 837,259 |
| Merchandise Expenditures | \$200 million | |

Source: Outdoor Industry Association, *Outdoor Recreation Participation & Spending Study: A State-by-State Perspective*, May 2003.

Visitation to roadless areas also bears 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 \$42.²⁰ That is, recreationists would rather pay \$42 than forego a day of recreation in a roadless area. Thus, the Bush administration's failure to protect Colorado's roadless areas could cost the state \$54.0 million in recreation expenditures each year.

As long as roadless areas remain intact through the Roadless Rule and other forest protections, they can continue to bolster local economies and allow recreationists to enjoy their remarkable outdoor opportunities.



WILDLIFE HABITAT

Across the United States, forestland, farmland, and other open space are rapidly vanishing. Urban development has quadrupled in the United States since 1954; by 1997, we were developing three million acres of land per 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 1990.²¹

A serious consequence of development is the loss of wildlife habitat. National forests, which are home to 30 percent of the nation's proposed, threatened, and endangered species, provide some of the species' last remaining habitat.²²

Roads criss-crossing our national forests have the effect of fragmenting species habitat, breaking large tracts of livable land into small, largely uninhabitable islands. In Colorado, 23 proposed, threatened, and endangered species live in the state's national forests. Each of those species could be hurt by the Bush administration's repeal of the Roadless Rule,²³ including the bald eagle, the Canada lynx, and the whooping crane.

The goal of the Endangered Species Act is to restore at-risk wildlife to self-sustaining levels. The Roadless Rule, in protecting nearly 60 million acres of wildlife habitat, offers hope that sensitive species will be able to recover on those lands. Four species in the United States are proposed for delisting—the gray wolf, the bald eagle, Eggert's sunflower, and Johnston's frankenia, a flowering plant.²⁴ Three of those four species have important habitat in the national forests. The logging, mining, and road-building that would follow the repeal of roadless protections could reverse years of recovery efforts.²⁵

In addition, ten species are currently proposed for inclusion on the threatened and endangered species list. 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 assure their need for protection.

Bald Eagle Recovering in National Forests

The bald eagle, the icon of American wildlife, is making a spectacular comeback from near-extinction. In 1999, the U.S. Fish and Wildlife Service proposed removing it from the list of threatened species. The proposal has been pending for nearly five years as wildlife biologists confirm its recovery across the lower 48 states and Alaska.

Historically, as many as 100,000 bald eagles may have flourished nationwide. Serious population declines began in the mid-to late 1800s when European settlers engaged in the first large-scale clear cutting operations in the United States and Canada. Populations continued to deteriorate following the widespread use of DDT in the 1950s through 1970s, causing the birds to experience reproductive failure.

It was not until the passage of the Endangered Species Act of 1973 that the bald eagle received protection for its forest habitat. Habitat protections allowed reintroduction and monitoring programs to succeed; by 1999, approximately 5,800 nesting pairs of bald eagles lived in the continental United States, up from 400 nesting pairs in 1960.

Ongoing destruction of bald eagle habitat is the most immediate threat to recovery. Ideal habitat consists of forested shorelines and cliffs, readily found in our national forests, where eagles nest in canopy trees. National forests have proven to be fertile breeding grounds—bald eagles are found in 112 national forests nationwide.²⁶ Within those national forests, nearly 41.6 million acres of land are protected under the Roadless Rule. In Colorado, bald eagles are found in the Rio Grande, San Juan, and White River National Forests, among others.



With the bald eagle poised for removal from the endangered species list, now is not the time for the federal government to be weakening protections for the bird's invaluable nesting and wintering grounds.

Eagles receive minimal habitat protections under the Bald and Golden Eagle Act, which would continue to govern the management of eagle populations. However, the best protections are those that prohibit the logging of their most pristine habitat. If the Bush administration has a real interest in recovering bald eagles, it should avoid opening million of acres of their forestland to logging, mining, and oil drilling by repealing the Roadless Rule and other forest protections.



WILDLIFE IN COLORADO AFFECTED BY CHANGES TO ROADLESS AREAS



| Common Name | National Forest | Status* |
|----------------------------------|--------------------------------------|---------|
| American Burying Beetle | Arapaho-Roosevelt | E |
| Bald Eagle | White River | T |
| Bald Eagle | San Juan | T |
| Bald Eagle | Rio Grande | T |
| Bald Eagle | Pike-San Isabel | T |
| Bald Eagle | Medicine Bow-Routt | T |
| Bald Eagle | Grand Mesa, Uncompahgre and Gunnison | T |
| Bald Eagle | Arapaho-Roosevelt | T |
| Bonytail Chub | San Juan | E |
| Bonytail Chub | Medicine Bow-Routt | E |
| Bonytail Chub | Grand Mesa, Uncompahgre and Gunnison | E |
| Bonytail Chub | Arapaho-Roosevelt | E |
| Canada Lynx | White River | T |
| Canada Lynx | San Juan | T |
| Canada Lynx | Rio Grande | T |
| Canada Lynx | Pike-San Isabel | T |
| Canada Lynx | Grand Mesa, Uncompahgre and Gunnison | T |
| Canada lynx | Arapaho-Roosevelt | T |
| Canada Lynx | Medicine Bow-Routt | T |
| Colorado (=squawfish) Pikeminnow | San Juan | E |
| Colorado (=squawfish) Pikeminnow | Medicine Bow-Routt | E |
| Colorado (=squawfish) Pikeminnow | Grand Mesa, Uncompahgre and Gunnison | E |
| Colorado (=squawfish) Pikeminnow | Arapaho-Roosevelt | E |
| Colorado Butterfly Plant | Arapaho-Roosevelt | PT |
| Greenback Cutthroat Trout | Pike-San Isabel | T |
| Greenback Cutthroat Trout | Arapaho-Roosevelt | T |
| Humpback Chub | San Juan | E |
| Humpback Chub | Medicine Bow-Routt | E |
| Humpback Chub | Grand Mesa, Uncompahgre and Gunnison | E |
| Humpback Chub | Arapaho-Roosevelt | E |
| Least Tern | Arapaho-Roosevelt | E |
| Mexican Spotted Owl | White River | T |
| Mexican Spotted Owl | San Juan | T |
| Mexican Spotted Owl | Rio Grande | T |
| Mexican Spotted Owl | Pike-San Isabel | T |
| Mexican Spotted Owl | Grand Mesa, Uncompahgre and Gunnison | T |
| Mexican Spotted Owl | Arapaho-Roosevelt | T |
| Mountain Plover | Medicine Bow-Routt | PT |
| Pallid Sturgeon | Arapaho-Roosevelt | E |

| Common Name | National Forest | Status* |
|----------------------------------|--------------------------------------|---------|
| Pawnee Montane Skipper | Pike-San Isabel | T |
| Penland Alpine Fen Mustard | White River | T |
| Penland Alpine Fen Mustard | Pike-San Isabel | T |
| Piping Plover | Arapaho-Roosevelt | T |
| Prebles' Meadow Jumping Mouse | Pike-San Isabel | T |
| Prebles' Meadow Jumping Mouse | Medicine Bow-Routt | T |
| Prebles' Meadow Jumping Mouse | Arapaho-Roosevelt | T |
| Razorback Sucker | San Juan | F |
| Razorback Sucker | Medicine Bow-Routt | E |
| Razorback Sucker | Grand Mesa, Uncompahgre and Gunnison | E |
| Razorback Sucker | Arapaho-Roosevelt | E |
| Southwestern Willow Flycatcher | White River | E |
| Southwestern Willow Flycatcher | Rio Grande | E |
| Southwestern Willow Flycatcher | Grand Mesa, Uncompahgre and Gunnison | E |
| Uncompahgre Fritillary Butterfly | White River | E |
| Uncompahgre Fritillary Butterfly | San Juan | E |
| Uncompahgre Fritillary Butterfly | Rio Grande | E |
| Uncompahgre Fritillary Butterfly | Pike-San Isabel | E |
| Uncompahgre Fritillary Butterfly | Grand Mesa, Uncompahgre and Gunnison | E |
| Unita Basin Hookless Cactus | Grand Mesa, Uncompahgre and Gunnison | T |
| Ute Ladies'-tresses | Arapaho-Roosevelt | T |
| Western Prairie Fringed Orchid | Arapaho-Roosevelt | T |
| Whooping Crane | Arapaho-Roosevelt | E |
| Whooping Crane | Grand Mesa, Uncompahgre and Gunnison | E |

*PT = Proposed Threatened; T = Threatened; E = Endangered

Source: USDA Forest Service

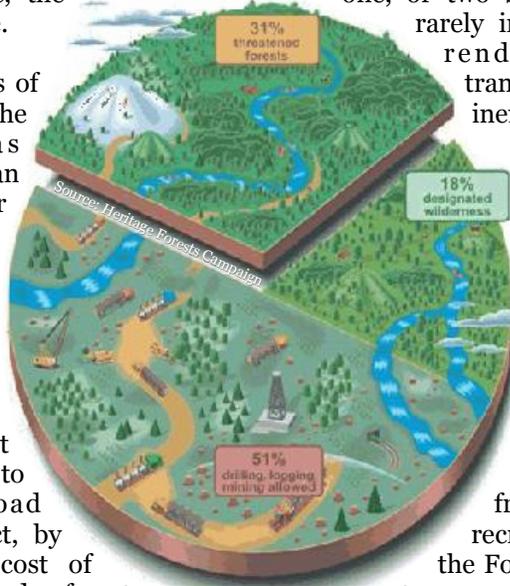
TIMBER SALES

For years, the economic gain derived from timber products has been thought to outweigh the value of clean water, recreation, and wildlife habitat. Of late, the opposite has been proven true.

Upkeep of the 380,000 miles of roads already criss-crossing the national forests has accumulated to more than \$10.3 billion in backlog for road and bridge capital improvement, maintenance needs, and administrative costs.²⁷ Colorado's portion of that backlog amounts to \$163.1 million.²⁸

Profits from national forest timber sales do not begin to chip away at the road maintenance backlog. In fact, by discounting the estimated cost of road-building, logging, and forest restoration, the Forest Service sells swaths of forest to timber companies for prices that are well below market value.

The purpose of setting such low prices is to encourage competition among bidders; however, 70 percent of all sales received zero, one, or two bids. As a result, bidding rarely increases to market value, rendering most timber transactions extremely cost ineffective.²⁹



In 1998, the last time the Forest Service was able to provide information about the costs of its timber sales, the agency had lost \$126 million.³⁰ Other analyses estimate the losses to be much greater. Compared with the nearly \$4.4 billion generated from water resources and recreation in roadless areas, the Forest Service should choose to manage the forests with a mind toward preservation, not the deforestation that would follow the repeal of the Roadless Rule and other forest protection laws.

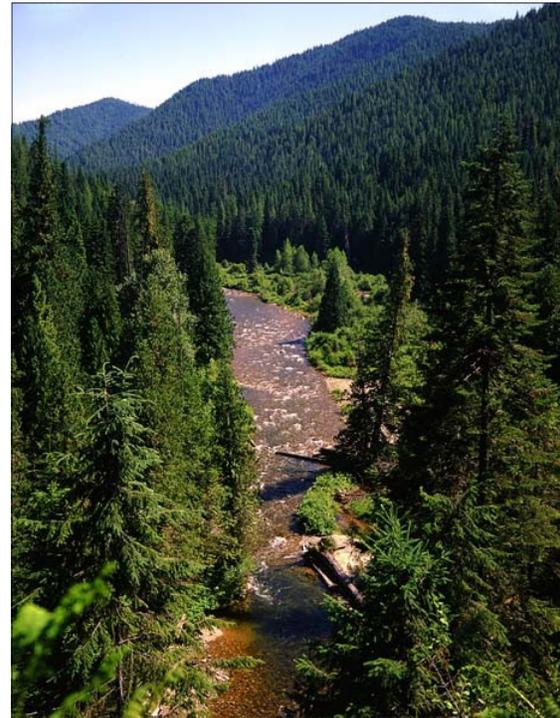


CONCLUSION

The American people have voiced their opinion through the millions of comments they have sent to the federal government: the preservation of road-free forests via the Roadless Area Conservation Rule makes sense for the nation and for Colorado. 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 proposal to repeal the Roadless Rule jeopardizes those significant economic and ecological values. At risk in Colorado is \$295.5 million in clean water and recreation benefits and the survival of 23 species.

Given the minimal benefits bestowed on the nation from timber sales, the Bush administration should drop its proposal to repeal the Roadless Rule and other forest protections; instead, the Forest Service should work aggressively to protect our roadless areas for future generations of Americans.



COLORADO

Inventoried Roadless Areas on National Forest System Lands

Categories of National Forest System Lands Within Colorado

| | |
|---|-----------------------|
| IRA, allows road construction or reconstruction | 24% (3,498,000 acres) |
| IRA, does not allow road construction or reconstruction | 6% (925,000 acres) |
| IRA, recommended wilderness | 0% (11,000 acres) |
| Designated Areas outside of IRAs | 22% (3,186,000 acres) |
| All Other National Forest System Lands | 47% (6,890,000 acres) |

-  Inventoried Roadless Area where road construction or reconstruction is allowed
-  Inventoried Roadless Area where road construction or reconstruction is not allowed
-  Inventoried Roadless Area where road construction or reconstruction is not allowed, and the forest plan recommends as wilderness
-  Designated Areas outside of Inventoried Roadless Areas
-  National Forest System lands outside of Inventoried Roadless Areas - not all private land is shown on the map
-  Interstate Highway
-  Other Highways
-  County boundaries

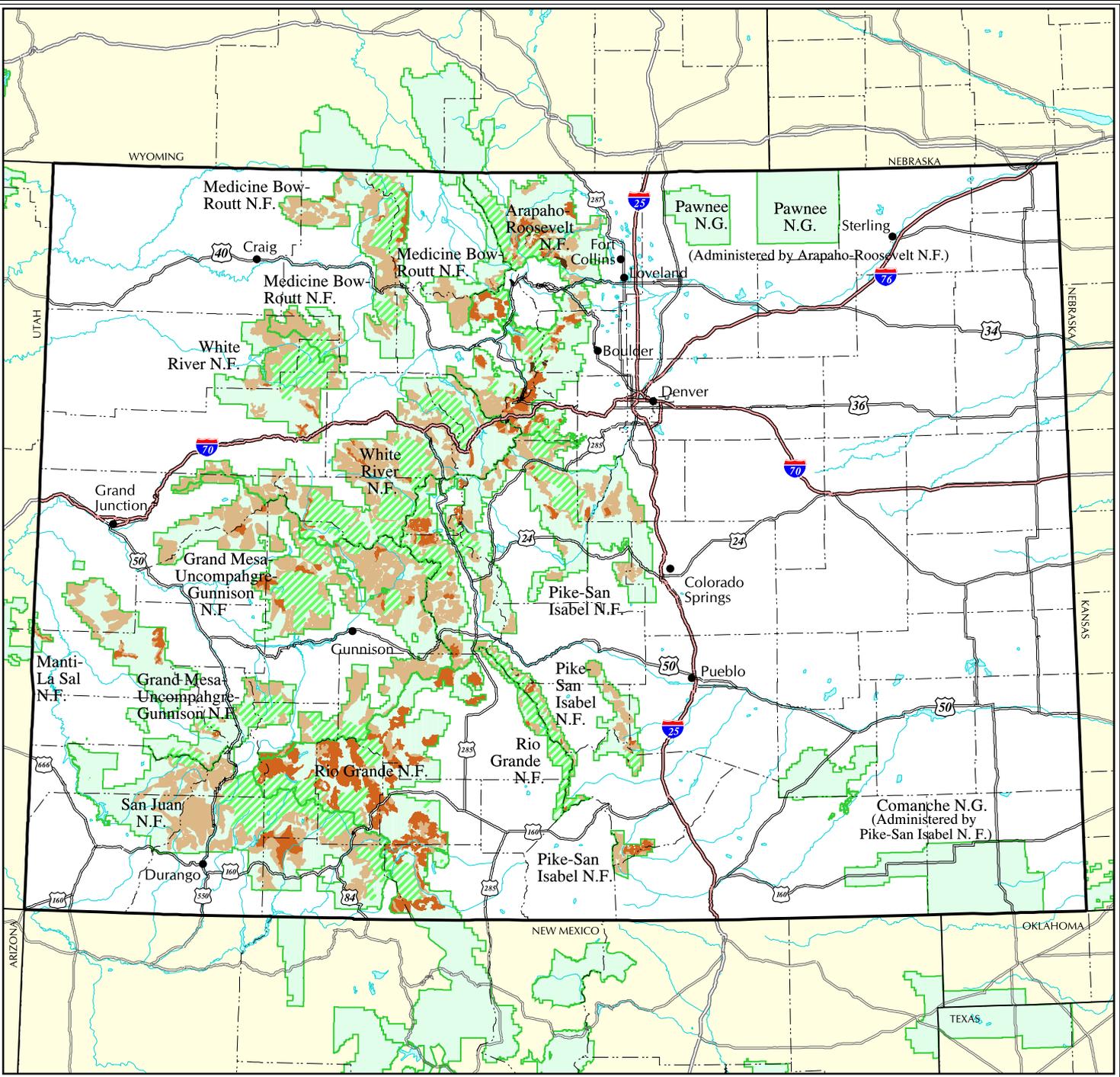


40 0 40 Miles

September 15, 2000
 Data Supplied by individual National Forests.
 Contact the National Forest Offices for further information.

Lambert Conformal Conic Projection

The USDA Forest Service uses the most current and complete data available. GIS data and product accuracy may vary. Using GIS products for purposes other than those for which they were intended may yield inaccurate or misleading results. The USDA Forest Service reserves the right to correct, update, modify, or replace GIS products without notification.





NOTES

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- ²⁵ USDA Forest Service, *Proposed, Threatened and Endangered Species National Master List By Region and Species Group* (spreadsheet data), downloaded from www.roadless.fs.fed.us/documents/feis/data/sdata.shtml, February 2001.
- ²⁶ Ibid.
- ²⁷ Taxpayers for Common Sense, *Road Wrecked: Why the \$10 Billion Forest Service Road Maintenance Backlog Is Bad for Taxpayers*, March 2004.
- ²⁸ Taxpayers for Common Sense, *Lost in the Forest: How the Forest Service's Misdirection, Mismanagement, and Mischief Squanders Your Tax Dollars*, 2002.
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PHOTOGRAPHY & GRAPHIC CREDITS

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