



America's Keystone Forests
Mapping the Next 100 Years
of Forest Protection



America's Keystone Forests: Mapping the Next 100 Years of Forest Protection

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TELL ME WHY



Grandeur. Majesty. Splendor. Bounty. President Theodore Roosevelt used these words a century ago to describe some of the great, unique and unspoiled landscapes of America. Informed by a lifetime of experiences in wild places, and inspired by the original thinking of early conservationists like John Muir, Roosevelt was not content to stand and admire the scenery: he placed some 230 million acres into scores of national forests, parks, wildlife refuges and other preserves. For decades, Roosevelt's foresight has helped each generation pass on priceless pieces of our natural heritage to the next.

Any heirloom begins to lose luster after decades of shoddy treatment, and some of Roosevelt's treasures have become tarnished and threadbare. While national parks and wildlife refuges have held up relatively well over the years, many national forests have faltered and declined. So, too, have many of the plants and animals that once inhabited our national forests in great abundance.

If the last 100 years tested Roosevelt's National Forest System, they also gave birth to the natural sciences of ecology, conservation biology and computer-assisted geography. These fields of study, unavailable to Roosevelt, have helped us grasp more completely that natural grandeur and bounty arise not only from windswept vistas and jagged peaks, but equally from the intricacy, stability and extent of the interwoven web of plants and animals that live together in a place. We must now arm ourselves with these new tools and this deepened understanding, and see how we can maintain and expand Roosevelt's conservation foresight into the next century.

America's Keystone Forests: Mapping the Next 100 Years of Forest Protection draws upon recently developed scientific

perspectives of the physical and biological characteristics of forests throughout America, and uses geographic software to condense this information into a series of maps that portray the quality and distribution of what remains. This highlights the "keystones" of our remaining forests. These keystones are the largest relatively undamaged contiguous forested areas that include the broadest spectrum of plant and animal species, and the widest array of forest types. If the results occasionally surprise the reader, it may be because salamanders, mollusks, trout and grizzly bears are all on relatively equal footing here. This approach is more comprehensive than traditional assessments of forest structure and condition, and is consistent with the emerging scientific understanding of the importance of every fiber in the cloth of plant and animal communities.

America's Keystone Forests offers a way forward for those who care about all aspects of the grandeur, majesty, splendor and bounty of America's forests. This cannot be the only way forward: complete restoration and protection of all of these keystone forests would not in itself guarantee the continued survival of every one of the plants and animals living in our national forests today. Nor would all of these keystone areas total up to anything like the size of Roosevelt's original national forest and park designations. But if we save these keystone forests and follow through with other important national, regional and local efforts to discover, protect and restore natural diversity in every form, we will have upheld Roosevelt's legacy and made good on our responsibilities to many generations to come.

Bill Haskins

Big Sky Conservation Institute

A BEGINNING



EXECUTIVE SUMMARY

2005 marks the 100th anniversary of the U.S. Forest Service, an event that will be met with celebration, pomp and circumstance within the agency. Reality, however, tells a far different story from the one that will be told by the Forest Service and its industry patrons. It is the story of an agency that long ago strayed from its original intent. It is the story of an agency that has been the victim of political manipulation and the influence of special interests such as the timber, oil, gas and mineral industries. The anniversary celebration will stand in stark contrast to the agency's legacy of on-the-ground mismanagement that has left the nation with only 15 percent of its biologically rich old-growth forests. In the lower 48 states, less than five percent remains. Indeed, 100 years after the establishment of the U.S. Forest Service, little of our once endless forest estate would be recognizable to those who first created the public lands system.¹

America's public forests, those that are owned by the American people, make up some of the most distinguishing landscapes that define the United States. The redwood giants of California, the Ponderosa pines of Arizona, the sugar maples of the Midwest and the spruce trees from Maine to Appalachia are American icons. However, most Americans mistakenly believe that their federal forests are protected from industrial activities such as logging, mining and drilling. Most Americans are also unaware that for decades their public forests have been systematically abused by a highly subsidized Forest Service, which wastes vast sums of taxpayer dollars on money-losing programs. The pace of this mismanagement has accelerated under the Bush administration to the detriment of our economy, clean air and water, climate stability, fish and wildlife habitat, recreational activities and public health.

Our remaining intact public forests serve society in many ways, and have far greater value intact than the timber that could be extracted from them. Our public forest lands are a peaceful refuge for physical and spiritual renewal. More than 60 million people depend on national forests for clean drinking water. Stands of old-growth forest reduce the

severity of forest fires. In fact, catastrophic forest fires in this country most commonly occur on logged and roaded lands, not in intact old-growth forests.² Intact forests also provide a huge number of jobs. Recreation on federal forests contributes more than \$111 billion to the economy, creating more than 2.9 million jobs each year.³

Despite the long list of economic, social and environmental benefits provided by intact forest land, what little remains continues to be fractured and significantly altered under the management of not just the Forest Service, but also the Bureau of Land Management (BLM). Unless far-reaching measures are taken, it is now questionable as to whether these remaining forests can sufficiently maintain ecological integrity, support the nation's biological diversity and provide long-term social and economic benefits for this and future generations.

To mitigate further degradation, this nation must allow for the protection and restoration of whole forest ecosystems to serve as a base for connected landscapes throughout North America. Determining where to start such a process has led to the development of numerous scientific studies that compare the physical makeup of forests with long histories of logging, mining, drilling and road-building to those that are relatively untouched. Other studies have evaluated forests by their concentrations of rare plant and animal species or have examined habitat and water quality.

Greenpeace, in cooperation with the Big Sky Conservation Institute (BSCI), has for the first time combined this data to create a map showing the "Keystone Forests" of the United States. Using the criteria of habitat fragmentation, the presence of rare species and ecosystem quality, Greenpeace and BSCI have identified the forests that represent the nation's last large areas of continuous forest that provide the healthiest habitat for the greatest number of species.

The keystone forest map emphasizes areas with the least habitat fragmentation because the breakup of habitat into small, isolated patches is considered to be a primary cause

of native species loss,⁴ particularly with regard to forest-dependent species.⁵ Most importantly, this map shows that these keystone forests are largely comprised of federal landholdings, land owned by the American taxpayer. If protected from the mismanagement of the Forest Service and BLM, these regions can serve as the greatest storehouse of the nation's land-based biological diversity and as a stronghold of environmental services that benefit the greatest number of people.

In this report, Greenpeace and BSCI identify 11 keystone forests that deserve priority for protection. A section on each forest includes maps showing the characteristics and ownership status of each forest, a physical description, a list of threats to the forest and current efforts to save it.

This report also details the mismanagement of forests on public lands. A history of the Forest Service illustrates how political and special interest pressures have subverted the agency's original mission, sacrificing its charge to sustain the health and diversity of our national forests and overemphasizing their timber productivity. The Forest Service's failure to take into account the economic value of non-timber prod-

ucts and environmental services—or worse, its deliberate disregard for such worth—is a record of scandalous fiscal irresponsibility.

The final section of this report lists concrete steps that the United States can and must take to protect the remaining largest tracts of intact forest. The critical first step to protecting our national forests is a moratorium on large-scale commercial logging and other industrial activities on land managed by the Forest Service and BLM. Secondly, a significant portion of these lands should be transferred to agencies and designations with a proven track record of greater protection. "A User's Guide to Federal Land Protection" provides options for increasing forest protection within the existing federal structure.

As the U.S. government enters into its second century of public land management, this report serves as a reminder and a warning. While we must celebrate our noble cause to protect our nation's grandeur, majesty, splendor and bounty, we must not be blinded by it. We must learn from the past to ensure our future.



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FIXING A HOLE



THE IMPORTANCE OF LANDSCAPE CONNECTION

Ecosystems are composed of numerous plant and animal species existing in an ever-evolving inter-relationship. Historically, the United States has divided and transformed its landscape to meet our material needs, often with little understanding or forethought. The result is that large, intact and connected natural ecosystems are increasingly rare. This is especially true of U.S. forests. Conservation biologists agree that America's individual protected areas, such as national parks and wilderness areas, are too small to support healthy and diverse ecosystems. The vast majority of these nature reserves are in fact "islands" of protected habitat in a vast sea of development.

Like island species, wildlife found in isolated national parks and wilderness areas must survive on limited resources, with restrictions on movement and with little flexibility in the face of catastrophe or competition. In fact, the extension of island theory into modern conservation planning began with research documenting the loss of wildlife species in North America's largest park complexes.⁶ This research demonstrated that the rate of local extinction in protected areas was inversely related to the size of area: the larger the protected area, the lower the likelihood that it would lose species to extinction over time.

Habitat diversity (i.e., the variety of different habitats within a given area) and special features such as caves, springs, cliffs and certain tree species, coupled with the mitigation of destructive impacts, are critical elements of an effective nature reserve system. Protecting examples of all representative ecosystem features in an ecological reserve network allows wild plants and animals in the region to flourish under the resulting habitat umbrella.⁷

In examining the relationship between area, species diversity and extinction rates, ecologists have identified a key weakness in current conservation network: a lack of the large protected natural areas, known as "cores." Cores are protected areas designed to maintain existing natural landscapes where biodiversity, ecological integrity and wilderness take precedent over other uses.⁸ Cores are necessary for protecting ecological health, particularly for large, wide-

ranging mammals. Even relatively sizable regions, such as the Greater Yellowstone ecosystem, must be connected to other large reserves if they are to safeguard animals such as wolverines and grizzly bears.⁹ Increasing the size and number of parks and wilderness areas is an effective way to establish core areas. Furthermore, safe corridors for travel between protected cores are necessary to ensure species viability over the long term.¹⁰

Ecologists now recognize that certain animals—referred to as "keystone species"—play a critical role in maintaining ecosystem diversity.¹¹ Keystone species, the custodians of healthy ecosystems, may occur at any ecosystem level, from plants and herbivores to carnivores and detritivores (waste eaters), and include animals that physically transform landscapes or aquatic habitat such as prairie dogs and cavity-excavating birds.

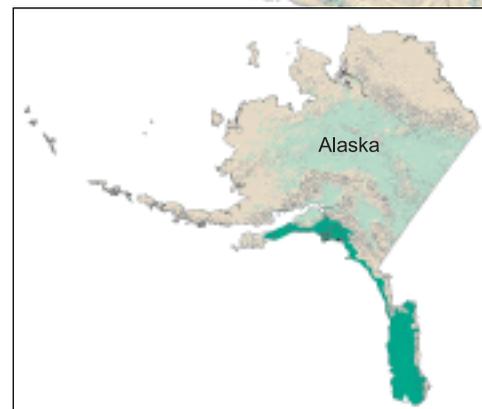
Contemporary conservation planners recognize that these three interdependent components—cores, corridors and keystone species—are necessary for healthy nature reserve networks that protect biodiversity. Modern conservation science provides us with the know-how to protect habitats effectively and to design future nature reserves. Research on ecosystem scale, connectivity and species composition indicates that we must increase our efforts to establish large, linked protected areas. For obvious reasons, these factors were not taken into consideration when the United States laid the foundation of our protected areas system 100 years ago.

If the United States is to safeguard its natural resources into the future and regain its international conservation leadership role, we must re-examine the management structure governing our last forest regions. Such an exercise will help determine where national parks, wilderness areas, national forests, wildlife refuges and other protected areas should exist and allow for higher-impact tourism, hunting, fishing and the harvest of non-timber forest products. The best place to start such a process is with our public lands in our most important forest regions—the keystone forests.

EVERY LITTLE THING



MAPPING THE UNITED STATES' KEYSTONE FORESTS



The keystone forest map identifies select remaining areas of forests in the United States that Greenpeace has prioritized for increased protection, conservation and restoration. These areas are called “keystone” forests, borrowing from the architectural term for the middle stone at the top of an arch that holds all the other pieces in position. The keystone is the central cohesive source of support and stability for the greater whole.

It is important to note that these keystone forests are not the only lands that need increased protected status. Indeed, many critical forest areas, such as Vermont’s Green Mountain National Forest and Colorado’s Rio Grande National Forest, have been aggressively logged and the very survival of several species, such as the Canada lynx and Northern goshawk, depend on these areas being protected and restored. However, protecting our keystone forests to serve as biological cores—the heart of our nation’s largest unfragmented forest cover, is an excellent beginning. Although prioritizing these

keystone forests for protection is vital, it is only a complement, not a substitute, for detailed planning on a regional and local scale.

Included in each keystone forest description are some of the federally managed forest areas such as national parks, national forests and wilderness areas. For the most part, we have excluded naming state or county parks or significant areas of privately protected land with the notable exception of the Maine Keystone Forest where limited federal ownership exists. These types of protected areas, especially those adjoining federal lands can serve as an excellent basis for a larger protected area. When referring to a larger ecoregion to which a keystone forest is a part of, we reference ecoregion names used by the National Geographic/World Wildlife Fund “Wildworld Global 200” project that identified terrestrial ecoregion’s worldwide (see www.nationalgeographic.com/wild-world/terrestrial.html).

To create this map, the following process was used:

Step 1. Select quantifiable factors to represent distinct characteristics of forest quality.

Physical fragmentation (i.e., the size, condition and remoteness of each forest tract). Forest tract characteristics are derived from Conservation Biology Institute’s (CBI’s) values for “class area” and “total core area index.” We also use CBI’s values for mean road density within forested tracts to represent remoteness and human impacts.¹²

Presence of hotspots of biological diversity (i.e., the forests that are important to the greatest number of rare species). We give higher value to those areas that have been found to have at least moderate terrestrial rarity-weighted richness index and those

Forested BLM Lands (non-wilderness)	1,983,084
Forested National Forest Lands (non-wilderness)	45,312,755
Forested National Wildlife Refuge Lands (non-wilderness)	66,315
Forested National Park Lands (non-wilderness)*	3,874,146
Forested Wilderness	14,944,541
Forested miscellaneous public and private preserves	18,467,286**
Privately owned, unprotected forest lands	34,287,180
Total Forested Lands	118,935,307
*Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.	
**Includes industrial forest lands in Maine	



watersheds that are “critical for conserving aquatic biodiversity.”¹³

Intactness of natural communities (i.e., forests that have most of their original parts in good working order). We give higher value to those areas in which the largest percentage of communities is intact, based on recent assessments of endangered communities.¹⁴

Step 2. Assign relative values for each factor and measure forested areas for each factor.

In our assessment, physical fragmentation is given the most importance. Hotspots of biological diversity are given an important, but secondary role. Community intactness rankings give additional value to those areas that have generally good ecological health, even if large numbers of rare species

may not be present.

Mapping software (GIS layers) is used to assign numeric values to represent each of the factors listed above. Forested areas are defined according to the U.S. Geological Survey National Land Cover Data set, which is consistent across the contiguous 48 states. This data does not include Alaska and Hawaii.¹⁵

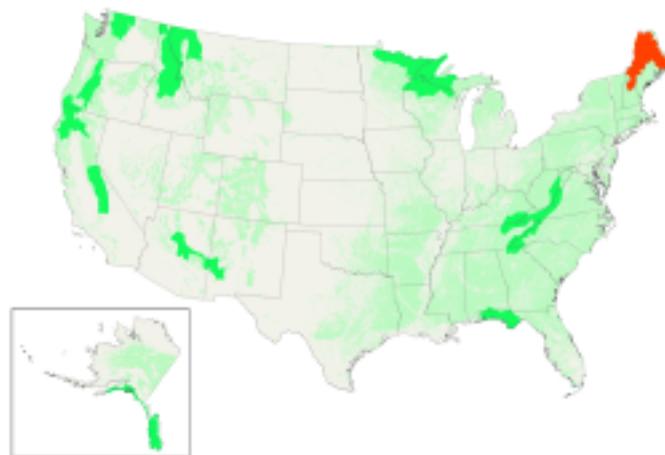
Alaska was not included in several of the studies from which we obtained fragmentation and hotspot data, so it was not possible to compare Alaska’s forests directly with those of the contiguous 48 states. We delineated the Alaska Keystone Forest by following the general boundaries of the most densely forested areas of coastal temperate rainforest within Southeast Alaska.¹⁶

Step 3. Sum of all factor values.

The overall value of a given forested location is the simple arithmetic sum of the numeric factors. Of all of the forested areas in the 48 contiguous states, we selected the top-rated 20 percent to represent the highest value forest. Where these forests form blocks of several million acres or more, we reviewed boundaries of national parks, wilderness areas, wildlife refuges, other public lands and private preserves, to identify America’s keystone forests.

One notable feature of this map is the relatively balanced geographical distribution of keystone forests. The large areas of unfragmented forests of the northern United States (many of which do not have great numbers of rare species) are well represented, as are the smaller, species-rich and critically important unfragmented forests of the southern United States.

KEYSTONE FOREST



Physical Description

Henry David Thoreau was so inspired by the forests of Maine in the mid-1800s that he proposed that it become a "national preserve." Today, the 10 million-acre "Maine Woods," part of the larger New England Acadian forest ecoregion, remain the largest undeveloped forest in the eastern United States. A mix of spruce-fir coniferous forest and beech-maple hardwood forest richly carpet this vast remnant of the legendary North Woods. Within this forest is a wide variety of native plant and wildlife species, including

moose, deer, black bear, beaver, loon, broad-winged hawk, blue-spotted salamander and brook trout. The region provides habitat for endangered and sensitive species such as the Atlantic salmon, bald eagle, spruce grouse, Canada lynx, pine marten, Northern bog lemming, blueback trout and small-whorled pogonia. There is also potential habitat for the restoration of extirpated species including the Eastern wolf, cougar, wolverine and woodland caribou.

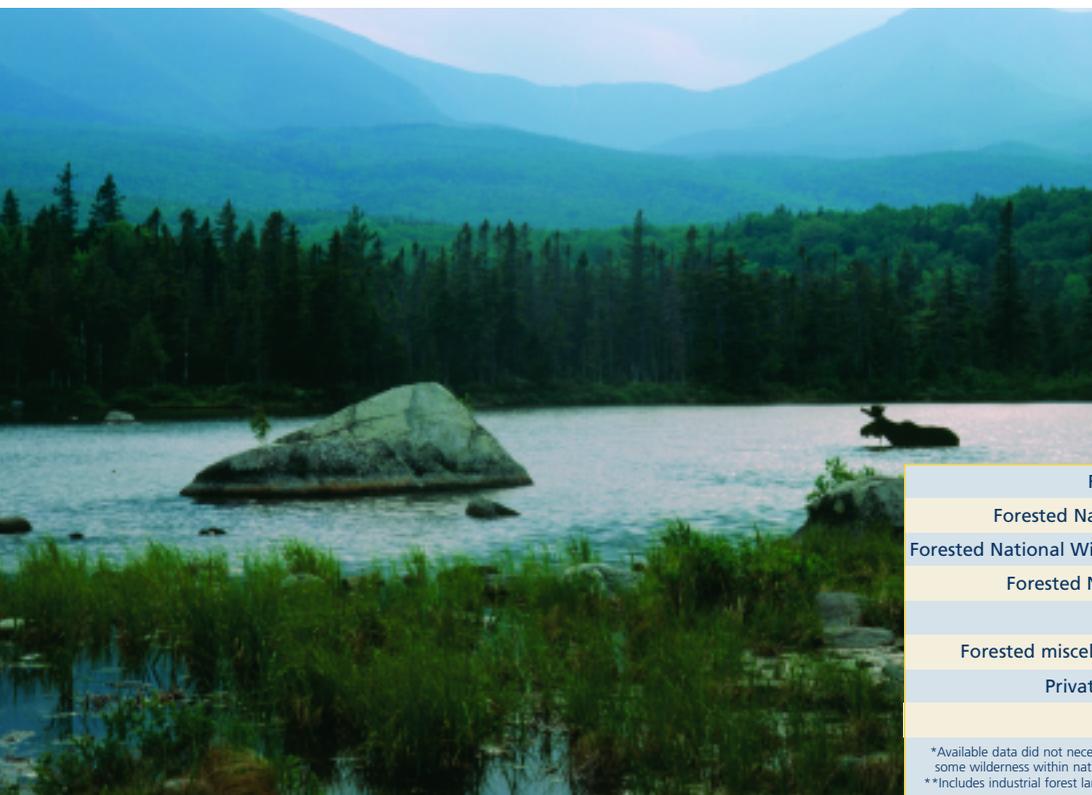
The landscape is mountainous, reaching its highest point on 5,271-foot

Mount Katahdin, dissected by major rivers such as the Allagash, Kennebec, Penobscot and St. John, and dotted with thousands of pristine lakes and ponds, including 75,000-acre Moosehead Lake. The Maine Woods play a critical environmental role as the headwaters of several major rivers, a massive carbon sink to help mitigate global warming, and a largely intact reservoir of native biodiversity. In the crowded northeastern United States, the Maine Woods offer outstanding backcountry recreation, particularly hiking, camping, canoeing, boating, fishing, hunting, cross-country skiing, snowshoeing, nature study and solitude.

Threats

Maine has one of the smallest percentages of public land of any state. Less than five percent is protected in public or private conservation ownership, and

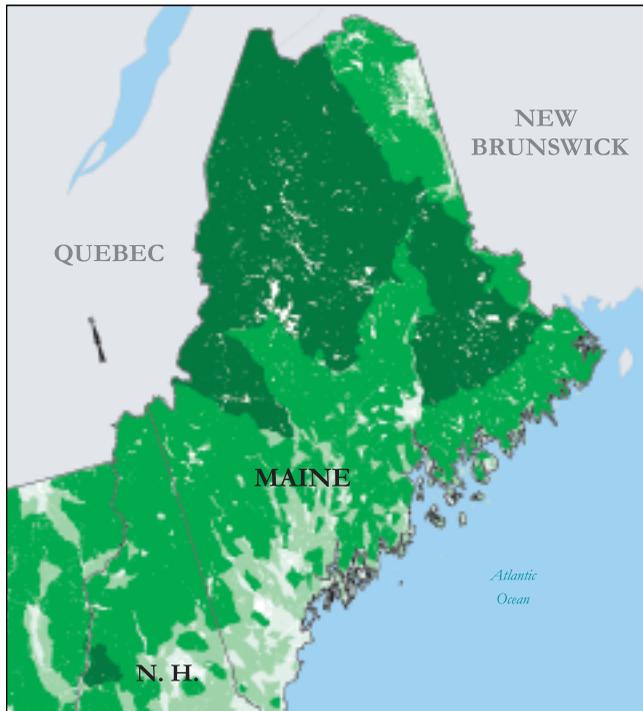
The Maine Woods are home to a variety of wildlife species including the moose shown here at Baxter Park.



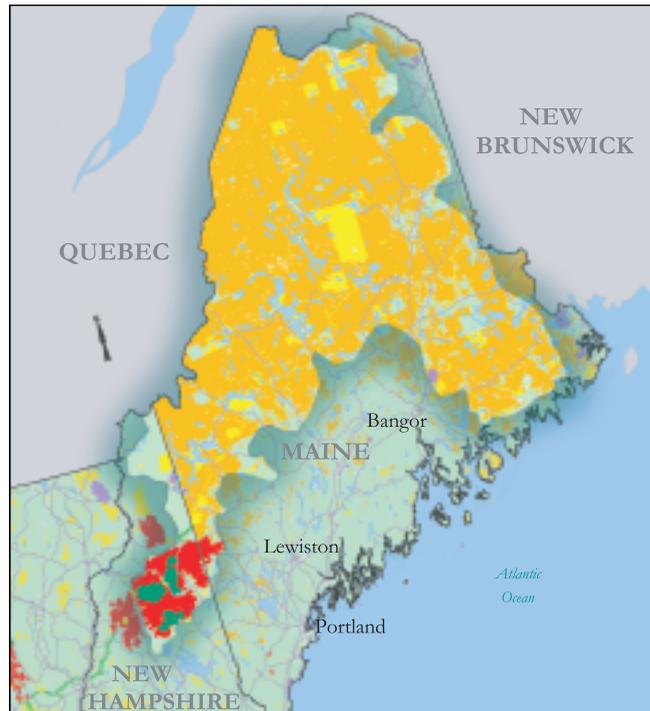
Forested BLM Lands (non-wilderness)	0
Forested National Forest Lands (non-wilderness)	458,636
Forested National Wildlife Refuge Lands (non-wilderness)	14,339
Forested National Park Lands (non-wilderness)*	2,162
Forested Wilderness	101,239
Forested miscellaneous public and private preserves	10,048,127**
Privately owned, unprotected forest lands	2,186,609
Total Forested Lands	12,811,112

*Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.
 **Includes industrial forest lands in Maine

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Forest Quality



Forest Ownership



less than one percent is preserved as wilderness. The famed "Appalachian Trail" begins in the Maine Woods, but it is only a thin "beauty strip" increasingly hemmed-in by clearcuts, roads and motorized recreation.

Transnational paper and timber companies, investment partnerships and real-estate speculators own most of the land in a few large blocks. During the last two decades these landowners have clearcut an area of forest larger than Delaware, built 15,000 miles of logging roads and subdivided remote lakeshores for second-home development. Intensive motorized recreation penetrates areas that were not long ago wild and roadless. More than five million acres of land have been sold in the last decade, with only a tiny portion being acquired by the public or other conservation buyers. Without the creation of new public parks and preserves, the Maine Woods will probably be irretrievably fragmented and

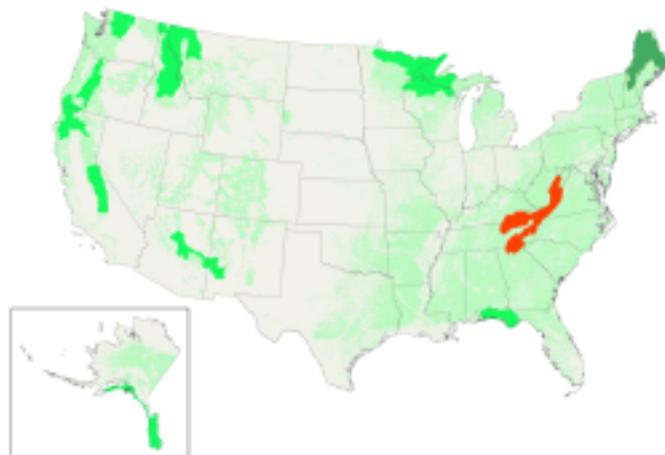
degraded within the next two decades.

Efforts to Increase Protected Areas

There is an existing proposal submitted to the National Park Service for the creation of a 3.2 million-acre Maine Woods National Park and Preserve in the heart of the Maine Woods. This new park would bring the land back into public ownership, restore past damage from logging and other industrial uses, guarantee public recreational access and serve as the foundation for a sustainable regional economy.

*Written by Michael Kellett
Restore the North Woods
www.restore.org*

KEYSTONE FOREST



Physical Description

The Blue Ridge-Appalachia Keystone Forest overlaps both the larger Appalachian mixed mesophytic forests and the Appalachian Blue Ridge forest ecoregions. They are some of the oldest and most biologically diverse temperate forests in the world. Due to the geologic and climatic stability of this region over the past 65 million years, a great number of plant and animal species have evolved specifically in this region, creating an environment rich with endemic species. The region also contains some of the last holdouts of

unlogged native forest in the eastern United States, including 130 hardwood tree species such as oaks, red maple, tulip poplar, chestnut and hickory. Also living in these forests are more than half the flowering plants and ferns in North America (more than 2,000 species). Coniferous trees also characterize this region with an overstory dominance of red spruce or Fraser fir. This region provides much-needed habitat for endangered species such as black bears, bald eagles and flying squirrels. Today, these forests contain more than 50

species of plants and animals formally listed as endangered or threatened, and more than 280 imperiled fresh water species.

The Appalachia forests have long been a major tourist destination for outdoor recreation activities such as fishing, hunting, hiking, kayaking and backpacking. Recreation in this area contributes a significant number of jobs and income to the region. Well-known recreation areas that contribute a significant number of jobs and income to the region include Great Smokey Mountain National Park, Big South Fork Recreation Area, and the George Washington-Jefferson and Monongahela National Forests.

Threats

This forest region is threatened by destructive logging practices (especially for woodchip demand), road-building and gas exploration. Air pol-

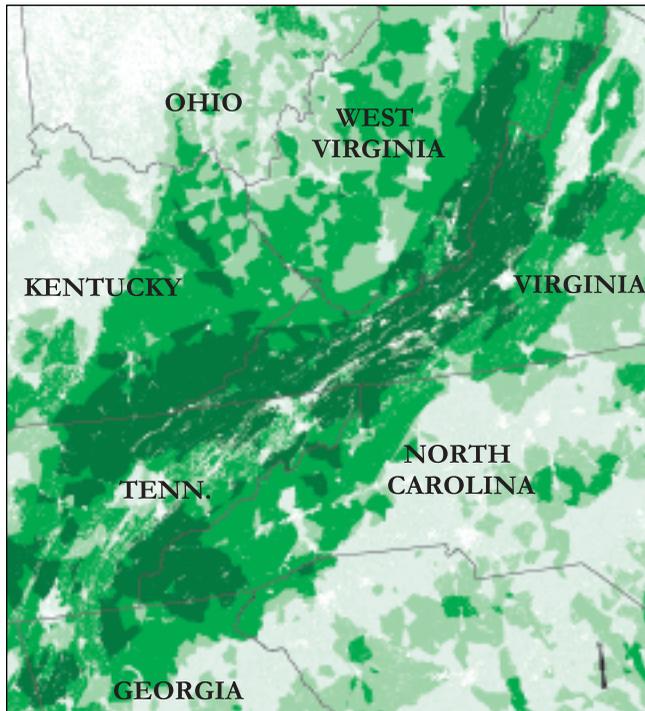
George Washington-Jefferson National Forest, Virginia.



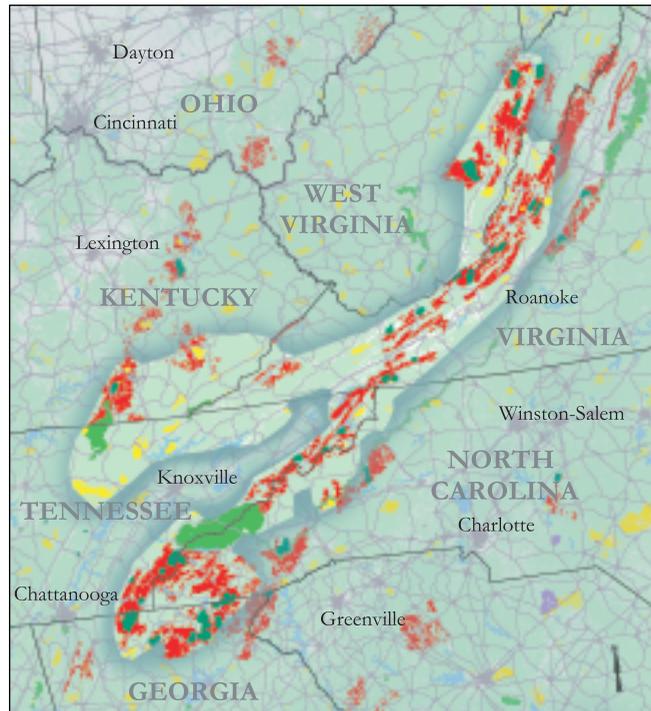
© DAVE MUHLY

Forested BLM Lands (non-wilderness)	0
Forested National Forest Lands (non-wilderness)	3,554,663
Forested National Wildlife Refuge Lands (non-wilderness)	504
Forested National Park Lands (non-wilderness)*	634,380
Forested Wilderness	343,923
Forested miscellaneous public and private preserves	559,803
Privately owned, unprotected forest lands	10,500,639
Total Forested Lands	15,593,912

* Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.



Forest Quality



Forest Ownership



lution, acid rain, invasive species and increasing urban sprawl heighten the immediate need for greater protected areas. Although the region has experienced more than a century of industrial logging, small remnants of native old-growth remain and much of the forest in the region that was clearcut a century ago are once again reaching maturity. Very little of this key-stone forest is under wilderness or national park status.

Efforts to Increase Protected Areas

There is a current proposal to create a new Blackwater Canyon National Park, which includes private lands in the canyon and key portions of the adjacent Monongahela National Forest.

The Ridge and Valley Wilderness and National Scenic Area Act of 2004, introduced by Representative Rick Boucher (D-VA) and Senator John Warner (R-VA) on April 22, 2004, would provide lasting protection for some 40,000

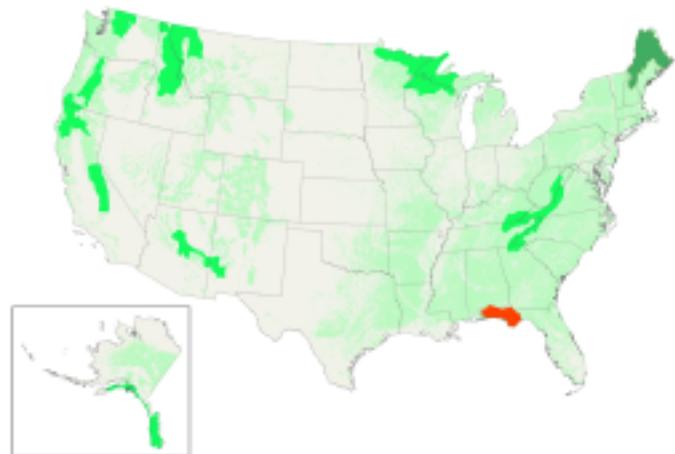
acres by establishing four new wilderness areas, two new scenic areas and expanding five existing wilderness areas in the Jefferson National Forest.

There are two other wilderness areas proposals. One proposal is the addition of 10,900 acres to the Laurel Fork Wilderness, and the second is the Little River Wilderness Proposal which would designate 28,000 acres as wilderness. The proximity of the Little River proposal to the Ramsey's Draft Wilderness would create a large, relatively continuous natural area. Acreage from both proposals would come partially from the George Washington National Forest.

The West Virginia Wilderness Coalition has identified areas throughout the Monongahela National Forest that warrant protection, including places such as Seneca Creek, Spice Run and Roaring Plains.

*Written by Greenpeace
For more information, visit Southern Appalachian Forest Coalition
www.safc.org*

KEYSTONE FOREST



Physical Description

The Florida panhandle, centered on the Apalachicola River Basin and part of the larger Southeastern Conifer forest ecoregion, is a well-known hotspot for biodiversity. It is home to the richest endemic plant life in the south and 75 percent of Florida's plant species. These longleaf pine forests and their wiregrass understory also provide habitat for a host of rare species, including 36 federally threatened or endangered species such as the red-cockaded woodpecker, Eastern indigo snake, gopher tortoise and flatwoods

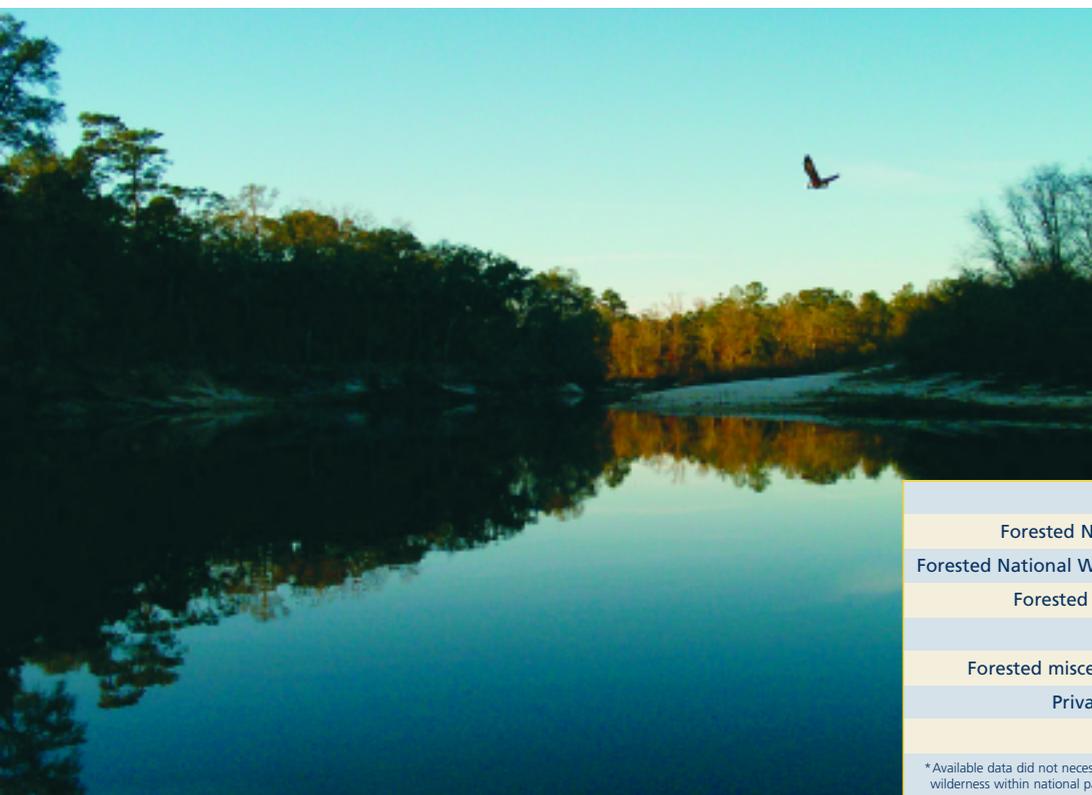
salamander. Other rare species, including Florida black bear, striped newt, Apalachicola king snake and Sherman's fox squirrel, are found here. Tree diversity and endemism is among the highest of any North American forest, with more than 190 tree species and 27 endemics. The wiregrass community contains some of the most diverse herbs in the world, with a single stand containing as many as 200 species.

The forests and numerous rivers of the Florida panhandle provide recreational opportunities for hunters, fish-

ermen, hikers, boaters and canoeists. In addition, the nutrient-rich fresh river water of the Florida panhandle makes the bays and estuaries along the Gulf Coast some of the most productive in the world. In fact, 10 percent of all the oysters harvested in the United States come from Apalachicola Bay.

Threats

The longleaf pine forests that once covered approximately 90 million acres from Virginia to Texas have been reduced to fewer than three million acres. Until very recently, the Florida panhandle had escaped the development pressures seen in the rest of the state. However, the largest landowner in the Florida panhandle, the St. Joe Company (formerly the St. Joe Paper Company), has recently decided to commercially develop the region and has begun selling off a significant portion

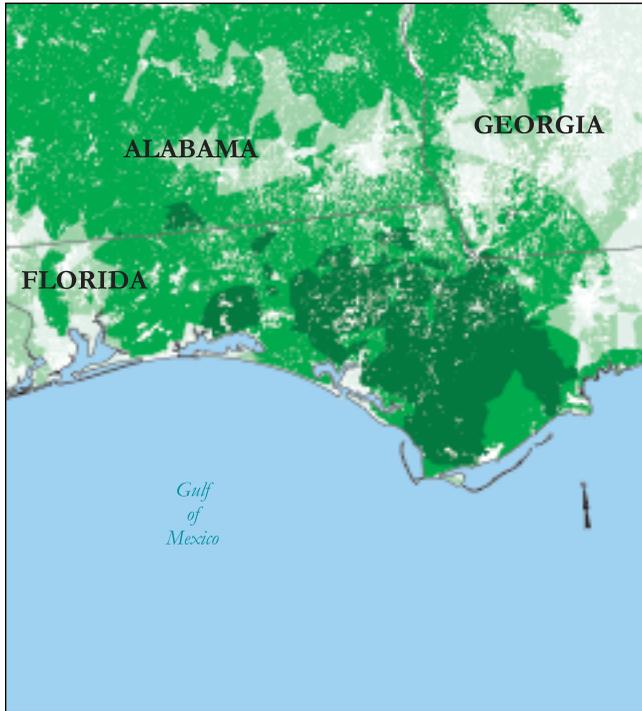


A Bald Eagle glides along the Ochlockonee River in the Apalachicola National Forest.

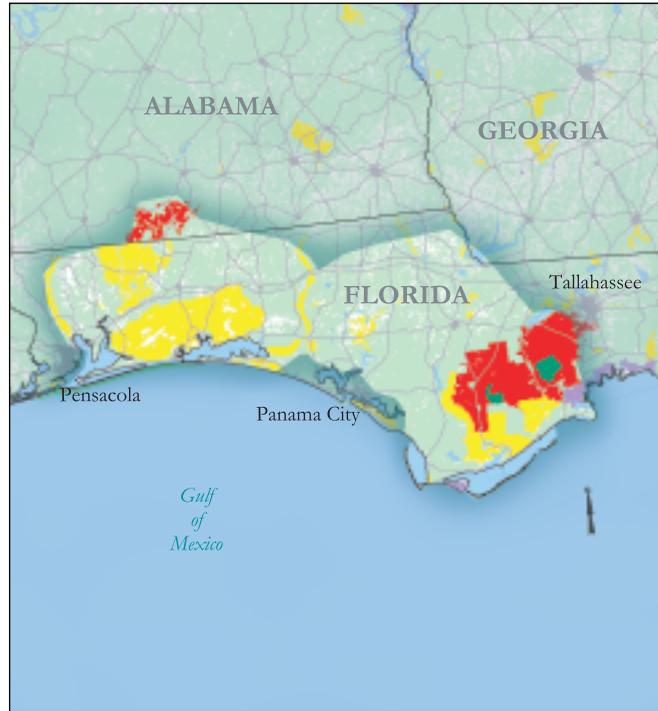
Forested BLM Lands (non-wilderness)	0
Forested National Forest Lands (non-wilderness)	589,994
Forested National Wildlife Refuge Lands (non-wilderness)	23,778
Forested National Park Lands (non-wilderness)*	1,297
Forested Wilderness	33,002
Forested miscellaneous public and private preserves	998,767
Privately owned, unprotected forest lands	3,210,596
Total Forested Lands	4,857,434

* Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.

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Forest Quality



Forest Ownership



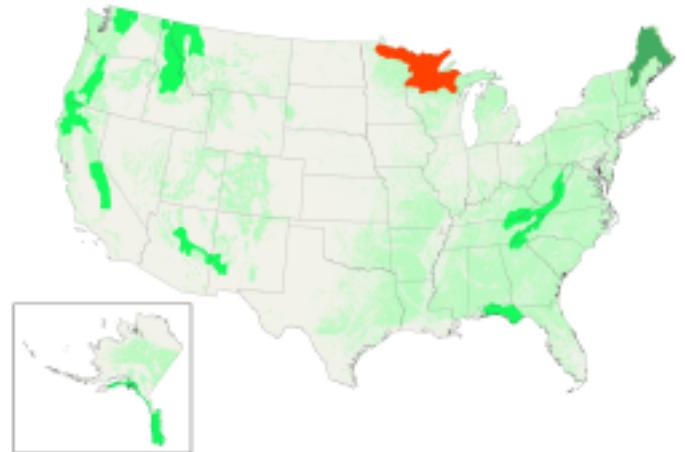
of its one million acres to land prospectors. Another threat to the longleaf pine ecosystems has been forestry practices on both public and private lands that have replaced the native longleaf pine forest with fast-growing slash pine plantations that retain only a fraction of the land's original biodiversity. Fire, a natural regeneration process for the wiregrass community, has been suppressed. On public lands, largely unregulated off-road vehicle use is also increasing.

*Written by Brett Paben
WildLaw
www.wildlaw.org*

Efforts to Increase Protected Areas

The Nature Conservancy has a 6,000-acre preserve along the Apalachicola River and has recently signed a Memorandum of Partnership with the state of Florida and the U.S. Department of Defense to establish a 100-mile protected corridor that connects Eglin Air Force Base and the Apalachicola National Forest.

KEYSTONE FOREST



Physical Description

The Upper Great Lakes Keystone Forest is part of the larger Western Great Lakes forest ecoregion. Even today, the remote Upper Peninsula of Michigan, northern Wisconsin and Minnesota harbor some of the most expansive forests remaining in the lower 48 states. A mix of spruce-fir coniferous forest and a hardwood mix of aspen, paper birch, beech and maple dominate this keystone forest. This vast forest is home to most of the wolves and almost one-half of the bald eagles in the lower 48 states, as well as other sensitive wildlife

species including the fisher, black bear, loon, osprey and brook trout. There is also potential habitat for the recovery of extirpated or rare species such as the cougar, lynx, marten and wolverine. The most dominant feature of the region is water, with hundreds of miles of shoreline on Lake Superior; tens of thousands of lakes, ponds and wetlands; and thousands of miles of rivers and streams. This keystone forest is well-known for its diverse backcountry recreational opportunities, including hiking, camping, canoeing, boating, fishing, hunting, cross-country skiing,

snowshoeing, nature study and solitude.

Threats

As the U.S. Forest Service has run out of areas to log in other regions, the rate of cutting has skyrocketed in the national forests of the Great Lakes. The state forests in the region have long been grossly mismanaged and continue to suffer major ecological damage from logging, road-building and intensive motorized recreation. A significant threat on both federal and state lands is widespread clearcutting to benefit commonly hunted wildlife, such as deer and ruffed grouse, to the detriment of many sensitive native species. Development on millions of acres of private inholdings and adjacent lands is a significant problem for the public lands of the region, as are expanding road networks and escalating levels of



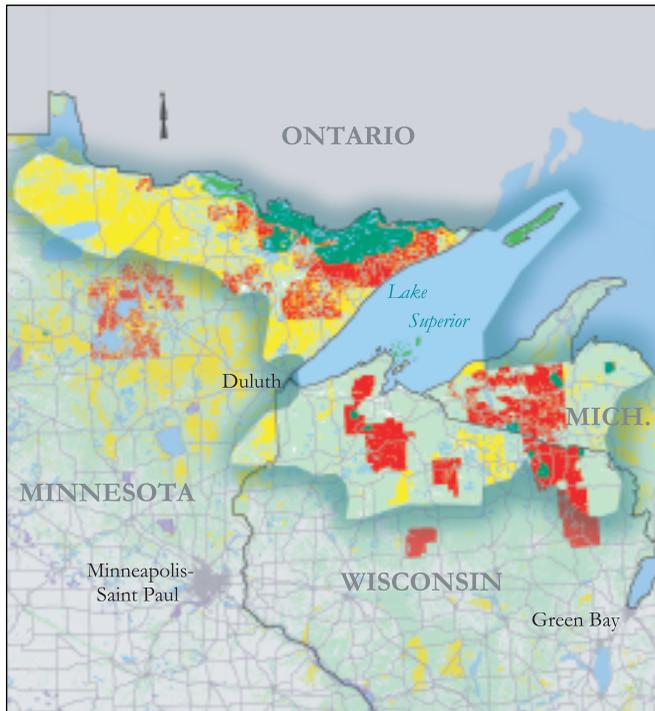
Chequamegon National Forest, Wisconsin.

Forested BLM Lands (non-wilderness)	25,868
Forested National Forest Lands (non-wilderness)	3,614,182
Forested National Wildlife Refuge Lands (non-wilderness)	0
Forested National Park Lands (non-wilderness)*	274,677
Forested Wilderness	940,474
Forested miscellaneous public and private preserves	4,263,189
Privately owned, unprotected forest lands	79,999,649
Total Forested Lands	17,117,462

* Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.



Forest Quality



Forest Ownership



off-road vehicle use. Without new national park or wilderness designations, the situation will certainly deteriorate in the coming years.

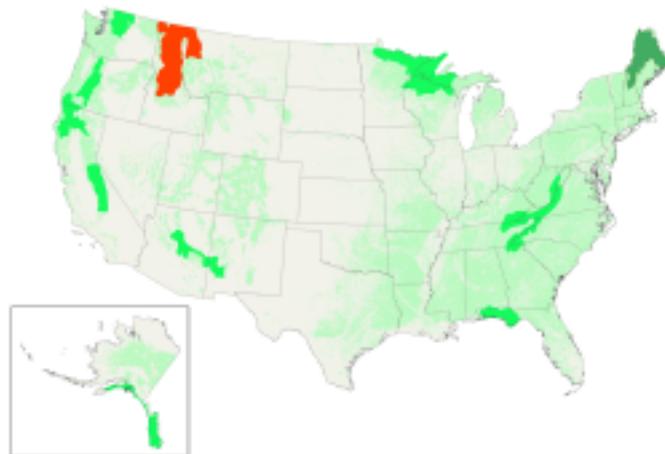
Efforts to Increase Protected Areas

Recent management plan revisions in Wisconsin’s Chequamegon-Nicolet National Forest (CNNF) claim an increase in protected areas from 71,864 acres to 184,600 acres, with 15,500 acres being proposed for wilderness designation. CNNF currently has 44,000 wilderness acres. In Michigan’s Ottawa National Forest, the Trap Hills Conservation Alliance is proposing a National Recreation Area that includes approximately 18,000 acres of wilderness. This draft proposal will be available to the public soon. Other remote areas in the Ottawa National Forest, as well as lands in the Hiawatha National Forest, Seney National Wildlife Refuge, Pictured Rocks National Lakeshore and Michigan state forests offer excellent

opportunities for protected area management.

*Written by Michael Kellett
Restore the North Woods and
Doug Cornett
Northwoods Wilderness Recovery
For more information, visit
www.northwoodswild.org and
www.hecenter.org*

KEYSTONE FOREST



Physical Description

Known as the “American Serengeti,” stretching across Idaho and Montana into the extreme northwest section of eastern Washington, the Northwest Rockies Keystone Forest is part of the greater North Central Rockies forest ecoregion. This keystone forest encompasses the largest expanse of biological diversity in the lower 48 states and contains the largest contiguous block of coniferous temperate forest in the Intermountain West. It is the only bioregion outside of Alaska that still contains all species present at

the time of the Lewis and Clark expedition. Many different forest types can be found here, ranging from wet forests full of cedar, fir and white pine to higher-elevation forests of lodgepole pine, white-bark pine and sub-alpine fir to drier, lower-elevation forests of Ponderosa pine and Douglas fir. Populations of bighorn sheep, grizzly bear, goshawk, elk, caribou and mountain lion roam the region’s forests, mountains and grasslands. Keystone species such as grizzly bear, woodland caribou and bull trout have been listed as threatened and endan-

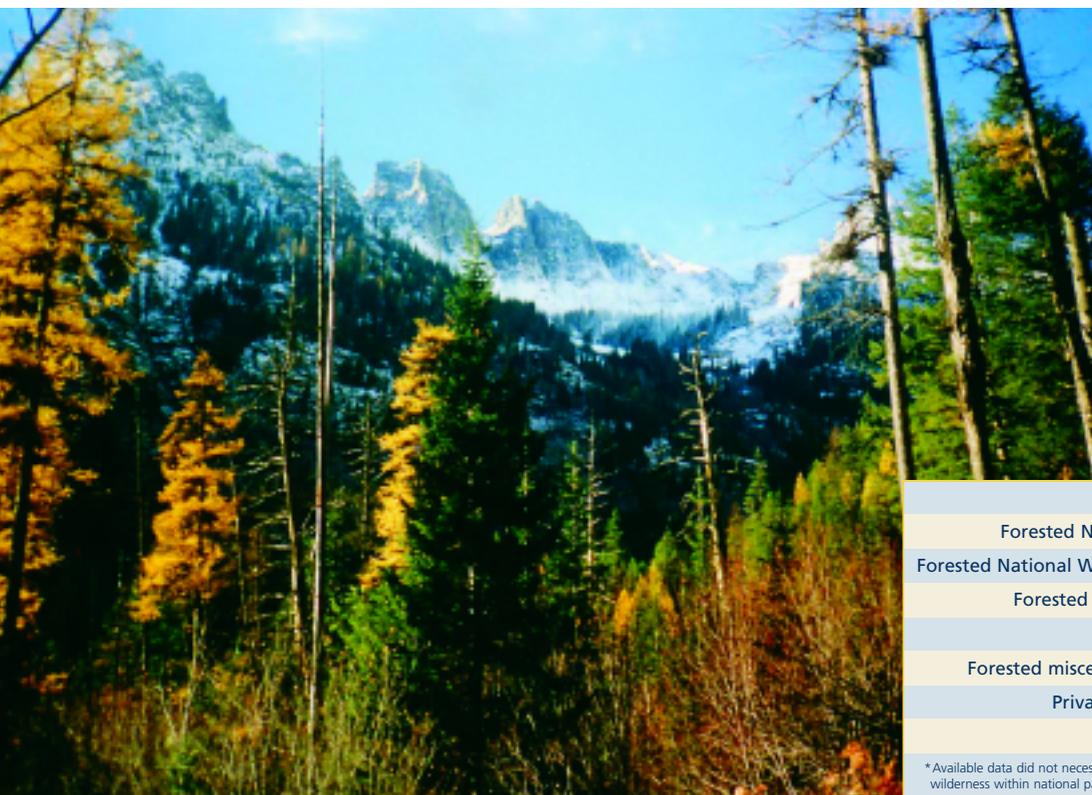
gered. Much of the nation’s fresh water originates here creating the headwaters for the Columbia River, the Missouri River and even for water draining north into Canada’s Hudson Bay.

This keystone forest is a haven for outdoor enthusiasts who use the area for fishing, hunting, backpacking, rock climbing, mountain biking, fly fishing, skiing, scenic and whitewater paddling and camping. Additionally, many locals use these forests to gather mushrooms, berries and other edibles.

Threats

This keystone forest continues to face a myriad of industrial threats from large-scale logging, mining and oil and gas companies. More than 20 million acres of publicly-owned wild lands remain unprotected. Iconic places such as the Rocky Mountain Front, the North Fork of the Flathead River near Glacier

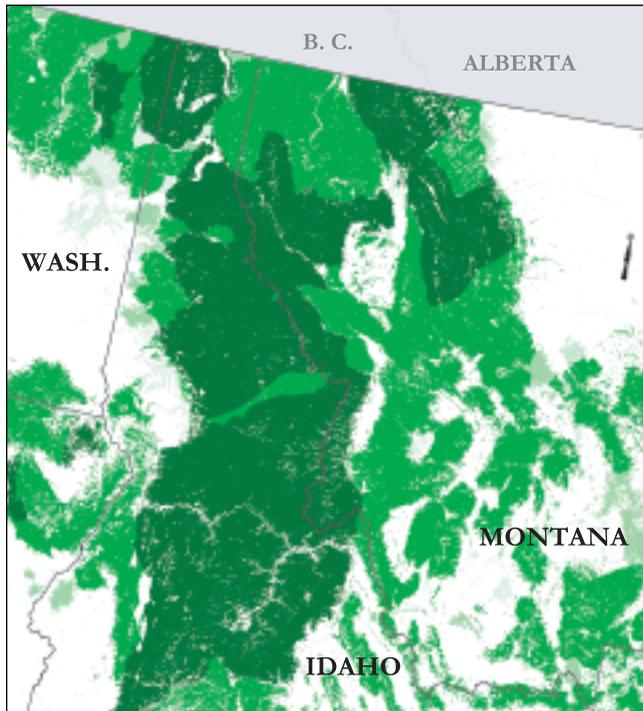
Bitterroot National Forest.



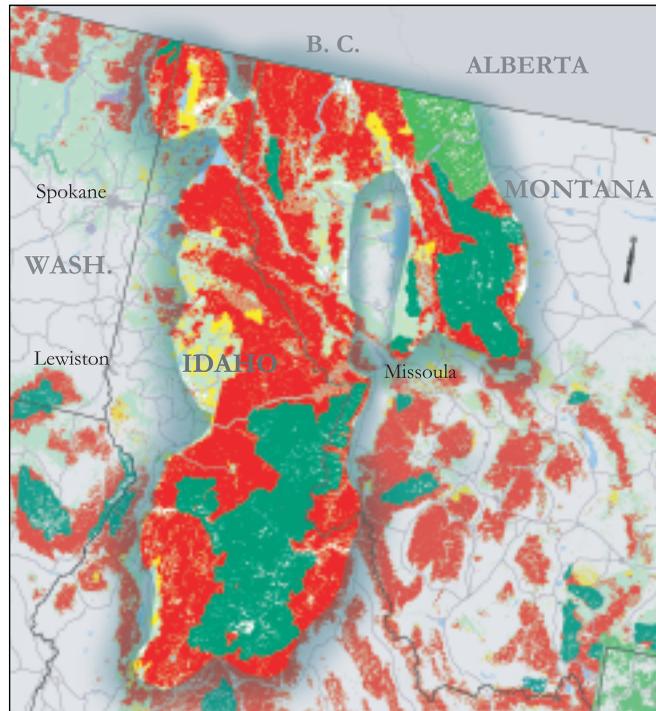
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Forested BLM Lands (non-wilderness)	146,418
Forested National Forest Lands (non-wilderness)	12,892,751
Forested National Wildlife Refuge Lands (non-wilderness)	1,297
Forested National Park Lands (non-wilderness)*	777,195
Forested Wilderness	5,039,447
Forested miscellaneous public and private preserves	944,869
Privately owned, unprotected forest lands	3,287,552
Total Forested Lands	23,089,529

* Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.



Forest Quality



Forest Ownership



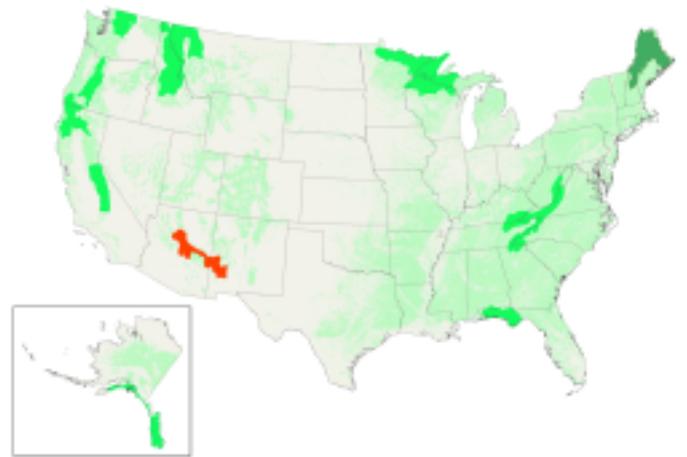
National Park, and the Lewis and Clark Trail in the Clearwater National Forest are all at risk. A relatively new and growing threat comes from off-road vehicles that cause both ecological damage and social conflict.

*Written by Jake Kreilick
National Forest Protection Alliance
www.forestadvocate.org*

Efforts to Increase Protected Areas

The Northern Rockies Ecosystem Protection Act (NREPA) proposes a wide array of wilderness designations throughout the region. In contrast to traditional state wilderness bills, designations under NREPA are made according to ecosystems, watersheds and science—not arbitrary political boundaries. NREPA would create more than 18 million acres of new wilderness and designate 1,810 miles of eligible waters as Wild, Scenic and Recreational Rivers. NREPA provides the means to connect the Northwest Rockies Keystone Forest with the neighboring Hells Canyon and Greater Yellowstone ecosystems.

KEYSTONE FOREST



Physical Description

Stretching from Flagstaff, Arizona almost to the Rio Grande Valley in New Mexico, the Mogollon Keystone Forest marks the southern edge of the Colorado Plateau where it meets the great Sonoran and Chihuahuan deserts. It is part of the larger Arizona Mountains forests ecoregion. The prominent feature is a long escarpment, known as the Mogollon Rim, that extends for several hundred miles, with an average elevation of 7,000 feet.

The Mogollon Keystone Forest is

best characterized by its vast stands of Ponderosa pine, the largest of its kind in the United States, but also is marked by the pinyon-juniper ecosystem of the upper deserts to the high elevation spruce fir forests. The effects of grazing, logging and fire suppression since the late 1880s on Ponderosa pine forests have been profound. Fire, a critical component to the Ponderosa pine ecology, has been very suppressed for many years. There are currently many efforts, some controversial, to restore this ecological process. In 1991, the National Biological Survey declared the

Southwest Ponderosa pine forests one of the nation's most endangered ecosystems.

The Blue Range of Arizona and New Mexico is currently the site of the 7,000 square-mile Mexican gray wolf recovery area. The jaguar, having once roamed these same landscapes, has made recent forays across the U.S./Mexico border. The tassel-eared Abert's squirrel, mule deer, rocky mountain elk and two seriously imperiled bird species, the Mexican spotted owl and Northern goshawk, also live among the pines.

Critical to the wildlife and human populations of this arid region are its rivers; the most notable being the Gila, Verde, San Francisco and Blue. The Wild and Scenic Verde River is the only river in this keystone forest area that has this status. However several other rivers, including the San

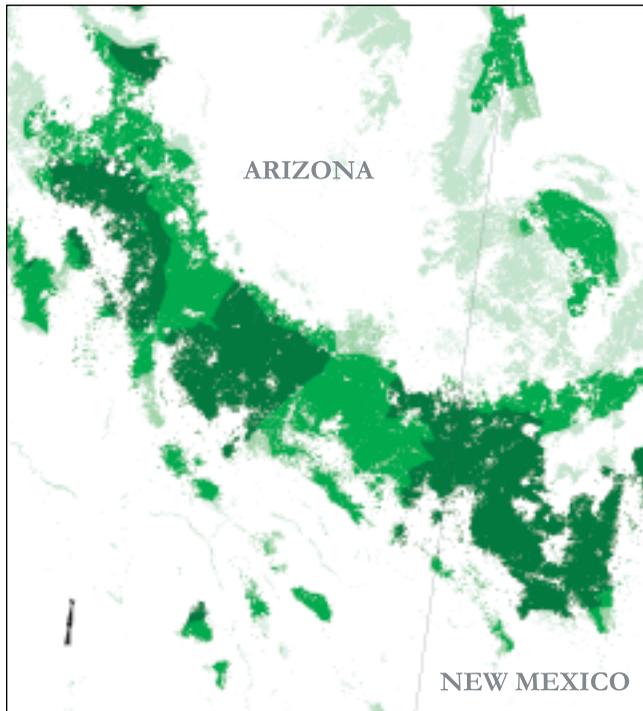
Gila National Forest, New Mexico.



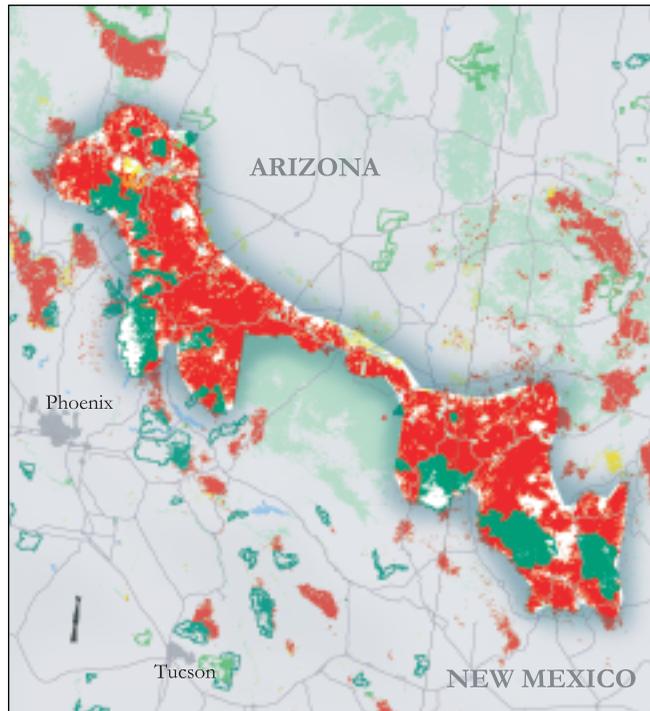
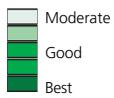
© USFS

Forested BLM Lands (non-wilderness)	14,123
Forested National Forest Lands (non-wilderness)	5,163,744
Forested National Wildlife Refuge Lands (non-wilderness)	0
Forested National Park Lands (non-wilderness)*	3,459
Forested Wilderness	937,303
Forested miscellaneous public and private preserves	62,833
Privately owned, unprotected forest lands	349,759
Total Forested Lands	6,531,221

* Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.



Forest Quality



Forest Ownership



Francisco, are strong candidates. Wilderness areas along the Mogollon Country include San Francisco Peaks, Matazal, Mount Baldy and Blue Wallow, Gila-Aldo Leopold Complex and Blue River Primitive Area. These protected areas are considered biological hotspots.

Threats

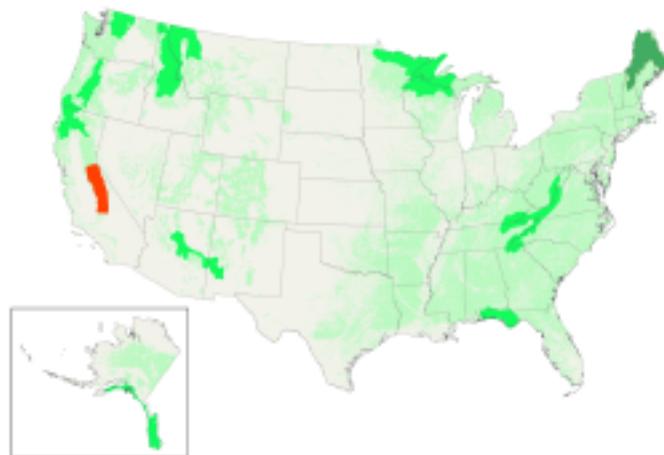
The major threats to the Mogollon Keystone Forest include logging, road-building, mineral extraction, grazing and water diversion for human consumption. Old-growth logging, however, is not entirely an anachronism, as “forest health” has become the latest dictum of the federal government. The string of federal wilderness serves as anchors for this wild, ponderosa country, but the growing wildland-urban interface presents unique challenges, e.g., maintaining the fire-based ecology.

Efforts to Increase Protected Areas

Several organizations are advocating for greater protection of the Sky Islands ecoregion, as well as the greater Mogollon Keystone Forest area, by reforming land management policies and creating national and international reserves.

*Written by Bryan Bird
Forest Guardians
www.fguardians.org*

KEYSTONE FOREST



Physical Description

The Sierra Keystone Forest, part of the larger Sierra Nevada forest ecoregion, hosts one of the most diverse and extensive forest ecosystems in North America. These magnificent forests, forming a mixed conifer forest landscape, provide habitat for many imperiled species, including the California spotted owl, Pacific fisher, Northern goshawk, American marten, Yosemite toad and the mountain yellow-legged frog. This keystone forest contains one of the highest levels of mammal endemism in North America. The for-

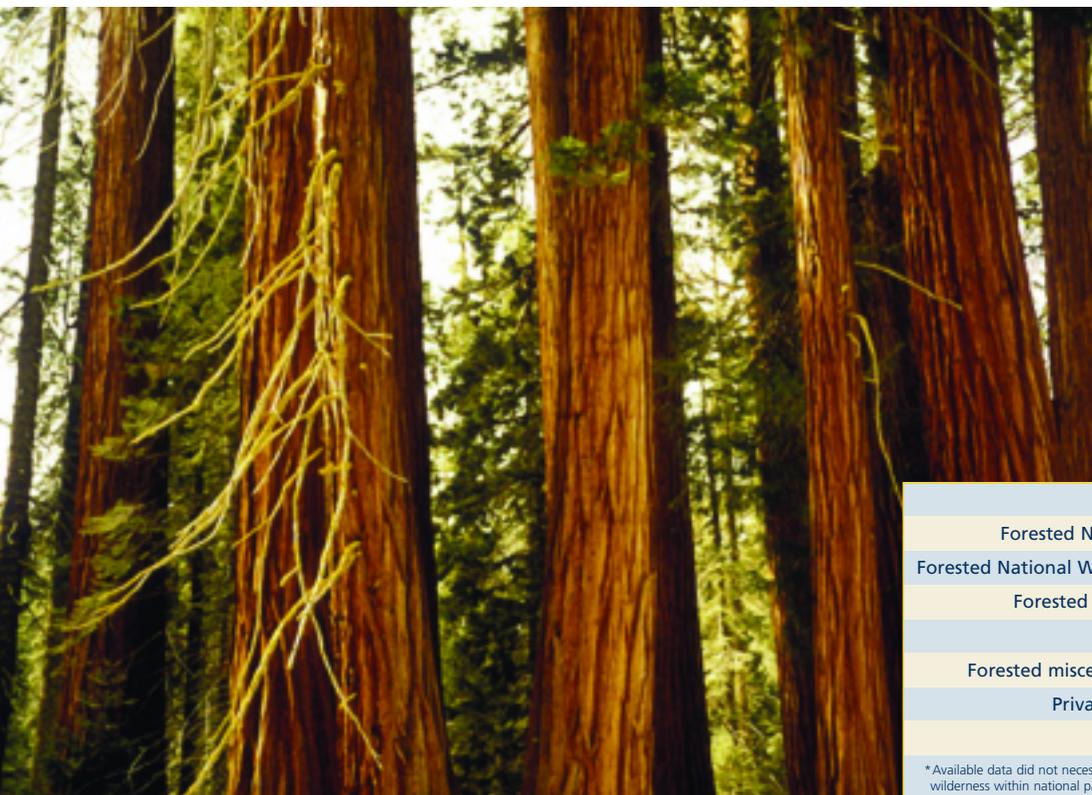
est is extremely diverse including the mixed conifer and sequoia forests at higher elevations, the red fir and lodgepole pine forests at lower elevations. The Sequoia National Forest and Monument contains the world-renowned groves of giant Sequoia trees that are among the oldest and largest trees in the world. The Inyo National Forest is one of the most used national forests in the country for recreation.

In most Sierra Nevada counties over the past 25 years, the primary areas of growth in the economy have been in

the areas of recreation and tourism, currently providing more jobs and roughly the same total amount of wages as all the commodity-based sectors combined. Recreation includes hiking, boating, hunting, rock climbing and fishing. This keystone forest, in particular, provides a significant proportion of California's drinking and agricultural water, including all the drinking water for San Francisco.

Threats

In 2001, the historic Sierra Nevada Forest Plan Amendment ("the Framework"), affecting 11.5 million acres in 11 national forests, was signed into law. The Sierra Nevada Forest Plan Amendment was the result of 14 years of research, planning and cooperative efforts by the Forest Service, scientists, community activists, business owners and environmentalists. The Framework was the Forest Service's first compre-

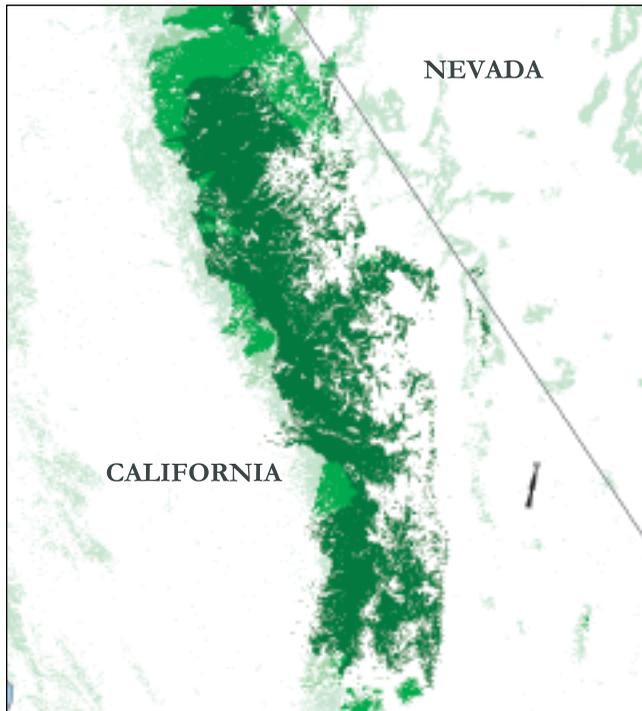


Sequoia National Park, California.

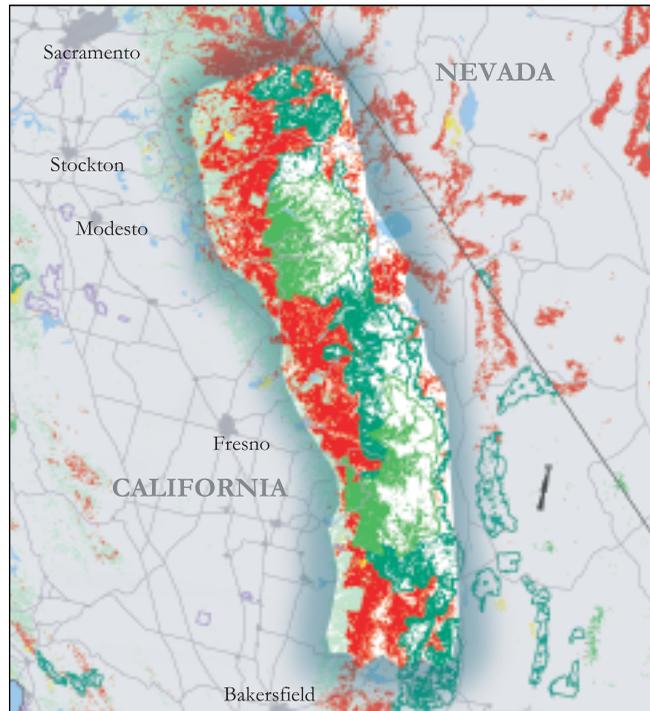
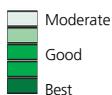
Forested BLM Lands (non-wilderness)	116,659
Forested National Forest Lands (non-wilderness)	2,099,926
Forested National Wildlife Refuge Lands (non-wilderness)	1,153
Forested National Park Lands (non-wilderness)*	817,691
Forested Wilderness	837,434
Forested miscellaneous public and private preserves	21,545
Privately owned, unprotected forest lands	732,593
Total Forested Lands	4,627,001

* Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.

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Forest Quality



Forest Ownership



hensive, Sierra-wide plan to reduce the threat of wildfire and to protect forest habitat. It included: 1) a commitment to restore and protect old-growth forest conditions, including all existing old-growth stands one acre or larger; 2) a prohibition against the cutting of large trees (20 inches diameter or greater); and 3) protection for imperiled aquatic species by establishing a comprehensive aquatic and riparian habitat conservation strategy for all of the national forest lands in the Sierras. Despite widespread support for this plan, the Forest Service, responding to pressure from the Bush administration, announced sweeping revisions to the Framework. The revisions nearly triple the amount of logging on national forests and limit safeguards for water and wildlife.

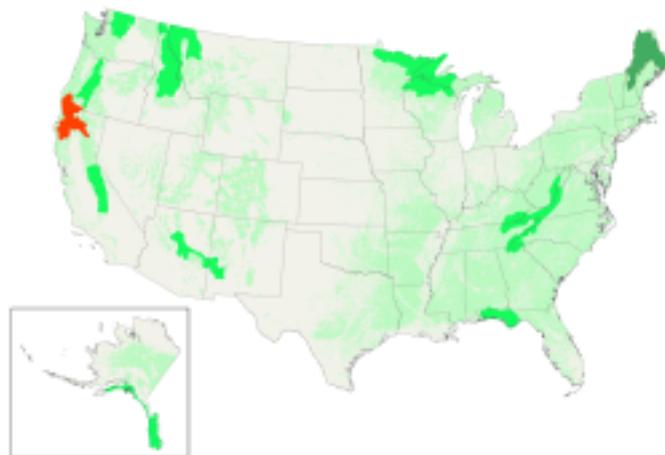
This keystone forest is also threatened by livestock grazing, conversion to tree plantations, fire suppression, air pollution and pathogens.

Efforts to Increase Protected Areas

The California Wild Heritage Act (S.1555) would designate some 2.5 million acres of wilderness in California and create more than 400 miles of Wild and Scenic Rivers. Many of these additions are located within the Sierra Keystone Forest.

*Written by David G. Graves
Sierra Nevada Forest Protection
Campaign
www.sierracampaign.org*

KEYSTONE FOREST



Physical Description

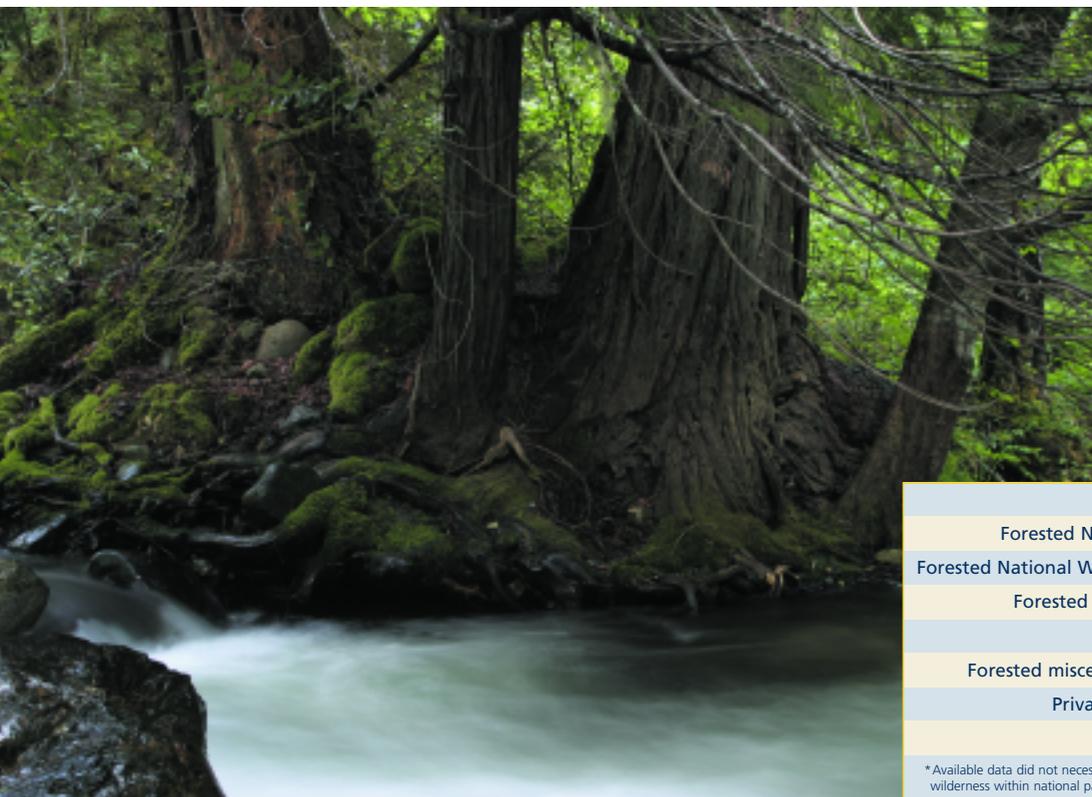
The Klamath-Siskiyou Keystone Forest ranging from Southwest Oregon to Northwest California is an area world-renowned for its biological importance and considered an “Area of Global Botanical Significance” by the World Conservation Union. It has also been proposed as a possible World Heritage Site and a United Nations Educational, Scientific and Cultural Organization Biosphere Reserve. This forest also has the largest network of remaining roadless wilderness in the Pacific Northwest, including the low-elevation 45,000-acre

Zane Grey.

The Klamath-Siskiyou Keystone Forest is a mixed conifer temperate forest that includes up to 40 species of conifers, the highest concentration in North America. Douglas fir is the dominant conifer. The forest also includes several long-lived species of pine and fir and endemic tree species such as Port Orford cedar and Brewer’s spruce. The Klamath-Siskiyou has 3,500 plant types, 220 of them found nowhere else in the world. There are also wilderness areas large enough to support the mountain lion, black bear, several

species of Pacific salmon, the tailed frog and various carnivores such as the Pacific fisher, pine marten, mountain lion and wolverine. Endangered species include the Northern spotted owl, marbled murrelet, bald eagle and coho salmon.

Three main river systems define the region: the Umpqua and the Rogue in the north and the Klamath in the south, with many large tributaries and coastal rivers adding to the mix. The Rogue, Illinois and Trinity Rivers are among those that give the Klamath-Siskiyou the largest concentration of Wild and Scenic Rivers in the United States. In these rivers are four imperiled fish species: the lost river sucker, the shortnose sucker and the commercially valuable Northern California coho salmon and steelhead trout. The area also provides excellent drinking water for local communities and offers world-class fishing, hunting, boating, rafting,



Port Orford cedar in the Siskiyou National Forest, Oregon.

Forested BLM Lands (non-wilderness)	511,885
Forested National Forest Lands (non-wilderness)	3,766,652
Forested National Wildlife Refuge Lands (non-wilderness)	0
Forested National Park Lands (non-wilderness)*	16,933
Forested Wilderness	1,238,498
Forested miscellaneous public and private preserves	201,324
Privately owned, unprotected forest lands	2,271,563
Total Forested Lands	8,006,855

* Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.

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Forest Quality



Forest Ownership



climbing and hiking opportunities. Non-timber resources such as mushrooms, cedar boughs and fisheries contribute significant revenue to local communities.

Threats

Commercial logging, primarily of old-growth, by the Bureau of Land Management, the Forest Service and private industrial land owners is a huge threat to this keystone forest. Federal logging operations, such as the Biscuit Salvage, are among the largest in the nation and typically include inappropriate responses to fire such as logging fire-resistant trees before, during and after fires. Mining is also a severe threat to this forest. The antiquated 1872 Mining Law allows miners to bulldoze and suction-dredge prime salmon spawning habitat, degrade river banks, pollute sensitive areas and even privatize public lands. In addition, a non-

native root disease is killing entire populations of the endemic Port Orford cedar (considered the most endangered forest tree species in North America). Off-road vehicles are another menace, damaging sensitive plant communities, wildlife habitat and riparian areas through erosion, soil compaction, noise and pollution. Cattle grazing harms stream sides where cows congregate, often in high elevation roadless and wilderness areas in the last summer months.

Efforts to Increase Protected Areas

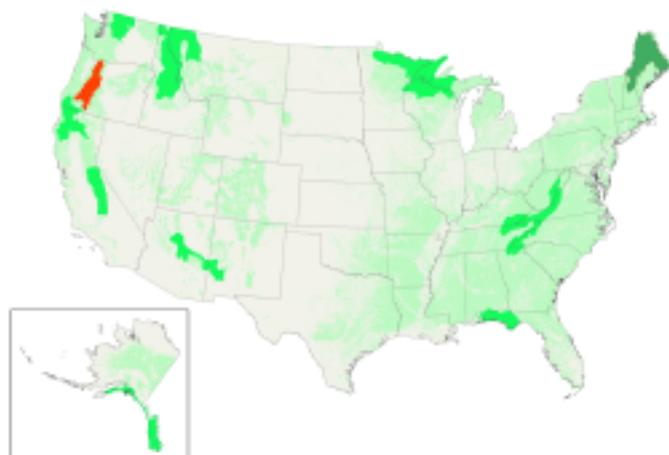
The proposed California Wild Heritage Act (S.1555) would expand several wilderness areas in the southern extent of this keystone forest. Also included in this bill are proposed Wilderness Study Areas, as well as Salmon Restoration Areas.

A coalition of groups has also proposed the Siskiyou Wild Rivers Area for protection. This area encompasses

one million acres that includes all or portions of the Siskiyou National Forest and the BLM Medford District. The coalition is seeking a combination of increased wilderness areas adjacent to the Kalmiopsis, additions to National Research Areas and Wild and Scenic Rivers and restoration zones which will also help protect the ecological integrity of the wildest, most intact forest left on the Pacific Coast.

*Written by Joseph Vaile
KS Wild
www.kswild.org*

KEYSTONE FOREST



Physical Description

The Pacific Northwest Volcanic Keystone Forest is part of the larger Central and Southern Cascade forests. This keystone forest is straight out of a storybook: cascading waterfalls, crystal clear streams and rivers and ancient rainforests. Most of this keystone forest contains the dominant conifers of Douglas fir, Western hemlock, Western red cedar, incense cedar, Pacific yew and a myriad of true fir. At lower elevations, hardwoods such as big leaf maple, vine maple and dogwood are present. The Northern spotted owl is

the most well-known endangered species in the area. However, other threatened species such as the bald eagle, bull trout and a host of salmon also reside in this area. Waldo Lake, considered one of the purest lakes in the world, is located near the Cascade Crest, 60 miles southeast of Eugene. The city of Eugene gets its municipal water supply from the magnificent McKenzie River, which has its headwaters in the Willamette National Forest. The town of Cottage Grove gets its municipal water supply from Brice Creek, in the northern portion of the

Umpqua National Forest. Outdoor enthusiasts including hikers, rafters, kayakers, bikers, hunters, anglers, mushroom pickers and non-timber product gatherers heavily use this region.

Threats

The greatest threat to this keystone forest is ongoing logging of ancient forest on public lands administered by the BLM and the Forest Service. Over the next 20 years, 1.1 million acres of late successional and old-growth forest are slated for logging.

Efforts to Increase Protected Areas

The Lewis and Clark Mount Hood Wilderness proposal introduced by Senator Ron Wyden (D-OR) would add 177,000 acres of wilderness and 48 miles of Wild and Scenic River designation around Mount Hood and in the Columbia Gorge. A small percentage of

Mount Hood National Forest, Oregon.



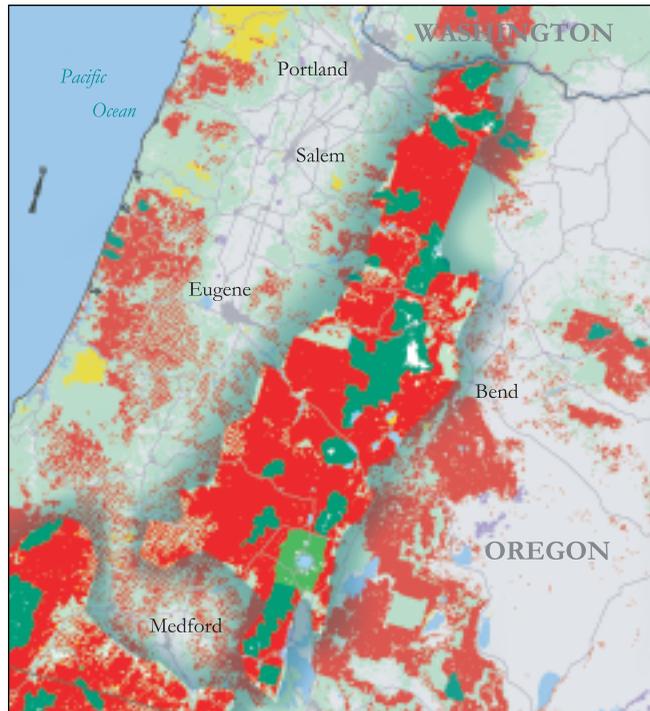
© CRAIG TUTTLE/CORBIS

Forested BLM Lands (non-wilderness)	189,291
Forested National Forest Lands (non-wilderness)	3,814,425
Forested National Wildlife Refuge Lands (non-wilderness)	793
Forested National Park Lands (non-wilderness)*	155,929
Forested Wilderness	897,240
Forested miscellaneous public and private preserves	10,664
Privately owned, unprotected forest lands	629,120
Total Forested Lands	5,697,462

* Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.



Forest Quality



Forest Ownership

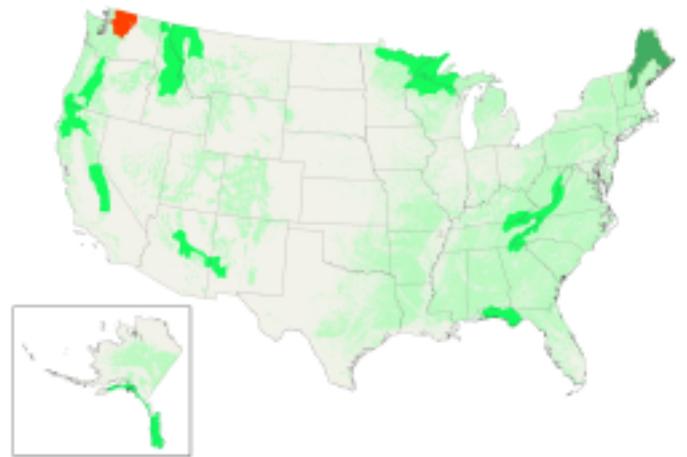


this legislation pertains to an eastern portion outside of this keystone forest.

There is a growing campaign to convert much of the northern portion of Mount Hood National Forest to a newly formed Mount Hood National Park. Though the exact boundaries would be determined by a national park feasibility study, probable boundaries could include the Oregon side of the Columbia Gorge, Mount Hood and the backcountry around the mountain, extending south to the Clackamas River. In addition, the campaign is expected to introduce wilderness legislation that includes approximately one million acres of roadless areas in national forest and BLM land.

*Written by Josh Laughlin
Cascadia Wildlands Project
www.cascwild.org*

KEYSTONE FOREST



Physical Description

The North Cascades Keystone Forest, ranging from Interstate 90 in Washington north to the Canadian border, is among the wildest places in America. During the months when the North Cascades Highway (SR 20) is under snow, the area features the largest contiguous expanse of roadless land left in the lower 48 states. This keystone forest stretches between the Puget lowland and the Cascade Mountains leeward forest ecoregions.

Forests of Douglas fir, Western hemlock and Western red cedar domi-

nate the Western slopes. The Eastern slopes vary from Douglas fir to Ponderosa pine to lodgepole pine. The valleys start as low as almost sea level and are often separated by high and rugged ridges that reach to stunning peaks, the highest of which is volcanic Mount Baker at more than 10,000 feet. In this remote expanse, low populations of grizzly bear, wolverine, lynx and cougar are still found and the occasional wolf. The usual list of Northwest forest-dependent species also live here, from the Northern spotted owl to Pacific giant salamander,

pine marten and a few lonely Pacific fisher. Runs of Pacific salmon, steelhead and bull trout vary in health.

The North Cascades is heavily used for recreation by both the urban population around Seattle and the surrounding rural communities. Hunting, fishing, hiking, birding, rafting, rock/mountain climbing, backcountry skiing and horsepacking are all common.

Threats

The North Cascades is presently one of the best protected ecosystems in the country, but Bush administration policies related to the logging of dry forests as well as the ongoing rollbacks of Northwest Forest Plan provisions, pose serious threats. There are also significant problems with overgrazing in some areas, excessive recreational use and growing impacts associated with population growth in valleys like the

Mount Shuksan is reflected in Picture Lake in the North Cascades National Park, Washington.



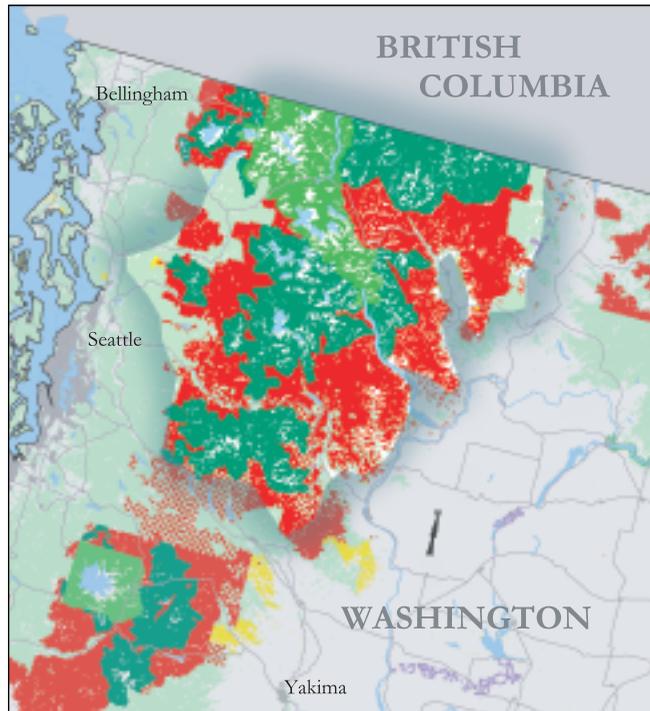
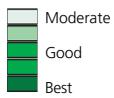
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Forested BLM Lands (non-wilderness)	6,773
Forested National Forest Lands (non-wilderness)	2,082,560
Forested National Wildlife Refuge Lands (non-wilderness)	576
Forested National Park Lands (non-wilderness)*	484,360
Forested Wilderness	1,586,887
Forested miscellaneous public and private preserves	6,341
Privately owned, unprotected forest lands	795,786
Total Forested Lands	4,963,283

* Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.



Forest Quality



Forest Ownership



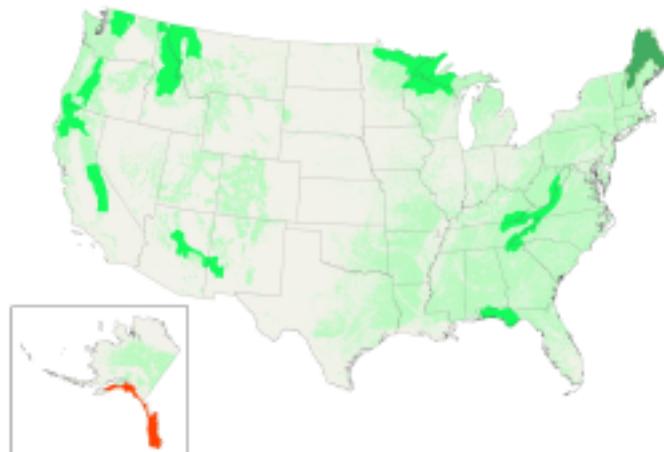
Methow and Skagit.

Efforts to Increase Protected Areas

The Wild Sky Wilderness Act would permanently protect more than 100,000 acres as a Wild Sky Wilderness Area of wildland in the Mount Baker-Snoqualmie National Forest. This act has passed the Senate twice, but is stalled in the House. Citizen proposals also exist for additional wilderness around Mount Baker and other areas.

*Written by Mitch Friedman
Northwest Ecosystem Alliance
www.ecosystem.org*

KEYSTONE FOREST



Physical Description

The northern limit of North America's coastal temperate rainforest is in Alaska. This is the rarest forest type on Earth with 38 percent of this ancient forest in Alaska. This keystone forest is part of the larger Northern Pacific Coastal forest ecoregion. Dominant tree species are Western hemlock and Sitka spruce, with some Alaska yellow cedar in the southern portion. Watersheds consist of small to very large islands numbering in the thousands, and relatively short mainland rivers with headwaters in a glaciated

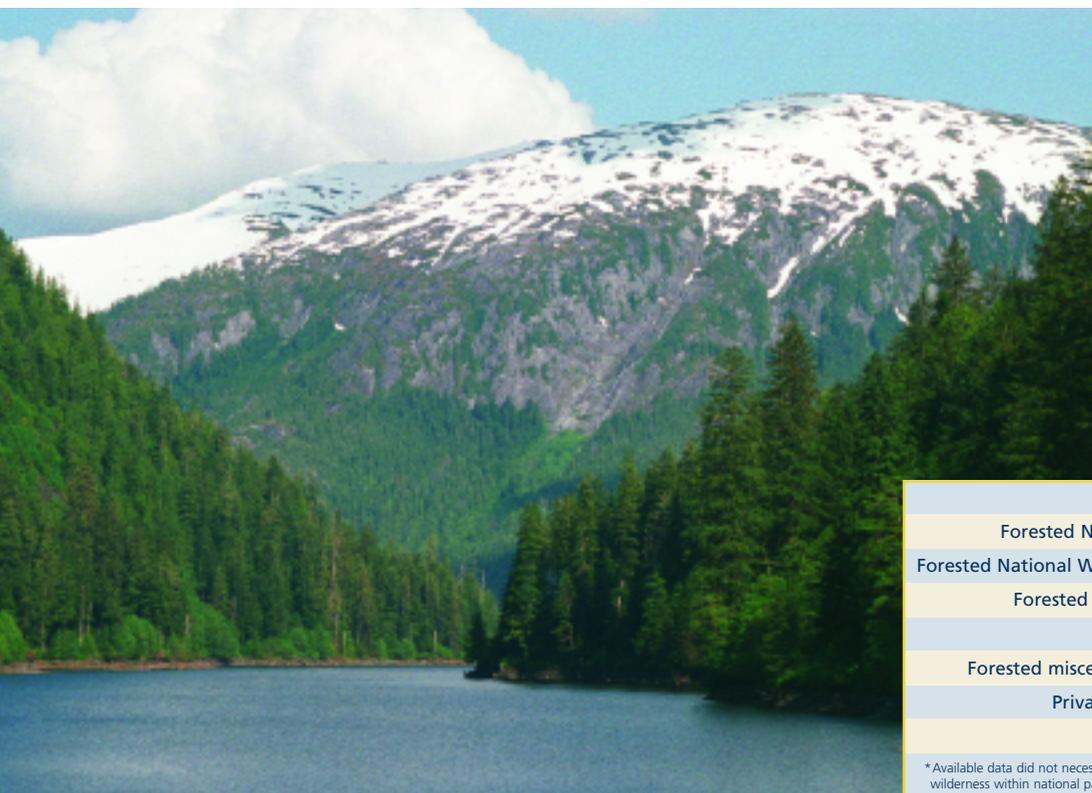
coast range hundreds of miles long that has peaks typically 5,000 to 10,000 feet in elevation, reaching to 18,000 feet. Some islands are also very mountainous and have alpine glaciers. The preponderance of land in the keystone forest is federal, nearly all of it in the Tongass and Chugach National Forests and Glacier Bay National Park. The state of Alaska, the University of Alaska, the Alaska Mental Health Trust, and a number of for-profit Native corporations have other significant landholdings.

Important wildlife includes five

species of salmon, brown and black bears, wolves, mountain goats, moose, deer and bald eagles. The area is also home to the imperiled Alexander Archipelago wolf and Queen Charlotte goshawk. There are several endemic animal populations as a result of the island geography. Many scientists believe the viability of several species in the southern part of the keystone forest is not assured beyond 100 years under current forest management practices.

Biological hotspots are estuaries and their surrounding forest, salmon streams and coarse-canopy forest (old-growth stands with large trees that have well-developed crowns and break snowfall well). Coarse-canopy forest was always rare here and now is being heavily targeted by a half-century of industrial scale logging (an estimated two-thirds has been lost). Much of the land area is non-forest (89 percent of

Tongass National Forest, Alaska.



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Forested BLM Lands (non-wilderness)	972,067
Forested National Forest Lands (non-wilderness)	7,275,222
Forested National Wildlife Refuge Lands (non-wilderness)	23,875
Forested National Park Lands (non-wilderness)*	706,063
Forested Wilderness	2,989,094
Forested miscellaneous public and private preserves	0
Privately owned, unprotected forest lands	2,323,314
Total Forested Lands	14,289,635

* Available data did not necessarily distinguish wilderness from non-wilderness within national parks, so some wilderness within national parks may be included within this statistic.



Forest Quality

- Remaining coastal temperate rainforest
- Other forested areas



Forest Ownership

- Forested BLM and national forest lands
- Forested national parks
- Forested wilderness areas
- Forested national wildlife refuges
- Misc. forested public lands and private preserves
- Privately owned forests
- Wilderness area boundaries
- National park boundaries
- National wildlife refuge boundaries
- Urban areas
- Highways

the Chugach National Forest and 54 percent of the Tongass National Forest), and much of the forested area is scrub forest. Accordingly, old-growth habitat is naturally highly fragmented, and in many places logging has dramatically increased fragmentation.

Native cultures have remained strong in this keystone forest. Sport and subsistence hunting, fishing and gathering are highly important activities in the regional culture (both native and non-native). Commercial fishing for salmon, ground fish and crab is a mainstay of the region. Tourism is also important, ranging from independent travelers who come to hike or kayak to cruise ships.

Threats

The primary threat in the southern portion of the forest is logging and associated road-building. Logging in the region is marginally economic, creating pressure to target valuable, accessible

low elevation coarse-canopy forest stands, often in roadless areas. Active plans by the state of Alaska to build a region-wide electrical intertie and to replace the existing ferry system with many short ferry hops connected by highways also present significant threats to the forest.

At present, there is no significant timber industry in the northern region. Proposed road access to the Bering coal-field presents one threat. Much of the shoreline/forest interface was damaged by the 1989 *Exxon Valdez* oil spill, and wildlife populations are stressed.

Efforts to Increase Protected Areas

Pending legislation: the Alaska Rainforest Conservation Act (H.R. 979) introduced by Rep. Rosa DeLauro (D-CT) with more than 100 cosponsors would permanently protect the remaining wildlands of the Tongass and Chugach National Forests to provide for hunting, fishing, recreation,

tourism and ecological integrity. Another area for protection includes the expansion of Kenai Fjords National Park to include portions of the Chugach National Forest on Prince William Sound.

Written by Greenpeace
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THE LONG AND WINDING ROAD



A BRIEF HISTORY OF PUBLIC LAND MANAGEMENT

The early pioneers of conservation did not have modern science to draw from when establishing our nation's public lands. To understand the need for an expansion of the protected area network, it is helpful to look first at the original intent of agencies created to manage our public lands and trace their evolution and effectiveness to the present. Such an understanding will help determine if these agencies have evolved over time, adapting to changing circumstance, in order to stay true to their conservation mandate, and if they have the capacity and the determination to protect these lands as healthy contiguous ecosystems into the future.

At the dawn of the 20th century, citizens and public officials began to realize that it was in the nation's interest to protect our natural resources from wholesale liquidation by an unchecked private sector. From the early 17th century to the middle of the 19th century, America's forests were considered unlimited and renewable. At this time most forests were cleared to create agricultural land, with the timber being used mostly for construction. For nearly 200 years, the Maine Woods provided nearly all the commercial demand without excessive drain. By the 1850s the ever-increasing rate of cut had depleted the Maine Woods and was successively replaced by heavy logging in New York, Pennsylvania, Michigan, Minnesota and Wisconsin as the principle suppliers of prime timber, up through about 1900. The dominant method of logging

was clearcutting. Consequently, widespread erosion, floods and rampant forest fires were the direct result of commercial logging of the unclassified public domain lands. The problem did not go unnoticed.

The first action was taken through policy and law, setting aside land that was to become the foundation for America's contemporary network of public lands. In 1889, Secretary of the Interior Carl Schurz addressed the American Forestry Association, stating that the unchecked and widespread destruction of the public forests "would be the murder of our future prosperity." He described "a public opinion, looking with indifference on this wanton, barbarous, disgraceful vandalism; a spendthrift people recklessly wasting its heritage; government careless of the future and unmindful of a pressing duty."¹⁷

In 1891, responding to the concerns of Secretary Schurz and other public land reformers, Congress enacted the Forest Reserve Act giving the president the authority to administratively withdraw and designate land as national forest reserves with the primary economic activity being limited to grazing, not timber production.¹⁸ However six years later in 1897, the stage was set for these reserves to be managed not only for continuous timber supply, but also for watershed protection, when Congress passed the Organic Act. In 1905, Congress moved the various forest reserves into the Department of Agriculture's new Forestry Division, which was renamed the U.S. Forest

Service in 1907 and designated the reserves as national forests.

Early governmental attempts to protect America's lands evolved into three of the four federal land agencies that today manage public lands: the U.S. Forest Service; the U.S. Fish and Wildlife Service; and the National Park Service. The fourth, the General Land Office, created in 1912 and renamed the Bureau of Land Management in 1946, was originally intended to sell land in the public domain to private citizens.

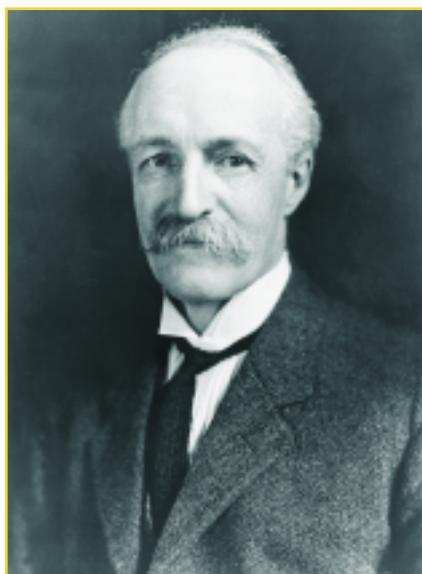
As stated, national "forest reserves," later to become our national forests, were created to prevent extensive erosion, devastating floods, watershed destruction and catastrophic fires that were the direct result of unrestrained logging in the private sector.¹⁹ Wildlife refuges were set aside to protect birds and other wildlife from the overexploitation wrought by commercial hunters, and national parks were established to preserve the undeveloped scenic wonders of the nation.

Today, one-third of the nation's landmass, 631 million acres, is under the management of these agencies, each with a different management priority stretching along a spectrum from strict preservation to full-scale resource extraction. With few exceptions, most of America's federally controlled forests fall under the jurisdiction of the U.S. Forest Service, the Bureau of Land Management or the National Park Service.

There are 155 national forests in the United States covering 191 million

acres of forested land stretching from Alaska to Puerto Rico.²⁰ Approximately 73 percent of this land, or roughly 140 million acres, is considered forested.²¹ The Bureau of Land Management manages approximately 55 million acres of commercial forest land.²² The National Park Service manages 388 national parks, covering more than 80 million acres including forested and non-forested land. The U.S Fish and Wildlife Service administers 93 million acres in the National Wildlife Refuge System [For a more detailed description of the various public land designations, see the User's Guide to Federal Land Protection].

Historically, it has been either the Forest Service or the National Park Service that has administered America's public forested lands. The major exception to this rule is the BLM, which, as the result of a revoked Congressional contract with railroad companies in the early 1900s, acquired some of the last

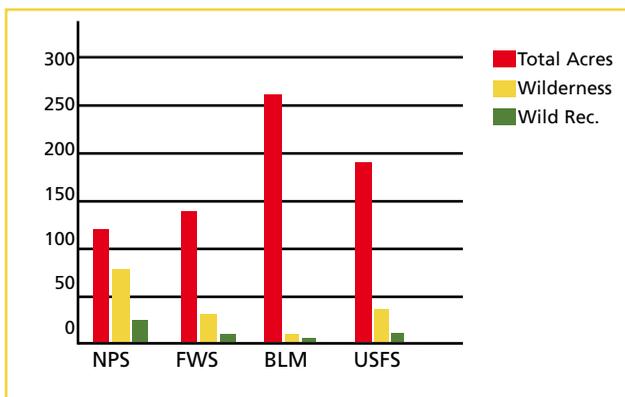


Gifford Pinchot (1865-1946)
First Chief Forester

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remaining old-growth forests in the Pacific Northwest that are today primarily logged for timber. The lion's share, however, of publicly owned forests remain under the jurisdiction of either the Forest Service or the Park Service. Interestingly, the philosophies of two

Chart of Public Land Acreage



early advocates of these federal land programs exemplify the divergent and fundamental differences between these two agencies today.

Gifford Pinchot, the first Chief Forester (1898-1910), promoted sustained-yield timber management under the principles of multiple-use forestry that he defined as the "greatest good for the greatest number for the longest time."²³ His was a decidedly utilitarian position, but it was still a significant improvement over the wanton waste and rapid logging that had characterized timber cutting on private lands prior to the establishment of the National Forest System.

John Muir, founder of the Sierra Club and a vocal spokesperson for wilderness in his time, stood in contrast to Pinchot, as the chief spokesman for and author about the "preservation" of wild lands. Muir served as a popular public voice of the basic aesthetic philosophy that emphasized preservation of wilderness while allowing compatible public enjoyment through recreation, education, appreciation and inspiration.

These two divergent management philosophies continue to differentiate the missions of the Forest Service and the National Park Service today. Then and today, the distinction between national forests and national parks is that parks do not allow commercial logging, hunting, grazing, oil and gas extraction or mining, while national forests allow all of these commercial extractive activities. The one excep-

tion is in Alaska where hunting is allowed within some national parks under the 1980 Alaska National Interest Lands Conservation Act.

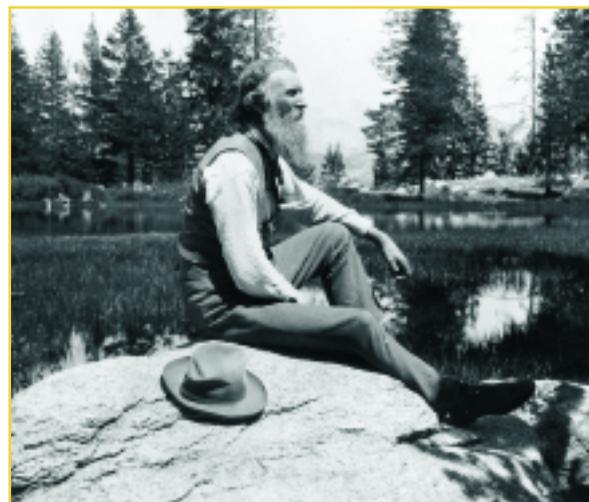
In the early 20th century, the Forest Service was proactive in meeting its mission "to sustain the health, diversity, and productivity of the nation's

forests and grasslands to meet the needs of present and future generations." Furthermore, Forest Service employees such as Aldo Leopold and Bob Marshall passionately championed wilderness values within the agency.

However, history has shown that the agency has been extremely susceptible to industry manipulation and the changing political winds of passing administrations that have ingrained an overwhelming timber bias within the agency. Spurred by public concern over Forest Service practices, temporary reforms have been enacted by one administration, only to be wiped away by subsequent administrations, resulting in continued long-term mismanagement of our national forests. Today a century after the agency's establish-

John Muir (1838-1914)
Founder of the Sierra Club

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ment this relentless exploitation has left us with only 15 percent of biologically rich old-growth forests. In the lower 48 states, less than five percent remains.²⁴

As noted above, there have been pivotal moments in history when deep criticism of Forest Service practices led to some change. However, the effectiveness of these reforms were commonly watered down or circumvented by industry lobby, its congressional allies or a pro-timber administration. For example, in the early 1970s, four events opened the public's eye to the Forest Service's shortsighted policies.

Both the 1970 Bolle Report and the 1971 Church Report originated from widespread public concern over the Forest Service timber bias. Both criticized the agency for disregarding the protection of environmental services like watershed and soil protection. The 1973 U.S. District Court case, *Izaak Walton League v. Butz* and the two Roadless Area Review and Evaluation processes (known as RARE I and RARE II) set in motion opportunities for real reform, but for the most part status quo extraction practices still dominate today.

Izaak Walton League v. Butz ruled, based on an interpretation of the 1897 Organic Act, that clearcutting was illegal in the Monongahela National Forest in West Virginia. After losing an appeal, the Forest Service responded



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“I recognize the right of this generation to develop and use our natural resources, but I do not recognize the right to waste them, or to rob by wasteful use, the generations that come after us.” - Theodore Roosevelt, speech in Washington, D.C., 1900

with a calculated political move of shutting down all timber sales across the Southeast. The political firestorm that ensued eventually led to the 1976 National Forest Management Act (NFMA), a compromise agreement.

While NFMA guaranteed public participation and required that each national forest operate according to a long-term management plan, Congress provided few explicit guidelines allowing the Forest Service to police itself, giving it broad management discretion for its timber program.²⁵ The task of specific rule making was delegated to a special committee of respected neutral forestry professors – known as the “Wise Men.”²⁶

In 1980 the Wise Men released a comprehensive set of rules, which if implemented, could have dramatically reduced the strong logging bias within the Forest Service.²⁷ However, the administration of the newly-elected President Ronald Reagan simply rewrote the Wise Men's rules keeping the Forest Service status quo intact.

The two simultaneous Forest Service Roadless Area Review and Evaluation processes, RARE I and RARE II, emerged from the burgeoning wilderness and environmental movement of the early 1970s, which had influenced Forest Service policy by forcing it to take into account the impacts of industrial activities on wilderness proposals. In response, the Forest Service initiated the Roadless Area Review and Evaluation for all roadless areas in order to determine which area should qualify as wilderness.

Grey Wolf

However, when the study was completed in 1972 both supporters of wilderness and logging were unsatisfied. As a result, a second study known as RARE II was initiated. RARE II identified 62 million acres of roadless areas larger than 5,000 acres. However, by the time the RARE II study ended in 1979, approximately two million acres of this land had logging roads constructed and timber sales. Congress did pass a series of wilderness bills for each state that had RARE II areas (except Idaho and Montana), creating some wilderness areas. Some of the RARE II areas not designated as wilderness were roaded and logged, others remained intact and were protected under Clinton's Roadless Area Conservation Rule.

With the election of Ronald Reagan, the 1980s were characterized by increased logging, below-cost timber sales, and the building of more logging roads. The result was increased entrenchment of timber industry influence over the Forest Service.

The period was typified by the Undersecretary at the Department of Agriculture, John Crowell, a former Louisiana Pacific executive who unabashedly stated, “One of my major initiatives has been to speed up harvest of slow-growing or decadent, over-mature timber stands in the Pacific Northwest, the old-growth.”²⁸

The public reaction to the public lands timber boom of the 1980s once again resulted in widespread discontent, due in large part to the massive destruction of old-growth forests in the Pacific Northwest, and the scientific discovery of old-growth-dependent

species such as the Northern spotted owl. Newly-elected President Bill Clinton responded by establishing an 18-month moratorium on road construction in national forest roadless areas in 1999 and directed the Forest Service to prepare an environmental impact statement on any future road construction in roadless areas.

In 2001, after 600 public meetings and more than 2.5 million people in 50 states had commented, President Clinton enacted the Roadless Area Conservation Rule. The rule prohibited road-building in more than 58.5 million acres of unspoiled national forests while allowing hunting, fishing and recreation to continue. However, this would not last.

Just as President Reagan had rewritten the Wise Men rules, President George W. Bush reversed and started

to dismantle campaign promises by starting to dismantle the landmark "Roadless Rule" shortly after taking office. In July 2003, the administration exempted Alaska's Tongass and Chugach National Forests, America's largest and second largest national forests, from the rule.

One year later, the administration announced its proposal to replace the rule nationwide with a state petition system. Under the plan each state will be removed from the rule, requiring individual state governors to petition the U.S. Department of Agriculture if they wish to opt back in. The Department of Agriculture reserves the right to refuse any request. Undersecretary Mark Rey, a former 18-year timber industry lobbyist, is likely to make the ultimate decision on any petition.

History shows that the Forest Service has taken a radical departure from the ideals of men like Pinchot, Leopold and Marshall. In a recent analysis of eastern national forests, Jim Furnish, a 34-year Forest Service employee and once Deputy Chief of the U.S. Forest Service (1999-2001), argued that today the Forest Service deliberately minimizes and eliminates opportunities to protect the last intact roadless forests in the eastern United States. Furnish cites "repeated, fundamental, and willful errors" in following the agency's own regulations revealing "a growing anti-wilderness bias within the Forest Service that results in deeply flawed recommendations" presented to Congress.²⁹

Myths and Realities about National Parks

Myth: National parks are being loved to death.

Reality: The assertion that parks are not a viable conservation option because they are overrun with people is false. All development within parks occupies less than one percent of the total land base. Even areas such as the South Rim Village of Grand Canyon National Park occupy less than one percent of the park. Most of the remaining land is either statutory or de facto wilderness, and will be managed that way in perpetuity, by policy, regulation and law.

Making the best-known spots within a park available to many visitors gives national parks a potent political constituency that significantly helps the National Park Service (NPS) secure funding for its work. Keeping the vast majority of park lands undeveloped—park policy for more than 100 years—is the reason that national parks provide better biodiversity protection than any other federal land designation.

Myth: Existing national parks are too expensive, so how can we afford more?

Reality: It is true that none of the public land agencies are receiving sufficient funding from Congress to manage our public lands well. However, because of its popularity, the National Park Service fares considerably better than its sister agencies. For the establishment of new parks, such as Congress transferring a national forest to the National Park Service, the cost would not be a wholly new federal expenditure, since the personnel, maintenance and operational funds now being expended by the Forest Service should be transferred along with the land.

Myth: National parks' land acquisition takes funding away from operation and maintenance of existing parks.

Reality: The Land and Water Conservation Fund (LWCF), established in 1965, funds land purchases for any of the

four federal land managing agencies. LWCF revenue is derived from a restricted account in the U.S. Treasury, provided from outer continental shelf oil and gas leasing royalties. The LWCF receives some \$900 million per year of these royalties, and Congress appropriates as much of this as it chooses to each of the agencies.

Over the life of the LWCF, the NPS has received far more than the other three agencies combined, both because of its greater popularity, and because Congress has specifically authorized park boundaries, including private lands that the NPS is directed to purchase at fair market value. LWCF funds cannot be used for maintenance and operations of federal lands, and thus, do not compete with these other activities for needed funding in the appropriations process. Taxpayer funds, as is often asserted, do not get diverted from management and maintenance of public lands to acquire additional acres of public lands.

TAXMAN



ECONOMICS: OUR LAND, OUR TAX DOLLARS WASTED

It is a long-standing fact that Forest Service timber sales cost the government more money to prepare and administer than they recoup from timber companies that bid on the sales. Even though Congress has held numerous oversight hearings, grilled hundreds of witnesses under oath and introduced legislation in several congressional sessions to stop this money-losing practice, no effective change in law has been enacted. Independent analysis has concluded that the total net loss to taxpayers from the timber sales program on national forests has averaged more than \$1 billion per year between 1997-1999.³⁰ The nonpartisan Taxpayers for Common Sense reported in 1998 that 105 of the 111 national forests operated at a loss.³¹

The Forest Service's own accounting procedures are so deplorable that, in 2001, the Government Accounting Office stated that these practices "made it impracticable, if not impossible, for us or anyone to accurately determine the Forest Service's timber sales program costs."³²

The fiscal track record of the Bureau of Land Management, which has been scrutinized to a much lesser degree, is equally disturbing. A study conducted by Public Employees for Environmental Responsibility of BLM's public domain timber sales shows widespread noncompliance with the agency's own policies and regulations. As much as half of the agency's timber was removed without proper payment from the timber industry. Furthermore, nearly all BLM forestry programs lose money on their timber

sales—losses roughly equivalent to the agency's entire forest management budget.³³

A primary expense for public lands logging is the pre-sale road-building which is paid for by the U.S. taxpayer. Between fiscal years 1998 and 2002, the timber industry was given more than \$140 million in taxpayer subsidies for timber road construction.³⁴ Even as the American people subsidize these new roads, there is a backlog on road maintenance of more than \$10 billion.³⁵ The lack of road maintenance, including decommissioning roads, also has serious ramifications for the nation's fresh water quality. According to former Undersecretary of Agriculture Jim Lyons, "Our number one water quality problem in the National Forest System is roads."³⁶

Both Presidents George H.W. Bush and Bill Clinton developed legislation

that would bring a halt to road-building, but their efforts were killed in Congress. President Clinton responded by issuing the Roadless Area Conservation Rule, which as stated previously, is now being eliminated by President George W. Bush.

Another factor related to the economic failure of the public land's timber sale programs is the failure to account for the economic value of environmental services and non-timber forest products provided by these lands. By law, the Forest Service must maximize the net social and economic contributions of national forests to the American people. Furthermore, the Forest Service is required to establish that the social and economic values associated with timber production are greater than the values for other uses such as recreation and environmental services³⁷ (continued on page 37).



The Bureau of Land Management and the Ancient Forests of Western Oregon

Much of Oregon's forest, especially that in the West, has been fraught with a legacy of timber industry domination with both state and federal governments facilitation. From the late 19th century, industry has been able to grab forest land, log it, get the government to create and maintain logging roads, buy timber from government lands and unduly stop environmental protections. Industry's stronghold, especially over the Bureau of Land Management, continues today, leading to the demise of some of the last remaining ancient forests in the United States.

In 1866, the U.S. government granted 3.7 million acres to the O&C railroad with the requirement that it sell the land to settlers.³⁸ Not too long afterward, the Great Lakes' timber reserves were running dry. With timber and forest land value increasing, the Pacific Northwest forests became a timber industry target.³⁹ The O&C owned some of the highest value forest land in Oregon, and in 1894, in violation of the government land grant, it began to sell large swaths of it to the timber industry.⁴⁰ In 1908, the federal government sued the O&C railroad for not selling the land grants to settlers.⁴¹ But it was not until 1916 that the U.S. government reclaimed all of the unsold O&C lands and the Coos Bay Military Wagon Road, totaling about 2.8 million acres.⁴²

These revested lands were to be managed by the General Land Office that in 1946, along with the U.S. Grazing Service, became the BLM. The government was to manage this land under multiple use as specified by the 1937 O&C Act.⁴³ The O&C Act also provided a payment of 50 percent of gross timber receipts to the local counties,⁴⁴ spurring local governments to be strong logging advocates. Oregon's coastal forests were now divided up in a checkerboard pattern with some land owned by the timber industry obtained through fraudulent land deals⁴⁵ and some squares managed by the BLM under the O&C Act of 1937.

The old-growth forests in the coast range managed by the BLM are warm fog-covered rainforests where trees grow astounding large in half the time. The BLM and the timber industry assumed they were made for logging and started clearcutting.

Systematic clearcutting accelerated during WWI when the U.S. government logged the Sitka spruce groves for airplane construction. However, by the time the government built the roads and rails into the Sitka spruce groves, the war had ended and the timber barons were sold the logging infrastructure for virtually nothing.⁴⁶ After WWII, the G.I. Bill housing boom also accelerated clearcutting.

Clearcutting and log transportation took a huge toll on forest ecology. Logs were moved to markets from the steep slopes via "splash dams," destroying thousands of miles of salmon-spawning streams by scouring out the stream channels.⁴⁷ By the 1960s, the salmon population was a tiny percent of its former grandeur. By the 1970s, most of the private land had been converted to young tree plantations and the pressure to finish off the BLM old-growth increased. Between 1983 and 1990, more than 200,000 log truck loads per year hauled away the old-growth rainforests on public O&C lands in western Oregon.⁴⁸ Clearcutting on these lands spurred environmental groups to protest the BLM's gross mismanagement.

In the early 1990s, with the Northern spotted owl and marbled murrelet critically endangered, lawsuits resulted in the creation of the Northwest Forest Plan (NFP) in 1994. The NFP mandated forest restoration, designated some of the old-growth into land reserves (Late Successional Reserves) and required trees near streams to be permanently protected. Unfortunately, about 40 percent of these "reserves" had already been clearcut.⁴⁹ Meanwhile, more than one million acres of publicly owned old-growth forests were not put in reserves and are available for conversion to tree planta-

tions for the benefit of the timber industry. One of those proposed timber sales is Kelsey Whiskey in the Zane Grey Roadless Area.⁵⁰

In response to the NFP, the timber industry sued the BLM, claiming any "reserves" are illegal on O&C lands. It lost when Judge William Dwyer ruled in 1994 that the BLM must comply with the Endangered Species Act and that the O&C land was critically important to the Northern spotted owl's survival. Judge Dwyer also ruled that the O&C Act required the BLM to "look not only to annual timber production but also to protecting watersheds, contributing to economic stability, and providing recreational facilities," as required by the 1937 O&C Act. The court ruling confirmed that the BLM old-growth reserves were an integral part of the NFP—it could not work without their inclusion.⁵¹

The timber industry appealed Dwyer's ruling, but settled in 1997.⁵² However, the Bush administration, with its paybacks to big timber, re-opened the case. As a result, in fiscal year 2005, the BLM must offer timber sales consistent with the highest estimates of the NFP.⁵³ Other requirements include: BLM selling 300 million board-feet per year of timber (60,000 truck loads) in the old-growth reserves (creating a first ever target volume in the Late Successional Reserves); a BLM test of the NFP assumptions (e.g., whether permanent wildlife reserves are even necessary); and by 2008, a BLM forest plan revision that will consider at least one alternative that removes all reserves from O&C lands.⁵⁴ This kind of alternative could eliminate all old-growth, stream-side and recreation reserves, further entrenching timber industry domination and forest destruction.

*Written by Francis Eatherington,
Umpqua Watersheds and Greenpeace*

“Over the long haul of life on this planet, it is the ecologists, and not the bookkeepers of business, who are the ultimate accountants.”

- Stewart Udall, 1970

Economic Values of Ecological Services

Recreation

The Forest Service estimated that the economic value of recreation in national forests was \$6.8 billion in 1993, and that by 2045 it will grow to \$12.7 billion.⁵⁵

Recreation, fishing and hunting contributed more than \$111 billion to the gross domestic product (GDP), creating more than 2.9 million jobs each year.

Clean Water

One of the most important environmental services that our national forests provide is fresh water. National forests are the single largest source of fresh water in the United States.⁵⁶ Over 60 million Americans, served by 3,400 public water systems, depend on national forests for their drinking water.⁵⁷ Each year, national forests provide more than 173 trillion gallons per year at an estimated value of \$27 billion per year.⁵⁸

Water utility companies spend tens of millions of dollars on water filtration that would not be necessary if surrounding forest had been left standing rather than clearcut by taxpayer subsidized logging operations. Additionally, once logged, many national forests are prone to flooding, mudslides and stream destruction due to run off and siltation. In 1996, after logging-induced catastrophic floods, the Forest Service spent more than \$100 million to repair roads destroyed by floods and mudslides.⁵⁹

Non-Timber Forest Products

Public forests contain non-timber products, such as medicinal plants, mushrooms and floral greens and boughs. The Forest Service estimates that more than 450,000 families rely upon non-timber products harvested from national forests.⁶⁰ In Oregon and Washington, national forests non-timber products provided about \$300 million to the regional economy in 1992.⁶¹ These products are also critical sources of subsistence foods. In Southeast Alaska, the average household consumes an average of 889 pounds per year of edible forest products, including 295 pounds of salmon.⁶² Alaska wild salmon are dependent on forest streams for their spawning grounds.

Protection from Catastrophic Fire

Fire is part of the natural evolutionary process of many forests, and natural intact forests actually reduce the risk of catastrophic fire. As a natural ecological disturbance, fire gives rise to a mosaic of habitats and age stands, creating a positive impact on biodiversity.⁶³ Fire releases cone seeds from species such as the Giant sequoia, lodgepole pine and Ponderosa pine and redistributes nutrients to the soil, benefiting new growth.

Under the guise of fire prevention, President Bush pushed through Congress his so-called “Healthy Forests Initiative (HFI),” which directs logging to remote, intact forests in one part of the country to pay for the thinning of fire prone forests in another. The result is that truly “healthy” forests, such as old-growth, become roaded and thinned, making them more susceptible to catastrophic fire. In November 2000, the Forest Service reported that “the number of large fires are dramatically higher in areas that are already roaded than in inventoried roadless areas.”⁶⁴

Climate

It is estimated that the climate regulation benefits associated with the 58.5 million acres of roadless areas in national forests are worth \$490 million annually.⁶⁵

U.S. Agriculture

Public forest lands also provide important habitat for species that either feed on agricultural pests or pollinate crops. Ladybugs, birds, bats, bees, amphibians and butterflies are all critical elements to U.S. agriculture. Research has estimated that the potential contribution of these wild pollinators to the agricultural economy is approximately \$4 to \$7 billion per year.⁶⁶

Specific requirements related to social and economic analysis are contained in at least nine separate statutes, regulations and guides, including the Multiple Use and Sustain Yield Act, the National Forest Management Act, the National Environmental Policy Act and the Forest Service's own Manual and Handbook. Within the framework of these statutes, the Forest Service must show that the public is better off economically with the logging program than without.

To make these determinations, the Forest Service is required to estimate all costs associated with logging incurred by society, and compare these costs with the economic benefits of logging. If the costs to the American public outweigh the benefits to the timber industry, then no logging should occur.⁶⁷ The Forest Service's refusal to conduct this type of analysis is in direct violation of statute, regulation, rule and directive.⁶⁸ A 1999 review of 203 Final Timber Sale Decision documents showed that none contained a

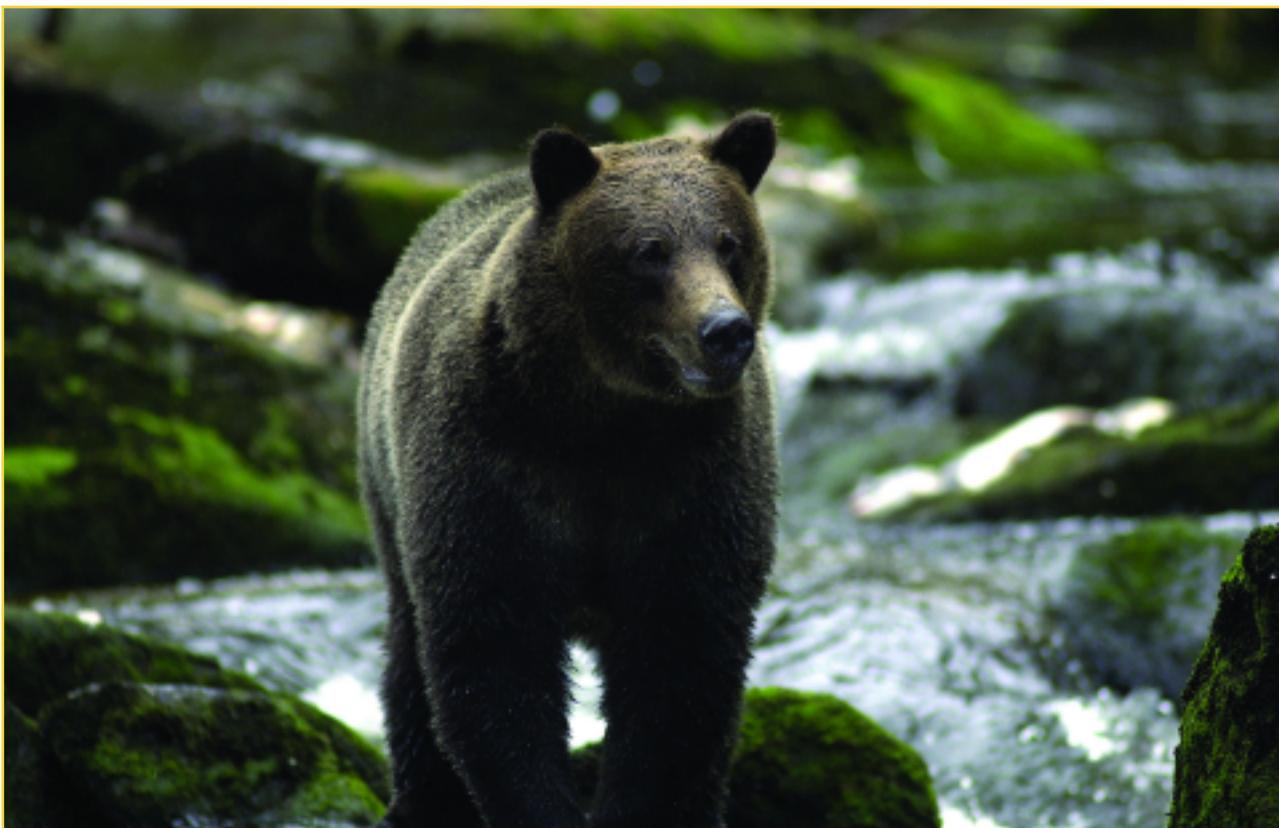
quantitative analysis of the socio-economic cost created by logging.⁶⁹ Showing further negligence, 66 percent of the projects did not even contain the basic type of financial analysis comparing monetary costs and benefits.⁷⁰

The close relationship with timber companies and their trade associations, all of which benefit from the low-cost supply, is another factor driving non-sustainable logging levels and maintaining the status quo despite its economic absurdity. Trade associations lobby Congress and gain political appointees who serve in top-level positions within the key government agencies. Today, this is best exemplified by President Bush's appointment of Mark Rey as Undersecretary for Natural Resources, with the Forest Service under his direct purview.

From a purely economic standpoint, our tax dollars would be better spent if our national forests were left standing. Independent economists and the Forest Service itself have estimated that tim-

ber accounts for less than three percent of the total value of goods and services from national forests, while recreation and fish and wildlife contribute to more than 84 percent.⁷¹ National forest land alone generates 31 times more jobs and 38 times more revenue through recreation and tourism than logging.⁷² Yet historically, the Forest Service has maintained a blatant disregard for the non-timber value of its lands.

Brown Bear (Grizzly), Annan Creek, Tongass National Forest, Alaska.



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NOWHERE MAN



GEORGE W. BUSH: AMERICA'S WORST ENVIRONMENTAL PRESIDENT

Under President George W. Bush, the United States is experiencing the most significant dismantling of environmental laws in our history. Simultaneously, Americans are experiencing an unprecedented restriction in their ability to participate in public land management decisions. The Bush administration has manipulated policy, regulation, legislative initiatives, budgets and day-to-day decision making to weaken or diminish the standard of conservation management of America's federal public lands. The administration has adopted a philosophy for federal land management that places the highest priority on resource extraction and development. It supports rapid expansion of oil and gas leasing, expedites approval of mining claims, relaxes air,

water and wetland protection standards and blatantly ignores public comments against resource extraction. The administration has opposed the creation of new national parks, cut the National Park Service's management budget, and fired Park Service employees who spoke to the press about budget cuts.⁷³ It has opposed the designation of new wildlife refuges, new endangered species listings and critical habitat conservation plans. It has opposed new wilderness designation or other special conservation designations within other public lands.

During the 2000-2002 election cycle, the timber industry alone gave more than \$3.3 million combined to the Bush/Cheney ticket and the Republican National Committee.⁷⁴ In return, the

president appointed veteran industry lobbyists to oversee key government positions. The administration has also quietly settled multiple lawsuits with the logging industry, undermining negotiated agreements and court-approved decisions. Further subverting the legal system, the administration has exempted government agencies from following specific legal requirements in cases where the courts have ruled against logging plans. The administration is also pushing some of the largest logging projects in history. Controversial decisions, such as changes to the National Forest Management Act or exempting the Tongass and Chugach National Forests from the Roadless Rule, are made on the eve of national holidays when the media and public are least attentive.



President George W. Bush on his ranch in Crawford, Texas.

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WE CAN WORK IT OUT



CONCLUSION

It is clear that the Forest Service has not evolved over time in order to guarantee the protection of the last vital forest regions it administers. In response to this failure a reclassification of important forest areas is urgently needed to ensure the long-term conservation of America's last great, wild regions.

History has shown that such protection will only be guaranteed by transferring these lands away from the Forest Service to other agencies and designations. As we have seen, one generation's hard-fought agency reform or policy change can be easily dismantled by another. Indeed 40 years of environmental policy and law, such as the Wilderness Act, the National Environmental Policy Act, the National Forest Management Act, the Northwest Forest Plan, the Sierra Nevada Framework and the Roadless Area Conservation Rule have been eliminated or rendered meaningless by the Bush administration in the last four years alone.

Reclassification is not a new concept. Some of the nation's best public lands currently managed as national parks were once national forests and were converted by acts of Congress. National parks such as Glacier [Montana], Glacier Bay [Alaska], Grand Teton [Wyoming], North Cascades [Washington], Olympic [Washington], Rocky Mountain [Colorado], Sequoia and Kings Canyon

[California] and Voyageurs [Minnesota] were all created, at least in part, from national forest or forest reserve lands. In addition, many wilderness areas have been created on national forests and BLM land giving them permanent protection from industrial exploitation. Many of these reclassifications and increased protective measures were established over the objections of the Forest Service and the timber, mining, energy or grazing industries.

On the centennial anniversary of the Forest Service, the United States is confronted with a situation very similar to that facing President Theodore Roosevelt when he helped create the agency. An unchecked private sector has created a modern-day version of Roosevelt's robber barons who are closely allied with powerful politicians and who seek short-term profits at the public's expense. President Roosevelt, one of our greatest environmental presidents, a Republican and a conservative, took action and so must we.

Roosevelt's vision has been corrupted as the U.S. Forest Service has evolved on a single trajectory of rapid liquidation of native forests and insufficient restoration. Accordingly, the United States must once again take bold initiatives to protect our last remnants of wild forests in parks and wilderness areas. With less than three percent of America's timber production coming from our federal forests,⁷⁵ the United States can well afford to take gallant action once again.

ALL TOGETHER NOW



RECOMMENDATIONS

To achieve long-lasting protection of our national forests, Greenpeace recommends the following:

1) A moratorium on large-scale commercial logging and road construction should be instituted in forests administered by the Forest Service and Bureau of Land Management. The moratorium allows a "time out," a period to investigate the mismanagement of our public lands, assess ecological integrity and devise appropriate remedies before further damage is done.

2) Forest lands administered by the Forest Service and the Bureau of Land Management that are of environmental, social and cultural significance, such as the identified keystone forests, should be given some form of increased federal or state protection. This can be achieved by designating the lands as wilderness or transferring them to either the National Park Service or the Department of Fish and Wildlife, depending on the circumstances of the region.

3) All pending national park proposals and wilderness legislation to protect forests currently designated as national forest, BLM or private land should be enacted immediately.

4) The management of land remaining under the Forest Service's jurisdiction should be focused on ecological restoration, non-timber forest products and recreation. All large-scale industrial activity should cease. The bipartisan National Forest Protection Act is currently the best framework to achieve this goal.

5) Full funding should be given to the National Park Service and the National Wildlife Preservation System. The National Park Service's current budget of \$1.3 billion falls short by at least \$600 million.

6) Agencies with a primary mandate for conservation and natural resource protection (such as the National Park Service and U.S. Fish and Wildlife) should be organized under a new cabinet-level department. This would eliminate the conflicting mandates that exist within departments such as Interior, Agriculture and Commerce.

7) Forest management laws and regulations weakened or eliminated by the Bush administration must be immediately reinstated. These include, but are not limited to, the Northwest Forest Plan, the National Forest Management Act, the Roadless Area Conservation Rule and the Sierra Nevada Framework.

8) Intact forests in the United States store vast amounts of carbon in soil and plants that are released by deforestation. Global warming (climate change) is a significant threat to forest stability, already impacting forest health, from shifts in species distribution to increasing droughts, fire and pest infestation. Therefore, policies and measures to solve global warming must be valued as forest protection actions. Protection of ecologically diverse national forests must consider increasing demands for resiliency and adaptation to climate change, including north-south species migration corridors and buffer zones around forest reserves.

THINK FOR YOURSELF



A USER'S GUIDE TO FEDERAL LAND PROTECTION

The purpose of this User's Guide is to inform activists and citizens about the various forms of federal land management that can provide increased protection. For each land classification, one will find general background information, an explanation of how such areas are established, and issues to consider when deciding on the best protection approach for a particular area. The following are the major public land categories, listed from most protected to least protected:

NATIONAL WILDERNESS PRESERVATION SYSTEM

Background

The National Wilderness Preservation System is not an independent federal land system. Congress may designate wilderness areas only on existing federal lands that meet the wilderness criteria set out in the act. This includes land managed by the National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service and Bureau of Land Management.

Wilderness areas are protected from the construction of roads, dams or other permanent structures. Timber cutting, new mining claims and mineral leasing, oil and gas development and motorized vehicles and equipment are prohibited. Special provisions in the law allow firefighting, insect and disease control and emergency actions to insure the health and safety of people. The law allows certain non-conforming pre-existing uses, such as livestock grazing, to continue.

The designation of wilderness areas requires an act of Congress. The criteria for new wilderness areas are set in the Wilderness Act. Wilderness is defined in the act as an area of undeveloped federal land that meets the following criteria:

- generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;
- has outstanding opportunities for solitude or a primitive and unconfined type of recreation;
- has at least 5,000 acres or is of sufficient size as to make practical its preservation and use in an unimpaired condition; and
- may also contain ecological, geological, or other features of scientific, educational, scenic or historical value.

Issues to Consider

By the mid-1980s, the creation of new wilderness areas had become the major offensive strategy of land preservation activists. Wilderness designation ensures strong and lasting protection. Unfortunately, many important areas are ineligible for designation under the Wilderness Act. Most of the nation's federal public lands do not qualify because of the presence of roads or other factors. Land that is state-owned or privately owned cannot be designated under the Wilderness Act.

Another major problem is a lack of public awareness about federal wilderness designation. For example, what designations allow hunting and which prohibit it? Lack of knowledge can

cause wilderness proposals to be controversial and make wilderness legislation difficult to pass.

Federal land management agencies usually fail to adequately consider roadless areas for their potential for wilderness protection. Instead, designation of new wilderness has almost always been driven by the efforts of concerned citizens. This tradition continues today, with citizen-inspired wilderness legislation pending or planned for a number of states and territories, including Alaska, California, Colorado, the northern Rocky Mountains, Puerto Rico, Utah, Vermont and Washington.

NATIONAL PARK SYSTEM

Background

Most national park areas are created by an act of Congress. First, a "special resource study" conducted by the National Park Service is usually required. After the study is completed, Congress must pass a bill that authorizes the establishment of a new National Park System unit. Each unit has its own unique authorizing legislation. The National Park System is made up of a wide range of natural, historic and archaeological units. Each has a different purpose and thus permits different activities within its boundaries. This allows national parks to be tailored in creative ways to address site-specific problems and opportunities.

There are more than 30 different National Park System classifications all under the jurisdiction of the National

Park Service. The following are the most useful designations for land protection activists, listed from the most protected to least protected category:

National Park Wilderness

Designated wilderness areas in national parks have the strongest protection of any federal public lands. They prohibit not only the activities banned under the Wilderness Act, but also livestock grazing, which is permitted in most other federal wilderness areas. There are currently 54 National Park System wilderness areas totaling almost 44 million acres. New National Park System wilderness requires an act of Congress.

National Preserves

A national preserve is a unit of the National Park System that is identical in management policy and intent to that of a national park, except that Congress has authorized a particular activity or type of use in each that does not occur in a national park. For example, national preserves in Alaska allow sport hunting and trapping.

National Monuments

National monuments are intended to preserve at least one nationally significant resource. They are usually created under the Antiquities Act of 1906, which authorizes the president to declare by public proclamation landmarks, structures and other objects of historic or scientific interest situated on lands owned or controlled by the government to be national monuments.

National Rivers, Seashores and Lakeshores

National rivers preserve ribbons of land bordering on free-flowing streams, which have not been dammed, channeled or otherwise altered. These areas allow recreational activities such as hiking, canoeing and hunting. National rivers include several variations, such as national river and recreation area, Wild and Scenic River and scenic river way.

National seashores and lakeshores are very similar in purpose and management to national rivers. Hunting is

allowed in most national seashores and lakeshores unless otherwise specified in the authorizing legislation.

National Recreation Areas

Originally, national recreation areas (NRAs) were units surrounding reservoirs impounded by other federal agencies. The concept of recreation areas has grown to include other lands and waters protected by Congress for recreational use, including major areas in urban centers. The focus is primarily on providing public recreation while preserving natural values. National recreation areas are generally the most developed and intensively used of the natural area National Park System units. However, with few exceptions they still provide protection from logging, livestock grazing, mining, oil and gas drilling and other extractive activities.

Issues to Consider

Along with federal wilderness areas, national parks have proven over time to provide the strongest and most permanent protection for large wild landscapes. The average new national park takes many years to go from vision to reality. However, once a national park is created, the land's preservation is a battle that will not have to be fought again. It is no coincidence that the most ecologically intact landscapes in the United States are centered on national parks or wilderness areas.

A number of campaigns are underway to create new National Park System units to protect significant forest lands. The most prominent of these park proposals are Blackwater Canyon National Park (West Virginia), Hells Canyon-Chief Joseph National Preserve (Idaho, Oregon and Washington), Maine Woods National Park and Preserve (Maine) and Mount Hood National Park (Oregon).

NATIONAL WILD AND SCENIC RIVERS SYSTEM

Background

The Wild and Scenic Rivers Act of 1968 establishes the Wild and Scenic Rivers System that includes "wild," "scenic" and "recreational" rivers. Wild rivers must be "essentially primitive and waters unpolluted." Scenic rivers are "largely primitive and shorelines largely undeveloped." Recreational rivers "are readily accessible by road or railroad" and "may have some development along their shorelines, and...may have undergone some impoundment or diversion in the past."

Wild and Scenic Rivers include a half-mile corridor on both sides of the river and prohibit the construction of new dams or other diversions. Wild and Scenic Rivers can be designated on federal, state, or private lands and provide for the acquisition of private lands within the river corridor.

There are currently 175 designated units of the National Wild and Scenic Rivers System encompassing 11,329 miles of river. They are managed primarily by various federal agencies, including the National Park Service, the Forest Service, the Bureau of Land Management and the U.S. Fish and Wildlife Service. Several rivers are managed by state agencies.

National Wild and Scenic River Protection Options

The Wild and Scenic Rivers Act designated 156 rivers for immediate inclusion in the National Wild and Scenic Rivers System. It also provided for the study of additional rivers for potential inclusion in the system, and included an initial list of 136 study rivers. After a study has been completed, rivers can be authorized for inclusion in the National Wild and Scenic Rivers System by an act of Congress or by individual state legislation submitted for the Interior secretary's approval.

In 1982, the National Park Service completed the extensive National Rivers Inventory (updated in 1993), that listed river segments that are free-

flowing and have one or more “outstandingly remarkable values.” Most of the rivers studied under the Wild and Scenic Rivers Act and the National Rivers Inventory have not yet been designated as Wild and Scenic Rivers.

Issues to Consider

The prohibition of new dams and water diversions alone makes it worth adding rivers to the Wild and Scenic Rivers System. Depending on the river classification and land management agency, designation under the Wild and Scenic Rivers Act can significantly strengthen river corridor protection. Although a Wild and Scenic River designation does not ensure the protection of private lands, it provides a mechanism for public acquisition, which can make future protection possible.

NATIONAL WILDLIFE REFUGE SYSTEM

Background

The U.S. Fish and Wildlife Service administers the 93 million-acre National Wildlife Refuge System (NWRS). The mission of the National Wildlife Refuge System is to “administer a national network of lands and water for the conservation, management and where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.” The NWRS includes 535 National Wildlife Refuges and other areas, totaling 91 million acres of land and water.

The 1997 National Wildlife Refuge System Improvement Act requires development of management plans for each refuge in the system, sets standards for refuge protection and establishes that the first purpose of refuge management is to protect biodiversity. In terms of on-the-ground management, many national wildlife refuges have fairly strong protection. They do not allow commercial logging, mining and most other industrial activities. They usually have minimal recreational

development and low public use. Many endangered wildlife species have recovered due, in large part, to national wildlife refuges. However, national wildlife refuges do not necessarily ensure the same level of protection as wilderness or National Park System units (see below).

National Wildlife Refuge Protection Options

Many national wildlife refuges continue to permit uses that are clearly damaging to native biodiversity. Some refuges face massive threats, such as the proposed drilling for oil and gas in the Arctic National Wildlife Refuge, and several already have active oil and gas wells. Intensive wildlife manipulation is often practiced and commercial livestock grazing is allowed in most of the western refuges. Sport hunting, which is allowed in more than half of the national wildlife refuges, is considered by many conservationists to be inconsistent with the purpose of the refuge system.

New national wildlife refuges can be created through specific legislation by the U.S. Congress to authorize the establishment of a refuge or an expansion. Moreover, there are a number of options for providing key national wildlife refuge lands with a higher level of protection. These options include the designation of qualified lands under the National Wilderness Preservation System, the transfer of certain areas to the National Park System or the designation of areas as additions to the National Wild and Scenic River System.

Issues to Consider

Few major new units have been added to the National Wildlife Refuge System in recent years. Meanwhile, conservationists have been so overwhelmed by the protection of national forests and Bureau of Land Management lands that they have paid relatively little attention to providing better protection for our existing national wildlife refuges. In fact, there is no active national wildlife refuge movement in

the United States today. This is an important and unfinished part of the American land conservation agenda.

NATIONAL FORESTS

Background

The National Forest System encompasses 191 million acres of national forests and national grasslands. These lands are managed for a wide range of “multiple uses,” including resource extraction (such as logging, livestock grazing, mining, and oil and gas drilling), recreation (such as hiking, camping, skiing, hunting, fishing, off-roading and snowmobiling), watershed protection and animal and plant habitat.

National Forest Protection Options

Citizen activists from around the country have been working to change the Forest Service mandate to focus on conservation rather than resource development and intensive recreation. This approach offers great promise, but it is a long-term effort. There are other options that may offer a better chance of providing permanent protection in the near-term. The section below ranks these options from the most protected to the least protected:

National Forest Wilderness

One option that offers permanent protection is to designate important national forest lands as wilderness. There are currently 406 national forest wilderness areas totaling almost 35 million acres. As with all wilderness designations, creating new national forest wilderness requires an act of Congress. Unfortunately, most national forest lands do not meet Wilderness Act criteria for designation. Moreover, national forest wilderness areas often permit commercial livestock grazing, a use that degrades wilderness values.

National Wild and Scenic Rivers

Designation under the Wild and Scenic Rivers Act offers another layer of protection for rivers in national forests. Wild rivers can preserve primitive river

corridors with little, if any, extraction and development. Unfortunately, the Forest Service often permits damaging activities, such as logging, livestock grazing and off-road vehicle use within the scenic and recreational river corridors. Still, Wild and Scenic Rivers prevent new dams and water diversions and offer the potential for better protection than conventional national forest lands.

National Scenic Areas

National scenic areas are not as protected as wilderness areas or National Park System units. However, they receive significantly stronger protection than standard national forest management. National scenic areas are designated through congressional legislation, which provides direction on the level of protection. Most national forest scenic areas allow some level of logging, livestock grazing and other industrial activities to continue.

National Monuments

There are only a handful of national monuments on national forest lands. They can be created under the Antiquities Act of 1906 or through congressional legislation. National forest monuments are not as well protected as those administered by the National Park Service. Most of them allow some level of logging, livestock grazing and other industrial activities to continue.

National Recreation Areas

National recreation areas (NRAs) are an improvement over general national forest management, but they are much less protected than National Park System NRAs. For example, most allow logging, livestock grazing, road-building and intensive motorized recreation. The creation of a national recreation area requires an act of Congress.

Issues to Consider

Special management areas such as Wild and Scenic Rivers, national scenic areas, national monuments and national recreation areas offer an increased level of protection from standard

national forest management. However, they still allow a number of damaging land uses. If the goal is preservation of lands free from resource extraction and intensive recreational uses, the best options are designation of wilderness areas or the transfer of key areas to the National Park System.

BUREAU OF LAND MANAGEMENT LANDS

Background

The Bureau of Land Management administers 267 million acres, including 55 million acres of forest land. This comprises approximately one-eighth of the United States' land base. The agency also administers 300 million additional acres of subsurface mineral resources.

Bureau of Land Management Protection Options

Conservationists have used a number of strategies to preserve key tracts of Bureau of Land Management land in recent years. The section below discusses these options, ranked from the most to the least protective:

Bureau of Land Management Wilderness

One option that offers permanent protection is to designate important BLM lands as wilderness. The BLM currently manages 161 wilderness areas encompassing 6.5 million acres.

Unfortunately, most BLM lands do not meet Wilderness Act criteria for designation.

National Wild and Scenic Rivers

Designation under the Wild and Scenic Rivers Act offers another layer of protection for rivers on Bureau of Land Management lands. Thirty-eight rivers or river sections are currently managed by the BLM as part of the National Wild and Scenic Rivers System. The BLM often permits damaging activities, such as livestock grazing, within the scenic and recreational river "corridors" but this designation does prevent new dams and water diversions.

National Conservation Areas

The Bureau of Land Management administers 13 national conservation areas encompassing 14 million acres. National conservation areas are created through an act of Congress, but their actual level of protection depends in large part on the BLM management plan for each area and how well the agency implements the plan. Many national conservation areas continue to be threatened by road-building, oil and gas drilling, mining, intensive motorized recreation and off-road vehicle use.

National Monuments

There are 15 national monuments totaling 4.7 million acres administered by the Bureau of Land Management. Unfortunately, these monuments generally allow commercial resource extraction and other industrial uses. Unlike national monuments under National Park Service administration, BLM monuments do not have specific congressional legislation to direct their protection.

Issues to Consider

In 2000, the National Landscape Conservation System was created to help ensure protection of these BLM special management areas. To date, this vision has not been realized. The Bureau of Land Management remains as firmly committed to industrial development as the Forest Service. For the foreseeable future, the only BLM lands that can be considered fully protected are those designated under the Wilderness Act or transferred to the National Park System. However, the creation of new Wild and Scenic Rivers, national conservation areas and national monuments is still an important tool that provides stronger protection than standard BLM administration.

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**DEATH BY A THOUSAND CUTS:
A TIMELINE OF BUSH ADMINISTRATION
ACTIONS THAT ENDANGER AMERICA'S
NATIONAL FORESTS 2001-2004**

**JANUARY 20, 2001: SINCE DAY ONE,
ROLLING BACK ENVIRONMENTAL
SAFEGUARDS**

On his inauguration day, President Bush orders all federal agencies to cease proposing new regulations, withdraw all regulations not yet posted in the *Federal Register* and postpone implementing for 60 days any new regulations that had been published.

MAY 4, 2001: PROMISES, PROMISES...

The Bush administration announces that it will uphold the popular Roadless Area Conservation Rule, which protects 58.5 million acres of intact wild forests in the National Forest System from most logging and road construction. The rule was put into place with overwhelming public support.

**OCTOBER 2, 2001: THE FOX ASSUMES
CONTROL OF THE HENHOUSE**

President Bush swears in Mark Rey – an 18-year timber industry lobbyist – to oversee the U.S. Forest Service as Undersecretary for Natural Resources and Environment. In 1995, Rey was the key architect of the "logging without laws" Salvage Rider. Under the Salvage Rider enough trees were cut from America's national forests to fill log trucks lined up for over 6,800 miles.

DECEMBER 14, 2001: PROMISES BROKEN

The Forest Service announces new guidelines that further reduce protections for roadless areas. Smaller, undeveloped forests adjacent to larger roadless areas are no longer protected from development. The changes also end mandatory environmental impact reviews of logging and road-building impacts on roadless areas and removes the requirement for public participation in project planning.

**FEBRUARY 6, 2002: THIS LAND IS THEIR
LAND. THIS LAND IS NO LONGER YOUR
LAND**

President Bush's 2003 budget authorizes the creation of "charter forests" whereby the management of publicly owned national forest land would be turned over to local private partnerships.

**APRIL 12, 2002: "STREAMLINING" WILDLIFE
TO BE MORE "EFFICIENT"**

A draft report by the Forest Service reveals that the agency intends to "streamline" rules protecting the environment and limit public challenges to its decisions. Within two years the agency would implement regulations limiting external review of the impacts of projects on endangered species.

**AUGUST 22, 2002: HORIZONTAL FORESTS
INITIATIVE**

President Bush unveils the so-called "Healthy Forests Initiative," which would limit citizen involvement and undermine the nation's environmental laws in order to dramatically increase logging in national forests.

**AUGUST 30, 2002: TOSS ANOTHER FOX IN
THE HEN HOUSE**

Allan Fitzsimmons is handpicked by the Bush administration to serve as Wildlands Fuel Coordinator for the Department of Interior. Fitzsimmons has published articles denying

the existence of ecosystems and stated that the extinction of the nation's 1,200 threatened and endangered species, "would be a disconcerting loss but would not constitute a crisis."

**JANUARY 27, 2003: FROM THE REDWOOD
FORESTS...**

Under the guise of fire prevention, the Forest Service issues a draft plan to resume the logging of giant ancient sequoia trees in the Giant Sequoia National Monument and two national forests in California's Sierra Nevada mountain range. The plan allows logging companies to cut down enough of the nation's grandest trees to fill more than 2,000 log trucks every year.

**FEBRUARY 20, 2003: SWEETHEART DEAL
FOR INDUSTRY**

Stewardship contracting becomes permanent for the next 10 years. Stewardship contracting, affecting both Forest Service and Bureau of Land Management land, is the first step toward privatizing the management of public lands. Private timber companies can now log the forest – with no revenue to the government – in return for taking some additional management actions on the forest. Stewardship contracting also reduces public and congressional accountability and federal fund oversight.

**JULY 29, 2003: CATEGORICALLY CUT ALL
TREES?**

The administration adopts new Categorical Exclusions allowing the Forest Service to bypass environmental reviews and limit public participation. It would also allow the construction of a half-mile of new temporary roads without environmental impact assessments or a public comment process.

**AUGUST 21, 2003: WHAT I DID ON MY
SUMMER VACATION**

Continuing the practice of breaking negotiated agreements, the administration announces plans to settle a timber industry lawsuit over the Northwest Forest Plan, which protects old-growth in Pacific Northwest national forests. Although the administration had been chipping away at the plan all year, caving-in on the suit gives the administration the opportunity to dismantle the plan all together.

**NOVEMBER 12, 2003: LET THEM EAT
BISCUIT**

The administration and the Forest Service propose one of the largest post-fire logging projects in modern history on the Siskiyou National Forest in Oregon. The "Biscuit Fire Recovery Project" calls for logging more than one-half million board feet of timber from the Wild Rivers Area, which could result in the disqualification of more than 60,000 acres of potential wilderness.

**NOVEMBER 25, 2003: AN ADMINISTRATION
TURKEY**

On the day before Thanksgiving, plans are revealed to gut the National Forest Management Act that has guided planning on 155 national forests since 1976.

**DECEMBER 4, 2003: SIGNING OF THE "NO
TREE LEFT BEHIND" BILL**

With great fanfare the president signs the deceptively named "Healthy Forests Restoration Act of 2003."

**DECEMBER 23, 2003: TWAS THE NIGHT
BEFORE CHRISTMAS**

The Bush administration exempts America's largest and second largest national forests, the Tongass and Chugach in Alaska, from the Roadless Area Conservation Rule. Once again, the administration announces these changes when the media is most inattentive.

JANUARY 9, 2004: NEW YEAR RESOLUTIONS

Resolving to "streamline" the logging approval process, the Forest Service issues its first rule under the Healthy Forests Restoration Act, limiting citizen's ability to appeal or challenge logging projects in court. If passed this rule will affect citizens' ability to protect some 20 million acres of national forests from destructive logging projects.

**JANUARY 22, 2004: BUSH CALIFORNICATES
THE SIERRA NEVADA FRAMEWORK**

The administration significantly changes the Sierra Nevada Framework, allowing a tripling of logging levels and the cutting of old-growth trees, including those in spotted owl reserves.

JANUARY 23, 2004: SEARCH AND DESTROY

Overlooking water quality, wildlife and fisheries issues, the administration overhauls the Northwest Forest Plan's Aquatic Conservation Strategy and eliminates the "Survey and Manage" provisions. Logging projects no longer need to comply with existing water quality standards or find and protect rare plant and animal species as mandated by the Northwest Forest Plan.

MARCH 18, 2004: DON'T ASK, DON'T TELL?

Public Employees for Environmental Responsibility leak an internal memo by Forest Chief Dale Bosworth outlining his desire to exempt the Forest Service from reviews by other federal agencies for compliance with endangered species, clean water, toxic chemicals and historical preservation laws. The agency wants to prevent any consultation unless it relates to fire risk, invasive species, unmanaged recreation or loss of open land.

**JULY 14, 2004: NATIONAL FORESTS – A
ROADSIDE CASUALTY**

The Forest Services announces its proposal to eviscerate the Roadless Area Conservation Rule. The proposal replaces the rule with a state process, whereby a governor who wants to protect wilderness must submit a request to the Department of Agriculture officials who will make the final decision. With former timber lobbyist Mark Rey at the helm, protection is not likely to be granted.

SEPTEMBER 9, 2004: DAM IT ALL!

The Department of Interior proposes to give dam owners the exclusive right to appeal department rulings on how dams should be licensed and operated on American rivers. By tweaking a little-known regulation, the proposal would prevent Native Americans and environmental groups from making appeals to stop forest and river damaging dams. This proposal is likely unconstitutional, violating due process and equal protection guarantees.

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