Statement of

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on

Managing Federal Forests in Response to Climate Change

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Chairman Wyden, Ranking Member Barrasso, and other members of the subcommittee thank you for allowing me the opportunity to testify today. I represent the National Center for Policy Analysis (NCPA) a nonprofit, nonpartisan public policy research organization dedicated to developing and promoting private alternatives to government regulation and control, solving problems by relying on the strength of a competitive, entrepreneurial private sector.

Global warming is a reality. But whether it is a serious problem — and whether emissions of carbon dioxide (CO2) and other greenhouse gases from human fossil fuel use are the principal cause — are uncertain. The current debate over the U. S. response to climate change centers around greenhouse gas emissions reduction policies, which are likely to impose substantially higher costs to society than global warming might.

The question remains; what should be done about the threat of global warming? Unfortunately, many proposals — including mandatory limits on CO2 emissions — would be much more costly to society than the danger it seeks to avert. Fortunately, there are policies that could be adopted that are desirable in their own right and are commendable, even if there were no threat of global warming. I outlined several of these policies in a report called 10 Cool Global Warming Policies that was published by the NCPA this past June. These policies would reduce greenhouse gas emissions, increase energy efficiency, reduce harms associated with global warming or increase the world's capabilities to deal with climate-change-associated problems. One of these policies is an alternative forest management strategy that, among other things, can reduce wildfires and increase forest health.

Forests are carbon sinks: As trees grow they remove carbon dioxide from the atmosphere and store it in their trunks, limbs and roots. In addition, forest soils, made up of dead organic matter built up over time, store a large amount of carbon. The canopy provided by densely packed tropical and temperate forests slow the decay of fallen leaves and other organic matter, slowing the release of carbon and facilitating its incorporation into the soil.

A 40-year study of African, Asian and South American tropical forests found that each year tropical forests absorb as much as 18 percent of all the CO2 emitted by burning fossil fuels. Temperate forests in the United States also absorb and store carbon. In 2004, the Environmental Protection Agency (EPA) estimated that forests sequestered 10.6 percent of the CO2 released by the combustion of fossil fuels, with urban trees absorbing another 1.5 percent. Other research indicates that U.S. forests may sequester as much as 40 percent of U.S. human greenhouse gas emissions.

Forest Fires Are a Growing Climate Concern

Unfortunately, poor forest management in the United States and other countries contributes to wildfires, which directly add carbon to the atmosphere and reduce the amount of CO2 absorbed by forests. For instance:

- Wildfires in the United States release about 290 million metric tons of CO2 into the atmosphere every year — equaling as much as 6 percent of the nation's annual emissions from burning fossil fuels.
- Pine beetle infestations have killed so many trees in Western Canada that they have contributed to a rise in large wildfires, turning Canadian forests from a net carbon sink that

absorbs 55 million tons of CO2 per year into a net emitter of up to 245 million tons annually.
- The Australian government calculated that wildfires in 2003 released more than 190 million tons of CO2; accounting for one-third of the country's total emissions, and it found that fires in 2006 and 2007 released an additional 360 million tons of CO2.
- In terms of total CO2 emissions, Indonesia is the third-largest emitter worldwide due largely to its annual wildfires — which emit nearly five times as much as its energy, agriculture and waste sectors combined.

How Government Ownership Contributes to Forest Fires

Large-scale forest fires are primarily the result of poor management of publicly owned forests. Federal mismanagement of U.S. forests has increased the number, size and cost of wildfires over the past decade. Historically, the national forests have been logged to provide lumber for commercial activities, to prevent wildfires and to promote forest recreation, species protection and land management. In recent decades, political pressure and lawsuits from environmental lobbyists prevented or delayed both commercial and salvage logging, turning much of our national forests into tinderboxes.

Policy Recommendations

Changing the management structure of national forests could enhance the quality and value of these lands.

Privatizing the forests
The private sector currently preserves, protects and promotes many historically important properties and manages the majority of the country's forests and rangelands in ways that promote environmental quality and benefit the owners and the public. The United States can safely and perhaps profitably sell some of the hundreds of millions of acres of national forests for market value, giving the owners of adjacent properties priority for ownership.

Possible buyers include forest product companies, sportsmen's clubs and environmental groups. While these lands will no longer be public forests, many and perhaps most will be managed sustainably, in ways that protect their natural character and enhance their environmental and economic value because of the incentives of private ownership. Private companies do not have the general treasury to bail out money-losing operations and therefore seek to maintain the value of their lands. Furthermore, privatizing public lands would increase the tax base in rural areas and reduce the strain on the federal budget.

Public versus Private Management
Private property owners have flexibility in managing their lands, whereas federal forest management is too often hampered by rigidity. For instance, when a wildfire struck near Storrie, Calif., in August 2000, more than 55,000 acres burned, mostly in the Plumas National Forest (28,000 acres) and Lassen National Forest (27,000 acres). About 3,200 acres of private forestland managed by W.M. Beaty and Associates also burned. However, the Forest Service and Beaty's responses couldn't have been more different. By 2001, Beaty foresters had:

- Reduced the chance of a future catastrophic wildfire by removing smaller dead trees and woody material — generating enough clean biomass to fuel 3,600 homes for a year.
- Harvested larger dead trees suitable for lumber processing — amounting to 64.5 million board feet, enough to build 4,300 homes.
- Spent millions of dollars to reforest the burned land, planting nearly one million seedlings of seven different tree species.

By contrast:

- The Forest Service removed dead trees and other fuels from only 1,206 acres and replanted 230 acres in the Lassen National Forest.
- In the Plumas National Forest, the Forest Service was prevented from removing dead trees and reforested only 181 acres.

Private forest owners are not hindered by bureaucratic federal rules requiring multiple studies, public hearings, comment periods and court challenges. Thus, they are better able to prevent infestations and respond quickly to disease outbreaks. Promptly removing dead and dying timber can prevent infestations from spreading to other areas and prevent potentially catastrophic fires. Private companies keep the number of trees per acre at an optimal level. This reduces fire hazards and lets sunlight reach the forest floor, which helps re-growth and biodiversity.

Alternatives to Outright Privatization

For political reasons, it may be impossible to sell certain national forests, but there are various mechanisms or institutional arrangements that would confer many of the benefits of ownership without removing land entirely from public control.

For instance, following a suggestion by economists Richard Stroup and John Baden, Congress could establish Wilderness Endowment Boards to own and manage national forests lands. These government-chartered, nonprofit entities, whose board members would be approved by Congress, would have a narrowly defined fiduciary duty to protect and enhance the natural values of the land under their charge. Activities such as oil and gas production, commercial hunting and other resource production could enhance forests without hurting the environment; such is the case with properties managed by the Audubon Society and the Nature Conservancy.

Each individual board would decide how to balance use, recreational access and strict "off-limits" preservation, bound only by their understanding of what is necessary to preserve and enhance the land while generating the revenues necessary to manage it.

Reintroducing Competition

Public lands retained by the federal government could still receive some of the environmental benefits of private ownership if federal, state and local governments competed for control of these lands within the public system. For example, teams of experts from federal and state agencies, environmental organizations and the timber industry in Montana and Minnesota compared the environmental effects of state and federal forest management practices. They all concluded that state foresters better protected watersheds and waterways from the impacts of logging and other activities:

- In Minnesota, 90 percent of county lands had the highest compliance rate with "best management practices" for protecting water quality; federal forests had a slightly lower compliance rate at 87 percent.
- In Montana, 99 percent of the watersheds in state forests were protected from all impacts from logging, compared to 92 percent in federal forests.

Congress could allow any state or county that demonstrates superior economic *and* environmental performance to take over the management of the national forests within their state or area. Congress could give fixed but declining block grants during a transition period to the forestry agencies that apply and allow them to retain any revenues generated. The program should be allowed to run for several years so state and county foresters could counteract the effects of federal mismanagement.

At the end of the trial, states and counties that have improved a forest's economic and environmental performance could be granted the forests outright and federal payments ended. If forests have not improved, they could be returned to federal control and new management experiments implemented. This program would provide Forest Service managers with an incentive to improve performance or risk losing control over the lands.

Why Is This a No-Regrets Policy?

Any of the management regimes suggested above should decrease the size, intensity and frequency of wildfires, meaning less CO2 will be pumped into the atmosphere each year and more carbon stored. Also, where there are currently more dead or dying trees or in burnt-over areas, trees will be replanted at a more rapid rate, increasing the carbon uptake of the nation's forests.

When pest infestations and fires do occur, the incentives for the new "owners" will be to help the forest recover as soon as possible in order to help wildlife recover, reduce soil erosion and stream destruction, restart natural ecological cycle and/ or make a profit.

Lastly, what about international forests? Despite the various legal systems and property rights regimes around the world, all forests should benefit from a no-regrets solution suggested in the paper mentioned previously: the widespread adoption of agricultural biotechnological innovations. Scientists are genetically engineering trees that grow faster and can store carbon at a higher rate than existing varieties. Such trees can be planted in forests where commercial timber producers are operating and in tropical forests previously lost to slash-and-burn agriculture. In addition, the adoption of new biotech crops that increase yields, improve nutrition and/or reduce the need for such inputs as fertilizers should also reduce stress on tropical forests by reducing the need of farmers to move from one forest plot to the next to maintain annual production.