EVERGREEN

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TIME IS RUNNING OUT FOR SOUTHWEST FORESTS

Will Congress Act Before It's Too Late?

"The greatest threat to the sustainability, diversity and social viability of the forests and communities of the West is our failure to restore forest health in the frequent fire forests of the West. Simply installing fuel breaks around our cities and rural developments and forsaking the wildlands would be an abdication of our responsibility to future generations. Attention cannot be narrowly focused on a ring around the developed areas. Such actions will fail to address one of the most contentious issues of our time, the protection of endangered species. Severe wildfires in frequent fire forests of the West are the greatest single threat to critical habitat for many of these vulnerable species because they are not adapted to stand replacing fires."

Wallace Covington, Ph.D., Regents' Professor and Director of the Ecological Restoration Institute, Northern Arizona University; in testimony before the Committee on Resources, Subcommittee on Forests and Forest Health, Flagstaff, March 3, 2003

Time is Running Out

An essay by Jim Petersen

Time is running out for forests in the Southwest. Wildfires and insects are devouring them in a death-dance unlike anything anyone has ever seen: unlike anything for which scientists can find precedent in nature. If Congress does not soon heed the urgent warnings of eminent scholars—among them fire ecologist Wally Covington—the region's forests will be lost.

Of the dozens of scientists who sense the urgency of the West's wildfire crisis, none seems to feel it more keenly than Dr. Covington, a soft-spoken, self-effacing forest ecologist whose credentials and research have thrust him to the forefront of the debate over what—if anything—to do about the West's wildfire crisis.

"The current rate of acceleration in the severity and size of wildfires in the West indicates that average annual losses over the next two decades will be in excess of five to ten million acres per year," an increasingly impatient Dr. Covington told members of the House Subcommittee on Forests and Forest Health at a March 7 field hearing in Flagstaff. "Using the reasonable assumption that preventive restoration treatments should at least be at the pace and scale of losses to severe stand replacing fire, one would conclude that we should be treating five to ten million acres per year. Our current pace and scale is woefully inadequate given the scope of the problem."

Cover: Columbia Helicopter twin-rotor Boeing 107 with its ponderosa pine payload high above the blackened remains of White Mountain Apache timberland in northern Arizona. Last summer's Rodeo-Chediski Fire destroyed 276,000 acres of tribal timberland. (Jim Petersen)

Jim Petersen

Several hundred northern Arizona residents rallied in Phoenix in late March in support of President Bush's Healthy Forests Initiative.

The West's forests contain too many trees to sustain healthy growth. And more are sprouting every year. Picture a solid block of wood the dimensions of a football field stretching a mile into the sky. That is the amount of new wood fiber that nature is adding to forests in Arizona and New Mexico every year. For the statistically minded, net annual growth in the Southwest's federal forests is 25 times greater than harvest and yearly mortality exceeds harvest by a factor of 4.4 to 1.

Suffice it to say the moisture, nutrient reserves and growing space needed to sustain such mind boggling growth don't exist in the Southwest and never have. Stressed by drought and the onset of unprecedented insect infestations, countless millions of trees are dying. Short of a large-scale thinning program, like the one Dr. Covington envisions, the region's already frightening wildfire crisis— fueled by these same dead and dying trees—will get worse. West-wide, the University of Idaho Policy and Analysis Group reports more than 50 million acres are in Condition Class 3, meaning the risk of catastrophic fire resulting in the loss of major ecosystem components is high.

But help may be on the way, thanks to President Bush's Healthy Forests Initiative, beyond doubt the most sweeping set of environmental reforms proposed since the Nixon Administration championed the Endangered Species Act, the National Environmental Policy Act and the National Forest Management Act back in the early 1970s. Assuming quick congressional approval the wildfire crisis facing the West will finally get some much-needed attention in the form of a more localized, less political forest restoration strategy for which there is a strong scientific basis.

"There is abundant scientific research that began in the 1890s and continues today that provides a sound scientific framework for implementing the science and practice of restoration in ponderosa pine and related frequent fire ecosystems," Dr. Covington told subcommittee members. "We have solid information about presettlement forest conditions, changes in fire regimes over the last century, deterioration of overall ecosystem healthy and ecological responses to thinning and prescribed burning—the key elements of any attempt to restore

ecosystem health in [the Interior West]"

Not everyone agrees with Dr. Covington's assessment. At least three southwest environmental groups—Forest Guardians, Center for Biological Diversity and the Forest Conservation Council—adamantly oppose the kind of restoration work advocated by scientists most familiar with the West's fire dependent forests. But other groups—most notably the Greater Flagstaff Forests Partnership - favor restoration. In fact, GFFP has partnered with Dr. Covington and Northern Arizona University's Ecological Restoration Institute on several demonstration thinnings in the Flagstaff area.

The split in opinion among environmentalists underscores the fact that the public has but two choices for dealing with the West's wildfire crisis: they can follow the advice of groups that favor allowing wildfires to run their course, no matter the environmental consequences, or they can side with groups that favor forest restoration programs scientists say will slowly reduce the risk of catastrophic wildfire.

Judging from polling and focus group work done in recent months by The Luntz Research Companies, Arlington, Virginia, the public has no appetite for catastrophic wildfire, which it consistently identifies with polluted air and water, sterile landscapes, the death of fish and wildlife, lives lost and property ruined. Equally clear is the fact most Americans see wildfire as a threat to forest legacies they want to leave for their children and grandchildren.

But nothing seems to harden opinion against wildfire more than first hand experience. Last summer, Arizona witnessed its largest, most destructive wildfire in history—the 468,000-acre Rodeo-Chediski Fire, a colossus that destroyed more than 400 homes and property worth $72.8 million.

"Do the math," says environmentalist Brian Cottam, coordinator the Greater Flagstaff Forests Partnership and a strong proponent of both forest restoration and development of the milling infrastructure needed to process wood fiber scientists say must be removed from the region's diseased and dying forests. "It will not take too many half-million-acre wildfires on the Mogollon Rim and we won't have any forest left here."

But now there are new reasons for worry. Edward Collins, Forest Service District Ranger at Lakeside, fears the visual impact of a pine beetle infestation that is spreading rapidly through two national forests between Show Low and Payson will be "much more significant" than the fire-killed ghost-of-a-forest that now lines mile after mile of the once scenic mountain highway that links the two communities.

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A bird's-eye view of the devastation the 468,000-acre Rodeo-Chediski caused in White Mountain Apache forests. The tribe lost 267,000 acres of centuries-old ponderosa pine. But because the tribe is a soverign nation it was able to promptly salvage its fire-killed timber in full compliance with federal environmental laws. Replanting will begin during the Southwest's late summer monsoon season. The Forest Service wants to restore a small portion of the public's fire losses too, but environmentalists have appealed the plan.

"It's pretty bad," concedes John Anhold, an entomologist with the Forest Service's Rocky Mountain Research Station at Flagstaff. "In fact, we've never seen anything like this in the Southwest."

According to Mr. Anhold prolonged drought and forest density have combined forces to create "the perfect setup" for several beetle species that are attacking pines—old and young alike—in unison. "In the short term there isn't much we can do to slow their advance," he says. "Long term, this is definitely a teaching moment and the lesson is that if we don't thin our forests, nature will."

It is no better in forests south of the White Mountains. Residents in historic Prescott, one of Arizona's hottest retirement markets, are bracing for the fact that beetles will eventually wipe out all of their ponderosa forests. In February, Prescott National Forest District Ranger Ernie Del Rio told residents of Crown King, 30 miles south of Prescott, that he expects 100 percent of the ponderosa pines in the area will be killed by bark beetles. As a fire prevention measure, the Forest Service has laid out a ten-year plan for removing brush and dead trees, but Bob Hennkens, a Prescott resident who nearly lost his home when fire veered into his neighborhood last year, expects the plan will be appealed by environmentalists.

"The fires will start in the dead trees in Crown King this year and roar over the mountain to hit Prescott head-on with a 300 foot wall of flame at 2000 degrees," he predicted in a recent e-mail exchange with colleagues from the Federal Laboratory Consortium. "The historic capital and home to 34,000 will indeed be history."

Mr. Hennkens, a technology transfer expert, is working with lab colleagues on what he calls "Forestry's Marshall Plan," a sweeping privately financed proposal for incubating small bio-mass and bio-fuel enterprises capable of consuming large amounts of low quality wood fiber scientists say must be removed from the West's fire-prone forests before disaster strikes.

"Our most abundant source of renewable energy rests in the creative genius of the 73 million Americans whose communities, homes and lives are threatened by the West's wildfire crisis," he said in a recent *Evergreen* interview, noting the government's estimate that some 20,000 western communities now lie in harm's way. "Unleashing this creativity requires that Congress grant at-risk communities the authority to make decisions about their forests. I know that radical environmentalists hate this idea, but their claim that local people aren't capable of making common sense decisions that balance

economic and environmental goals is silly and unsubstantiated.

"We have a moral obligation to protect our forests from catastrophic fire," he continued. "With access and enlightened local decision-making we can do it without draining the federal treasury. Given the opportunity, I'm confident entrepreneurs will commit their capital to businesses that will make and market value-added bio products and bio fuels from fiber that will otherwise burn, polluting our air and water, destroying the very forests we all want to save for our children and grandchildren."

If ever there was a case for Congress breathing life into Mr. Hennken's vision, or any of the other entrepreneurial visions stirring in the Southwest, it lies in the sorrowful web of irony sewn in the aftermath of last summer's Rodeo-Chediski Fire. Originally two fires, high winds drove them into a single firestorm that forced the evacuation of 32,000 families. The fire overran parts of Heber, Overgaard, Cibeque, Claysprings, Pinedale and Linden but Show Low, Pinetop and Lakeside were spared.

No one has suffered more in the aftermath than the White Mountain Apache tribe, which lost 276,000 acres of centuries-old ponderosas that, for all their economic value, are regarded as priceless by tribal members for whom there is no distinction between land and self. And now the land is scarred. August 2002 rains stripped already denuded streambeds to bedrock. From the air, a black and white moonscape stretches from horizon to horizon, accented by the red-orange of exposed mineral soil and the needle-less skeletons of trees.

"Our losses are great," says tribal chairman Dallas Massey. "It will take generations for our forests to recover."

Although the tribe lost nearly 35 percent of its forestland base, it is not without the means to help itself. Because the 1.6 million acre White Mountain reservation is a sovereign nation admission to its forests is by invitation only—and sue-happy environmentalists aren't welcome. Further, because the tribe's Mexican spotted owl habitat management plan has the blessing of the U.S. Fish & Wildlife Service it is free to manage its forests anyway it wants so long as it does not run afoul of the Endangered Species Act or other federal environmental laws. Thus, the tribe is doing what the U.S. Forest Service can only wistfully watch: it is salvaging its fire-killed timber and preparing to plant a new forest.

Meanwhile, the Forest Conservation Council, a Santa Fe-based group, has appealed the Forest Service's quite modest plan for cleaning up fire-ravaged forests adjacent to the tribe's salvage operation. Spokesman John Talberth said, "the council objects to the basic idea of logging trees damaged in the fire." FCC sued in federal court January 9, the day after the Forest Service sold four salvage sales to Arizona and New Mexico firms. Although officials don't expect FCC's suit will be upheld they concede it will have the desired effect: delay salvage and restoration work until the dead wood proposed for removal no longer has any commercial value. Unlike fir, ponderosa deteriorates in a matter of months.

The enormity of the task facing the tribe—and the need to complete the salvage operation while the wood still has value—caused the tribe to take the extraordinary step of seeking outside help. For the first time in nearly 50 years, it sold some of its prized timber to outside contractors, most notably Sierra Pacific Industries, California's largest lumber manufacturer. Sierra, in turn, hired Oregon-based Columbia Helicopters to log remote never before logged canyons the tribe's conventional logging crews could not reach. Not surprisingly, many tribal members are angry about the fact that their biggest and best trees are going by rail to Sierra Pacific mills at Sonora and Susanville, California and not to the tribe's own mills at nearby White River and Cibecue.

"They don't understand that our mills can't possibly mill all that dead timber before it rots," explains tribal forester Paul DeClay, Jr., an Apache himself and a White River native. "Besides, the tribe is broke. We could not afford to hire Columbia, so we did the next best thing. We sold the timber we could not reach to a company that could afford to hire them. Tribal crews are working in smaller timber in well roaded areas that have been logged two to three times before."

Since last October more than 250 Columbia loggers, contract timber fallers and truckers have been bivouacked in Show Low area motels, but most of the $3 million the company had paid out through February is leaving the state, underscoring two ironies: first that there are no sawmills left in northern Arizona capable of capturing the revenue that is rolling through Show Low and Heber more than a hundred times a day on logging trucks bound for rail heads at Globe and Snowflake; second that these loggers and truckers from Idaho, Montana, California, Oregon, Washington and Alaska are here because there is no work for them back home.

"I understand and respect local anger and frustration," says Columbia project manager John Carroll, an Oregonian who has been living at Show Low's Holiday Inn Express since October. "It's sad that there's no industry left here. You can be sure our crew would a lot rather be going home after work instead of back to a motel room. But we can all hope the day will

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Near Heber, Arizona, the beetle-killed aftermath of last s
overran more than 400 homes in Heber, Overgaard, Cibe
from the fact that its forests contain far too many trees to
[see chart] annual growth is almost 25 times harvest and

come when the public realizes that protecting forests means stand density has to be controlled. If we don't do it, nature will. We're seeing the result now in the form of large, increasingly frequent wildfires. As a logger I can tell you that thinning in green timber and watching the flush of new growth that follows is a lot more satisfying than picking up the pieces after a terrible fire like this."

Nevertheless, the work Columbia's big twin-rotor ships do is remarkable in its own right. Although they are expensive to operate, the five Vietnam-era Boeing 107s the company brought here are capable of moving enormous amounts of wood in a matter of hours. Almost without a trace, they can retrieve valuable trees from steep slopes and remote canyons where road construction might well trigger erosion or landslides.

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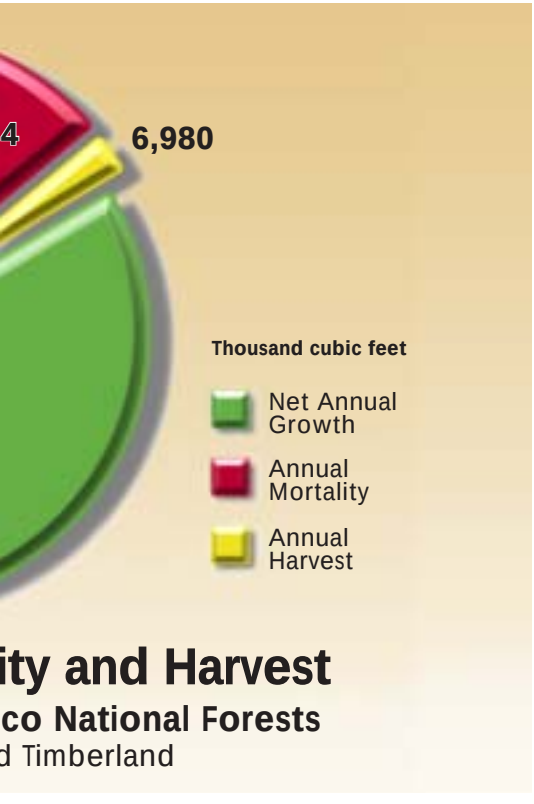

"They are tools, just like any other piece of logging equipment," Mr. Carroll says of helicopters. "In the right setting in the hands of skilled crews they do an excellent job."

Of all the ironies foisted on the tribe by the tragedy of fire the cruelest would seem to lie in the bittersweet knowledge that their most valuable trees—once milled in California—are destined for markets in nearby Phoenix and Albuquerque.

"It's unbelievable isn't it?" observes Jack Chase, Sierra Pacific pine lumber salesman. "But we're selling several truckloads a month to remanufactures in both markets."

Unbelievable indeed says Lee Nelms, a furniture manufacturer in Phoenix, confirming that his company buys 15 truckloads of pine a month from Sierra Pacific. Mr. Nelms' company, Trendwood, employs about 360 people in the manufacture of generic pine bedroom furniture for several specialty furniture retailers.

"We used to buy 75 percent of our pine from mills in the Southwest," he says. "But they're all gone now so we buy pine where we can find it, mostly from California. Our raw material costs are up $25-30 a thousand. Meanwhile, the trees down here are still growing like crazy. It's ridiculous. Someone needs to compare what is happening in the tribe's forests with what is not happening in national forests. Once the burned timber is salvaged the tribe will plant a new forest. Meanwhile, the Forest Service is in court and probably won't get anything done."

Over the next ten years the tribe will plant about 12 million seedlings on an estimated 73,000 severely burned acres. They would also like to build a new mill at White River, one large enough to bring some vitality back into the region's lumber and logging industries. But Chairman Massey says the tribal council is reluctant to commit its' scarce capital, or anyone else's for that matter, without an ironclad 20-year agreement with the Forest Service.

"Environmentalist litigation is the problem," Mr. Massey says flatly. "There is no certainty in supply. We can't invest in a new mill without knowing where the wood will come from, so while we see a great potential in processing wood that needs to be removed from federal forests, we don't see much certainty."

Adding insult to injury, the tribe recently announced it will close its' Cibeque mill once the current salvage operation ends. There isn't enough tribal timber left nearby to keep it running. Nor is there any federal wood available, dead or otherwise. Under the circumstances one could easily forgive Mr. Massey for being discouraged about tribe's future in forestry and wood products, but he remains passionate about their widely admired forest management program and what it portends for future generations of Apache job-seekers.

"We practice the kind of forestry I think most people wish the Forest Service were practicing in national forests," he said. "We thin to promote tree growth, reduce the risk of fire, insects and diseases, and protect our neighbors from wildfire."

Mr. DeClay concurs, noting that the tribe's foresters aren't constrained by tree diameter limits that impede the Forest Service's ability in increase biological diversity in national forests. "We let nature tell us what the forest needs," he explains. "We use thinning to create a diverse mix of wildlife habitat types—elk, deer, turkeys, lions, bighorn sheep, Mexican wolves and spotted owls—featuring ground-level vegetation and trees of all ages and sizes."

Of late Mr. Massey has been making the rounds at congressional and state sponsored hearings, pleading the case for restoration forestry and the need for federal assistance for tribal forests and the tribe's White River sawmill. In March he and Dr. Covington shared the stage in Flagstaff and Prescott, where Gov. Janet Napolitano hosted the state's annual forest health forum. His message, packed in a stunning Powerpoint presentation never varies: restoration forestry is the way—and here are the before and after pictures to prove it.

"Most Arizonans get it," declares Sylvia Allen, a grass roots organizer from the Heber-Overgaard area. "They see huge fires and they know that thinning is the only safe solution. What's so frustrating is that we can't do anything about it until Congress modernizes regulations that allow radical environmentalists to stop everything, no matter the public will. We nearly lost our town in the Rodeo-Chediski Fire. Real estate values, tourism, ranching—our entire economic base—depend on the presence of healthy and

attractive forests. We're looking at total economic collapse if it happens again."

Ms Allen and her northern Arizona neighbors took their fears and frustrations to Phoenix in late March, staging a half-day rally in a park across the street from the state capital. Several hundred people made the trip to register their displeasure with radical environmentalists and to signal their strong support for the President's Healthy Forests Initiative and for state and federal legislators who are supporting him.

"It is no longer a timber or a jobs issue," Ms Allen says. "It is an environmental issue. Forests are dying and burning. Our air and water are polluted. Once beautiful forests are gone. Our heritage is burning. People who don't know much about forestry now recognize that our forests need to be thinned."

Gila County Commissioner Ron Christianson, who heads the Public Lands Steering Committee for the powerful National Association of Counties, seemed to speak for everyone at the rally. In words clearly intended for Phoenix area residents who don't yet understand the wildfire crisis and its ramifications for desert communities, he said, "We are in a war for preservation of our culture, economy and way of life. There is suffering all around us, brought on by people who don't live here and have no vested interest in our families, businesses, schools or communities. If we don't restore our forests you will lose your source of water."

Increasingly, the public is making the connection between catastrophic wildfire and loss of watersheds, but there is less understanding of the loss of stream flow scientists attribute to the presence of too much vegetation.

An Oregon State University study estimates that a 12-inch diameter western juniper consumes 17.7 gallons of water daily. Juniper thickets, which stretch for mile after mile across much of the Southwest, are thus consuming about 413 million gallons of water per square mile annually—a fact that does not surprise George Duda, an Albuquerque-based urban forester with the New Mexico Energy, Minerals and Natural Resources Department.

"Many private landowners have told us that following forest thinning mountain springs that have not run for decades suddenly reappear," he says. "Clearly, we have too much living biomass for the carrying capacity of the land. Loss of water, increasingly large wildfires, insect and disease infestations and 100-year-old trees barely five inches in diameter are the result. The big old ponderosas we all want to save have become like prisoners on death row waiting for their time to die."

The executioner will come for New Mexico's largest and last sawmill on June 7. Rio Grande Forest Products, Espanola, will close for good, a victim of litigation that has completely shut down the state's federal timber sale program. The mill, built by Duke City Lumber Company in 1968, underwent a $3 million re-tooling in 1989 so that it could handle small diameter logs. Yet according to the Forest Service, less than three percent of net annual national forest growth in the state has been harvested annually since 1998.

"This is devastating," declares Espanola mayor Richard Lucero. "Rio Grande not only employed a lot of people [152 counting contract loggers and truckers] they also spent a lot of money in stores around here."

Ironically, it is the death gasp of the Southwest's timber industry that is fueling renewed public interest in wood consuming businesses. Minus mills and loggers to demagogue, the region's forest combatants have but one choice left: manage their forests or let them burn.

"It is easier to see the real question when you no longer have to pretend that the timber industry is gone," observes Bruce Vincent, a grass roots organizer and former logger who spoke at the Phoenix rally. "The industry *is gone* in the Southwest, but the final question looms larger than ever: 'Will society care for its forests or abdicate that responsibility to wildfire?' Some say fire is the answer, but most folks who have seen the environmental and economic devastation big fires cause seem to have concluded that society can do a better job."

The pretending has ended in Mr. Vincent's hometown, Libby, Montana. The town's last and largest mill closed earlier this year after nearly 100 years of continuous operation.

Hopes for picking up the pieces in more than a hundred western timber communities rest on matching the public's environmental expectations with market realities. It will be easier said than done. The milling industry that survived the collapse of the federal timber sale program buys its logs all over the world

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[Top] This log deck on the White Mountain Apache Reservation holds about 80 truckloads of logs salvaged from the Rodeo-Chediski Fire—enough to construct about 48 three-bedroom homes. The tribe is thought to have lost about 430 million board feet of timber. [Below] The tribe loss is Jake Goetzinger's gain. Mr. Goetzinger, who hails from Tangent, Oregon, was grateful he found work in Arizona. Many Oregon log truckers went broke after the federal timber sale program collapsed.

now. Among the nation's largest lumber and papermakers there is scant interest in again doing business with the federal government, and even less interest in seeing federal wood fiber flood brutally competitive global markets that are already awash in cheap wood.

"The West's few surviving family-owned sawmills would seem to be a good place to start," Mr. Vincent says. "Most of the technological advancements that have fueled progress in our homebuilding industry started out in these mills as strategies for recovering more wood fiber from expensive logs. It seems reasonable—even likely—that the capital and entrepreneurial genius needed to develop viable new markets for wood will be tried—and perfected—here first."

Ever sensitive to sea changes in public mood, environmentalists appear to be trying to moderate a litigation strategy that has driven most of the West's family-owned sawmills out of business. Three frequent litigators— the Sierra Club, Southwest Forest Alliance and the Center For Biological Diversity - recently decided against appealing Forest Service plans for thinning in the 10,000-acre Kachina Village-Forest Highlands tract south of Flagstaff.

"I think they are trying to salvage what little credibility they have left in the Southwest," observes Allen Ribelin, co-owner of High Desert Investments, a Flagstaff logging company his father started. "Forest Highlands is a world-class gated golfing community. I understand that the homeowners' association had threatened to counter-sue. I admire their tenacity but with no mills left I have no idea who will buy the wood. We haven't sold a pine log out of our deck since last December."

The scramble by environmentalists to save face has also spawned what noted forest ecologist Tom Bonnicksen calls "a fortress mentality—the idea that cutting fire breaks around the West's at risk communities solves the problem."

"It won't stop wildfires and it won't protect forest communities," says Dr. Bonnicksen, a founding member of the Society for Ecological Restoration and author of "America's Ancient Forests," a fine history of forests and forest use in America.

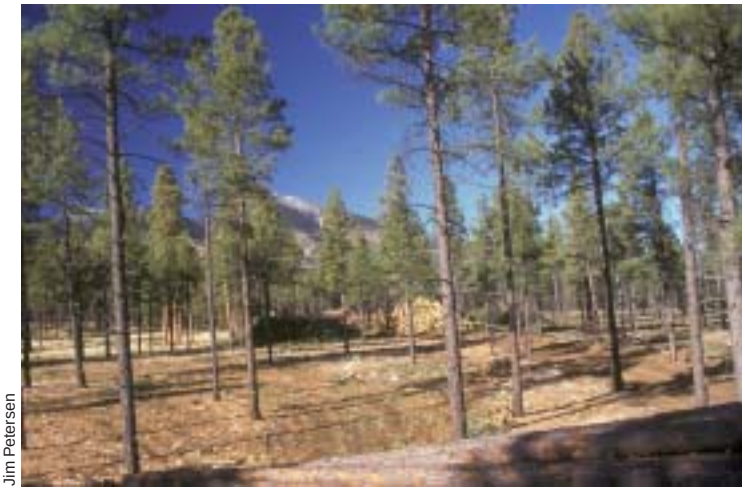
"I am reminded of the walled cities of medieval Europe," Dr. Bonnicksen says of the Sierra Club's Community Protection Fire Plan. "Zones where most of the trees and brush are removed are supposed to keep out the enemy fire in the same way that moats and high walls were supposed to keep out enemy armies in the Middle Age. But walled cities were abandoned after it was discovered invading armies were laying waste to the countryside before they crashed through the walls. Wildfires behave the same way, which is why we have to deal with the problem at its source—out in the woods where big fires get started."

As evidence of his belief that today's super-heated forest fires are not slowed by defensible spaces cut from forests on community perimeters, Dr. Bonnicksen cites the disastrous Los Alamos Fire, which spared thinned areas adjacent to the New Mexico town, but sent wind-driven embers into nearby residential areas, destroying 405 homes.

Apart from their limited value, Dr. Bonnicksen points out that the firebreaks the Sierra Club advocates will do nothing to protect more distant forest resources the public values, including watersheds that provide drinking water for an estimated 80 percent of the entire West.

"Forests in the West's remote canyons and valleys produce most of the water stored in reservoirs and aquifers," he says. "Healthy forests promote ground water absorption and slow snowmelt giving downstream water districts the ability to handle spring runoff. Wildfires compromise water production, washing tons of soil into watercourses and hardening surface soils so they can't absorb water. The forest restoration plan offered by President Bush is our best hope for protecting communities, watersheds and other forest values. The fortress mentality the Sierra Club advocates didn't work in the Dark Ages and it won't work now."

Decision time has come in the Southwest. The choices are inevitable and unavoidable: restoration forestry or ash and ruin. The clock is ticking.



Jim Petersen

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[Top] Aftermath of a thinning project in the Fort Valley area west of Flagstaff, Arizona, designed by Northern Arizona University forest ecologist Dr. Wallace Covington. One local environmentalist called this view "a clearcut" and said the site had been "nuked." You decide. [Below] Dr. Covington's thinning produced hundreds of truckloads of good quality, small-diameter logs like these. But because there is only one sawmill left in the Southwest it took many months to find a buyer for these logs.

Jim Petersen is executive director of the non-profit Evergreen Foundation and editor of Evergreen Magazine, the foundation's periodic journal. He has reported widely on the West's looming wildfire crisis since 1987

YOU DECIDE

This . . .

Aftermath of New Mexico's 2000 Viveash Fire

Or this?

Aftermath of White Mountain Apache thinning

This . . .

A streambed scoured to bedrock by post-fire flooding

Or this?

Lush vegetation in a managed, privately owned forest in western Oregon

The Evergreen Foundation

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Columbia Helicopters

We want to publicly thank Columbia Helicopters for flying us above the White Mountain Apache Tribe salvage operation near White River, Arizona.

White Mountain Apache Tribe

We appreciate the assistance of the White Mountain Apache Tribe for again graciously welcoming us into their soverign nation. Thanks also to tribal chairman Dallas Massey and tribal forester Paul DeClay Jr. for their assistance with this report.

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