Groups call for end to clearcutting

Sometimes when they won’t give you an inch you’re better off just asking for the whole mile.

Raising the stakes after a moderate bill to limit clearcutting in California was narrowly prevented from passing out of committee by the timber industry recently, Forests Forever and its allies have called on the state’s highest elected officials to ban clearcutting outright.

Assembly Bill 2926, authored by Assembly Speaker Pro Tem Sally Lieber (D-Mountain View), was killed on Apr. 17 in the Assembly Natural Resources Committee. A rush of last-minute lobbying by Big Timber tipped the scales.

The measure would have encouraged less-damaging methods of timber harvesting, such as selective cutting.

The bill garnered four “aye” votes, one short of the number needed for passage. (See sidebar on page 10 for roll results.)

Forests Forever, the bill’s organizational sponsor, is now asking its supporters to write to the state’s three top elected officials—Gov. Arnold Schwarzenegger, Lt. Gov. John Garamendi, and Attorney General Jerry Brown—and urge that they campaign to end clearcutting in California.

“The time for incremental measures is past, when it comes to an abominable practice like clearcutting,” said Forests Forever’s executive director Paul Hughes.

“The industry throws a tantrum against even the most gradual reforms, so it’s time to go for what we really want—a complete end to clearcutting.”

(For a good look at the devastation caused by clearcutting, see the photo spread on pages 6 and 7 of this issue.)

In addition to Forests Forever, Sierra Club California, Planning and Conservation League, Environment California, Defenders of Wildlife, and other conservation groups—some two dozen in all—lined up behind the bill.

On the other side of the fence sat the timber industry and its politically muscular players: Sierra Pacific Industries (SPI), the American Forest and Paper Association, the California Chamber of Commerce, the Farm Bureau and others.

**Inside The Watershed**

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Doublethink means the power of holding two contradictory beliefs in one’s mind simultaneously, and accepting both of them . . . . These contradictions are not accidental, nor do they result from ordinary hypocrisy: they are deliberate exercises in doublethink. For it is only by reconciling contradictions that power can be retained indefinitely.

– George Orwell, 1984

While we certainly don’t live under the kind of totalitarian regime depicted in George Orwell’s dystopian novel 1984, for many years now forest advocates have been noticing government programs and pronouncements eerily reminiscent of themes depicted in the book.

One recent item was the renaming of the California Department of Forestry and Fire Protection (CDF) as “CalFIRE” in January 2007.

Fire prevention and -fighting has long been a dominant function of this agency. Its current profile includes thousands of firefighters and staff, hundreds of stations, over a thousand engines, trucks and bulldozers, dozens of airtankers, tactical planes and helicopters, and a budget of almost $1.4 billion.

Orwell would appreciate the irony: This same agency has virtually sole jurisdiction over the activity arguably most responsible for contributing to wildfire.

Yet logging, clearcutting most of all, heats up and dries out the forest, greatly increasing fire conditions. In 1996 the Sierra Nevada Ecosystem Project, a blue-ribbon science panel charged with studying the Sierra region and its future land-use management, concluded:

“Timber harvest, through its effects on forest structure, local microclimate and fuels accumulation, has increased fire severity more than any other recent human activity.”

Is it too much to suggest a sort of “perpetual war,” as described in 1984, in the forests of this country— with the public effectively controlled by fear of wildfire, at the same time Big Brother benevolently administers “fuels-reduction” programs that cut both ways on fire danger?

Sadly, it’s probably not a stretch, when one considers the vast landscape being devastated by clearcutting, and its harm to water quantity and quality, in worsening global warming, and much more . . . all costing millions of taxpayer dollars and impacting the lives of millions of increasingly thirsty and fire-harried Californians.

(The forest fire-fighting industry is even attended by the heavy equipment, military tactics, “paratroops,” astronomical budgets, and risk to life and limb associated with a shooting war.)

We don’t mean to suggest that CDF is deliberately creating wildfire conditions in order to justify its firefighting role and budget. CalFIRE staff are by-and-large hardworking and well-intentioned folks. It’s at the mission level the agency is flawed.

After all, CDF isn’t solely to blame for bad forestry if the regulatory framework surrounding it promotes destructive forest practices. The timber industry aggressively attacks even incremental reform attempts. Meantime a pivotal number of politicians, fearful of losing industry backing during an election cycle, won’t stand up.

As if the approach were borrowed from 1984, the deforestation of California goes on largely out of public view, screened off from roadways by unlogged “beauty strips.”

By simply showing the public pictures of clearcuts, as we’ve done throughout this issue, we can help expose this wrong— and thereby take another step toward ending it.

— Paul Hughes
Clearcutting’s worst offender

The Sierra gets an SPI haircut
Timber giant never met a clearcut it didn’t like

Clearcutting—chopping down every tree in a given area—has been increasing in California.

Over the ten years ending in 2006, 350,000 acres of forest were approved for clearcutting. And more than 250,000 acres of trees destined to be clearcut belong to a single timber giant—Sierra Pacific Industries (SPI).

SPI, based in Anderson, Calif., is the largest private landholder in the state. Of the state’s almost 7.6 million acres of private and industrial timberland, 1.5 million belong to SPI, 20 percent of the total. The company is the third-largest landowner in the United States.

More of the Sierra Nevada has been clearcut by SPI than by anyone else—and the company plans to clearcut 30 to 60 percent of its holdings over the next century, denuding 750,000 to 900,000 acres of Sierra forests.

“A recent study by the California Department of Forestry revealed that in the last seven years, Sierra Pacific Industries has increased the amount of acreage that they’re clearcutting by 2,426 percent,” noted Doug Bevington, organizer for the John Muir Project in an interview on National Public Radio in 2000.

SPI is also the biggest purchaser of timber from public lands in the state. According to the U.S. Public Interest Research Group, SPI cuts 39 percent of all the federal timber in California.

And there have been persistent charges from forest activists that the company logs more public land than it has paid for.

In a May 27, 2007, article in the Wall Street Journal, SPI Chief Executive Officer Archie “Red” Emmerson claimed that clearcutting was actually good for forest health, taking out “excess” trees much as a forest fire would do.

“By clear-cutting, we’re planting superior trees and getting rid of the bad stuff. It’s no different than farming,” Emmerson said.

“Taking 100 percent of the trees off a site is not analogous to fire, except for fire on [tree] plantations, which do tend to burn off 100 percent,” said Addie Jacobson of Ebbetts Pass Forest Watch, a Calaveras County group that has been fighting against SPI clearcuts in its neck of the woods.

“A forest fire doesn’t remove everthing. Even after a fire you have standing dead trees, and you have some materials that actually have some habitat benefit. After a fire you don’t do deep ripping of the soil, and you’re not going to do widespread herbicide application.”

The clearcuts left by SPI are turned into even-aged tree plantations, an agricultural approach to forestry that leans heavily on application of pesticides to clear competitive species that might slow the growth of commercially valuable trees.

These single-species plantations lack completely the biodiversity found in a natural forest. Because of this, plantations make poor wildlife habitat. Pesticides destroy the biological community essential to forest health, from the understory growth between larger trees to fungi and microorganisms in the soil.

Not only are these plantations unsightly and sterile, but also they are dangerous vectors for forest fires. The closely planted trees in a plantation tend to ignite faster, burn hotter, and spread fire faster than trees in a natural forest.

“When you change a landscape from old growth to plantation, you change the wildlife habitat,” Jacobson says. “Old-growth species have less and less habitat in which to live, and many of them are valuable because of their scarcity.”

Reining in the damage

A coalition of environmental groups including Ebbetts Pass Forest Watch, ForestEthics, Environment Now, Green Corps, and Forests Forever is drawing public attention to SPI’s forestry practices. A current ForestEthics campaign, Saving the Sierra, targets SPI among other companies that are logging irresponsibly in the Sierra Nevada.

—M.L.
Global warming and the end of cheap, readily available oil are in a neck-and-neck race to see who kills off fossil fuels first.

But a rush to find an oil substitute in so-called “biofuels” could kill off our forests as well.

**Breathing oil, eating oil**

Just take a look around and check off the items you can see from where you’re sitting that are made from, powered by, or otherwise depend on petroleum for their manufacture or distribution. Unless you’re sitting naked in the middle of a wilderness area the chances are your checklist will be pretty long.

Fossil fuels are completely woven into the way most Americans live now. Transportation to work or to the supermarket, the food on the grocery shelves, the clothes people wear—all depend in one way or another on oil and gas. Automobile use is especially vulnerable to impending change. As oil becomes prohibitively expensive, driving habits will have to change. For people commuting long distances by car, this is bad news indeed.

**Running on empty**

Researchers and entrepreneurs have put forward various liquid-fuel substitutes for petroleum to keep what writer James Howard Kunstler calls “the happy motoring utopia” in business a while longer. These range from oil made by algae to diesel made from used cooking oil.

The most commonly proposed stand-in, and the only one currently in production on a large scale, however, is ethanol.

Though at first ethanol may seem like a good idea, it might turn out to be as bad for the Earth as oil. Compared with gasoline, ethanol made from corn produces 10 to 20 percent less carbon dioxide. But when all of the petroleum inputs to corn’s planting, fertilizing, cultivation, harvesting, processing and transportation are taken into account, a gallon of corn-based ethanol contributes as much greenhouse gas as a gallon of crude oil—or more, depending on which studies you read.

And when conversion of natural forests and grasslands to ethanol-producing croplands is taken into account, the global effect on CO2 emissions is actually worse than petroleum.

“Emissions from ethanol are 93 percent higher than gasoline,” said University of Minnesota ecologist David Tilman, co-author of a research paper in a recent edition of the respected journal *Science*.

Ethanol is made from plant matter—in this country, mostly from corn. Brazil manufactures ethanol from sugar cane—some 3.5 billion gallons a year, half the world’s output. Ethanol can be added to gasoline, and cars can be re-engineered to run on it primarily.

Ethanol is popular with corporate agriculture since it needs corn—a lot of corn—a crop already loaded with subsidies. According to USDA, $900 million went to subsidize corn ethanol in 2006. U.S. production will certainly fall short of the goals announced by President George W. Bush in his 2007 State of the Union address, however. He called for production of 35 billion gallons of alternative fuels such as ethanol by 2017.

According to an article by Milton Maciel, a Brazilian sugarcane ethanol producer writing on the *Energy Bulletin* website, to replace its current gasoline use with ethanol the United States would need to produce 400 gallons of ethanol per acre per year, which would require 350 million acres of land.

The amount of land currently growing corn for all uses in this country is 75 million acres.

If we dedicated all the corn now grown in the United States to ethanol, it would only reduce our petroleum usage by 12 percent, according to Jeff Goodell in the July 24, 2007, *Rolling Stone*.

And long before the land limit was reached, a steep run-up in food prices (which has already begun) caused by dedicating corn to fuel would make ethanol the most unpopular liquid since Socrates chugged that cup of hemlock.
Warming ourselves with wood

Biomass energy involves burning wood or other vegetable matter to generate power, or as a direct heat source.

Biomass energy generation can employ a wide variety of materials as fuel: wood debris from construction and demolition, sawmill scrap, and brush and small trees (“woody biomass”) from forest thinning projects, as well as agricultural waste or specially grown crops.

Biomass energy is an old idea—one of humankind’s oldest technologies. A campfire is biomass energy at work. Towns in timber-producing regions have used biomass to generate municipal heat and power for years. Sawmills can use their own scrap lumber and sawdust to fire up boilers for heat or power generation.

As reported in a recent issue of High Country News, a New Mexico alternative energy company, Local Energy, says it could heat downtown Santa Fe for a year on about 20,000 tons of biomass.

Trees for ethanol

The latest buzzword in biofuel circles is “cellulosic” ethanol. This means using woody fiber to create ethanol, rather than farm crops such as corn or cane. It is a process in its infancy, not nearly ready for prime time.

So far there is just one commercial-scale cellulosic ethanol refinery (in China), producing 10 million gallons a year. Easily grown fiber sources such as switchgrass are usually put forward as the feedstock of choice.

But forests can be cooked down into ethanol, too.

The Portland Press Herald recently reported, “Researchers at the University of Maine have developed a way to heat and squeeze wood to make ethanol, a process that is factoring into a U.S. Senate debate over how to reduce the country’s need for oil.”

And the U.S. Forest Service last year announced, “Large-scale cellulosic ethanol production from wood may become an economically viable option for offsetting fossil fuel emissions.”

Fueling with forests

What is good for automobiles, however, is seldom good for forests and their storehouses of biodiversity and other values. Using woody biomass for fuel and power production could be the beginning of the end for healthy forest ecosystems.

But, since foresters public and private will be cutting all that understory brush for fuel reduction anyway, why not turn it into ethanol?

First, it’s expensive to transport all that brush to a distant biofuel refinery. It makes more sense to build refineries near the source of the fuel. But for good reasons the environmentally concerned public probably won’t like having biofuel refineries sited near—or in—public forests.

Second, the supply of brush from thinning projects would not long be adequate to the demand. Tom De Luca, senior forest ecologist with The Wilderness Society, estimates that thinning of national forests could supply at most 60 million tons of biomass a year, and perhaps about 2.5 billion gallons of ethanol. Compare that figure with the annual gasoline usage in the United States: about 146 billion gallons.

At the same time, demand for liquid fuels will grow steadily as oil

Protecting the forests from fuels

A far-sighted bill emerged briefly last year in the state legislature—one of many new proposals to help implement A.B. 32, California’s landmark anti-global warming bill of 2006.

Senate Bill 210, sponsored by Sen. Christine Kehoe (D-San Diego), would have required the California Air Resources Board to establish a low-carbon standard for transportation fuels in the state.

Further, and most important, it carefully defined what kinds of biomass could be used for power generation and where they could be harvested.

The bill would have forbidden the state board from overruling environmental protection laws in the name of biofuels production, transportation or harvesting:

“Fuel produced from biomass that is derived from any of the following does not meet the low-carbon fuel standard:

• any national wildlife refuge, national park, national monument, national forest, national grassland, or federal wilderness study area;

• late-succession forest stands, state parks, reserves, and forests; intact, rare, threatened, or endangered ecosystems;

• lands owned or managed by the Department of Fish and Game, crops from land where native forest, riparian areas, or native grasslands were cleared for agricultural production or wetlands were drained for agricultural production.”

This protective language was stripped out of the bill before it went to a floor vote; in any case, the final form of the legislation was ultimately vetoed by the governor.

But just such protective, explicit standards in all biomass legislation present and future will be needed to keep our forests from fueling our road trip into oblivion.
Clearcuts plunder Sierra forests

The photos on these pages (with one exception) were taken by members of the Central Sierra Environmental Resource Center (CSERC) in 2007 on Sierra Pacific Industry’s Cow Camp timber harvest in Calaveras County.

The group asked the California Department of Forestry to reject SPI’s timber harvest plan and direct the company to use less-damaging methods of harvesting than clearcutting.

(right) Five years after this clearcut near Highway 4 was logged, only a small amount of vegetation has returned to the site.

(left) A typical SPI clearcut, with extensive destruction of habitat and removal of oaks and other hardwoods.

(right) Destruction of groundcover, bushes, wildflowers, and other important plant species occurs with a clearcut. The vegetation thus destroyed is needed by wildlife for food, shelter from predators and protection from weather.
After the area is clearcut, herbicides are applied to kill brush and other species of trees that might compete with commercial plantation trees. Here the herbicide treatment has killed nearly all the understory vegetation.

Clearcuts in Giant Sequoia National Monument— a federal forest supposed to be off-limits to logging, much less clearcutting.

In this clearcut, the litter of small logs, branches, and brush known as “slash” is left behind when the commercially valuable trees are removed. The stand of trees in the right rear were left vertical in what the timber companies call a “visual retention group.”

Photos courtesy John Buckley, CSERC, except photo of Giant Sequoia National Monument clearcut, courtesy Martin Litton.
Kent Stromsmoe, long-time forestry activist, Republican, nature lover, computer whiz, youth mentor, firefighter, Burning Man enthusiast, and organizer of mud football games, passed away last May 31 of complications from diabetes at the age of 54.

Stromsmoe was born and lived his entire life in the town of Martinez, California. He left an indelible impression on everyone who encountered him.

“Kent was brilliant,” said Karen Erickson, his sister. “Rash, outspoken, an incredibly kind man of contrasts.”

“He could always make my head spin by his incredible knowledge,” said activist Dan Hamburg, Forests Forever board member and former congressman representing California’s redwood region. “He knew a thousand times more about forestry than I did.”

“Kent will be missed by everybody on our board and in our organization,” said Mark Fletcher, who was Forests Forever’s board president from 1995 to 2007. “We all agree there’s no way we can replace him or his knowledge.”

Kent Stromsmoe loved to be in the outdoors.

“His love of nature began through scouting,” his sister said. “He loved nature early on, and always would take off to go snow camping in the Sierra.” Stromsmoe eventually attained the level of Eagle Scout.

His interest in helping to preserve the environment continued in high school, where he founded an Ecology Action group. This was his first active involvement in conservation, something that would become a lifelong passion.

A burly man with a mustache and short-cropped dark hair, Stromsmoe worked as a firefighter for the University of California at Davis and later as a building contractor. In the 1980s he got involved with computers—“He was an absolute genius with computers,” Erickson said.

His various careers did well enough— and his health deteriorated badly enough—that he retired early and began to devote himself to his two passions—protecting forests, and mentoring disadvantaged kids.

Karen Pickett of the Bay Area Coalition for Headwaters first met Stromsmoe in the early 1990s– during the campaign to save Headwaters Forest from logging by Pacific Lumber Co.

“There was a lot going on then,” Pickett recalled. “Litigation, shareholder education, direct action, large public rallies. People were mounting blockades in the forest using lockboxes, pieces of pipe protestors use to attach themselves to gates or circle themselves around a tree.

“When Kent showed up at a meeting for the first time, he said that he could help weld some of the lockboxes. He had climbing gear. I think he used to work as an arborist, and he offered to let us use that gear as well.

“It kind of floored me, given that he looked more like a Republican than a forest activist (and he was). After that first meeting, he jumped into the campaign with both feet.”

The natural

A quick study in just about everything, Stromsmoe took to political organizing and writing legislation. He eventually headed the legal team that in 2002 wrote the Heritage Tree Preservation Act, an initiative that became a bill in 2003. It would have protected California trees older than 150 years.

The bill is still alive, being re-introduced in the state legislature nearly every year. Some activists who knew Stromsmoe regard it as a prominent part of his personal legacy to the forestry reform movement.

But Stromsmoe was never content
to be far from the forest for long. Pickett remembers a hike into the Headwaters Reserve, after it was protected in the 1999 Headwaters Deal, to see the road removal and restoration work the federal Bureau of Land Management (BLM) had started.

“We went into the old growth where years ago, Pacific Lumber had cut an illegal road that BLM was then decommissioning. It was a profound experience to see the road being erased from that precious piece of ancient forest, and brought tears to my eyes. I looked over at Kent, and he was crying. He loved that forest deeply.”

Besides Forests Forever, where he was an Advisory Council and Board member from 1999 to the end of his life, Stromsmoe also worked with other environmental groups, such as the Campaign for Old Growth, and was on the steering committee for Bay Area Coalition for Headwaters for many years.

On background
For all his passionate activism and deep knowledge of the legislative process, Stromsmoe never sought the limelight. He preferred to work behind the scenes.

Paul Hughes, executive director of Forests Forever, said: “He was a sort of stealth weapon, an unseen force who actually wrote legislation including the Jackson Forest bill that passed through both houses in 2004.”

Stromsmoe was a regular attendee at California Board of Forestry meetings. “The first time I saw Kent was at a Board of Forestry hearing,” current Forests Forever President Ken Smith recalls. “There were all sorts of people there—Earth First! people, other forest activists, timber industry people. Outside the meeting there were a bunch of people talking to a guy with a three-piece suit and a crew cut. He seemed to be someone that everyone wanted to talk to.”

That someone turned out to be Kent Stromsmoe.

“The interesting thing about Kent was that he seemed to know everybody,” said Fletcher. “Not just on the Board of Forestry, but people who were involved in forest activism, even people you wouldn’t expect him to be on a first-name basis with.”

As a lifelong Republican, walking precincts since his teens, Stromsmoe became an associate member of the California Republican Central Committee in 1971.

But the Republican Party he grew up with was not the party it has since become. “Kent felt that the party he knew had been hijacked,” Erickson said.

He particularly objected to the intolerant, hyper-partisan strain of politics that had developed in and around the party. “Kent was always socially liberal. He hated the change in the Republican Party in the last ten years. He wanted to reclaim the party for moderates.”

Burning Man
As if there weren’t enough aspects to his personality already, Stromsmoe also became deeply involved in the wild annual gathering of artists and celebrants in the Nevada desert known as the Burning Man festival.

“What attracted Kent to the Burning Man festival,” said Erickson, “was more the celebration, the acceptance and the giving culture.

“At the festival Kent would go riding around in a little cart, passing out frozen pops in the desert heat. Acceptance of people and differences was important to him.”

Helping others
Trees and Burners were not the only living beings helped by Stromsmoe. He mentored kids from disadvantaged backgrounds, providing jobs and shelter for them, taking them camping, giving them fatherly advice and direction.

“Kent really helped out a lot of kids who had gotten off on the wrong track,” Fletcher said. “Kids who needed somebody who was like a parent, to get them back on the straight path.”

“Kent spent a lot of his life taking care of other people,” Erickson said. “He could do most anything, from putting up a building to making a campsite. He could fix almost anything. Everything he built he built to last.

“But more than anybody I know he believed in people.”

—M.L.
In the end, Assemblymembers Lois Wolk (D-Davis) and Felipe Fuentes (D-Arleta) clung to the fence, answering “Not Voting” when the roll was called on the measure.

“We have been told that this is an election year, and that money and politics are informing decisions rather than bill substance,” said Addie Jacobson, Forests Forever Advisory Council member and activist with Ebbetts Pass Forest Watch.

“Apparently (Wolk and Fuentes) felt that voting as they did would allow them to fly below the radar of public awareness and would not harm their standing with those who have endorsed and supported them.”

Wolk, termed out of the Assembly this year, is running a tight race for state Senate in District 5 (covering parts of Solano, San Joaquin and Yolo counties). Fuentes is running for re-election to his Los Angeles-area Assembly seat.

A.B. 2926 would have restricted the maximum area of clearcuts to 10 acres. The bill also would have forbidden clearcuts immediately next to an older clearcut unless the older cut had regenerated to at least 50 percent canopy cover.

The California Forest Practice Rules now allow clearcutting in maximum parcels of 40 acres. And a new clearcut need only be separated from an older one by a thin border of trees left as a buffer.

Allowing such side-by-side clearcuts has resulted in today’s vast patchwork of bare ground hopscotching across the landscape.

“Clearcuts increase flooding and stream sedimentation, destroy wildlife habitat and recreational values,” Hughes said. “And they’re just plain ugly.”

Clearcutting and equivalent methods of timber harvesting—so-called “even-aged” management—have been increasing in the state. From 1996 to 2006 the acreage approved for clearcutting by the California Department of Forestry came to more than 350,000 acres. One company alone—SPI, see related story on page 3—had more than 250,000 acres of its timber harvests approved for clearcutting during the same period.

The tourism, recreation and retirement economies have become much larger contributors to Sierra communities—and to the California economy as

Supporters and Opponents of A.B. 2926

SUPPORT
Butte Environmental Council
California Native Plant Society
Californians for Alternatives to Toxics
California Oak Foundation
CalTrout
Cascade Action Now!
Central Sierra Ecological Building and Design Association
Community Action Project
Defenders of Wildlife
Ebbetts Pass Forest Watch
Environment California
Environmental Protection Information Center
ForestEthics
Forest Issues Group
Forests Forever
Forests Unlimited
Klamath Siskiyou Wildlands Center
Mountain Alliance
Native Forest Council
Merita Callaway, Calaveras County Board of Supervisors
Northern Calif. Council, Federation of Fly Fishers
Outdoor Adventure River Specialists
Planning and Conservation League
Rainforest Action Network
Real Goods Solar Living Institute
Sierra Club California
Sierra Club, Loma Prieta Chapter
Sierra Club, Redwood Chapter
Sierra Club, Motherlode Chapter
Sierra Nevada Alliance
Solar Living Institute
South Yuba River Citizens League
The Foothill Collaborative for Sustainability
Yuba Watershed Institute

OPPOSE
American Forest and Paper Association
Associated California Loggers
California Chamber of Commerce
California Farm Bureau Federation
California Forestry Association
California Licensed Foresters Association
Forest Products Industry National Labor Management Committee
Sierra Pacific Industries

See “Clearcutting,” p. 12
becomes scarcer and more expensive. Eventually there will likely be pressure to take bigger trees for biomass . . . then even bigger trees . . .

Third, some businesses can be expected to argue that it is more cost-effective to make biofuels by cutting down native forests and replacing them with plantations of faster-growing trees—perhaps even trees that have been genetically modified to make them more useful as a biofuel source.

But heavy use of petroleum-based herbicides and massive water requirements make plantation forestry a short-sighted energy solution at best. (See “Test Tube Trees” in the Spring 2005 issue of The Watershed.)

Foreign forests as fuel

Brazil is the largest producer of ethanol in the world, and able therewith to supply its own fuel needs.

But if the United States begins to import Brazilian biofuels to meet its deep thirst for transportation fuel, it would put a serious strain on productive capacity.

Already the government of Brazil is planning to clear 150 million acres of land for sugarcane production. Increasing land use to produce ethanol for export would displace small farmers, forcing many of them to clear cropland out of one of the most biodiverse and environmentally valuable rainforests in the world.

Palm oil also can be used as a fossil fuel substitute—in this case for diesel. The danger is the same as for ethanol: changing land use patterns to favor fuel production over food and forests.

According to “The Agrofuels Trap” by Anne Petermann, co-director of the Global Justice Ecology Project, “Ecuadorean agribusiness plans . . . to clear (250,000 acres) of natural forests for oil palm production. In Colombia oil palm production is already dubbed the ‘diesel of deforestation.’ ”

Fuelish choices

It probably isn’t a good idea to encourage use of forests as fuel source, period. Given the vast amounts of fuel our civilization needs to continue in its present mode of transportation and industry, the best long-term solution would seem to be to avoid both fossil fuels and biofuels.

Conservation and energy efficiency would be good alternative strategies to start with. The energy we save will give us more time to design cities and transportation modes not dependent on petroleum or dubious substitutes.

We will need to change our ways of powering ourselves if we are to avoid the twin catastrophes of global warming and oil depletion. At this stage, simply swapping in biofuels for petroleum appears inadequate to keep things running as they have.

The terrible truth may be that there is no adequate substitute for petroleum. We may have to power down—that is, reduce our energy use absolutely.

There simply are not enough forests and other growing things to heat all our houses, make all our goods, and keep all the cars we drive on the road.

—M.L.
a whole—than logging in recent decades. Yet clearcuts, leaving behind devastated landscapes looking like the result of a bombing raid, reduce the value of these economies substantially.

Clearcuts add greatly to wildfire hazard. When a forest is clearcut, branches and other woody material (“slash”) are left behind. Exposed to increased sun and wind, this slash dries out. At the same time, removal of vegetation increases ground temperature and drying air circulation.

Further, most clearcuts are replanted as plantations of single-species, same-aged trees of a commercially valuable type such as ponderosa pine. These plantations, with low branches and even-height canopies, are especially prone to destructive wildfire.

Water quality is another casualty of clearcuts. Some 80 percent of California’s drinking water comes from forested watersheds.

But clearcuts expose forest soils to direct rainfall impact and to weathering, promoting erosion and siltation of streams. The state’s increasingly precious reservoir capacity diminishes with each truckload of silt that washes into it.

Accelerated runoff from the denuded and compacted forest floor contributes to flooding. And when timberlands on steep slopes are clearcut and roots holding the soil are killed and torn out, landslides occur more often.

The powerful herbicides used to prepare clearcuts for replanting frequently wash into streams, contaminating water for wildlife and humans.

As if these things weren’t enough, clearcuts affect a forest’s ability to counteract global warming.

“According to the California Energy Commission, California lost 30 percent of its (forest) sequestration capacity in the last decade alone,” said Laurie Wayburn, president of Pacific Forest Trust in San Francisco.

Clearcuts remove the larger, older trees that capture more atmospheric carbon than the young plantation trees that usually replace them. Studies have shown that it can take between 80 and 120 years for a clearcut forest to again become a net sink for carbon dioxide.

According to Mark Harmon, professor of forest science at Oregon State University, “Timber harvest, clearcutting in particular, removes more (stored) carbon from the forest than any other disturbance (including fire).”

The three state officials targeted by Forests Forever all are considered likely to run for high office within the next two years—Garamendi and Brown for governor, Schwarzenegger for U.S. Senate.

They can and should begin now to build into their campaigns a prominent and aggressive plan to end clearcutting in California.

“It’s time to stop compromising with a greedy and destructive industry,” Hughes said, “and call upon the state’s most powerful elected officials to enact an out-and-out ban on clearcutting.” —M.L.