

The San Diego
Union-Tribune.

March 17, 2008

Letting Nature Clear the Air

California is Reshaping Forest Management Strategies in the Campaign to Reduce Gas Emissions

By Michael Gardner

SACRAMENTO – For California's timber industry, the value of forests may no longer be just the logs but also what's in the wood.

Trees absorb carbon dioxide from the Earth's atmosphere, where the presence of too much of the greenhouse gas – emitted by cars, factories and other human activity – is being blamed for the escalating threat of global warming.

The 17 million acres of timberland in California are becoming part of the solution.

Across the state, nature's photosynthesis technology is being enlisted as California gradually reshapes forest management into an ally in the campaign to reduce greenhouse gas emissions and prevent severe climatic disruptions.

“Can you think of anything more appealing to the public than planting redwoods to fight global warming?” said Mike Wells, a parks superintendent overseeing a revegetation project at Cuyamaca Rancho State Park in East County.

Along Cuyamaca and Middle peaks, where the 2003 Cedar fire charred hillsides so intensely that natural rejuvenation of 17,000 acres of mixed conifers is virtually impossible, workers are planting swaths of

fast-growing native Jeffrey pine, a species picked for its fire resistance – and superior ability to store carbon dioxide.

Near Mount Lassen in northeastern California, Gary Hendrix is helping researchers learn more about how his family's forest land can be better managed for fire protection and to soak up tons of carbon dioxide when he is not milling his Ponderosa pine into unique gift boxes for books.

Along California's north coast, conservation-minded organizations manage forests for storing carbon even while allowing some logging to keep the local economy churning.

The most notable of those sites, the 2,200-acre Van Eck Forest in Humboldt County, operated by the Pacific Forest Trust, has attracted international attention for its carbon offset program. Sun Valley jet-setters such as Gov. Arnold Schwarzenegger, industrial producers and solo commuters have invested in maintaining and planting trees. The project's goal: store a half-million tons of carbon dioxide over the next 100 years.

Pacific Gas and Electric Co. has invested in carbon sequestration programs at the Garcia River Forest in Mendocino County, where the Nature

Conservancy and other conservationists hope the trees preserved on its 23,700 acres will bank 77,000 tons of carbon emissions annually – the equivalent of taking more than 51,700 cars off the road every year.

“If we only address emissions from the energy sectors and the consumption of fossil fuels we won't be addressing climate change,” said Louis Blumberg, a climate policy specialist with the Nature Conservancy.

Challenges still loom, however, as the state Air Resources Board pursues a strategy on reducing carbon dioxide emissions that likely will include regulations sweetened by incentives.

Carbon markets, which allow polluters to pay landowners to protect forests and, in turn, receive credit toward complying with greenhouse gas emission limits, remain unsettled.

There is also an intense behind-the-scenes struggle over whether the state should require landowners to sign binding promises not to develop the land as a condition of receiving benefits or participating in carbon markets.

Questions over how to fairly and accurately credit landowners for the amount of carbon saved through innovative new forestry management in comparison to what would be stored by the trees anyway are still not completely answered. That's a complicated, yet important, distinction given the potential value of carbon credits.

Timber interests, already believing there is too much regulation, remain leery of more government intervention.

Some environmental groups are wary of timber interests using the process to secure state permission to log increased numbers of larger, older trees by arguing that newly planted forests would absorb more carbon more quickly as they mature.

“The logging industry is shamelessly trying to exploit legitimate concern over global warming to advance their agendas,” said Bill Magavern, director of the Sierra Club in California. “Some of the same people who have denied global warming has been a problem are now claiming to be the solution.”

However, some studies point out that wildfires

release large amounts of greenhouse gases and that forest thinning would reduce the fuel for fires.

Industry in California, such as refineries and power plants, is facing regulations to gradually scale back greenhouse gas emissions to 1990 levels by 2020.

Dave Bischel, president of the California Forestry Association, is optimistic that the state can achieve its goals as long as landowners are provided the proper incentives, from financial resources to streamlining permits.

“We've estimated conservatively that we can double the amount of sequestration out of forests over the next 15 years if the proper incentives are provided,” Bischel said.

About half of the 17 million acres of timber land in the state is public property and half is in private hands. Industrial forests of more than 50,000 acres each make up at least 4.2 million acres, according to state figures.

In broad terms, an acre of 40-year-old trees can absorb nearly the same amount of greenhouse gases emitted every year by a car. Foresters say as much as half of a tree's weight can be stored carbon. Just as importantly, carbon does not escape when a tree is logged and processed into desks or bookcases. Amounts have even been measured in 400-year-old Elizabethan-era furniture.

State air quality regulators report that 8 million metric tons of carbon dioxide could be pulled out of the atmosphere annually by 2020 “with appropriate incentives, programs and management.”

“We have an opportunity to set the record straight – that forests have to be part of the solution,” said Tony Brunello, one of Schwarzenegger's top climate-change advisers.

Moreover, the emerging trend toward managing some timber for carbon savings could deliver other benefits. Significantly, private and public investments to protect carbon-storing forests could encourage landowners to rebuff advances from monied suitors seeking to convert trees to tracts.

“The two things markets pay landowners for is development and logging the most they can as quickly as they can,” said Laurie Wayburn, president of the Pacific Forest Trust. “California has flipped that on its head by paying to protect and restore the land while still allowing some logging.”

Other states, from Montana to Texas, and the U.S. government also are taking action. In a recent meeting in Bali, Indonesia, many countries – backed by \$400 million pledged by the World Bank – agreed to work together to slow the pace at which carbon-absorbing forests are being cleared to make way for farmland. That fire is often used for the clearing makes matters worse.

Worldwide, deforestation is a major culprit, accounting for about 20 percent of the greenhouse gas emissions entering the atmosphere every year because of human activities.

“This is not just about California or the U.S. This is about the world,” said Nicholas Martin, a program officer for Winrock International, a global nonprofit that works to wed economic and environmental sustainability.

In California, industry, landowners and government agencies are working to establish the rules for a carbon market. Once in place, companies could invest in forest programs. In return, they would receive credits that could be applied toward meeting emission reductions required of operations elsewhere.

“We get calls almost every single day,” said Josh Margolis, a prominent carbon trader with the San Francisco firm of CantorCO2e.

Nevertheless, Margolis urges caution. Carbon markets across the country rise and fall, depending on demand for reductions, supply and government regulations.

“That’s a daunting goal, one that will require equal parts ingenuity and cash to realize,” he said. “There are no ruby slippers to click.”

Martin agreed caution must be the watchword.

“Some segments of the industry see this as a cash cow. They’re going to be disappointed,” he said.

Martin also advises state regulators against going too far, such as rewriting timber harvest plans to add dictates, such as where to plant specific species, predicated on emission targets.

“If you add additional layers of rules on top of already prescriptive rules, you will make all the opportunities to do market-based solutions disappear,” Martin said.

As part of a West Coast partnership led by the California Energy Commission, Winrock International is working in Shasta County with local partners on a research project that aims to lower forest-fire danger, plant trees that best absorb carbon dioxide, and still produce sustainable timber yields.

Hendrix, whose family has milled lumber since 1897, is one of about a dozen private landowners participating in the program.

“Our family wants to leave a legacy,” he said. That legacy could be as weighty as slowing global warming, or as down-to-earth as blocking the march of subdivisions rising from the valley floor toward his 2,300-foot ridge near Mount Lassen.

“What if I’m wrong? What if there isn’t such a thing as global warming?” Hendrix said. “Then I’ve only left behind a better legacy and cleaner world.”