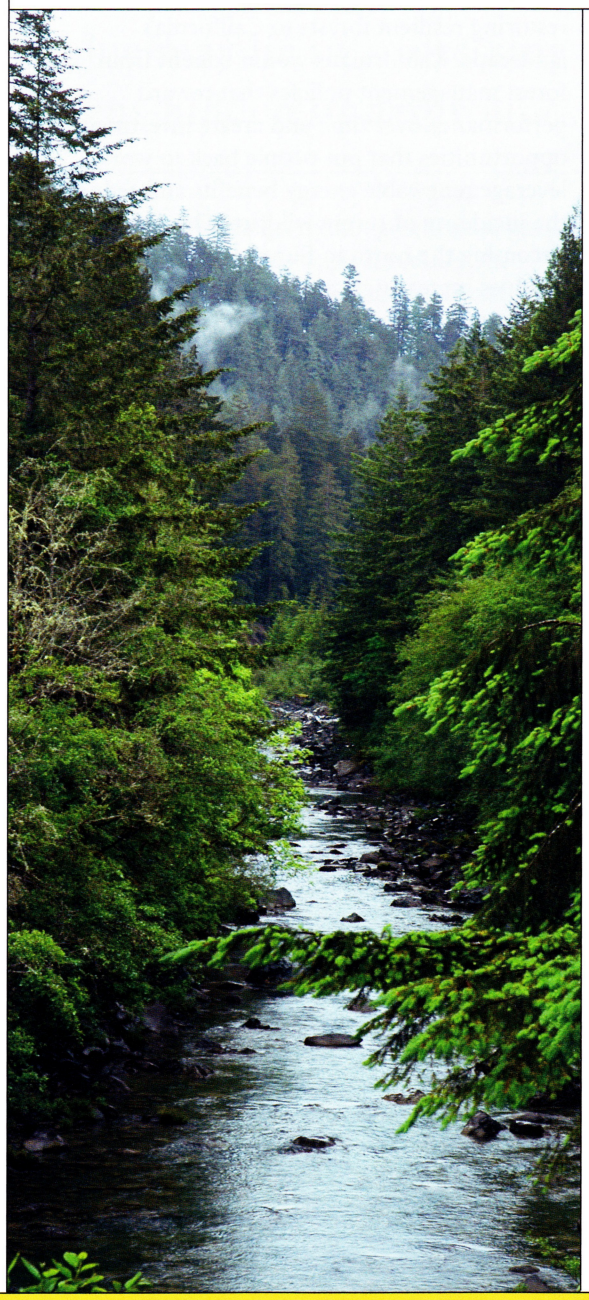
Welcome to the Bank of California Carbon

By Mary D. Nichols

What is a forest worth? Is it more than the volume of wood, multiplied by the going price of lumber?

Threats to our forests are expected to increase as the effects of climate change become more pronounced.

Offset projects will help remove carbon dioxide from the atmosphere while also protecting water quality, salmon runs and wildlife.



>> Managing forests can accelerate growth, enhance water quality and protect standing carbon.

Environmentalists complain that the value of forests' wildlife, water quality and recreational benefits get short shrift because they carry no price tags. Timber interests complain that environmentalists ignore the costs of delay and reduced harvests, imposed by regulation. So traditional adversaries can agree at least on one thing: putting a price on carbon that reflects the true value of keeping trees standing will be good for both business and the environment.

Forests serve as a first line of defense in climate change because they sequester vast amounts of carbon dioxide, the major global warming gas. Their worth as climate stabilizers is the volume of carbon stored in the wood, multiplied by the going price of carbon. With a price on carbon in place, a forest carbon market could generate considerable wealth in a state endowed with 34 million acres of forestlands – one third of California's landmass.

The role of California's forests in climate protection goes back eight years, to then-state Sen. Byron Sher's legislation enabling forest landowners' participation in the California Climate Action Registry. The law required the Registry to adopt generally accepted standards for quantifying forest carbon – allowing the gains resulting from forest conservation actions to be marketed as "carbon reduction credits" for businesses looking to shrink their carbon footprint.

The state Air Resources Board recognized the exceptional value of California's forests in its Scoping Plan for implementation of Assembly Bill 32 – the California Global Warming

>> Replanting harvested lands with young, fast-growing trees can provide long-term carbon sequestration benefits.

Solutions Act of 2006. The plan calls for "no net loss" of forests' carbon storage capacity through 2020. To accomplish this, the air board and CAL Fire staff are developing a system for tracking changes in forest carbon.

Forest threats and climate change

Threats to our forests are expected to increase as the effects of climate change become more pronounced – longer and drier summers, reduced snowpack and wilder wildfires. We must monitor changes in growing seasons and shifts in forests' range and distribution.

Reforestation is sure to be a key safeguard along with forest thinning projects to reduce the risk of catastrophic wildfires. Demand for thinned wood is expected to grow with the state's expansion of renewable energy from biomass.

In one of its first climate protection measures, the air board in 2007 adopted the Registry's forest protocols – making it possible to generate emission-reduction credits in the growing global carbon market. These were voluntary standards for forest landowners looking to reduce their carbon output in anticipation of regulated emission limits.

Now, the air board is developing a cap-and-trade regulation that would limit greenhouse gas emissions from major sectors of the California economy. The proposed trading program could create a market for forest carbon credits. Industries covered by the cap could offset a certain portion of their greenhouse emissions by paying forest landowners to plant trees on brush fields, extend harvest cycles and restore forests damaged by wildfire and insects. Enhancing forest growth and other conservation actions could qualify as "offsets" so long as they can be verified as emission reductions that would not have otherwise occurred.

Carbon trading moving forward

The Air Resources Board staff is developing for board consideration later this year a new set of "compliance-grade" forest protocols for the proposed offsets and trading program. The process will include an environmental review. Transparency is key, with public workshops enlisting participation from the California Forestry Association, forest landowners, the timber industry, environmentalists and other interest groups.

With AB 32's forest offsets in full play, landowners will have a long-term financial stake in managing timber not only for two-by-fours but also for carbon storage. Banks will tally their assets both in board feet of lumber and metric tons of stored carbon. The influx of offsets income will help maintain California's timber industry and the jobs it generates in rural communities. And the offsets projects will help remove carbon dioxide from the atmosphere while also protecting water quality – forests are the source for most of California's water – salmon runs and wildlife.

California has a strong record of setting environmental standards that others follow. California is asserting its environmental leadership through the Governors' Climate and Forests Task Force, a consortium of 14 states and provinces from the United States and the key tropical forest countries of Brazil, Indonesia and Mexico. The group seeks to integrate forest carbon markets to curb deforestation, which accounts for 17 percent of global warming emissions.

What we do in California with our forests can build momentum nationally and internationally. California's pioneering climate law sets the stage for that to happen. It's a launch pad for the emerging forest carbon market – a market that will take off as landowners see their greening of forests putting green in their bank. ■

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>> Wood products can keep the carbon captured by trees stored safely out of the atmosphere.