



California Forestry Association

1215 K Street, Suite 1830

Sacramento, CA 95814

(916) 444-6592 fax (916) 444-0170

www.foresthealth.org cfa@foresthealth.org

MEDIA CONTACT: BOB MION

California Forestry and Carbon Sequestration

California's forests sequester some 5 million metric tons of carbon every year. They could capture twice as much if policies were enacted to provide investment incentives. Healthy, well-managed forests scrub the air and act as "carbon sinks," removing carbon dioxide from the atmosphere, storing the carbon and releasing air-cleansing oxygen.

Forest management as practiced on California's private forestlands provides unique carbon benefits. Of the 165 business sectors identified by the California Air Resources Board, the forest sector *is the only one that sequesters carbon*. All others are net carbon emitters.

California forestry provides carbon benefits through a basic, five-step continual cycle:

- 1.** Trees absorb carbon dioxide from the air and through photosynthesis. Trees release oxygen while storing carbon in the wood fiber of their roots, trunks and branches.
- 2.** Harvesting trees and milling them into wood products like lumber for homes can keep the carbon absorbed in tree trunks safely out of the atmosphere for 100 years or more. In carbon accounting terms, this process transfers the carbon fixed by the trees in the "forest pool" to the "product pool."
- 3.** Harvesting also provides fuels management benefits and can reduce greenhouse gas emissions from wildfire. Lower fuel loads mean lower-intensity wildfires, less carbon going up in smoke and lower firefighting costs.
- 4.** Forestry provides clean, renewable energy more efficient than solar and more reliable than wind. Small trees and branches are used to produce bio-energy. The more biofuel energy we generate, the less fossil fuel we need to burn and the more we reduce carbon emissions.
- 5.** Forests are replanted and trees are given ideal growing conditions, which accelerates the rate at which trees remove carbon from the air – continuing an ongoing cycle of sequestration.



Forestry-Carbon Facts

- Wood is nearly 50 percent carbon by weight.
- Wood substitutes consume more energy and produce more greenhouse gas emissions than wood. Using steel or concrete instead of wood generates 33 and 80 percent more greenhouse gas emissions, respectively.
- The U.S. Department of Energy estimates that America's forests hold the capacity to reduce our dependence on fossil fuels by 30 percent.
- Young forests sequester carbon at a faster rate than older forests; very old forests may be net emitters of carbon.