**WOOD PRODUCTS**

**It takes a tree -** Did you know each person in the United States uses as much wood as a 100-foot-tall tree every year to meet the needs for building, paper, packaging and other products? Thousands of items we use every day are made from wood. Wood products make up almost half of all raw materials used in manufacturing in the U.S. - and that's a good thing.

In home building, studies have shown wood performs better than steel and concrete. Buildings hundreds of years old prove that wood is long lasting. It takes more fossil fuel (gas, coal and oil) to make building materials like concrete and steel and that releases more carbon into the air than wood production. Wood also sequesters, or stores, carbon even after trees are cut down, which keeps carbon out of the atmosphere.

Unlike fossil fuels, which will someday be in short supply, wood is a renewable resource. A renewable resource means the supply of the resource can be replaced again and again. Nearly all of a tree can be used to make wood products or energy. No part of a tree is wasted - bark, needle, sap or sawdust. In fact, much of the energy used at mills and for making wood products comes from using the plant matter from trees.

Many forests in the United States are full of small, overcrowded trees. More and more of the wildfires in the western United States are burning in these crowded, or overstocked, forests. These overstocked conditions increase the risk of fire and the possibility of trees becoming damaged by insects, diseases, and drought. Removing trees, or thinning, crowded forests can help reduce these risks. However, unless the logs and other tree materials can be sold, it may be too expensive to thin the forest. Using different parts of the cut trees to make valuable products is one way to pay for thinning projects that improve forest health.

Trees with a small diameter can be used for many products. Paper products can use even the smallest wood fibers. Oriented strand board (OSB) and fiber board (MDF) use wood chips and sawdust. Posts, railroad ties, and poles can be made using the "whole tree" once they are processed. Layers of lumber made from smaller wood can be glued together to become larger, stronger beams. And the "waste", called biomass, can be used to produce energy.

Thinning overcrowded forests is an important part of managing healthy forests. When we remove trees from the forests, we end up with "waste" material that won't be used to make wood products. Wood, branches, bark and leaves from trees and shrubs and the leftovers from harvesting and milling can be used to create woody biomass. All of these waste wood products are processed together and used as fuel, often to produce heat and power. Although using woody biomass does produce carbon dioxide, the remaining healthy trees use carbon dioxide from the atmosphere and release oxygen. We can use the renewable biomass instead of fossil fuel and our forests will recycle carbon dioxide for us.