

# Evaluating Wood Waste for Reuse and Recycling at Mount Tabor Meadows – a Green (EarthCraft) Housing Development



Phil Araman<sup>1,2</sup>, Dan Hindman<sup>2</sup>, Matt Winn<sup>1</sup>, Jason and Justin Boyle<sup>3</sup>

<sup>1</sup>Southern Research Station, USDA Forest Service

<sup>2</sup>Department of Wood Science and Forest Products, Virginia Tech

<sup>3</sup>Green Valley Builders, Inc.



## What is “Green” Building

**Green building** is the practice of increasing the efficiency with which buildings use resources (energy, water, and materials) while reducing building impacts on human health and the environment during the building's lifecycle, through better siting, design, construction, operation, maintenance, and removal.



## What is EarthCraft?

**EarthCraft** is a residential green building certification program that serves as a blueprint for energy- and resource-efficient homes.

## Study Overview

We are working with an EarthCraft certified “green” developer in Blacksburg, VA to quantify the amount of OSB, treated lumber, and spruce dimension lumber waste after home construction and determine potential uses for discarded material as an alternative to landfilling.



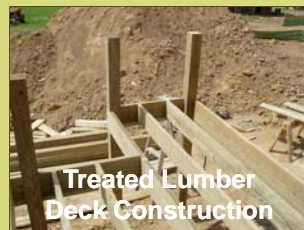
### Potential OSB Products

Shelving, Pallet Parts, Stair Treads and Risers



### Potential Treated Wood Products

Finger-Jointed Lumber, Landscaping, Porch Swings, Trash Bins, etc...



### Potential Spruce Products

Finger-Jointed Structural Lumber and Molding



### Potential Ground Products

Mulch, Biofuels



Initial results indicate that 50-60% of the OSB waste material as well as 35-50% of the treated lumber waste can be recycled into solid useable products.\* If other potential products of different sizes and shapes are developed, the recovery yield could increase significantly. The remaining materials can be processed for biofuels and mulch.

*\*Note: The project is in the very early stages and much more recovery, reuse and recycling data will be generated.*