



# Oregon Department of Forestry



## THANKS FOR ASKING ABOUT ...

### Global Climate Change: How Forests in Oregon Can Help by Providing Forestry Carbon Offsets

Remember the old saying, “Everyone talks about the weather, but no one does anything about it”? That old saying may not longer be quite true.

For the past 100 years, society has benefited from the burning of fossil fuels, and the clearing of land for agriculture and urban development. Society continues to benefit from these activities, but in doing so, the amount of carbon dioxide in the atmosphere has increased. Unless action is taken, these increases will continue.

Many in the scientific community have linked increases in atmospheric carbon dioxide to concerns about climate change and global warming. This is sometimes called the greenhouse effect because the increased concentrations of carbon dioxide and other gases trap heat radiating from the Earth’s surface much like a greenhouse’s windows trap heat from radiating sunlight. Both national and international policy makers want to take steps to control the levels of greenhouse gases (like carbon dioxide) in the earth’s atmosphere.

As a result of these international discussions, as well as the result of actions taken here in Oregon, landowners are presented with an opportunity to help efforts to slow climate change, and build a cushion against its harmful effects. How? By growing a new crop – stored carbon.

Forest landowners now have opportunities to help efforts to slow climate change, and build a cushion against its harmful effects. How? By growing a new forest, which among its many other benefits, stores carbon.

Storing, or “sequestering” carbon in soil as organic matter and in trees as wood and branches helps reduce the amount of carbon dioxide in the atmosphere. That’s why soil and vegetation are sometimes called carbon “sinks.”

Conservation practices that increase carbon storage on forestlands include

- reforestation (tree planting) of underproducing lands
- managing woodlands to conserve soil and improve growth
- improving forest health and reducing wildfire risk
- restoring and protecting wetlands.

### Forestry Carbon Offsets

A forestry carbon offset is a transferable certificate or note documenting a measured amount of carbon dioxide removed from the atmosphere and stored as carbon in healthy forests.

Forestry carbon offsets are in demand by power generating companies and other businesses interested in reducing the environmental impacts from conducting their operations. For example, if a power company were to demonstrate that it has entered into an agreement with a landowner (or a program that works with

landowners) to fund the establishment of a new forest, or cause the adoption of a forest management practice that increased carbon sequestration and the storage ability of the forest, then they could claim credit for the additional amount of carbon dioxide removed from the atmosphere.

### **Passage of House Bill 2200**

The recent passage of House Bill 2200 serves as a beacon that signals to third-party verifiers and forestry offset purchasers that Oregon is prepared to get serious about the carbon business.

House Bill 2200 authorizes the State Forester to establish programs to market, register, transfer or sell forestry carbon offsets on behalf of state forestland beneficiaries, the Forest Resource Trust, and other non-federal forest landowners. The bill recognizes a wide range of forest management activities – those designed to protect our environment as well as those designed to provide our wood products – as having the potential to give rise to forestry carbon offsets.

ODF's first priority in implementing House Bill 2200 is to develop the carbon accounting system, beginning with the practice of reforesting underproducing lands. The accounting will be administered under the Forest Resource Trust, and eventually the system will be expanded to include other forestry activities.

For any carbon offset to become a commodity for sale, exchange or use as mitigation for compensating environmental impacts, the amount of carbon dioxide sequestered and stored needs to be measured and tracked in a carbon accounting system. The carbon accounting system must also establish that the measured amount of carbon dioxide is additional, permanent, and reliable, and the activity responsible for it does not cause the release of carbon back to the atmosphere elsewhere (leakage).

Additional means that the activity is a direct action that was voluntarily taken as a means to improve the carbon storage capability of the forest. For example, in Oregon, reforestation after timber harvest is not additional because this is required of landowners under Oregon's Forest Practices Act.

In contrast, voluntary reforestation of underproducing lands (e.g., brush, marginal agricultural lands or pasture) is additional and gives rise to forestry carbon offsets. Reliability and permanent ensure that the underlying activity is completed so that the carbon storage ability of the forest is improved and the increased carbon storage from the activity is long-term. Market assurance that the notes and certificates reported from the carbon accounting system represent actual reductions of atmospheric carbon dioxide can be provided by third party verifying organizations.