

Meeting Summary

Forestry Subcommittee
Natural Resources Committee
Oregon Global Warming Commission

Meeting held July 7, 2008
1 – 5pm
Oregon Department of Forestry Headquarters

The purpose of the meeting was to hear from a diversity of sources in order to gain a broad perspective on the issues of forests and their relationship to global warming, and to solicit input on items that may form the basis for recommendations to the Global Warming Commission.

Speakers were asked to address, “What efforts are occurring now that involve forests in global warming issues?” “Where are there gaps in these efforts?” “What are priority recommendations to the Commission?”

Subcommittee co-chair Greg Miller from Weyerhaeuser Corporation moderated the meeting, and co-chair Marvin Brown from the Oregon Department of Forestry kept notes to develop this summary.

Dean Hal Salwasser, from OSU College of Forestry, and Dr. Edie Sonne Hall, a forests and climate change expert from Weyerhaeuser Corporation, provided overview perspectives on the relationship between forests and global warming.

This included an analysis of actual climate change, the forest ecological processes that can impact climate and the plant biological processes that influence the storage and/or emission of greenhouse gases. Also discussed were the impacts that climate change could have on forest ecosystems.

Both underscored that forests at the global, regional and state level are significant for their capacity to store carbon. Converting forests to other land uses both creates additional greenhouse gas emissions, and lowers overall carbon storage in the terrestrial biosphere. Thus, keeping forests as forests should be a baseline priority.

They provided a number of other suggestions for enhancing forests’ role in mitigating global warming.

- 1) There is a need to promote international, national and state policies that reverse global deforestation trends.
- 2) Forest management practices that increase carbon storage potential and decrease greenhouse gas emissions should be better developed and promoted.
- 3) Policies that accurately credit the value of carbon stored in forests and allow landowners to monetize that value should be created.

- 4) The value of carbon storage in wood products and the value of substituting biomass fuels for fossil fuels need to be appropriately recognized.

Anticipating the changes that global warming might cause to forest ecosystems is difficult to do with any degree of specificity and emphasis should be placed on managing for ecosystem resilience and adaptability.

Cameron Smith from the Governor's Economic Policy Office, Linc Cannon, Economist with the Oregon Forest Industries Council, and Steve Brink from California Forest Products Association discussed the work of Oregon's Western Climate Initiative (WCI) Forest Carbon Working Group.

The WCI is an effort involving several western states and Canadian provinces aimed at reducing greenhouse gas emissions and developing trade mechanisms for greenhouse gas off-sets. In Oregon a "Forest Carbon Work Group" was formed to provide input to the Governor's staff on properly recognizing the role of forests as carbon offsets within the WCI process.

The Work Group is a highly diverse, multi-stakeholder body that has met bi-weekly for the past six months. While agreeing on the common goal of, first and foremost, keeping forests as forests, they have also made progress in dealing with the complex questions that come up when trying to value carbon storage in forests. These questions typically revolve around:

- 1) Additionality and baseline.... that is how do you adequately account for and value carbon storage as a material contributor to greenhouse gas reduction given that forests are already a prominent part of the landscape?
- 2) Permanence.....specifically, what are the differences in value and desirability between forest management scenarios intended to store carbon permanently (eg. permanent easements) versus carbon storage contracts with specific durations?
- 3) Leakage.....for example, how do you account for the fact that reducing the forest products raw material supply from one forest as a means to increase carbon storage likely means that the fiber supplied from a different forest will be increased?

The Work Group is hoping to propose a suite of carbon off-set marketing alternatives to accommodate the fact that forest landowners are diverse and have a range of frequently dissimilar land ownership objectives. For example, return on investment goals for some landowners will probably make carbon storage from extended rotations too costly to be competitive. Landowners with a high tolerance for low economic return do exist, though, and often have objectives that are highly compatible with extending tree harvest rotation ages.

During this portion of the meeting there were references to the desirability of promoting higher growth rates as a means of increasing carbon sequestration rates. This assumption was questioned by some participants, particularly where it might be applied to federal

forests currently managed to provide the biological benefits associated with old growth forest conditions.

Dr. Elaine Oneil, Research Scientist from the University of Washington, reviewed research conducted by The Consortium for Research on Renewable Industrial Materials and interpreted some of the results in terms of how climate change issues relate to wildland fire occurrence.

Data was presented showing that the inventory of standing wood fiber on federal forests continues to increase, while the acreage of these lands that burn annually also has increased and will continue to do so because of global warming. These fires are a source of significant greenhouse gas emissions. It was estimated that one 385,000 acre fire in Eastern Washington released the annual carbon emissions equivalent of 1,000,000 sport utility vehicles.

The Consortium's research concludes that significant greenhouse gas reduction benefits would be captured if, on these fire prone public lands:

- 1) Large volumes of fiber were removed through thinning; and
- 2) The removed fiber were converted to durable wood products that took the place of non-renewable building materials such as concrete and steel; and/or
- 3) The removed fiber was used as biomass fuel to replace non-renewable energy sources.

Overall, there is more global warming benefit to be gained by using wood for higher value wood products than for biofuels. More benefits could be gained by:

- 1) Promoting greater use of durable solid wood building materials;
- 2) Promoting longer rotations;
- 3) Conducting more intensive management to increase forest growth rates; and
- 4) Improving home building designs to substitute even greater quantities of wood for other materials that are currently used.

Some meeting participants disputed the validity and conclusions of the research, citing among other things that the use of recycled non-wood building materials was not adequately recognized and that some of the economic analysis was not defensible.

Scott Fogarty, Executive Director of Friends of Trees in Portland, spoke on the role of urban/community forests and green space in climate change mitigation.

In Oregon there are one million acres of trees within urban growth boundaries and another two million acres within one mile of these boundaries. Beyond the known benefits of carbon sequestration, urban trees absorb other air pollutants, generate oxygen, cool the air through evapo-transpiration, provide shade to reduce solar energy heating and thus reduce energy requirements for summer air conditioning and provide thermal insulation in winter to reduce the energy requirements of winter heating.

Portland Mayor-elect Sam Adams has proposed a “Gray to Green” five year, fifty million dollar initiative to promote urban tree planting (approximately 80,000 trees) and other urban ecosystem improvement projects. The State of Washington recently passed the Evergreen Cities Act to promote urban forests and their values, and Congress has proposed HR 5867 The Energy through Conservation Act that includes tree planting in conjunction with utility activities, as well as HR 6078 The Green Act to promote green building materials, renewable energy sources and green landscaping.

Surveys indicate tree canopy covers 24% of Portland’s surface area while the American Forests Association recommends 40% canopy cover.

He recommends that:

- 1) The role of urban forests be appropriately recognized in global warming deliberations;
- 2) Funding for urban tree planting and management be promoted;
- 3) Policy makers be fully informed on the role and importance of urban trees; and
- 4) Urban and Community Forestry interests be adequately represented on the Global Warming Commission.

A scheduled presentation by Joe Misek, Oregon Department of Forestry, to highlight recommendations from the Department’s Biomass Working Group was by-passed in the interest of time. The following was gleaned from materials subsequently provided.

The Work Group was formed to begin charting a more strategic approach to the utilization of forest biomass as a means to improve forest health. Membership includes forest and energy industry representatives, the Warm Springs Indian Tribe, legislators and Congressional staff, government agencies and others.

The Group drew upon a study conducted by the Oregon Forest Resources Institute. Findings included:

- 1) Approximately 4.25 million acres of Oregon forest have the potential to provide forest biomass by thinning stands currently at risk of significant ecosystem alteration because of extreme, uncharacteristic wildfire impacts.
- 2) The greatest opportunities exist in the regions of:
 - a. Jackson, Josephine and Douglas Counties;
 - b. Grant, Union, Wallowa and Baker Counties;
 - c. Crook, Deschutes, Jefferson and Wasco Counties.
- 3) Areas identified were on public and private land within units where harvesting is not statutorily or administratively excluded. Federal lands make up 72% of the total.
- 4) Thinning staged over a 20 year period could produce one million bone dry tons of woody biomass per year, plus merchantable sawtimber.

Their recommendations relevant to Federal Actions include:

- 1) Federal funding for land management, research, demonstration and the federal biomass transportation tax credit are all essential.
- 2) The federal biomass production tax credit should be increased to be on par with other renewable energy tax credits.

Recommended State Actions include:

- 1) Create staffing to support community collaboration aimed towards developing biomass utilization systems in rural areas.
- 2) Fund needed research and development.
- 3) Continue inter-agency biomass/federal lands collaboration as outlined under Senate Bill 1072 passed during the 2005 legislative session.
- 4) Develop incentives to off-set capital costs of biomass energy facilities.

Andrew Yost, Forest Ecologist with the Oregon Department of Forestry, presented views on forest ecosystems and their adaption to climate change.

The changes that global warming will cause to forest ecosystems is unknown, but assumed significant. Ultimately, species associations will migrate, adapt, reconfigure or disappear and there is little data or research to specifically predict what may happen or where it may occur.

The key recommendation is to commit substantial resources towards vegetative monitoring and analysis that is long term and collaborative among agencies and interests. With this information changes in species distribution can be quantified and trends projected.

At conclusion the co-chairs thanked all of the speakers and participants.

The meeting agenda and a list of attendees are attached.

Copies of speaker presentations and materials can be found at <http://www.oregon.gov/ENERGY/GBLWRM/GWC/GWC-meetings-NatRsrc.shtml>