



"STEWARDSHIP IN FORESTRY"

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# MEMORANDUM

**Date:** September 28, 2010  
**To:** Cascadia Wildlands  
**From:** Jim Young, Coos District Forester  
**Subject:** Cascadia Wildlands comments on the Elliott State Forest 2011 Annual Operations Plan.  
June 28, 2010

This memorandum presents ODF's response to comments from Cascadia Wildlands (CW) specific to consideration of global warming and climate change in the Elliott State Forest 2011 Annual Operations Plan. We are responding to written comments dated June 28, 2010, as well to those provided in testimony to the Board of Forestry at its meeting on July 30, 2010.

**CW-1:** "Our comments estimated that over 154,000 tonnes of carbon could be removed from the Elliott, in just the 2011 sales. Does ODF agree with this estimation?"

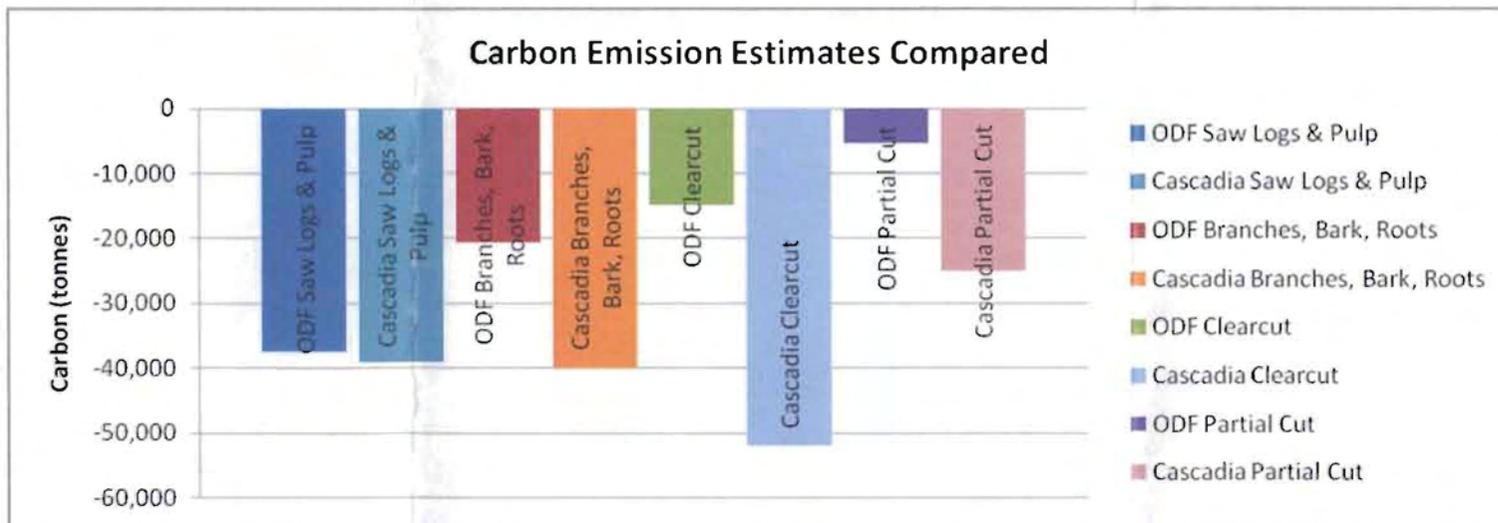
**ODF:** We believe the estimate to be too high by a factor of two. We understand the calculations that CW conducted. We used the same BLM protocol, but our assumptions about operational decisions and distribution of carbon pools differ significantly (see Table below).

It appears the main difference is that CW assumes that all carbon not stored in wood products (154,000 t) would leave the forest, and that, except for 8,000 t no carbon is stored on site in wood products post-harvest. CW also assumes that the equivalent of only about half the amount of carbon on clearcuts would be stored in partial cut carbon pools (25,000 t).

ODF used the BLM eco classes to calculate carbon pools and to determine differences in pools for products pre- and post-harvest and for clearcuts and partial cuts. We also assumed that 50% of harvest residuals would remain on site and become part of the non-live tree pools, as part of standard operations and to meet management plan targets for downed wood and snags. The result is that about 78,000 t would leave the forest, about half of the CW calculated carbon removal.

## Comparisons of Estimated Carbon Emissions Resulting from 2011 AOP Harvest Utilizing BLM Plan Revision Methods

	ODF <sup>^</sup>			Cascadia Wildlands <sup>^^</sup>		
	Pre Harvest Stored	Post Harvest Stored	Difference	Pre Harvest Stored	Post Harvest Stored	Difference
Live Tree Pools						
Saw Logs & Pulp Products*	48,390	11,048	-37,342	47,027	8,000	-39,027
Branches, Bark, Roots **	41,132	20,566	-20,566	39,973	0	-39,973
<i>Sub Total</i>	<i>89,522</i>	<i>31,614</i>	<i>-57,908</i>	<i>87,000</i>	<i>8,000</i>	<i>-79,000</i>
Non Live Tree Pools ***						
Clearcut	51,950	37,154	-14,796	52,045	0	-52,045
Partial Cut	76,219	70,913	-5,306	25,000	0	-25,000
<i>Sub Total</i>	<i>128,170</i>	<i>108,067</i>	<i>-20,102</i>	<i>77,045</i>	<i>0</i>	<i>-77,045</i>
<b>Grand Total</b>	<b>217,691</b>	<b>139,681</b>	<b>-78,011</b>	<b>164,000</b>	<b>8,000</b>	<b>-154,000</b>



\* Post harvest storage in wood products plus pulp (100 years)

\*\* Assumes 50% of harvest residuals remain on site and move to non live tree pools

\*\*\* Pools assume the values of the post harvest eco. class

<sup>^</sup> Estimates based on ODF interpretation of the BLM appendix C calculation procedures

<sup>^^</sup> Estimates extracted or imputed from Cascadia Wildlands comments

**CW-2:** "...it is a requirement of ODF to calculate carbon emissions as outlined by the State of Oregon in the "Oregon Strategy for Greenhouse Gas Reductions" which requires ODF to "Consider greenhouse gas effects in farm and forest land use decisions." Do you have a response to this comment?

**ODF:** The "Strategy" is a series of recommendations made by the Governor's Advisory Group on Global Warming and, as such, does not represent binding requirements to state agencies. The referenced recommendation, BIOSEQ-2: Consider greenhouse gas effects in farm and forest land use decisions, refers to Oregon Revised Statutes (ORS 197.010-197.245) governing land-use planning and focuses on Oregon's upper-level statewide planning goals and guidelines in Oregon Administrative Rules (OAR Chapter 660), rather than on land management within specific land use areas. ORS 197.277 provides for an exclusion to "programs, rules, procedures, decisions, determinations or activities carried out under the Oregon Forest Practices Act...", indicating that operations conducted under the FPA meet the land use planning goals. We recognize the increasing importance of greenhouse gases (GHG) and their potential effects on climate and the environment. As responsible stewards of Oregon's forests, in the future, we will pay attention to GHG effects of our operations to the best of our ability. However, we currently do not have the resources to conduct detailed analyses of all of our operations.

**CW-3:** [Referring to HB 3543] "That law designated an Oregon Global Warming Commission that is designated to track and evaluate: "The carbon sequestration potential of Oregon's forests,..." The ODF should respond to this comment."

**ODF:** ODF is working with close cooperation with the Oregon Global Warming Commission on achieving the mandates of Section 12(1)(i) of HB3543 in several ways. The language in HB3543 cited by Cascadia Wildlands originated in ODF amendments to the bill when it was being written. The State Forester is an ex-officio member of the Global Warming Commission. ODF is in the process of submitting a draft resolution that describes ongoing work and new research projects for helping the Commission meet these mandates. ODF is a member of the Forest Climate Change Work Group which was formed within the Commission's Natural Resources Committee. The Work Group is developing recommendations for the contributions that the forest sector could make to GHG reductions listed in HB 3543, and for potential research to address and monitor predictions made by climatologists. The Work Group also established a Forestry Technical Team, of which ODF is a member, to develop a vision and recommendations of contributions that the forest sector might make to achieving GHG reduction targets in the development of the Commission's "Roadmap to 2020."

**CW-4:** "...the Oregon Global Warming Commission released their first Report to the Legislature. Their document reported: "Oregon Department of Forestry has become increasingly involved with carbon issues,..." Exactly how has ODF 'become involved with carbon issues?'"

**ODF:** ODF has been involved in a number of carbon and climate change efforts for over a decade:

- Forest Resource Trust – Forest Establishment Program – In 1999, ODF received \$1.5 million in carbon dioxide emission offset funding from the Klamath Co-Generation Project in south central Oregon. The \$1.5 million payment meets, in part, requirements of the co-generation project's site certificate as issued by the Oregon Energy Facility Siting Council. The offset practice is forestation on non-industrial private lands. Forestation is converting lands that once were forested, but currently are in agricultural, range or poorly stocked forest use, back into healthy, productive forests through the establishment of new forests. The offsets

are measured and reported by the Oregon Department of Forestry and then retired by the Oregon Energy Facility Siting Council per the requirements of the site certificate.

- House Bill 2200 – Passed by the 2001 Oregon State Legislature and signed into law. House Bill 2200 establishes State Forester authority to sell forest carbon offsets from Oregon Department of Forestry managed forest lands. Requires the State Forester to develop an accounting system for measuring and reporting forest carbon offsets. Sets up the Oregon Department of Forestry as a potential aggregator of forestry carbon offsets by giving the State Forester the authority to enter in agreements with non-federal forest landowners for the purpose of marketing carbon offsets. Affirms the role of the Oregon Board of Forestry with respect to developing voluntary principles and standards for the accounting of forest carbon offsets. Establishes an advisory committee to assist the Board in developing principles and standards for carbon accounting.
- Oregon Board of Forestry – Forestry Program for Oregon – Adopted in 2003, the Forestry Program for Oregon sets forth the Oregon Board of Forestry’s strategic vision for Oregon’s Forests for the 2003-2011 period. The Board’s strategy is framed around internationally recognized criteria and indicators for sustainable forest management. One criterion is carbon storage and the corresponding Forestry Program for Oregon strategy is “Enhance carbon storage in Oregon’s forests and forests products”. The Board identified seven specific actions for implementing the strategy: 1) maintain and increase Oregon’s forestland base, 2) develop tools to predict how forest management and wildfire affect forest carbon pools, 3) promote landowner understanding of the potential role of forests in carbon storage, 4) promote the development of markets for forestry carbon offsets, 5) promote the use and reuse of Oregon wood products, 6) promote local markets for Oregon wood products, and 7) promote greater consumer awareness of the environmental advantages of using renewable and recyclable forest products.
- West Coast Regional Carbon Sequestration Partnership (WESTCARB) – Initiated in 2003; one of 7 regional carbon sequestration partnerships funded by the U.S. Department of Energy. WESTCARB is led by the California Energy Commission and the terrestrial component is Arizona, California, Oregon and Washington. Current research in Oregon (the ArcFuels project of the USDA Forest Service Western Environmental Wildland Threat Assessment Center of the Pacific Northwest Research Station) is modeling the feasibility (and developing accounting protocols) of forest fuel treatments to reduce wildfire severity and extent as a carbon offset opportunity. ODF is a member.
- Governor’s Advisory Group on Global Warming – The purpose of the 2004 advisory group was to recommend greenhouse gas emission reduction goals for Oregon and recommend specific actions Oregon can take to move toward meeting the emission reduction goals. The recommended actions fall in the following areas: 1) Integrating Actions, 2) Energy Efficiency, 3) Electrical Generation and Supply, 4) Transportation, 5) Biological Sequestration, 6) Materials Use, Recovery and Waste Disposal, and 6) State Government Operations. Recommendations were released in as the *Oregon Strategy for Greenhouse Gas Reductions*. Identifies 3 significant actions for offsetting greenhouse gases through biological sequestration: 1) reduce wildfire severity and extent from forest fuel treatments, 2) maintain the forest land base, and 3) forestation. ODF chairs the Biological Sequestration Subcommittee to the Technical Committee.
- Forest Biomass Working Group -- Established in November 2005 to help accomplish the State’s biomass energy and utilization of forest biomass goals. Reducing fuel loads through the utilization of forest biomass from overstocked forests would improve overall forest health, diversity and resiliency and reducing pollution, including carbon dioxide, from wildfires and prescribed burns. ODF provides staff support to this group.
- Oregon Forest Carbon Stakeholders (FCS) Working Group – An ad hoc group of forest industry, family forest landowner and conservation interests formed to develop and provide the Oregon Governor’s Office information and strategies for how forestry and forest lands can be part of the Western Climate Initiative. ODF convened this group at the request of the Governor and provided staff and technical support.

- Oregon Global Warming Commission – House Bill 3543 (passed by the 2007 Oregon Legislature) formally established greenhouse gas emissions reduction goals for Oregon and created the Oregon Global Warming Commission and the Oregon Climate Change Research Institute. The Global Warming Commission is charged to develop recommendations for the 2009 Oregon Legislature that further key elements of the Governor’s 2009 Climate Change Initiative. The Commission will track and evaluate the carbon sequestration potential of Oregon’s forests and assess management strategies that increase sequestration, reduce wildfire emissions and increase the production/utilization of wood products. The Commission will research adaptation strategies regarding changing species distributions as a result of climate change. ODF co-chairs the Forestry Subcommittee to the Natural Resource Committee of the Commission.
- In addition, ODF has been a collaborator with The Climate Trust and The Climate Change Integration Group, serves on the SB 513 working group, and is a supporter of Community Forest Authorities.