The Oregon Global Warming Commission's

Forest Carbon Accounting Report

https://www.keeporegoncool.org/s/2018-OGWC-Forest-Carbon-Accounting-Report.pdf
Key excerpts selected by Oregon Wild
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Recently, the Oregon Global Warming Commission released the Forest Carbon Accounting Report. A few key takeaways challenge some common assumptions about forest carbon, illustrate the important role Oregon's forests can play in mitigating the effects of global climate change if, and the importance of adopting climate-smart forest management policies.

Importance of Oregon's forests and impacts of historic logging

"Oregon forests hold globally significant carbon stores, in forests that, notwithstanding two centuries of harvest and other landscape changes, rival tropical rain forests for carbon density and quantity of stores." (Page 1)

"Carbon contained in Oregon forests was likely substantially greater prior to Euro-American settlement over the last 200 years, settlement that included land clearing for agriculture and intensive logging..." (Page 1)

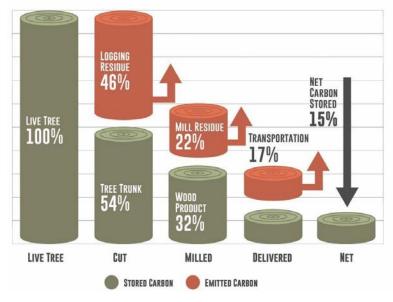
Logging is always worse than not logging from a carbon standpoint

"Based on credible evidence today, forest harvest does not appear to result in net carbon conservation when compared to carbon retention in unharvested forests." (Page 5)

"Significant amounts of carbon are lost at each stage in timber harvest and processing into wood products, and in decomposition at the end of useful product life. Meanwhile, trees remaining in forests are actively withdrawing carbon from the atmosphere. The forest stores and conserves carbon more effectively and for longer periods of time than do most products derived from harvested trees." (Page 5)

Graphic created with data from Smith et al.2006 and Gower et al. 2016

FATE OF CARBON FROM HARVESTED WOOD



Why changing forest management is important

"While prior levels of forest carbon are unlikely to be recovered, significant increases from present levels are possible with changes in forest management harvest. It is less clear whether converting standing timber into wood products can be an effective strategy for maintaining or increasing overall forest carbon storage. Finding ways to better align harvest with carbon goals should be an important outcome for evolving state carbon policy and forest management practices."

(Page 1-2)

Importance of federal forests

"Almost three-quarters (73 percent) of net carbon stores are found in publicly-owned (mostly federal) Oregon forests...carbon stores are increasing on these lands. During the ten year period analyzed, these forests were withdrawing more carbon from the atmosphere than they were losing to in-forest decomposition, combustion and harvest." (Page 4)

Policy suggestions to increase carbon storage

"Options from reduced harvest of public lands to longer rotations on private forestland, expanded riparian buffers, use of variable retention harvesting, and purchasing conservation easements could be considered." (Page 15)

"For illustrative purposes, the Community Land Model calculated that "if harvest cycles were lengthened to 80 years on private lands and harvested area was reduced 50 percent on public lands, state-level (carbon) stocks would increase by 17 percent." (Page 16)

Logging releases much more carbon than fire does

"...on average, for the period 2001-2015, forest fires in Oregon appears to have released around 5.3 million tons CO2e annually (Law et. al, 2018) to the atmosphere, or a quantity equal to about 9 percent of all Oregon non-forest greenhouse gas emissions. This is substantially less than the net amounts of carbon annually withdrawn from the atmosphere by Oregon's forests during this same period." (Page 5)

"Overall and on average, most Oregon forest fires appear to release +/- 5 percent of the carbon contained in a given acreage (Law and Waring 2015)." (Page 12)

"Harvest-related loss of forest carbon stores appears to be substantially in excess of fire-related carbon emissions; by one analysis, harvest reduced Oregon in-forest carbon stores by 34 percent between 2001 and 201519 (Law et al. 2018) if compared to a non-harvest base case." (Page 16)

