

Senate Committee on Energy and Environment

Testimony on SB 541: Would include atmospheric carbon sequestered by the lands and waters of the state in calculation to determine progress towards greenhouse gas reduction goals.

Angus Duncan, Chair Emeritus, Oregon Global Warming Commission, March 25, 2021

Mr. Chairman and Committee Members:

Let me start by calling this bill out for what it is: an effort to artificially cut in two the fossil fuel-based emissions reduction goals that have guided Oregon's climate policies for at least the last 17 years, without reducing actual emissions by a single ton.

When Governor Kulongoski's Advisory Group on Global Warming devised the goals the 2007 Legislature later adopted, we had no data on the carbon cycle for Oregon's natural and working lands so we grounded our recommended goals in the data we did have: emissions from fossil fuel combustion in power plants, industrial facilities, and transportation.

When the Global Warming Commission, which I had the privilege of chairing for its first decade, developed its Roadmap to 2020 recommendations for meeting Oregon's second mandated goal, we acknowledged the absence of reliable data by explicitly excluded forest carbon and other land and water sequestration options from our analysis and conclusions, while asking the Department of Forestry and the US Forest Service for a sufficiency of data on which to base any land-based capture and sequestration goals. We did not know, at the time, whether this separate part of the carbon cycle would prove an asset or a still heavier lift for our state.

The clear history of Oregon's greenhouse gas emissions goals and policies has been that the land-based carbon cycle has been consistently treated and regarded as **additional** to fossil-based emissions reduction goals.

Beyond this history, there is a broader rationale for resisting a crippling bill such as SB 541.

The critical point to defining global GHG emissions policies is not to seek the lightest level of obligation but to leverage to the fullest our varying capabilities to reduce our carbon footprint.

Thus while Oregon ranks roughly even over all with other states in our transportation emissions per capita, our urban centers have greater opportunities to reduce this footprint than do rural areas. They are asked to carry a commensurately greater responsibility for transportation emissions reductions.

Likewise the Pacific Northwest has lower power sector carbon levels due to our history of developing hydroelectricity. In this sector we start our emissions challenges from second base and have an easier pathway to reducing electricity emissions than would a state dependent on coal plants. So we should expect to draw down emissions in this sector faster than a state without our natural advantages.

We share with our Pacific coastal neighbors north and south in the stewardship of some of the most carbon-dense forests in the world. That shouldn't lighten our fossil-based emissions responsibilities; instead it should be leveraged, with its own goals, as must the other substantial forest carbon stores in the Amazon, in Central Africa, in Indonesia and in the northern boreal forests. These forests, if managed to capture and hold atmospheric carbon, can buy the world – and Oregon -- time to bring our fossil-based emissions under control.

Trying to pick off a lighter share of this larger responsibility because Oregon has forests, and Nebraska had the bad judgment to be without, is a nonsensical position. It suggests that if Oregon checks off that lesser responsibility we will be somehow immunized from the impacts of climate change taking place world-wide. But backing down greenhouse gas emissions is a global community responsibility, not a state-by-state, country-by-country checklist. We each have to pull our weight according to our singular mix of responsibilities and opportunities. There's no vaccine for climate change; no immunization we can earn on the cheap.

Because Oregon is gifted with forests and other natural and working lands, it must carry a commensurate responsibility for protecting and strengthening their role in containing greenhouse gas emissions globally . . . in **addition** to reducing our use of fossil fuels and their resulting emissions.

So we should set a goal for carbon capture and sequestration in our abundant forests and fields . . . but a goal that is **additional** to our fossil fuel emissions reductions. Thus, with (1) a modest reduction in harvest in public forests and (2) an equally modest extension of harvest rotations on westside industrial forestlands from ± 45 years on average to ± 80 years – still short of the 100 year historical cycle – plus afforestation/reforestation projects, we could increase forest carbon capture and sequestration by up to another 30 million tons annually, doubling our present global contribution¹.

Achieving both goals – an end well within our capabilities – would shift our state overall from a carbon source into a carbon sink that is actually reducing net atmospheric carbon. We would shift from part of the problem to a significant part of the solution.

Our forests are our crucial contribution to solving climate change. We are blessed to have this additional tool, and we must resolve to use it wisely.

I appreciate that climate deniers will reject this reasoning as they reject any meaningful actions to back down emissions. Credit to them for devising ever more devious dodges to resist such actions until it's too late to save our world . . . but the Legislature is surely proof against this latest back door exercise in denial.

¹“Land use strategies to mitigate climate change in carbon dense temperate forests” Law et al, PNAS April 3, 2018, <https://www.pnas.org/content/115/14/3663>