Timothy Leadingham

Dear Public Servants: I see the Climate Commitment Act as a good start with serious gaps in coverage. One such gap is emissions from forest clearing for urban development. Emissions from forest clearing can be very high in Western Washington, 150-200 tons CO2 e per acre plus ongoing loss of sequestration annually. Only about 150 acres per year of forest conversion to urban is needed to exceed 25,000 tons per year. This activity should not be exempt from the cap and invest program. Only sustainable timber harvest regulated by the state forest practices act should be exempt. Any entity or its subdivisions which exceed 25,000 tons of emissions per year across the entire state should be subject to the cap and invest rule. Thank you.

Dear Community Leaders and Public Servants:

I am a recent (June 2021) transplant to Olympia, but formerly lived in Washington for 30 years and consider it my home. When I read about the Thurston Climate Mitigation Plan I was thrilled that local governments were cooperating in this extremely important endeavor. I have read the plan in some detail and I have some serious concerns about how it can be implemented and the emissions reductions actually achieved and exceeded. Your plan calls for 4% of the 45% emissions reductions to come from increased carbon sequestration by 2030 and 12% of the 85% reductions by 2050. I wondered how that could be done without substantially banning forest clearing for urban development. For example, I have analyzed the Port of Olympia lease proposal in Tumwater and found that if all 97 acres of mature forest were cleared for warehouse construction, it could result in 40,000 tons of CO2 emissions, which is over 1% out of the 4% sequestration needed by 2030. Your agencies and jurisdictions should all be demanding of the Port Commission that a full EIS be completed for these significant climate impacts as well as other serious impacts to water quality and runoff.

I decided that few if any public officials would take notice of one project's impact in isolation. I decided to use what admittedly limited information I could gather on a county-wide basis to present a scenario that attempts to achieve the increased sequestration in forests that is called for in your plan. I used the Thurston Watershed land cover data that I believe is dated 2016 and updated it for total carbon sequestered in forest using USFS and American Forests data available at iTreetools.org. I could not find land cover for the 20,000 acres of UGA in the county, so I assumed it was about the same percentage forest as the whole county. I will use 10,000 acres of forest in the UGA available for development over the next 29 years to 2050. You may say that it is more or less, but I think my analysis serves to illustrate my point. I calculated using iTreetools that if 345 acres of forest were cleared for development per year for 29 years, 1.7 million tons of CO2 would be cumulatively emitted and the ongoing sequestration lost. This allows for a reasonable amount of carbon stored in solid wood products long-term. I also assumed that 20 street and other trees would be planted per developed acre over that time which would store 100,000 tons (actually much less because I assumed they are all planted at the beginning). The net carbon emissions from the 10,000 acres developed is 1.6 million tons. This represents about half of all recent annual emissions in the county that are quantified in the TCMP document.

I tried to think of a reasonably ambitious but possibly politically doable mitigation scheme for this development scenario. I decided on a 1 million tree planting campaign accompanied by preserving half of the 10,000 acres in small to larger parcels left undeveloped. This mitigation plan would save half the emissions plus the carbon stored in the 1 million trees, resulting in 342,506 tons of CO2 net emissions increase . This serves to illustrate how difficult it will be to get to any significant sequestration increase without substantially stopping almost all forest conversion to urban. The only alternative I see is to acquire a large amount of farmland and reforest it, which goes counter to other goals of the TRPC.

I bring this to your attention as an example to inspire better planning which considers all impacts including climate. Our planning and implementation needs much better data to be effective. For example, does anyone actually inventory the amount forest being converted to urban? Can we get updated land cover data and find out how much of the UGA is forest? The public must be made aware of all projects with potentially significant climate impacts (those climate impacts should be identified in the SEPA process) and also be fully informed of the magnitude of those impacts. We must change the ways we do the public's business in order to meet the challenge of this existential crisis. Business as usual is simply not acceptable.(Opinion Alert!) Thank you for reading this.

Peace with the Earth,

Timothy Leadingham, retired forest management planner and data analyst, US Dept. of Interior

Olympia, WA