

Data Submitted (UTC 11): 9/19/2024 8:16:28 AM

First name: Thomas

Last name: Conlon

Organization: GeoPraxis

Title: CEO

Comments: The discussion in the DEIS of carbon stock management appears to be limited in scope, selective as to which topics are emphasized, and largely qualitative. The discussion in "7.4.2 Forest Management for Carbon Optimization" on pages 44 and 45 is very broad and non-quantitative.

For example the following sentences illustrate this point:

\* "Management can also address effects of previous land uses, such as past clearing with subsequent forest regrowth or fire suppression resulting in dense stands." Here there is no attempt to characterize the relative quantitative significance of any of these factors ("past clearing", "forest regrowth", or "fire suppression"). Do they each have an equal effect on the carbon stock? Or are some factors more or less significant?

\* "For example, timber harvest aimed at removing hazardous fuels and reducing live tree density can yield short-term carbon emissions but ultimately reduce risk of high severity wildfire, yielding long-term increases to carbon stability (Krofcheck et al. 2019)." How much "timber harvest" for these purposes is optimal for yielding long-term increases to carbon stability? What are the definitions of short-term and long-term? Is there a quantitative harvest threshold beyond which this statement is no longer true? The DEIS does not answer this question.

\* "For projects involving forest harvest, some removed carbon can be stored for long time periods if converted to harvested wood products (HWP)." While this may be qualitatively true when taken out of context (as it is here), there appears to be no attempt to quantify what fraction of carbon originally held in the natural forest ends up post-harvest stored in these resulting wood products. Furthermore, there appears to be no attempt to calculate whether this quantity of stored carbon exceeds -- on a net-to-gross basis -- the actual carbon emissions of all the activities of harvesting, transporting, processing, distributing, retailing, purchasing, and installing these "stored" wood products. Peng, et al. (2023) <https://www.nature.com/articles/s41586-023-06187-1> state that methods that overlook the time scales involved in recovering from the effects of timber harvesting are insufficient and "have major, although often ignored, carbon costs that should be attributed to human activity."

\* Moomaw and Law (2023) <https://www.nature.com/articles/d41586-023-02238-9> further argue that, "To determine forest carbon emissions by tracking the life cycle of harvested wood, it is essential to quantify the carbon stocks in forest ecosystems and to understand how they change with harvests. It is also crucial to quantify emissions associated with the decay and combustion of residues left at the harvest site, and the decay of wood products in landfill, as well as emissions from the combustion of harvest residues at timber mills. This DEIS fails to adequately calculate these costs.

\* "The Intergovernmental Panel on Climate Change (IPCC) recognizes wood as a renewable resource that when sustainably managed can mitigate climate change (IPCC, 2022b)." However, as Moomaw and Law (2023, op cit) noted, "In 2014, the Intergovernmental Panel on Climate Change (IPCC) found that the perception that bioenergy is carbon neutral was based on a misinterpretation of the guidelines for how greenhouse-gas emissions are calculated." Given the deep integration of biomass-based cogeneration in the US forest products manufacturing industry, the failure to account for any bioenergy-related carbon emissions in the discussion of "forest management" is another major oversight of this DEIS.

If the US Government was not subject to any national or international agreements to address a climate crisis such oversights in a DEIS of this type might be excusable. However, considering that climate destabilization is already creating climate refugees all over this country and threatening our global security, to ignore such important issues in this DEIS is conspicuous and should be corrected, and recirculated for comments.

Respectfully Submitted,