Data Submitted (UTC 11): 3/29/2024 2:27:27 AM
First name: Vinton
Last name: Thompson
Organization:
Title:
Comments: I have general and specific objections concerning an area in which I made comments on the original plan. Both concern the general issues of carbon balance and managing for carbon sequestration. My general objection concerns the following comment and response (from p.6 of "Comment Period Consideration Summary For the Draft Environmental Assessment"):

Comment: "Project activities will release carbon stored in the soil and lead to soil carbon loss."

Lead sentence of response: "Outside of a very few situations, forest management activities conducted properly (i.e. no major soil disturbance) have not been shown to result in significant loss of carbon from the soil. "

While the response makes general assertions about the likely small scale of any initial negative effect on carbon sequestration and the likelihood of long-term positive gains, these assertions are not supported by site-specific quantitative analysis. As a consequence, they are difficult to substantiate and impossible to refute. The issue under consideration is not the overall result of forestry activities in the WMNF, but of proposed activities in three particular tracts. The analysis should be specific to these tracts and should be quantitative.

My specific objection concerns the following comment and response from the same source (again p. 6):

Comment: "Project activities will negatively affect mycorrhizal fungi and the arboreal ecosystem."
Response "Since this project has no intention to convert forested land to a different land use, the specific actions proposed are intended to enhance compositional and structural diversity within the project area, this approach should insure a diversity of plant species, which will maintain a diverse soil microbiome. When a tree is harvested it is possible the ectomycorrhizal fungi associated with that tree might die, this along with the root system of the tree will continue to decompose within the soil profile and provide a source of organic matter and humic material that enhances aggregate stability in the profile. It should be noted that ectomycorrhizal fungi can extend far into the soil and infect multiple host plants at once, an evolutionary mechanism that helps these species persist despite disturbance. The Forest Carbon White paper discusses effects on soil carbon in section 3.1."
The "Forest Carbon White Paper" makes it clear that little is in fact known directly about the effects of forest cutting on soil carbon sequestration in our area of the country. What is known more generally cuts in two directions. On the one hand, for our soil type, Spodosols, the overall effect of cutting seems to be small. However, there is evidence for significant loss of carbon in the deeper soil layer, which is the layer generally most closely associated with ectomycorrhizae (Nave et al. 2010, cited in the document). The Forest Service should move with some humility, accept that real knowledge of the carbon consequences of cutting are not known with any certainty, and find the expertise to make a more detailed, site-specific analysis of the question. If in the end, a decision is made to go ahead blindly, I urge the Forest Service to engage qualified researchers to use this cut to study the effects of forestry practices on carbon sequestration in our Northeast Region.