March 30, 2018

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Re: Early Successional Habitat Creation Project #53629

Dear Mr. Sinclair:

Thank you for providing the opportunity to submit my objections to the Environmental Assessment ("EA") for the Early Successional Habitat Creation Project #53629 ("ESHC"). I appreciate the time, research, and effort that went into addressing the comments submitted during the Comment Period for this project. I respectfully submit the following objections to the ESHC EA.

Carbon Sequestration:

The "Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emission and the Effects of Climate Change in National Environmental Policy Act Reviews", issued August 1, 2016 by the Council on Environmental Quality (CEQ) contained the following recommendations:

- Section I, 6th paragraph "As discussed in this guidance, when addressing climate change agencies should consider: (1) The potential effects of a proposed action on climate change as indicated by assessing GHG emissions (e.g., to include, where applicable, carbon sequestration); and, (2) The effects of climate change on a proposed action and its environmental impacts."
- Section III, A., 1st paragraph "...CEQ recommends agencies use the projected GHG emissions associated with proposed actions as a proxy for assessing proposed actions' potential effects on climate change in NEPA analysis."
- Section III, A., 2nd paragraph "Climate change results from the incremental addition of GHG emissions from millions of individual sources, which collectively have a large impact on a global scale. CEQ recognizes that the totality of climate change impacts is not attributable to any single action, but are exacerbated by a series of actions including actions taken pursuant to decisions of the Federal Government. Therefore, a statement

that emissions from a proposed Federal action represent only a small fraction of global emissions is essentially a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether or to what extent to consider climate change impacts under NEPA. Moreover, these comparisons are also not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations because this approach does not reveal anything beyond the nature of the climate change challenge itself: the fact that diverse individual sources of emissions each make a relatively small addition to global atmospheric GHG concentrations that collectively have a large impact. When considering GHG emissions and their significance, agencies should use appropriate tools and methodologies for quantifying GHG emissions and comparing GHG quantities across alternative scenarios. Agencies should not limit themselves to calculating a proposed action's emissions as a percentage of sector, nationwide, or global emissions in deciding whether or to what extent to consider climate change impacts under NEPA."

Even though the above referenced CEQ guidance was withdrawn effective April 5, 2017, it still provides a valid set of guidelines and recommendations for assessing the Climate Change impact of Federal actions. The ESHC EA does not provide any levels of specificity concerning the impacts of CO2 release or carbon sequestration to support the Draft Decision to move forward with Alternative B. Therefore, the validity of the ESHC EA can be called into question and should be relied upon for supporting a Final Decision. I provide the following examples:

- The ESHC EA does not provide the projected GHG emissions associated with the
 proposed action of the harvesting activities. There is no mention of how much CO2 is
 estimated to be released due to the use of fossil fuel powered mechanized equipment
 for the purpose of clearing roads and logging landings, the cutting and removal of trees
 and underbrush, and any post-logging clean up activities.
- The ESHC EA Section 3.7.4.2 Alternative B: Proposed Action, 3rd paragraph states "Considering emissions of GHGs in 2010 was estimated at 13,336 ± 1,227 teragrams carbon globally (IPCC 2014) and 1,881 teragrams carbon nationally (US EPA 2015), the ESHC Project makes an extremely small contribution to overall emissions." This statement may be true. However, the problem of Climate Change is the result of the incremental addition of GHG emissions from millions of individual sources, which collectively have a large impact on a global scale. Therefore, each individual action that results in the release of CO2 or impacts the sequestration of CO2 should have an estimated measurement so that the cumulative effects can be recognized and assessed.
- The ESHC EA Section 3.7.4.2 Alternative B: Proposed Action, 3rd paragraph states "Therefore, at the global and national scales, the direct and indirect contribution from Alternative B to GHGs and climate change would be negligible. In addition, because the direct and indirect effects would be negligible, Alternative B's contribution to cumulative effects on global GHGs and climate change would also be negligible. Lastly, carbon emissions during the implementation of Alternative B would have only a momentary influence on atmospheric carbon concentrations, because carbon will be removed from the atmosphere with time as the forest regrows, further minimizing or mitigating any potential cumulative effects." These statements do not take into

- consideration the cumulative impacts of multiple forest harvesting activities not only in the Northeast, but across the United States.
- The ESHC EA Section 3.7.4.2 Alternative B: Proposed Action, 5th paragraph states "The proposed activities in the ESHC project are not considered a major source of GHG emissions." This activity by itself may not be a major contributor, but the cumulative effects of this and other forest harvesting activities do have a significant impact on GHG emissions and carbon sequestrations.

The Forest Carbon Assessment for the Green Mountain National Forest, August 16, 2018, pg 15, last paragraph states – "For RPA's North Region (equivalent to Forest Service's Eastern Region boundary, but includes all land ownerships), projections indicate that the rate of carbon sequestration may start to decline in the 2020s, mostly due to the loss of forestland (land-use change), and to a lesser extent through forest aging and increased disturbances (Fig. 11)." – With this in mind, the Draft Decision to move forward with Alternative B is suspect as it further supports the decline in carbon sequestration.

In my ESHC Comment Letter, I asked the following three questions. None have them been answered to any level of specificity.

- Has any analysis been conducted to determine how much CO2 absorption ability this
 project and the associated vegetative treatments will reduce?
- If yes, what is the impact to CO2 absorption?
- How will this loss of CO2 absorption be offset?

Non-Native Plant Species

The ESHC EA Section 3.4.4.2 Alternative B: Proposed Action, 2nd paragraph states – "Although Forest Plan standards and guidelines and project design criteria (Appendix B, Non-native Invasive Plants) are not capable of being completely effective to reduce the extent to which existing infestations expand and new infestations get established, these protective measures would still result in a low to moderate risk rating for non-native invasive plants." – What is the basis for this statement of "low to moderate risk"?

In the ESHC EA Section 3.4.5 Cumulative Effects, it is recognized that "Design criteria have been developed to minimize these effects (Appendix B, Non-native Invasive Plants), but it should be noted none of the design criteria would entirely prevent or eliminate problems. The extent of the cumulative effect would depend on the extent to which design criteria are able to be fully implemented and the degree to which they are successful." — Non-native Invasive Plants are a significant problem in Vermont. Any intentional activity that might increase the spread of Non-native Invasive Plants should be avoided until the Forest Service has developed design criteria that have a much higher likelihood of successfully countering the spread of Non-native Invasive Plants.

Soils & Wetlands

In the ESHC EA Section 3.6.4.2 Alternative B: Proposed Action, Timber Harvest Activities (pg 47), 4^{th} paragraph states – "Monitoring by the Forest Service on the Green Mountain National

Forest has shown Forest Plan standards and guidelines and Vermont Acceptable Management Practices are successfully implemented most of the time in harvest areas, ..." – The Forest Service has a responsibility to ensure that the Forest Plan standards and the Vermont Acceptable Management Practices are successfully implemented "all of the time", not "most of the time". If the Forest Service is unable to ensure that the appropriate standards are followed all of the time, then the analysis in the Environmental Assessment is subject to being incorrect and cannot be relied upon.

In the ESHC EA Section 3.6.4.2 Alternative B: Proposed Action, Wetland treatments (pg 48) 1st paragraph states – "Wetland treatments could negatively affect important wetland functions supporting habitat quality in the short-term by decreasing ground shading, in turn raising soil and water temperatures, increasing evaporation rates, and causing the wetlands to retain less water, and retain water for a shorter period. This could negatively affect plant and animal species requiring cooler temperatures, higher water levels, or longer hydro-periods. In the long-term, wetland soil resources may improve, once trees grow enough to shade wetlands, due to an increased supply of downed woody material to feed soil organic matter." – There is no mention of the long term impacts if the wetland soil resources do not improve. What monitoring will the Forest Service do post-wetland treatments to determine if the wetland soil resources are recovering to their pre-wetland treatments state? What actions will the Forest Service take if the wetland soil resources do not improve?

These are my objections to the ESHC EA.

Thank you for allowing me to submit these objections and I look forward to your response.

Sincerely,

Mark Nelson

REDACTED CONTACT INFORMATION