Internal Review of Appendix: In-Stand Surface Application of Biochar in Forestlands

Date: July 20, 2022
Reviewers: Ned Horning, Gisel Booman

Summary of Internal Review Process

The intent of the Regen Registry Internal Review is to ensure methodologies submitted to the Regen Registry meet the integrity expected by our community and ensure the document is sufficient to warrant review by Expert Peer Reviewers. The task of an Internal Reviewer is to act as an ally to methodology developers by providing critical feedback to help facilitate an understanding of how to improve the methodology to best serve Earth Stewards while maintaining scientific and community integrity.

The Regen Network Science Team has reviewed the *Appendix: In-Stand Surface Application of Biochar in Forestlands* to facilitate the creation of a strong methodology which can be submitted to External Peer Reviewers. Our feedback has been provided in two ways:

1) Direct Comments: To provide targeted constructive feedback to specific sections of the methodology, our team commented directly in the methodology document on what we found confusing, thought needed more definition, or what we thought was out of scope for this methodology.
   ***All comments that were posted inline and the response to those comments are recorded in the document** Appendix: In-Stand Surface Application of Biochar in Forestlands_Internal Inline Comment Revision Report*

2) Overall Reflections: To provide more generalized feedback to your methodology as a whole, our team provided the additional reflections in this document. Reflections were categorized by reviewers, each of whom had different thoughts on how to improve the methodology. A final combined summary of comments, feedback and suggestions is found in the Combined Summary section.

Reviewer 1 - Ned Horning:

General Comments:

The document is well written and most of my comments are mostly suggestions.

They probably should define what they mean by “forest”. Depending on the harvest methods there might not be many or any trees remaining.

Answer: *Important question. Given the context of "forestry" in our area, we would want to allow use in connection with clear-cuts, as long as there is the potential to reforest an area and it otherwise qualifies with windbreaks and the other criteria cited above. I doubt there is a single definition of "forest," although It seems appropriate to have a working definition that puts boundaries on the use of this appendix - let's add a sentence to define "forest" and describe the forest application of biochar*

Resolution: *Added “As per the Verra methodology, forest operations must be approved under a sustainable management plan or forest certification. Appropriate application sites within these forests include intact stands, recently thinned, or recently cut areas, provided the soil organic horizon remains intact. Some good indicators of this include the presence of organic matter (leaves, sticks, cones, needles, etc) that haven’t been heavily disturbed by harvest operations. “*

Comments by Sections:

Introduction & Summary:

They refer to “projects” and it seems like it should be “methodology”

Answer: *Would stipulating field practices in the methodology restrict other projects in a way that has unintended consequences?*

Resolution: *Left as “project”*

Place-Based Production Methods:

They compare their approach to other burning methods but it seems like they should have some comparison with leaving the slash on the ground without burning it.

Answer: *From a fire and pest management perspective, I don't know of many operations that do that. Any leftover material, especially from a fuel reduction project, would not be left out to decay as this would defeat the purpose of mitigating fire hazard in that area. Instead, these piles are often moved to log landings and lined up and burned.*

Resolution: *This is fine as is*

Benefits of In-Stand Surface Application of Biochar:
Their comparison with indigenous burning does not seem appropriate. They also talk about thinning for wildlife and fire reduction but that might produce biomass too small for biochar and also might not create a suitable environment for on-site conservation burns.

See notes in "*Kulshan Carbon Trust - Appendix: In-Stand Surface Application of Biochar in Forestlands_Internal Inline Comment Revision Report*"
Answer: *Changed to "Mimicking some aspects of these" which is acceptable*

Summary:
The summary and first paragraph mention that they "propose" changes but it seems like that language should be in a letter requesting the addition of the appendix and not in the appendix itself.

Final Decision: - Pass or Suggested for another round of Internal Review
This is pretty much ready to go. I suggest they read my comments and address them at their discretion.

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Reviewer 2 - Gisel Booman:

The document is well written and aligned to its scope.

I left some comments in the text.

***See notes in "*Kulshan Carbon Trust - Appendix: In-Stand Surface Application of Biochar in Forestlands_Internal Inline Comment Revision Report*"**

My main suggestion is that whenever there´s some reference to a Kulshan Carbon Trust project, that should be replaced in the text with some more general requirements, guidelines or exceptions to the current methodology under Verra. The Kulshan specific project information could be used to back up the request to expand the Verra method if there´s any citable reference.

Final Decision: Please consider my comments and suggestions. My overall decision is that this is ready to move forward.

Combined Summary/Feedback/Suggestions

General Comments:

Congrats the team has decided that your methodology is ready for Expert Peer Review with some addressing specific internal comments at your discretion.