Internal Review of Soil Organic Carbon Estimation

Partner: Ecometric
Submission Date: August 1, 2022

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 *Soil Organic Carbon Estimation* 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 your methodology, our team commented directly in your methodology document on what we found confusing, thought needed more definition, or what we thought was out of scope for this methodology. The comments can be found in this [document](#).

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.

Internal Review:

Reviewer 1 - Ned Horning:

General Comments:

This seems to be relatively well written but it seems to be missing some key pieces of information. Maybe those will be in the credit class document? I'm thinking of things like land cover/land use, specific amendments and ag practices... As it's written it seems like anything goes. There is also no mention of additionality, permanence, leakage or buffer pools that seem to be in all carbon credit methodologies. Also no environmental co-benefits but that might be intentional.

In general the modeling sections need work to be more clear about workflow and basic concepts like training, validation and test data.

Comments by Sections:

Methodology Overview:
It's short and simple but could use some additional information. They mention co-benefits but they are not discussed in the document.

Project Boundaries:
The minimum sampling frequency seems high.

Calculating Carbon Sequestration using Remote Sensed…:
The section "SUBSEQUENT" needs work. It's not at all clear to me. I left a number of inline comments.

Calculating the Creditable Carbon Exchange:
This is basically following the Carbon+ approach.

Data Reporting:
They mention "a report will be submitted to the Regen Registry". We will work with Ecometric on clarification around this - where the data is stored and how it is shared.

Data Storage:

They should consider a minimum length of time to store data.

Data Verification:
They need to specify how often and who will do the verification.

Final Decision: - Pass or Suggested for another round of Internal Review
I suggest another round of internal review. This needs more information on modeling and probably more information related to other carbon credits as I noted above.

Reviewer 2 - Gisel Booman:

General Comments: The methodology is concise, well written. In many sections it is using the same text from the carbonplus method (RND´s), so I think some citations are missing whenever the paragraph is copied. The eligibility criteria is important and missing here, also the permanence and leakage. But I don´t know if there´s an additional document with these more programmatic pieces being developed, maybe the credit class doc.

Comments by Sections:

Methodology Overview: In this section the eligible land uses, land management, history of management in the last years before baseline should be stated.

Project Boundaries: The frequency of sampling seems to be too high, maybe there is a mistake as it does not match the 3 year max between samplings stated below in another section.

Calculating Carbon Sequestration using Remote Sensed…: I would recommend permanent plots , i.e. the same sampling locations through the project lifetime. It seems that if a stratification can be done after baseline, the location of samples might change. ,

Calculating the Creditable Carbon Exchange: It is based on the carbonplus method.

Data Reporting: -

Data Storage: how and where should be explicit.

Data Verification: how verification will take place is not described. By whom, when.

Final Decision: I suggest a second internal review until the eligible management practices are clarified, so I can evaluate better if it´s viable. Also I would need to know where permanence, leakage and additionality are addressed and how, and if there is a credit class document under development that complements this doc.

Combined Summary/Feedback/Suggestions

General Comments:

Both reviewers are suggesting that another submission to our Internal Review will be beneficial before submitting this to Expert Peer Review as well as some clarification around what will be included in the credit class document. Clarification around baseline and monitoring frequency needs to be inserted. We can support you in the verification and data storage sections.