



Soil Enrichment Protocol V2.0 Update Workgroup Meeting Notes and Takeaways

Workgroup Meeting Date: 5/29/2024

Workgroup Members in attendance:

Name	Organization	Present (P)/Absent (A)
John Harnice (Alternate)	AgriCapture	P
Matt Campbell	Aster Global Environmental Solutions, Inc.	P
Sami Osman	ATOA Carbon	P
George Burba	Water for Food Global Institute/LI-COR Biosciences	A
Jocelyn Lavallee	Environmental Defense Fund	P
Nick Nugent (Alternate)	Grassroots Carbon Public Benefit LLC	P
Max DuBuisson	Indigo Ag	P
Ryan Pape (Alternate)	Indigo Ag	P
Josiah McClellan	Land O'Lakes Truterra	P
Meredith Varie (Alternate)	Land O'Lakes Truterra	P
Jennifer Nelligan	National Association of Conservation Districts	P
Michael Nassry	Nutrien	A
Mike Gill (Alternate)	Nutrien	P
Lucia von Reusner	Regrow Ag	P
Robert Parkhurst	Sierra View Solutions	P
Jason Ackerson	Soil Health Institute	P
Negar Tafti	The Nature Conservancy	P
Brian McConkey	Viresco Solutions Inc.	A
Karen Haugen-Kozyra (Alternate)	Viresco Solutions Inc.	A

Agenda:

- **Project Definition:** Continuing conversations that were started during meeting #2, we've identified the below areas within project definition that need further clarification in the protocol, including whether projects are required to include SOC.
 - o **Defining Project Activities:** Last meeting's discussion proposed refining the list of project activities included in the protocol to prioritize practices that explicitly effect SOC. We've included the current list of project activities to continue that discussion, including example scenarios of projects with activities that target SOC accrual and those that do not. Further discussion is needed on the eligibility activities within a project that do not measurably affect SOC.
 - o **Defining Project Area:** Further discussion is needed around defining project areas when they include grasslands and improving definitions of grasslands in the protocol. Other definitions that may need further clarification include "native ecosystem" and defining the extent of woody biomass removal that's allowed.
- **Start Date**
 - o Further discussion is needed around how fields are added to projects in respect to their start date. Currently the protocol requires that fields being added to a project need to be submitted to the Reserve within 12 months of their start date. This is often challenging for projects that are enrolling fields within a program without knowing exactly when their start date is going to be. Several approaches have been proposed as an alternative to submittal to the Reserve that will be discussed.
- **Cumulative Accounting**
 - o Indigo Ag has put forward a proposal for adopting cumulative accounting as an alternative approach that would allow for accounting of credits over all past and current reporting periods. Indigo has included some overview slides that explain the approach and how it would affect quantification of credits within the protocol.
- **Model & Soil Sampling Task Force**
 - o A model and soil sampling task force has been created with representatives from the working group with backgrounds in modeling and soil science, as well as technical experts from organizations affiliated with work group members. This group will meet separately to address changes to the modeling guidance and soil sampling sections of the protocol. All changes proposed by the task force will be brought to the main workgroup for final approval. Additionally, task force meetings will be open for observer attendance and recordings will be publicly available on the SEP protocol development page.

Main Points of Discussion in Meeting:

- Project Definition – Section 2.2
 - o Discussion around whether projects should be required to account for SOC or whether this can be optional if project activities mainly target other emissions (CO₂, CH₄, or N₂O). It is the Reserve's understanding that the intent of the protocol is to mainly focus on SOC, with other emission sources accounted for as applicable. However, the list of project activities allowed under the protocol includes activities that do not materially affect SOC, and as such clarification is needed.
 - o From last meeting, there was language proposed to change the project definition to make it clearer that projects need to focus on practices that intend to increase SOC with the option to also decrease net emissions of CO₂, CH₄ and N₂O.
 - o Workgroup members largely felt this language was too restricting, and advocated for

- keeping and/or language.
- Workgroup members presented conflicting views on how the protocol should be updated – whether language change is necessary or whether current language allows flexibility that projects
 - Differentiation between project definition vs. GHG assessment boundary
 - One interpretation of Section 4 is that projects are always required to include SOC, per GHG assessment boundary section.
 - Some proposed keeping project definition language but make SOC in section 4 more explicit that this must be included in projects.
 - Points raised by members include:
 - Flexibility with whether SOC is targeted initially or not – example if farmer’s practice initially is targeting of emission sources like N₂O, they are still allowed to be included in the project but may have a goal of adding on additional practices as they go.
 - Workgroup members felt flexibility is top priority
 - Advocated for including all project types regardless of whether they include SOC or not – keep protocol broad to allow all agricultural practice changes
 - Overall members expressed desire to keep current language and allow for projects to have SOC be optional, but further discussion is needed on when and how SOC should be accounted if it’s not the main SSR being targeted by the project activity and whether other areas of the protocol should include clarifications.
 - Discussion around requiring soil sampling and modeling of SOC
 - Some advocated for not mandating SOC if project can prove impact to SOC is de minimis
 - Disagreement whether it can be proven that any one SSR has de minimis impact – question of whether just using literature sources for example that show minimal impact would be sufficient.
 - Project Activities
 - Members advocated for flexibility – if projects are targeting agricultural emissions at the farm level, project developers would like to be able to do that all within one protocol and project. Project developers are seeing more interest with enrolling farmers at the farm level – so the ability to account for all their emissions across different crops and activities would be more desirable.
 - If a project includes several different project activities that target different SSRs, some advocate for requiring different projects to separate out the different project activities a project developer may be focusing but which would be difficult to quantify together under one project.
 - Overall takeaways:
 - Keep and/or in definition section to provide flexibility
 - Look at other areas (such as Section 4 SSRs, or quantification sections), to provide guardrails for projects
 - As a next step for the Reserve, we’ll go back and look at SSRs and quantification sections to see if there’s guidance we can provide there for projects
 - Note that for projects with fields that eventually plan to adopt practices that will effect SOC but may start with non-SOC targeting practices (such as N₂O), there should still be a requirement for having SOC measurement from the beginning of the field being enrolled in the project. But this might also affect the baseline modeling that’s done – so needs to be thought through

more with how this would be handled.

- Project Area definitions
 - o There was conversation around whether the grasslands definition should be updated to be less restrictive on tree canopy cover. Currently, grasslands are defined as areas dominated by <10% tree canopy cover, but some have proposed raising this threshold to potentially 30%, to account for some grassland ecosystems that have greater tree cover but are still being grazed.
 - o Concerns were raised around increasing this threshold due to model limitations around being able to model SOC dynamics under trees. If a model was validated with data collected in more heavily wooded areas, then they could include that area in the project. Potential to add clarification of tree canopy cover limited to the conditions under which the project's model has been validated.
 - o Others raised concerns around the unintended consequences of increasing the tree canopy threshold – specifically if the threshold was increased, that would de-incentivize land managers from managing woody encroachment, which could negatively impact biodiversity.
 - Points were made around management of grasslands, specifically removal of woody biomass and invasive species or native species that have invasive tendencies that need to be managed for. Need to adjust wording so that invasive language isn't used.
 - o If threshold is raised to 30%, it should include a stipulation that these more forested areas have been historically grazed as well as include more guidance around exempting woody biomass accounting in grasslands where removal of biomass is necessary to maintain ecosystem health.
 - Could require projects to provide evidence the management practices around removing biomass still have the intent of building up SOC or show that biomass would have been removed regardless of the project activity.
 - o Overall members expressed support for language being added around what the intent of biomass removal is versus providing a more precise definition of amount of biomass being removed.
- Timeline for fields being added to a project (Submittal deadline)
 - o Currently new fields may be added to projects if submitted to the Reserve within 12 months after the field start date. This is a very administratively burdensome process and there's a need for more guidance on how this can be better streamlined.
 - o One solution raised was to assess a field's eligibility by looking at the date the field signed a contract (would need to define what is eligible as a contract) and ensuring that date is signed prior to the end date of the field's initial cultivation cycle.
 - o The Reserve will follow-up with verifiers to discuss alternative approaches and discuss more internally on alternative documents that may be allowed for confirming a field's eligibility.
- Project start date
 - o Project start date is set as the earliest field's start date within a project. However, because fields can defer verification, there are situations where a project's start date may have to change in future verification periods when older fields are brought in that push the earliest field's start date back to an earlier date than originally set.
 - o Workgroup members supported adding further guidance to when the above situation is allowed. The Reserve will review internally to assess this further and draft guidance.
- Cumulative Accounting
 - o Indigo Ag provided an overview of cumulative accounting as a proposed alternative

- to changing the accounting over time of credits in SEP projects.
- Cumulative Accounting would allow for accounting over all reported periods and adjust new issuances to reflect updated results from past periods.
 - Pros to this approach:
 - Able to take advantage of improvements over time - Allows for applying model improvements to past issuances and ability to fix mistakes caught in later verification periods
 - Reduces uncertainty
 - If errors are found, they can be corrected and applied to past issuances – would correct for over credit or under credit issuances
 - Potential complications:
 - Changes the idea of crediting period and how that is defined. Need to make a policy decision on how vintages will be determined.
 - Precedent for this approach is primarily in a forestry context – applying to agriculture would be a new application
 - If a project transitions to a new protocol version, the new protocol version would then be applied to all past periods. Would be the preferred way to handle protocol version updates, but historically new protocol versions has not changed previous issuances.
 - The Reserve will continue to review internally as well as discuss this topic with the modeling and soil sampling task force that is being created.

Action Items for the Reserve:

- Review Section 4 (GHG Assessment Boundary) to identify areas for further guidance around which SSRs need to be accounted for and when
- Further review internally allowances of non-SOC practices/accounting and optionality of SOC
- Grasslands definition – develop further language that adds to intent of activities around maintaining grasslands and allowance of tree canopy cover.
- Field submittal process – will review internally and with verifiers to further language around alternative processes for submitting fields within a project.
- Project start date – will review language updates that provide further guidance for when a project start date may be altered.