

April 22, 2022

RE: Comments on proposed VCS methodology - Improved Forest Management through Targeted, Short-Term Harvest Deferral

Dear Verra Secretariat:

Thank you for the opportunity to comment on Verra's proposed new methodology. My comments are provided below, following the structure of the provided spreadsheet. Some comments are adapted from comments I submitted to Verra on April 8, 2022 on tonne-year accounting.

Section 5, p 10. Suggested change: Carbon in harvested wood products should be accounted for

The tonne-year accounting methodology over-credits the benefit of deferring harvest by ignoring carbon held in harvested wood products. The goal of the methodology is to credit the temporary reduction of carbon dioxide (CO₂) in the atmosphere from a short-term postponement in harvesting. When the methodology defers harvest it also defers the transition of some portion (typically a significant portion) of forest carbon into lumber and other wood products that can remain in these products for several years to several centuries. The actual reduction in atmospheric CO₂ from delayed harvesting is the reduction in carbon released to the atmosphere from timber harvesting, which does not include the carbon converted into harvested wood products.

Accounting for carbon held in harvested wood products can be a straightforward correction to the current methodology.

Comment on overarching approach - Additionality: The proposed methodology is vulnerable to non-additional crediting from adverse selection.

Additionality is trickier with tonne-year accounting than with land use methodologies requiring longer-term storage. If we knew perfectly what each participating forestland owner would do each year without offsets we could accurately measure the effect of offsets on on-site forest carbon stocks and credit appropriately. In practice, baseline stocks are uncertain in a long time frame and are even more uncertain in any particular year. Forest management differs between parcels with similar characteristics because of a myriad of factors. This is especially true for small-scale landowners, who are the main focus of this protocol. Compared to large industrial timberlands which can have established harvesting schedules, small landowner harvesting decisions are commonly affected by less predictable and less modelable circumstances such as the financial needs and forest management goals of forestland owners.

Models can statistically estimate what a landowner is likely to do by comparing with other similar lands using dynamic baselines and taking into account the landowner's past practice. But it is not possible to predict with confidence what would happen on all plots in any particular year.

This means that carbon offsets will result in adverse selection. Of the pool of similar landowners, those that would not have harvested in the credited years are most likely to participate, because they can be paid for what they would have done anyway. To provide a quantitative example of adverse selection, let's say that ten small landowners each have a modeled 50% chance of harvesting this year. We don't know which ones would have harvested and which would not have; we only know that they all have a 50% chance of harvesting under current conditions. When we offer these ten landowners the chance to sell carbon credits for not harvesting this year, those who actually would not have harvested are likely to be the first to respond. Ideally the funds would be sufficient to convince some of the other landowners, who would have harvested, to decide to postpone harvesting by one year. But if participation is less than 100%, there is a good chance that more than half of the participants are from the set that would not have harvested anyway.

Non-additional crediting due to adverse selection is an inevitable challenge with any offsetting program and must be managed to avoid over-crediting. Current improved forest management (IFM) methodologies use baselines designed to average over many years. The long-term commitment to hold carbon can partially remedy any over-crediting at the project start. Even if initial credits are non-additional, the offset program acts like an easement, preventing management changes over decades. For some plots (but not all) non-additional credits generated early in the project can become addition over time as landowner management choices are constrained. It can be argued that the biggest effect of current IFM methodologies is the long-term commitment – the year on year requirement to avoid forest conversion or carbon reduction. Even though there is still a timing disconnect – credits generated for reductions that could happen over many decades are used to offset immediate emissions from the buyer – the offset program can still reduce forest carbon loss over the project life.

Tonne-year accounting abandons that long-term commitment, significantly weakening the effect of the offset program and making it essential that credits are truly additional each year. Additionally, with tonne-year accounting, even more business-as-usual land management could be credited since the lack of long-term commitment creates a lower barrier to entry and more opportunity for gaming.

Comment on overarching approach - tonne-year accounting: short-term tonne-years of carbon storage cannot “offset” CO₂ emissions

More broadly, I believe that the overall goal of the protocol to try to equate short term deferrals in emissions with emissions of greenhouse gasses is ill-founded. Tonne-year accounting attempts to create an equivalence between the emission of one tonne of CO₂ and the temporary removal or storage of a greater quantity of CO₂ from the atmosphere. But the nature of the effects are different enough to make an equivalence claim problematic.

In the long-run, short-term storage has little to no climate benefit. All else being equal, over the long run, drawing carbon temporarily out of the atmosphere does not change the amount of warming caused by that carbon - it only shifts that warming back in time.

Additionally, all else is not equal. Since temperatures are rising, pushing back when carbon is in the atmosphere by short periods of time causes more climate impact over the atmospheric lifetime of that carbon, because each tonne of atmospheric CO₂ causes more damage when temperatures are higher. If that temporary storage is used to offset the release of a tonne of CO₂ it doesn't neutralize or counterbalance the climate effects of those emissions. It only reduces warming temporarily and may cause even more warming in the future.

Temporary storage therefore cannot truly "offset" the climate impacts of releases of CO₂ into the atmosphere. If they are used in addition to (not instead of) emissions reductions, temporary removals can potentially help to "buy time" or smooth emissions peaks until dramatic emissions reductions and significant removals are performed. But this is a different type of impact from reducing fossil fuel emissions.

Proposed changes to address both overarching problems:

This methodology aims to create an incentive program for small landowners to defer harvesting through the carbon market. An offsetting approach is not appropriate because the effects are difficult to measure for individual plots for individual years due to adverse selection, and short term harvesting deferrals can not be equated with, and therefore legitimately traded with, reductions in fossil fuel emissions. The proposed program can create incentives, if offset prices are high enough, for changes in harvest practice over a sustained time programmatically over a landscape.

Verra might consider selling something other than offset credits, perhaps "tonne-year carbon credits." This would involve estimating effects programmatically, based on discernible changes in land management over the pool of participating lands and adjusting discount rates as needed to accurately reflect overall program impact.

Most sincerely,

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