

California Air Resources Board Workshop: Discussion of U.S. Forest Projects Compliance Offset Protocol November 30, 2022

Remarks of Panelist Constance Best, Co-Founder and Senior Strategic Advisor, Pacific Forest Trust

Chair Randolf, Ms. Sahota and the whole California Air Resources Board (CARB) offset team, thank you very much for the opportunity to speak today.

Pacific Forest Trust conserves forests, advances forest-based climate solutions, protects water sources and saves wildlife habitat. We are about sustaining the forests that sustain us all.

To briefly summarize my remarks:

- As CARB staff have described, every provision of the Protocol is underlain by strong reasoning and solid rationale as to why it is the way it is. It is very, very conservative in quantifying emissions reductions and nuanced in its methodology. PFT has been active in the development of forest offset methodologies in the US and internationally for 30 years and **we believe California's Protocol is justifiably the global standard.**
- As there appears to be some confusion among the public, I will focus my time primarily on illuminating the **critical relationship between baselines, additionality and permanence** as this is central to the integrity of the Forest Protocol.
- As the Protocol has been tested in the field for over a decade, assuring many millions of forested acres are being managed for carbon stores across the U.S., we agree that **now CARB needs to take advantage of lessons learned on the ground and advances in science to refine the Protocol**. They need to examine new data, technology and statistical methods to inform inventories, baseline quantification and verification. We support CARB's intent to review the buffer pool underwriting in light of increased wildfire and other climate risks. Further, it's time to take immediate steps to begin implementing the suite recommendations of the AB 398 Offsets Task Force.

Forests are complex and so is the US FPCP

The Protocol has complex interlocking requirements that are often poorly understood and misconstrued. It's <u>totally</u> not built for sound bites. This makes the Protocol an easy target for distortion and misinformation, often driven by folks whose mission is to cast doubt, as they are fundamentally opposed to offsets in the first place – no matter how limited their use.

The Protocol is complex because forests are. These dynamic carbon systems are characterized by flux. Forest carbon stocks go up and down due to natural cycles of growth,

death and decay as well as the impacts of forest management decisions. This flux occurs at multiple levels – tree, stand, forest ownership, landscape – over multiple timeframes.

Therefore, characterizing a baseline for a forest carbon project is both a spatial and a temporal challenge. As the baseline is essential to determining what carbon is "additional" in a forest, a baseline cannot simply be a snap-shot in time because that inevitably skews the data and is easily gamed.

The Protocol's approach takes out the noise of the flux generated by business-as-usual (BAU) forestry and by natural conditions. It does this by creating an average carbon value modeled according to certain rules for the lifetime of the project to serve as the baseline reference for crediting. This prevents offsets being issued for forests that would re-grow anyway as part of regular forest management, or other short-term considerations.

Common Practice: Carbon Stocks in the Neighborhood

As staff have described, the second element of the Protocol's Baseline calculation is comparing the project's starting carbon stocks to what's called "Common Practice" or the average stocks of similar forests located in the general neighborhood of the project. This added Baseline element is designed explicitly to prevent exaggerating the likelihood of depletion of carbon rich forests that could arise from modeling legally permitted and economically feasible forest management. **Common Practice puts a floor on what is permitted for credit as avoided depletion**.

Common Practice is derived from statistically robust Forest Service FIA data that quantifies the average forest carbon stocks over multiple ownerships. **The resulting metric defines the cumulative impact of management decisions over time and over a range of owners with different management goals for similar forests.** This broad spatial analysis once again turns down the noise of carbon flux to create an objective reference point for all projects in a given assessment area.

Can the Common Practice data and the geographic assessment areas be improved and updated? Absolutely and they should be -- regularly, in a predictable fashion.

Some people feel the Common Practice baseline should consist of a handful of stands with similar characteristics -- but that data won't tell anyone how the constellation of management decisions and natural carbon flux over time and space is reflected in the neighboring landscape -- which is the point of having the Common Practice element.

Together Common Practice and the BAU baseline provide two of the 3 necessary benchmarks for carbon additionality.

Permanence is the 3rd key to assuring Additionality:

Determining the additionality forest carbon stocks cannot be based only on stocks assessed at a moment, a year, or a few decades. It has to be assessed for the 100 year lifetime of the project. Why? Same reasons – the noise of flux from natural and management cycles. We can't

count growth of a stand over 30, 40 or 50 years as an enduring increase in carbon since shortly it is likely to be logged, with only about 35% of carbon being transferred into durable wood products.

Time is all the more critical in the use of carbon credits to *offset* **a ton of CO2 emitted by a polluter that would not otherwise be allowed.** There needs to be reasonable equivalence between the cycling time of CO2 in the atmosphere and the durability of the offset commitment, and 100 years is the international standard.

Further, the very fact that a California forest offset project must commit to maintaining C stocks 100 years from crediting is in and of itself a huge and additional commitment given the 40 – 60 year economic lifetime of most forests. This 100 year guarantee represents an enduring change in management that would not have occurred absent the offset project.

Lastly, let's look at the Buffer pool:

The bottom line is, so far so good. It is far, far from depleted as some allege.

But we can all see that climate change impacts are worrisomely more severe than understood when original risk rating system was created to determine each project's contributions to this natural risk insurance pool. Now that we have more experience and data, it's time for the Buffer Pool's estimation methods to be scrutinized. And if the risk assessment system needs refinement based on new and better data, let's do it now -- and on a regular schedule.

But step back for a moment: In spite of repeated media hype that all of California's forests are being vaporized by extreme fire events, in fact, fire isn't burning up all that standing carbon. Far from it. A recent scientific analysis of the Rim Fire by Oregon State University emeritus professor Mark Harmon¹ shows that somewhere between .1% and 3.2% of live carbon is actually combusted in a fire, depending on fire severity. The rest is gradually released over time as the trees decay into soil.

Yet CARB's very conservative accounting rule for post-fire re-inventory treats every dead tree as an immediate 100% emission. This significantly exaggerates the loss of offsets from fire. In fact, it suggests that the amount of lost offsets paid out of the Buffer Pool **may largely be a function of the rules, not a result of the actual fire**. *This bears scrutiny, too*.

At the same time, we need to make sure that Project developers take seriously the risk of offset loss from drought, bugs, fire and other impacts driven by accelerating climate change. **They should not overly rely on the limits to liability provided by the Buffer Pool.** Forest offset projects, like all forests, need active management for resilient carbon stocks: reducing fuel ladders, thinning stem counts and fostering large, older trees should be incentivized in the Protocol even though this can mean a short-term reduction in forest carbon. Adjusting the risk ratings used in determining the Buffer Pool contributions is a good place to start.

Thank you for your time and attention. I look forward to answering any questions.

¹ Harmon, M.E.; Hanson, C.T.; DellaSala, D.A. Combustion of Aboveground Wood from Live Trees in Megafires, CA, USA. Forests 2022, 13, 391. <u>https://doi.org/10.3390/</u> f13030391