

## COMMENT

5 November, 2020

Gavin McCabe, Chair  
Compliance Offset Protocol Task Force

Dear Chair McCabe:

We would like to register concern about the Compliance Offset Protocol Task Force draft recommendation to decrease contributions to the forest carbon buffer pool (**Draft Recommendation 17b**). As a group of global change scientists with expertise ranging from forest carbon cycling to disturbance ecology, we are deeply concerned because reducing the buffer pool would be inconsistent with the best available science and could fundamentally undermine the effectiveness of the Offset Protocol.

The 2020 fire year has shattered records. California experienced four of the five largest fires in state history, with similarly unprecedented fire years in Oregon and Colorado. These fires ravaged rural communities, made the air unbreathable for millions, and even burned through most of a large ARB-approved forest offset project in Oregon (1).

Fires are expected to grow larger and more severe in the future due to climate change. We are still in the early stages of the transition to a warmer, drier, more fire prone future in many parts of the United States (2-4). Furthermore, climate change will likely exacerbate other threats to forest carbon, including pest and pathogen outbreaks and severe droughts capable of killing hundreds of millions of trees over a few years, such as the 2011-2015 California drought (5-7). It simply is not scientifically credible to recommend decreasing contributions to the forest buffer pool.

Instead, risks to forest carbon permanence should be systematically updated and quantified using cutting-edge scientific tools, including forest inventory records, remote sensing, and ecosystem modeling. Evidence-based updates are likely to **substantially increase** forest buffer pool contributions for most projects. In particular, the current protocol broadly underestimates forest carbon permanence risks (8), which is perhaps best exemplified by the fact that forest projects in fire-prone California are assessed as having the same fire risk as projects in temperate Michigan. While “Climate Resilience Plans” might reasonably reward land managers who take proactive steps to reduce climate risks to forest carbon permanence, any such resiliency planning must start from a place that accurately characterizes those risks based on the best available science.

As a group of scientists concerned about climate change and interested in supporting rigorous, evidence-based natural climate solutions, we are eager to help improve calculations and ensure that the best available science is reflected in policy.

Sincerely,

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Grayson Badgley, Columbia University  
Philippe Ciais, Laboratoire des Sciences du Climat et de l'Environnement  
Christopher Field, Stanford University  
Jeremy Freeman, CarbonPlan  
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George Koch, Northern Arizona University  
Steven Pacala, Princeton University  
James Randerson, University of California Irvine  
Anna Trugamn, University of California Santa Barbara  
Park Williams, University of California Los Angeles

#### ENDNOTES

1. Hebert, Claudia, Jared Stapp, Grayson Badgley, William Anderegg, and CarbonPlan Team. "Carbon offsets burning". <<https://carbonplan.org/research/offset-project-fire>> Accessed 2 Nov 2020.
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4. Moritz, Max A., et al. "Climate change and disruptions to global fire activity." *Ecosphere* 3.6 (2012): 1-22.
5. Seidl, Rupert, et al. "Forest disturbances under climate change." *Nature Climate Change* 7.6 (2017): 395-402.
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7. Kurz, Werner A., et al. "Mountain pine beetle and forest carbon feedback to climate change." *Nature* 452.7190 (2008): 987-990.
8. Anderegg, William RL, et al. "Climate-driven risks to the climate mitigation potential of forests." *Science* 368.6497 (2020).

*\*Note: Institutional affiliations for signatories are provided for context. The views expressed belong solely to the signatories, and not necessarily to the signatories' employers or organizations.*