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Center for Tropical Research Congo Basin Institute 300 La Kretz Hall Ste 300 LOS ANGELES, CALIFORNIA 90095-1496

August 28, 2019

Mr. Richard W. Corey Executive Officer Air Resources Board 1001 I Street Sacramento, California 95814

via electronic submission to https://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=tfs2019&comm_period=N

RE: Proposed California Tropical Forest Standard

Dear Mr. Corey:

The Center for Tropical Research (CTR) at UCLA respectfully submits this letter in support of the California Air Resources Board (CARB)'s Updated Tropical Forest Standard ("Standard"). CTR is a leading center focused on tropical studies that builds capacity to conduct research on tropical systems in California and around the globe, and serves as a source of world-class science on tropical ecosystems. We find that the proposed Standard would advance California's landmark efforts to combat global climate change while protecting indigenous peoples and providing a critical signal to tropical jurisdictions. The Updated Tropical Forest Standard released July 30, 2019 makes valuable improvements to the prior draft.

Tropical forest protection is an indispensable strategy for fighting climate change, protecting public health, preserving biodiversity, and protecting and enhancing the livelihoods of forest-dependent peoples. With this Standard, California can establish a high-quality global model for assessing international forest offsets and signal to jurisdictions across the world that protecting forests is critically important. Recent fires in the Amazon—and less well-publicized ones in the Congo Basin—demonstrate the importance of global investment in this sector.

It is well documented that preserving and maintaining the world's tropical forests and natural lands are critical to global public health and to fighting climate change. Tropical forests sequester carbon from the atmosphere, thereby mitigating climate change and harmful air pollution. Tropical forests also actively cool the atmosphere. The failure to decrease tropical deforestation and

¹ Stephens, BB et. al (2007). Weak Northern and Strong Tropical Land Carbon Uptake from Vertical Profiles of Atmospheric CO2, 316 *Science* **316**: 1732.

² Nepstad, DC; Stickler, CM; Soares-Filho, B; Merry, F (2008). Interactions among Amazon land use, forests and climate: Prospects for a near-term forest tipping point, *Philosophical Transactions of the Royal Society B* **363**: 1498.

degradation would be catastrophic for forest biodiversity and, as a result, carbon sequestration.³ Tropical soils depend on tree biodiversity to sequester carbon effectively, and this ability diminishes as biodiversity diminishes.⁴ When tropical forests are harmed and degraded, carbon sequestration is subsequently diminished by harm to trees as well as soils.⁵ In this way, tropical deforestation and degradation have become among the largest sources of carbon emissions, releasing more global greenhouse gas emissions annually than the global transportation sector.⁶ The recent Intergovernmental Panel on Climate Change report reflects the immense importance of tropical forest management practices, indicating with high confidence that deforestation and degradation pose "profound challenges" for sustainability of human settlements, food, livestock feed, and other important ecosystem services.⁷ Recent research into tropical forests has underscored their importance to global carbon levels, and highlighted how poorly understood these critical ecosystems are. For instance, as recently as last year new research showed that peat deposits in the Conga Basin forest sequestered nearly 60 billion metric tons of carbon, effectively doubling the amount of carbon that is stored in that tropical forest region.⁸

Given the critical role tropical forests play in combatting global climate change, we support the Tropical Forest Standard as an important step towards California's thoughtful and effective engagement in this important sector. By approving the Updated Standards, CARB would join a growing list of California institutions that recognize and value the role of tropical forests in the health and well-being of Californians. The Congo Basin is the second largest tropical rainforest after the Amazon, hosts incredible biodiversity, and is estimated to hold approximately 60 million metric tons of carbon. In 2015, with approval from the University of California Office of the President, UCLA inaugurated the Congo Basin Institute (CBI), its first foreign affiliate, which is based in Cameroon. CTR led the creation of CBI, and the University of California campuses at Davis and Riverside have also joined CBI.

CBI works closely with local populations in the Congo Basin, including a long term collaboration with members of the indigenous Baka tribe. This work gives us an intimate view of the marginalization indigenous communities face, as well as the tremendous knowledge and forest

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³ Laurance, WF et. al. (2012). Letter: Averting biodiversity collapse in tropical forest protected areas. *Nature* **489**: 290.

⁴ Bunker, DE et. al (2005). Species Loss and Aboveground Carbon Storage in a Tropical Forest. *Science* **310**(5750): 1029.

⁵ Laurance, WF and Williamson, GB (2002). Positive Feedbacks among Forest Fragmentation, Drought, and Climate Change in the Amazon, *Conservation Biology* 15: 6.

⁶ Winkler, H (2014). Emerging lessons on designing and implementing mitigation actions in five developing countries. *Climate and Development* 6:1 (Mar. 26, 2014).

⁷ Intergovernmental Panel on Climate Change, *Global Warming of 1.5 C – Summary for Policymakers*, at SPM-22 (Oct. 6, 2018), *available at* http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf.

⁸ Dargie, GC; Lewis, SL, Lawson, LT; Mitchard, ETA; Page, SE; Bocko, YE; Ifo, SA (2017). Age, extent and carbon storage of the central Congo Basin peatland complex. *Nature* **542**: 86-90.

⁹ "Indigenous", is a fraught term in Central Africa. The term indigenous people originated in the Latin American context, where indigenous communities are homogenous in clearly defined territories. In Central Africa, the term "indigenous" implies that Bantu ethnic groups, who have been present in the area for millennia, are not natives, creating additional tensions between Bantu and Baka ethnic groups. Here, we refer to Baka as "indigenous" in the American understanding of the word, without comment or prejudice towards the lively discussion of the term's meaning within the context of Central Africa.

management capabilities they can contribute. As such, we welcome the incorporation of the incorporation of the Governors' Climate and Forests Task Force Guiding Principles for Collaboration and Partnership Between Subnational Governments, Indigenous Peoples and Local Communities into the Updated Standards.

We also welcome the Updated Standards' potential role as a model high-quality jurisdictional approach to reducing deforestation. The aforementioned recent discovery of peat deposits containing an estimated 30.6 billion metric tons of carbon in the Congo Basin underscores the importance of the region in combatting global climate change. Yet many of the existing deforestation reduction programs and model have emanated from Latin America. The Congo Basin is a unique geographic, political, and socio-economic region, and having standards that are clear and of high quality, while also offering flexible guidance that extends beyond offsets and carbon markets will facilitate the creation and implementation of deforestation reduction models there. We believe the Updated Standards would support jurisdictions like those in the Congo Basin to better understand the role they can play in avoiding carbon release, and paves the way for participation of this critical region in large-scale deforestation reduction programs.

CTR supports action by CARB to approve the Updated Tropical Forest Standard. We believe this Standard presents an opportunity for California to lead the world in tropical forest protection and conservation, which has the potential to yield immense public health and environmental benefits.

Respectfully submitted,

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