

Proposal for a modification to American Carbon Registry methodology "Afforestation and Reforestation of Degraded Land, v1.1"

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The Restore the Earth Foundation is in the process of developing an Afforestation/ Reforestation (AR) project on Pointe aux Chenes Wildlife Management Area in Louisiana, to be registered under the American Carbon Registry (ACR), and applying methodology "Afforestation and Reforestation of Degraded Land." The project area is indisputably a wetland, with organic soils and sustained periods of inundation.

The methodology, in its current form, is not applicable to wetlands through the following condition (Section 4, Applicability, p. 4):

"The land does not fall into wetland<sup>1</sup> category."

This applicability condition is a legacy of the CDM AR methodologies, from which the ACR methodology was adapted. Our understanding, confirmed in a recent discussion with Neil Bird of Joanneum, former member of the CDM AR Working Group, is that the condition was included because potential emissions from wetland soils could not be easily estimated and incorporated in the methodology.

The solution, to make the methodology applicable to wetlands, is to narrow the applicability conditions so that soil can be conservatively excluded from the project boundary, i.e. disallow conditions in which emissions from soil could be higher in the project case than in the baseline.

This could be done by expanding the immediately preceding applicability condition (b) (Section 4, Applicability, p. 4)

"If at least a part of the project activity is implemented on organic soils, drainage of these soils is not allowed and not more than 10% of their area may be disturbed as result of soil preparation for planting."

to reference wetlands in addition to organic soils, and to replace drainage with *any* hydrological manipulation (including rewetting, which could increase methane emissions e.g.). This should be sufficient to exclude project circumstances in which soil emissions on a wetland are increased either through hydrological manipulation or soil disturbance.

Transpiration by trees could also impact hydrology, and potentially increase soil carbon emissions where species with high water demands (e.g. *Eucalyptus* or *Melaleuca*) are planted and succeed in drawing down the water table. To address this, we propose restricting application of the methodology on

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<sup>1</sup> "Wetlands", "settlements", "cropland" and "grassland" are land categories as defined in the *Good Practice Guidance for Land Use, Land-use Change and Forestry* (IPCC, 2003).

wetlands to planting only species likely to have occurred under historic natural forest conditions in the project area, ensuring that species used are characteristic of forested wetlands and would not significantly alter site hydrology to a non-wetland state.<sup>[DS1]</sup>

A further modification to the methodology requirements in Table 1 (p. 6) would exclude soil carbon from the project boundary if implemented on wetlands (currently references organic soils), and consequently would conservatively ignore any increases in the soil carbon pool in the project case (which can be expected where hydrology remains the same, soil disturbance is minimal, and trees are planted and organic matter inputs increase).

The specific modifications proposed below should be sufficient to permit exclusion of the soil organic carbon pool and allow the methodology to be used on wetlands.

We propose the following modifications:

- 1) Remove from Section 4, Applicability, p. 4, applicability condition (c) “The land does not fall into wetland<sup>2</sup> category”.
- 2) Revise applicability condition (b) (Section 4, Applicability, p. 4) from

“If at least a part of the project activity is implemented on organic soils, drainage of these soils is not allowed and not more than 10% of their area may be disturbed as result of soil preparation for planting”

to

“If at least a part of the project activity is implemented on organic soils **or wetlands, intentional manipulation of the water table** is not allowed (*i.e. the project activity shall not involve manipulation of hydrology or otherwise affect hydrology*), not more than 10% of their area may be disturbed as result of soil preparation for planting planting **and species planted are restricted to those likely to have occurred under historic natural forest conditions in the project area, per best available knowledge (relevant literature and/or consultation with local experts).**”<sup>[DS2]</sup>

- 3) Revise text in Table 1, p. 6, under “Accounted for” column, “Soil organic carbon (SOC)” row, from “Yes (alternatively No if project implemented on organic soils)” to “Yes (alternatively No if project implemented on **wetlands<sup>3</sup> or organic soils**)”

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<sup>2</sup> “Wetlands”, “settlements”, “cropland” and “grassland” are land categories as defined in the *Good Practice Guidance for Land Use, Land-use Change and Forestry* (IPCC, 2003).