

From: [Jason Funk](#)
To: [GHGInventory](#)
Cc: [Noah Deich](#); [Miriam Swaffer](#)
Subject: EPA must utilize Tier 2 and Tier 3 data in estimating emissions from lands newly classified as "forest land converted to grassland" in subsequent drafts of the Inventory of U.S. Greenhouse Gas Emissions and Sinks
Date: Friday, March 17, 2017 4:42:23 AM

To whom it may concern:

I write to submit a comment on the Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2015, on behalf of the Center for Carbon Removal. The Center is a 501(c)(3) advocacy organization dedicated to finding climate change solutions. My personal qualifications include UN certification as an expert reviewer of GHG inventories for the Land use, Land-Use Change and Forestry (LULUCF) sector, and this comment is aimed at that sector.

We noted significant changes to the estimates of the magnitude of the historical U.S. LULUCF sink in the Draft Inventory, compared to estimates from previous years. In some cases, these revisions changed previous estimates in a way that decreased the magnitude of the overall sink by more than 50 percent, compared to estimates for the same year in previous Inventories.

Upon further investigation, we found that these significantly revised estimates appear to arise from a reclassification of lands that formerly met the national definition of forest land, but have now been reclassified as grasslands because they no longer meet one or more of the criteria of the forest land definition. Furthermore, the estimates of biomass in these newly reclassified grasslands appear to rely on Intergovernmental Panel on Climate Change (IPCC) default values, consistent with a Tier 1 approach.

We commend the efforts in this draft to improve the quality and transparency of the information used to develop the Inventory. In this case, we are concerned that the use of IPCC default values for U.S. grassland carbon stocks may actually diminish the accuracy of the estimated emissions from these lands, and hence of the entire inventory. Since this single factor seems to account for a change in the emissions estimate on a scale of hundreds of millions of tons CO₂-e, it seems important to construct the most accurate estimate possible.

In our view, while the 2006 IPCC Guidelines allow for the use of Tier 1 data when necessary, it is good practice for countries to use country-level (Tier 2) or spatially explicit data (Tier 3) whenever possible. And in this case, the Tier 1 default values are probably not representative of the carbon stocks in lands that were recently forested. In many cases, these areas may still have significant amounts of carbon present in woody material in above- or below-ground biomass, dead wood, and litter, as well as in soil organic matter. To represent these areas with default values for grasslands likely significantly overestimates the emissions from these lands, in a way that diminishes the accuracy of the Inventory, rather than enhancing it.

We have come to understand that Tier 2 and Tier 3 data related to carbon stocks in areas

newly classified as "forest land converted to grassland" may be available from federal agencies (including the US Forest Service, Bureau of Land Management, and possibly others), national laboratories, academic institutions, and other sources. *We request that EPA undertake a robust effort to identify and utilize such information in subsequent development of the Draft Inventory.* In our view, the use of Tier 1 emission factors for these areas is not consistent with good practice, and we urge EPA to develop an Inventory that fulfills the IPCC principles to the greatest possible degree.

We would like to thank you for your ongoing efforts to compile the Inventory and we commend you for performing this important work with great care. We hope you will take this comment as a constructive contribution to the valuable work you have been doing.

Respectfully,

Jason Funk, PhD
Associate Director for Land Use
[Center for Carbon Removal](#)

