

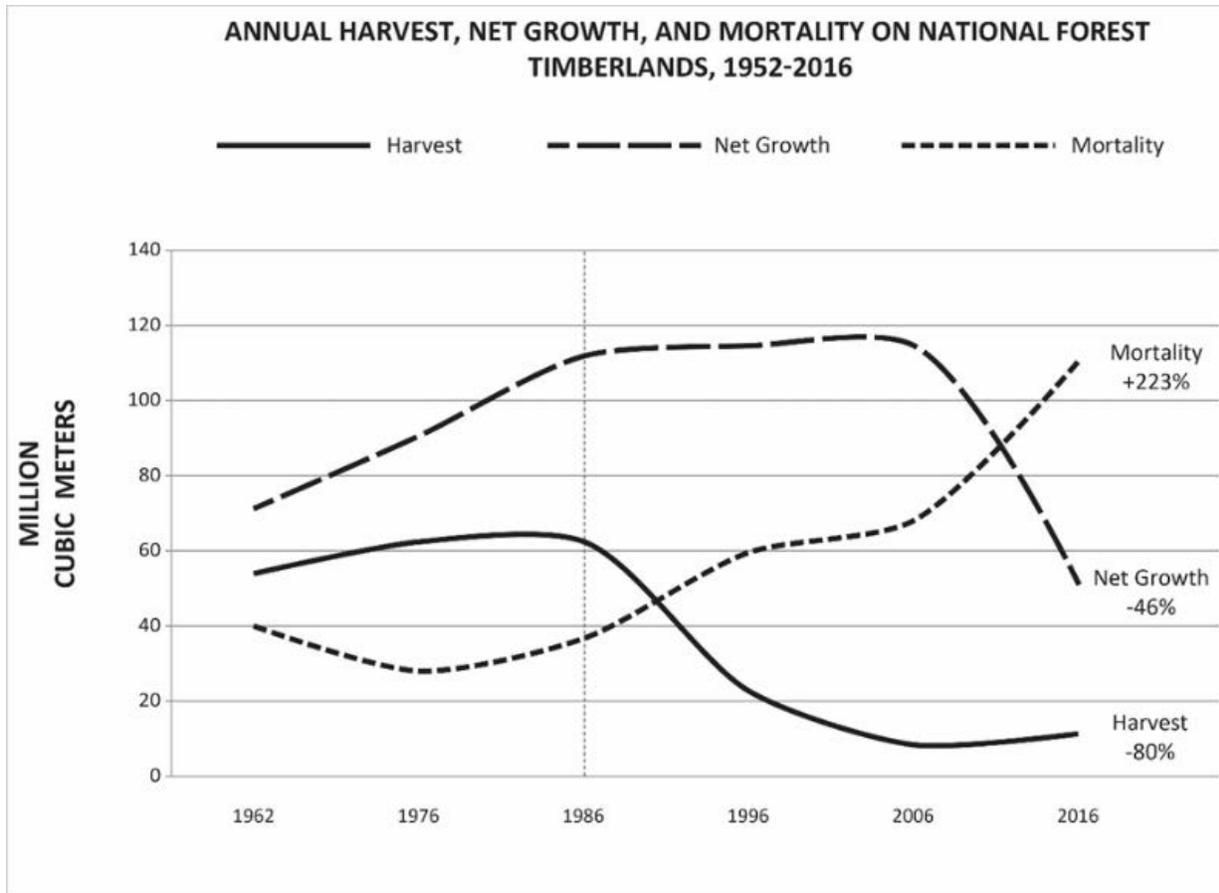
Statement of  
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Before the  
United States House of Representatives  
Subcommittee on National Parks, Forests, and Public Lands (Committee on Natural Resources)  
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CONCERNING H.R. 2049 - The REPLANT Act

I am the Director of Science and Sustainability at CORRIM, the Consortium for Research on Renewable Industrial Materials, a non-profit with twenty university members from across the USA. Collectively we have spent twenty-five years studying the environmental performance of wood, and in the process doing the calculations that demonstrates the unique, measurable benefits of using wood as a climate mitigation technology. My field of expertise is on the impacts of climate change on our forests, lifecycle assessments of forest operations, forest management and natural disturbance, and forest carbon.

I was invited to speak today about the efficacy of planting trees after climate driven disturbance, as proposed in the REPLANT Act. Our research finds that a more comprehensive approach that accounts for forests, wood products, wood alternatives, and their impacts, is needed to maximize climate benefits from forested systems. The accounting is complex, so in May 2021 we released a synthesis work called [The Plant a Trillion Trees Campaign to Reduce Global Warming – Fleshing Out the Concept](#). The slide you are seeing is Figure 1 of that paper.

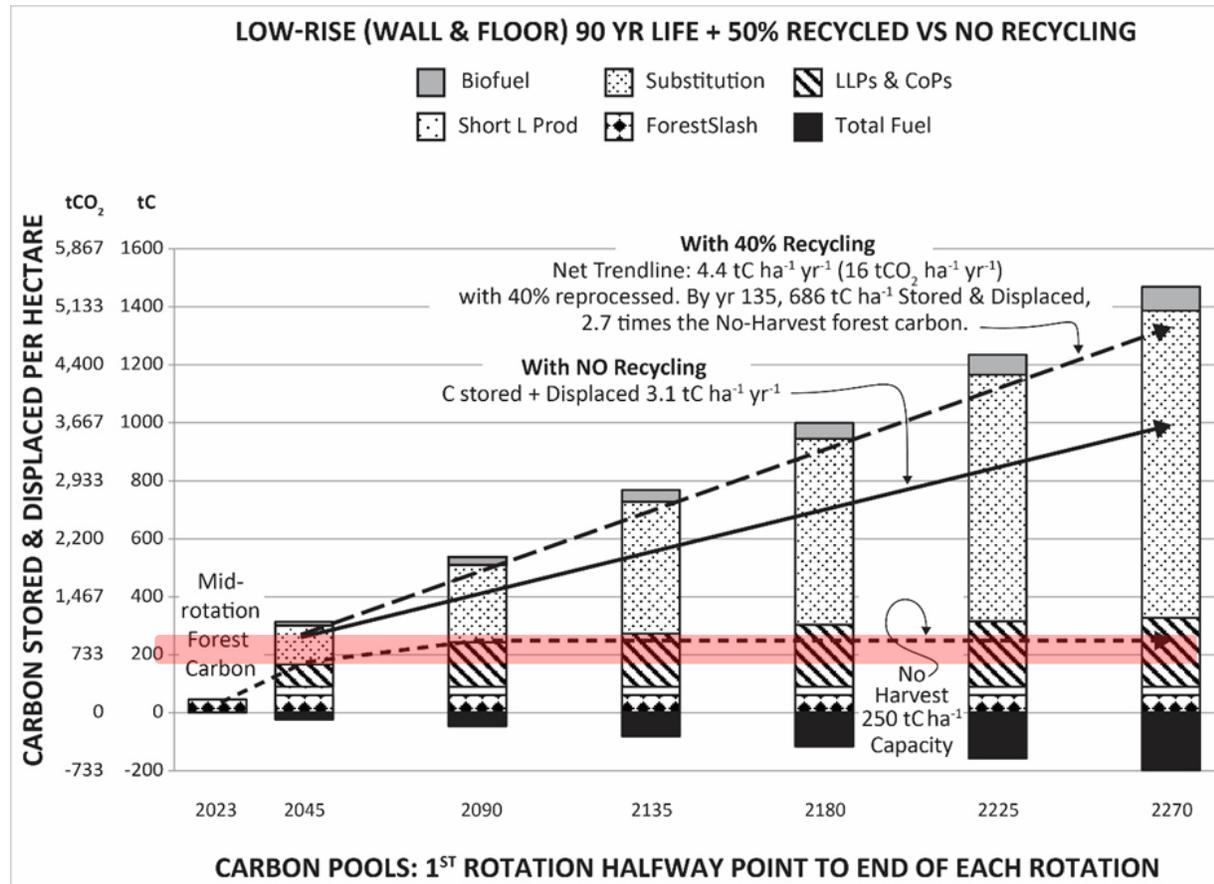


It shows the annual harvest, net timber growth, and tree mortality across all national forest timberlands, from 1962 to 2016. It uses US Forest Service (USFS) Forest Inventory and Analysis (FIA) data that is gathered as a requirement of the 1974 Resource Planning Act. Beginning in 1986 (vertical dotted line), timber harvesting declined on national forests by 75% but there was no corresponding increase in net growth. Why? Because fires, insects, and disease increased mortality by more than 200%. Many areas are now becoming sources of greenhouse gas (GHG) emissions instead of sinks, including some of the states that you represent. How did that happen?

The forests were often too dense, too uniform, and too old to sync with the changes we are seeing in our weather and climate. Our analysis of FIA data shows that even before the natural disturbance events, these overcrowded forests provided little biodiversity and little resistance to catastrophic wildfires. What these data also show is that planting more forests will not address the climate problem unless we also think about how we are going to manage them in the face of our current and future climate challenges.

CORRIM’s comprehensive analysis of the entire life cycle of the forest, plus wood products and alternative materials, and their uses and impacts, shows how to address current and future climate challenges starting today, with today’s technologies. In the figure shown we have even

considered a visionary alternative that incorporates wood into the circular economy – which really is the next frontier for all material use.



Our analysis shows that even for forests managed on relatively short rotations in the Douglas-fir region, the climate benefit of removing carbon dioxide from the air via tree growth, combined with current allocations of wood products, and common substitutions for non-wood products far exceeds potential benefits of leaving the forest unmanaged and unharvested as shown by the red bar overlain on the figure. It also shows that with management, and not just tree planting, we can attain carbon benefits faster and with fewer risks of loss than if we plant it and leave it to nature.

Analysis of current FIA data, and its inclusion in the Environmental Protection Agency (EPA) GHG accounts, show that privately managed forests are still able to offset the high mortality seen on public lands. For how much longer given forest mortality from recent (and current) fire seasons is unknown. So yes, we need to replant public lands after natural disasters, as there are thousands of acres of denuded burned-over land, some of which has suffered a complete loss of seed source due to extreme fire conditions which kills residual trees and the soil seed bank.

That said, the REPLANT Act is based on an extremely limited small scale vision that puts a band-aid on the problems facing our national forest system. There are millions more acres in desperate need of remedial treatment that could yield timber products, rural jobs, and materials for the infrastructure re-build that is currently under discussion, all with a low carbon footprint. Such an integrated approach would result in much greater benefits across multiple systems. Concurrently treatments would increase the vigor on the remaining trees and mitigate fire risk, thus ensuring the health and future of our national forest system consistent with the multiple use mandate of the 1974 Resource Planning Act that you are contemplating amending using the REPLANT Act of 2021. Thank you so much.