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Comments: I am a climate scientist who has done research on forest carbon dynamics.

The proposal to conduct major harvests in Telephone Gap is inconsistent with maintaining existing forest carbon stocks in the mature forests to be harvested. The age of the proposed forest is consistent with its being a mature forest that still has the potential to accumulate much additional carbon during the critical next 50 years when it is essential to be removing the most atmospheric carbon to meet temperature limiting goals identified by IPCC. A recent research paper supports this finding that is authored by retired senior USFS scientist Richard Birdsey. <https://doi.org/10.1016/j.foreco.2023.121373>

Converting mature forests of this age into early successional habitat is perhaps the worst outcome because it maximizes the forest carbon loss. In the Green Mountain National Forest in Vermont, USFS has approved 40,000 acres of harvest since 2016, targeting many mature and old trees. One 14,270-acre area that was approved for harvest in 2019 contained more than 130 stands older than 100 years. Telephone Gap that hosts many of these older forests is targeted for these harvests.

This is also inconsistent with President Biden's Executive Order Executive Order 14072 of April 22, 2022 to identify mature and old growth forests with the goal of addressing climate goals.

When it was announced that Forest Management Plans would be revised, but that forests would continue to be managed under existing harvest guidelines, scientists sent a letter calling for a moratorium on harvests to prevent the loss of these forests that are important for climate. The letter that includes the scientific judgement of 195 forest and climate scientist including members of the National Academies of Sciences is attached. <https://sites.tufts.edu/gdae/files/2024/03/MOG-Scientist-March-8.pdf>

In the justification of the harvest, it is claimed that harvesting this relatively small area within a larger forests is insignificant. This is incorrect! A relatively small number of large trees hold a disproportionately large amount of the carbon. In a study done on six National Forests in Oregon and Washington, found that the largest 3% of live trees held 42% of the carbon. <https://doi.org/10.3389/ffgc.2020.594274>

The Intergovernmental Panel on Climate Change Report AR6 calls for conserving large amounts of important ecosystems to achieve climate goals.

* To limit increasing temperature to no more than 2.7oF (1.5oC) the world must achieve Net Zero by 2050 when all emissions from combustion and land use no longer exceed removals by forests and other ecosystems. IPCC 2018 <https://www.ipcc.ch/sr15/>

* Global average temperature has already risen by 2.2o F (1.2oC)

* "Safeguarding biodiversity and ecosystems is fundamental to climate resilient development, in light of the threats climate change poses to them and their roles in adaptation and mitigation (very high confidence)." IPCC AR6 WG 2 Summary for Policymakers D.4)

* "[hellip]maintaining the resilience of biodiversity and ecosystem services at a global scale depends on effective and equitable conservation of approximately 30% to 50% of Earth's land, freshwater and ocean areas, including currently near-natural ecosystems (high confidence)." (IPCC AR6 WG 2 Summary for Policymakers D.4)

* "[hellip] protection of existing natural forest ecosystems is the highest priority for reducing GHG emissions (Moomaw et al. 2019) and restoration may not always be practical." (IPCC AR6 WG 2 page 303)
<https://doi.org/10.3389/ffgc.2019.00027>

The prudent action for the future of the climate and the integrity of this forest, is to abandon the current harvest plan for Telephone Gap and other areas in Green Mountain National Forest.