



# Friends of the Clearwater

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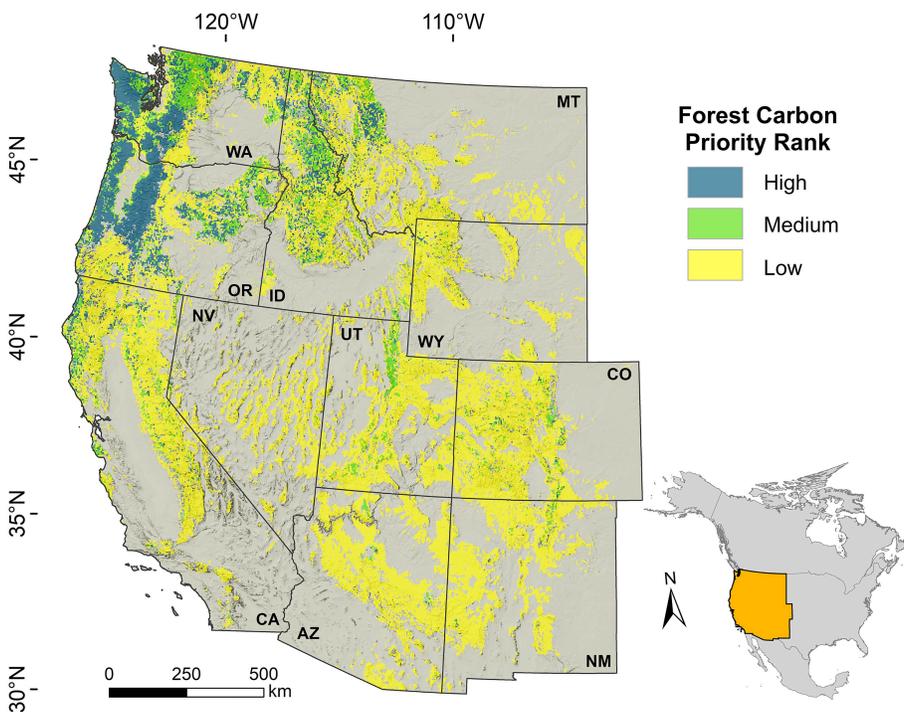
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Facing the challenge of global warming head-on overlaps with Friends of the Clearwater's mission because one prong of climate defense is forest defense. Friends of the Clearwater is a non-profit that has defended the Idaho Clearwater Bioregion's wildlands and biodiversity since 1987 through grassroots advocacy and education, a forest-watch program, and when necessary, litigation. The Wild Clearwater Country, the northern half of central Idaho's "Big Wild"—also the southernmost part of the largest inland temperate rainforest in the world—contains many unprotected roadless areas and wild rivers that provide crucial habitat for numerous rare plant and animal species. These areas have the potential to provide a natural and cost-effective strategy to slowing global warming.<sup>1</sup>

Earth's forests are the planet's lungs because trees sequester carbon dioxide out of the atmosphere and store it. "Compared with other terrestrial ecosystems, forests store some of the largest quantities of carbon per surface area of land."<sup>2</sup> For this reason, all forests are generally carbon sinks and can mitigate global warming. However, Pacific Northwest forests have more potential to sequester

carbon and maintain biodiversity than other forests in the Western U.S. In 2019, a group of researchers prioritized forest lands in the U.S. West that had lower vulnerability to future drought and fire, a high potential to sequester carbon, high carbon density above and belowground, high tree species richness, and habitat for endangered species.<sup>3</sup> They mapped the following, with the areas of blue and green containing the most of these criteria (left).



North-central Idaho is speckled with pockets of high-priority forest that "exhibit features of older, intact forest

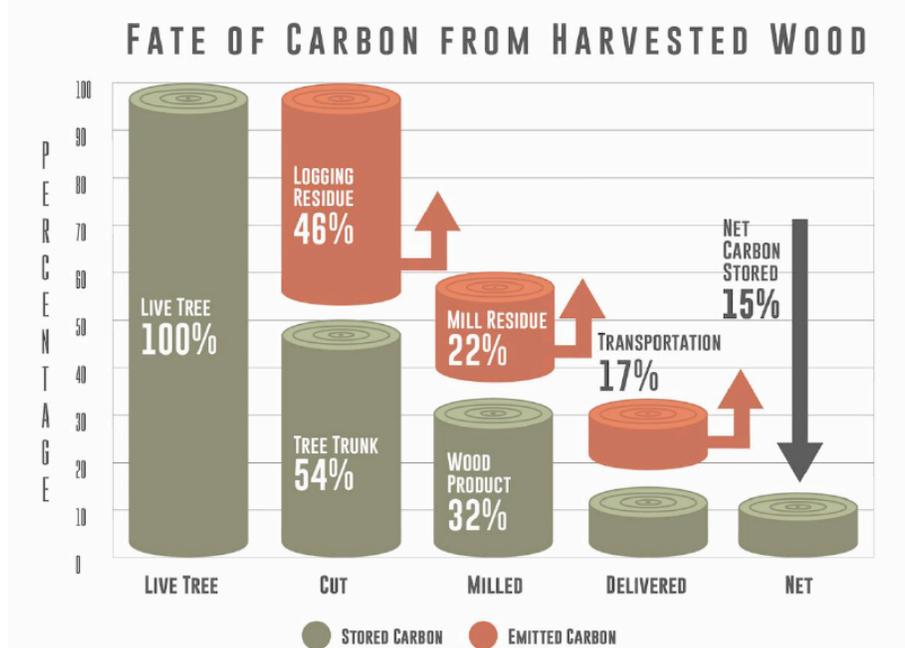
<sup>1</sup> Buotte et al. 2019. Carbon sequestration and biodiversity co-benefits of preserving forests in the western USA, doi: 10.1002/EAP.2039; Law et al. 2018. Land use strategies to mitigate climate change in carbon dense temperate forests. PNAS 115(14): 3663-3668.

<sup>2</sup> Achat, D. L. et al. Forest soil carbon is threatened by intensive biomass harvesting. Sci. Rep. 5, 15991; doi: 10.1038/srep15991 (2015).

<sup>3</sup> Buotte et al. 2019. Carbon sequestration and biodiversity co-benefits of preserving forests in the western USA, doi: 10.1002/EAP.2039

with structural diversity[], including carbon density and species richness.”<sup>4</sup> By 2099, high-ranked forests could sequester up to 20 percent of the global mitigation potential for temperate and boreal forests,<sup>5</sup> and medium-ranked forests can augment that so long as these forests aren’t logged.

Logging adds to carbon emissions. Forests store large quantities of carbon within the soils, which ground-based harvest disturbs. Logging removes a tree and its potential to sequester carbon. And wood products store only approximately 15 percent of the carbon that can be stored by a living tree:



Courtesy of <https://josephinedemocrats.org/forest-defense-is-climate-defense/>,<sup>6</sup>

Natural fire emits less CO2 than logging with the aim of reducing future fire emissions. Research has found high carbon losses associated with “fuel treatment” and only modest differences associated with the high-severity fire and low severity fire that fuel treatment is meant to encourage.<sup>7</sup> And where some disturbances like insects, disease, and fire kill trees and lower carbon sequestration, logging has the greater impact—up to ten times the carbon from forest fires and bark beetles together.<sup>8</sup> The Forest Service is ignoring this science as it sets the direction for forest management for the coming two decades.

The Forest Service is revising the land-management plan for the Nez Perce-Clearwater National Forest, which will govern how the agency manages the land for the next two decades. The Forest Service did not recognize anthropogenic-caused climate change in its environmental analysis. The agency attributed the warming climate to a natural oscillation pattern in the Pacific Ocean. Although the

<sup>4</sup> Buotte et al. 2019. Carbon sequestration and biodiversity co-benefits of preserving forests in the western USA, doi: 10.1002/EAP.2039.

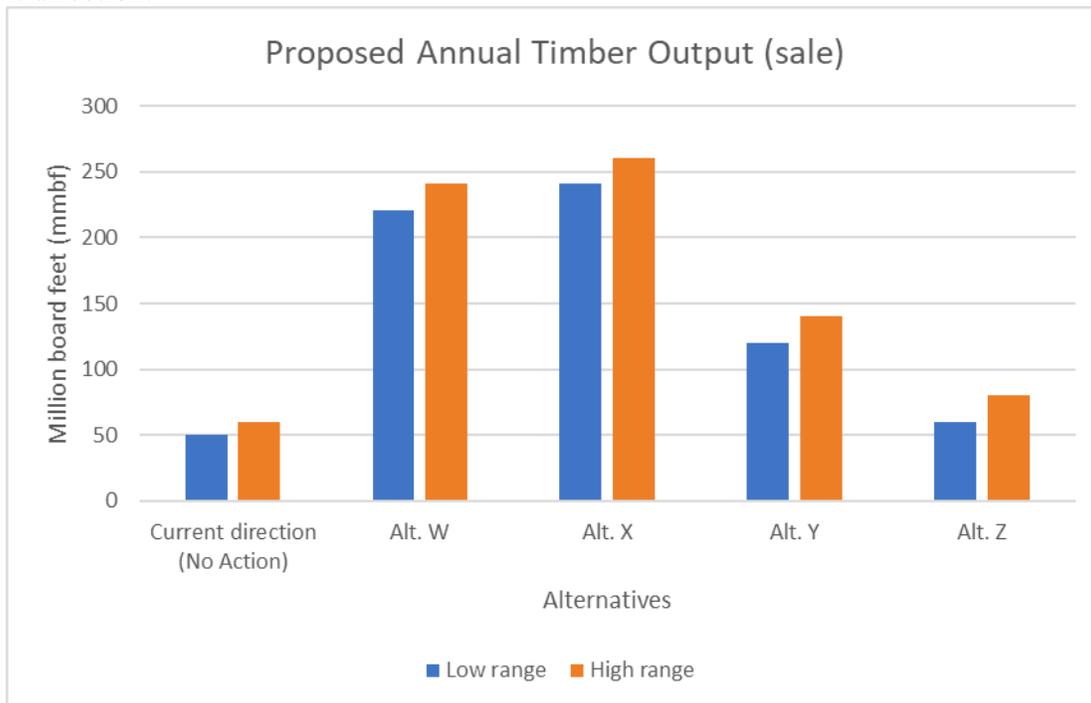
<sup>5</sup> Buotte et al. 2019. Carbon sequestration and biodiversity co-benefits of preserving forests in the western USA, doi: 10.1002/EAP.2039.

<sup>6</sup>This chart, designed by Jarrett Matthews, draws information from the following articles: Smith et al. 2006. Methods for calculating forest ecosystem and harvested carbon with standard estimates for forest types of the United States. USDA FS Gen Tech Report NE-343; Gower 2003. Patterns and Mechanisms of the Forest Carbon Cycle. Annu. Rev. Environ. Resour. 28:169-204.

<sup>7</sup> Campbell et al. 2012. Can fuel-reduction treatments really increase forest carbon storage in the western US by reducing future fire emissions? Front. Ecol. Environment 10(2): 83-90.

<sup>8</sup> Harris et al. 2016. Attribution of net carbon change by disturbance type across forest lands of the coterminous United States. Carbon Balance Manage (2016) 11:24, DOI 10.1186/s13021-016-0066-5

Forest Service acknowledged the overwhelming consensus that temperatures will increase, because the Forest Service did not acknowledge the human factors that can accelerate that, the Forest Service avoided a discussion about how all of its alternatives might impact the climate. Every single alternative that the Forest Service is considering will increase logging, from increasing it by 1/3 the current direction (what the Forest Service designated as the ecologically driven alternative) to up to five times the current direction.



*Above: Chart of logging levels, in million board feet, for the current direction in comparison to every alternative the Forest Service is considering to adopt for the revised forest plan. Chart courtesy of Friends of the Clearwater based on the Forest Service’s draft environmental impact statement for the Nez Perce-Clearwater National Forests Revised Forest Plan.*

As illustrated by the chart above, every management direction will increase carbon emissions from their current amount. And these alternatives eliminate the limited protection currently in place for old-growth and aquatic habitats, which could combine with increasing temperature to render biodiversity more vulnerable than ever.

Friends of the Clearwater is engaging in the administrative process to convince the Forest Service to create a direction that will protect forests as a regional strategy to counter global warming. Friends of the Clearwater is also educating the public on the science that suggests that increasing logging on the Nez Perce-Clearwater National Forests would irreversibly damage intact forests that sequester carbon and espouse biodiversity. We are encouraging as much of the public as possible to comment on the draft environmental impact statement and make their voices heard because public pressure supported by the best available science is our most effective strategy to pressure the Forest Service to reverse its proposed course, which will accelerate global warming.

Please visit [www.friendsoftheclearwater.org/forest-plan](http://www.friendsoftheclearwater.org/forest-plan) to link to the Forest Service’s draft environmental impact statement, for information and discussion points to get you started on your comment, and for information on how to submit your comments by email, mail, or online. Please contact our office if you have any questions. **THE DEADLINE TO COMMENT IS APRIL 20, 2020.**