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February 25, 2020

The Honorable Raúl Grijalva
Chair
Committee on Natural Resources
U.S. House of Representatives
1324 Longworth House Office Building
Washington, DC 20515

Re: Letter of Opposition to The Trillion Trees Act

Dear Chairman Grijalva,

On behalf of the undersigned organizations and our millions of members and supporters, we write to express our opposition to H.R. 5859, the Trillion Trees Act introduced by Congressman Bruce Westerman (R-Ark.).

While we support ecologically sound tree-planting as a means to increase carbon sequestration and climate adaptation, this legislation presents a false solution for addressing the climate crisis by misallocating resources to focus on industrial logging rather than on urgently needed steep reductions of fossil fuel emissions. The bill would significantly increase logging across America's federal forests, convert millions of acres into industrial tree plantations, increase carbon emissions, increase wildfire risk, and harm wildlife and watersheds.

We strongly support U.S. leadership to halt deforestation internationally and to reforest severely degraded and converted forests. However, the international section of the bill has no binding

requirements and relies instead on voluntary private donations, calling into question the efficacy of that provision.

The following summarizes our concerns with the bill's provisions that affect federal public lands management.

1. The bill distracts from urgently needed reductions in fossil fuel emissions.

Carbon pollution from fossil fuels is the overwhelming reason climate change is such an urgent problem. To address it the 2018 IPCC "Special Report on Global Warming of 1.5°C" made clear that global emissions must be cut by half by 2030 to limit warming to 1.5°C and avoid the worst damages of the climate crisis.¹ The United Nations' November 2019 "Emissions Gap" report reiterated the need for urgent action.² If the world is to limit global warming to the 1.5°C target, the United Nations report concluded that countries must cut emissions by at least 7.6% per year over the next decade, for a total emissions reduction of 55% between 2020 and 2030.³

Yet the bill is devoid of any action that would reduce fossil fuel emissions from federal and non-federal lands. This is especially alarming given the amount of federal land and waters opened to new leasing, including the opening of the Arctic National Wildlife Refuge to fossil fuel exploitation and the massive increase in drilling and fracking across America's public lands.

Additionally, any benefits to the climate from planting tree seedlings would not be realized for many decades until most of the new trees would reach maturity. Federal law already requires replanting after logging, which raises other issues about the best way to achieve resilience following natural disturbance. The climate crisis demands urgent atmospheric CO₂ reductions now.

2. The bill would dramatically increase logging and contradicts the best available science for increasing carbon stores.

The bill requires the secretary of Agriculture to set targets for increased domestic wood growth and establishes a task force to develop policy recommendations, but requires that those policies "maintain yearly sustainable increases in the amount of board feet harvested from public lands." Further, the bill requires that targets for increasing domestic wood growth be established at levels which represent the "maximum feasible increase in the total wood volume" federal landowners can achieve and targets any natural disturbance of forest stands (e.g. ice, wildfire, blowdown, insects) as priority areas for logging and monoculture replanting.

This timber production model contradicts the best available science for increasing forest carbon stores which supports preservation of natural forests versus plantations.⁴ It also ignores forest

¹ Intergovernmental Panel on Climate change, Global Warming of 1.5°C, An IPCC Special Report on the Impacts of Global Warming of 5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, In the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty (2018), available at: <https://www.ipcc.ch/sr15/>.

² United Nations Environment Program (2019). EMISSIONS GAP REPORT 2019, available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/30797/EGR2019.pdf>.

³ *Id.* at 25, 26.

⁴ Moomaw et al. 2019 Intact Forests In the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good. *Frontiers in Forests and Global Change*.

conservation and extending rotations in previously logged areas as viable strategies. For example, continued logging of old-growth temperate rainforests in the Tongass or other National Forests clearly does not meet the purpose of capturing and storing carbon.⁵ Further, scientific studies indicate that extended logging rotations can store more carbon than short-rotation logging. Moreover, even if the best available science supports *less* logging to grow more carbon, the bill legally prohibits the Task Force from making such recommendations.

3. Carbon is better stored in forests than wood and paper products.

The bill is focused on increased carbon storage through utilization of forest and wood products and discounts tree mortality and natural disturbances as providing carbon benefits. Yet only a fraction of the carbon stored in a standing tree is sequestered in a final wood product. Dr. Mark Harmon, a professor emeritus at Oregon State University with extensive research experience on forests, forest carbon and related issues, in his testimony⁶ before the House Natural Resource Committee on climate change and forests, stated:

The concept that carbon is completely lost or habitat is completely lost because of mortality is mistaken at best. When trees die in a forest from natural causes, a substantial part of the carbon remains (even in the case of severe fires more than 90% remains) and this carbon is gradually lost through the process of decomposition (which takes decades to centuries).

Specifically, when carbon is removed from forests through harvest, not all of the carbon ends up as solid products. If the harvested carbon is used for lumber/plywood/OSB production then somewhere between 30- 40% is lost to the atmosphere in the manufacturing process. If the harvested carbon is used to make paper, then the amount lost to the atmosphere is around 50% and if used as fuel then it is 100%. Contrast these amounts to the range of live carbon lost to the atmosphere during natural disturbances: somewhere between zero and 10%.

4. The bill's carbon-accounting methodology is biased against carbon storage in forests and in favor of industrial logging.

The bill requires the secretary of Agriculture to develop models to evaluate the lifecycle forest carbon sequestration potential associated with active management of the national forest system. However, among the eight factors listed, the bill makes no mention of several essential factors that must be considered in a scientifically sound carbon lifecycle model. Specifically, the factors do not include the amounts of carbon released through logging and milling operations, loss of soil carbon, log transport, eventual building demolition, or wood product decomposition or silvicultural success rates. It is incorrect to assume that that whatever carbon is harvested is replaced sustainably by new forest growth in the future.

The fact is that timber harvest is a large source of carbon emissions. A U.S. Forest Service study of net carbon change in the lower 48 states found that carbon emissions from logging between

⁵ Leighty et al. 2006 Effects of Management on Carbon Sequestration in Forest Biomass in Southeast Alaska Ecosystems 9:1065 DOI: 10.1007/s10021-005-0028-3

⁶ Statement from Dr. Mark E. Harmon, Professor Emeritus to the United States House Natural Resources Committee Subcommittee on National Parks, Forests, and Public Lands Concerning the hearing on Climate Change and Public Lands: Examining Impacts and Considering Adaptation Opportunities, Committee Hearing Date: February 13, 2019 Testimony Date: February 21, 2019

2006 and 2010 — including taking into account carbon in long-lived wood products — were more than 5 times higher than losses from fire, wind, and insect infestation, reducing the potential carbon sink of U.S. forests by more than one-third.⁷

The bill's focus on timber production and replanting following logging would increase the acres of plantations on national forests. Research has demonstrated that total ecosystem carbon in plantations is 28% lower than in natural forests.⁸ Plantations are also more susceptible to uncharacteristic wildfire.⁹ Other studies have shown that extending harvest cycles and reducing cutting on public lands had a larger effect than either afforestation or reforestation on increasing carbon stored in forests in the northwestern United States.¹⁰

5. The bill creates a perverse incentive to log public forests.

The bill creates a perverse incentive to support unsustainable logging by allowing state governors to retain timber-sale revenues under good-neighbor agreements. Public forests and watersheds are still suffering harm caused by decades of logging promoted by this very arrangement of funding county services through resource exploitation on federal lands. Taxpayers nationally are still paying for the damage caused to our forests.

It would put state governors in the position of advocating for ill-advised unsustainable logging levels, even as their constituents increasingly favor the conservation of forests because of their importance to wildlife and outdoor recreation and the resulting economic benefits.

6. The bill undermines the National Environmental Policy Act, public engagement, and the disclosure of environmental consequences.

The bill would allow the secretary of Agriculture or Interior to waive site-specific NEPA analysis with respect to logging in “priority lands.” The bill defines priority lands so broadly as to likely encompass tens of millions of acres of public forests managed by the Forest Service and the Bureau of Land Management. Waiving site-specific NEPA analysis will cause more habitat degradation on public lands, more wildlife losses to extinction, and shut the public out of decisions affecting public forests.

7. The bill would interfere with an independent judiciary.

The bill is clearly intended to have a chilling effect on anyone who would challenge its industrial timber-production approach. This section attempts to “bar the public from the courthouse door” by dictating what judges could evaluate when deciding whether or not to grant any injunctive relief. Additionally, this provision would apply to *all* forest management, going beyond the scope of the bill.

⁷ Harris et al. Carbon Balance Manage (2016) 11:24 DOI 10.1188/s13021-016-0066-5. Attribution of net carbon change by disturbance type across forest lands of the conterminous United States

⁸ Liao C, Luo Y, Fang C, Li B (2010) Ecosystem Carbon Stock Influenced by Plantation Practice: Implications for Planting Forests as a Measure of Climate Change Mitigation. PLoS ONE 5(5): e10867. <https://doi.org/10.1371/journal.pone.0010867>

⁹ Zald et al. 2018. Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape. Ecological Applications, 0(0), Ecological Society of America; *see also*, Odion et al. 2004 Patterns of Fire Severity and Forest Conditions in the Western Klamath Mountains, California. Conservation Biology Volume 18, No. 4

¹⁰ Law, B. E., Hudiburg, T. W., Berner, L. T., Kent, J. J., Buotte, P. C., and Harmon, M. E. (2018). Land use strategies to mitigate climate change in carbon dense temperate forests. *Proc. Natl. Acad. Sci. U.S.A.* 115, 3663–3668. doi: 10.1073/pnas.1720064115./

8. Contradicting laws of physics, the bill falsely asserts biomass energy from burning wood is carbon neutral.

The bill's directive to EPA to reflect the carbon neutrality of forest biomass as carbon neutral is not scientifically supported.¹¹ Burning wood to generate energy puts more CO₂ into the atmosphere than burning fossil fuels to create the same amount of energy, because wood has a lower energy density. Theoretically, much of that CO₂ can eventually be reclaimed, if the forest is allowed to regrow to its original pre-logged age; that would take decades, however, and in the interim burning biomass increases atmospheric CO₂¹² at a time when we must be reducing emissions.

In closing, we need to do more to *protect* our forests, not convert them into industrial plantations. Solutions to address the climate crisis must focus on deep reductions in fossil fuel emissions.

Sincerely,

350 Silicon Valley
350 Spokane
Alaska Wilderness Action
Alliance for the Wild Rockies
American Bird Conservancy
Anthropocene Alliance
Applegate Neighborhood Network
Bark
Battle Creek Alliance & Defiance Canyon Raptor Rescue
Blue Mountains Biodiversity Project •
Bold Alliance
Cascade Forest Conservancy
Cascadia Wildlands
Center for Biological Diversity
Conservation Congress
Conservation Northwest
Defenders of Wildlife
Earth Ethics, Inc.
Earthjustice
Earthworks
Elders Climate Action
Environmental Law & Policy Center
Firefighters United for Safety, Ethics, and Ecology (FUSEE)
Forest Web
Friends of Bell Smith Springs
Friends of Del Norte
Friends of Mohawk Trail State forest
Friends of Plumas Wilderness
Friends of the Bitterroot

¹¹ Manomet. 2010. Biomass Sustainability and Carbon Policy Study. Center for Conservation Sciences

¹² William H. Schlesinger. Are wood pellets a green fuel? *Science*, 2018; 359 (6382): 1328 DOI: [10.1126/science.aat2305](https://doi.org/10.1126/science.aat2305)

Friends of the Clearwater
Friends of the Earth
Friends of the Inyo
Friends of the Kalmiopsis
Friends of the Wild Swan
Geos Institute
Great Old Broads for Wilderness
Greenpeace USA
Heart of the Gila
High Country Conservation Advocates
Hilltown Community Rights
Institute for Carbon Removal Law & Policy, American University
Jefferson State Financial Group
John Muir Project of Earth Island Institute
Kalmiopsis Audubon
Klamath Forest Alliance
Klamath-Siskiyou Wildlands Center
Last Tree Laws
League of Conservation Voters
Livelihoods Knowledge Exchange Network
Los Padres Forest Watch
Mass Forest Rescue
Massachusetts Forest Watch
Montana Wilderness Association
National Parks Conservation Association
Natural Resources Defense Council
Northcoast Environmental Center
Oil Change International
Old-Growth Forest Network
Oregon Wild
Partnership for Policy Integrity
Public Citizen
Rachel Carson Council
RESTORE: The North Woods
Rocky Mountain Recreation Initiative
Rogue Valley Citizens for Clean Air
Safe Alternatives for our Forest Environment
San Luis Valley Ecosystem Council
Sclerophyll Project
Sheep Mountain Alliance
Sierra Club
Soda Mountain Wilderness Council
South Umpqua Rural Community Partnership
Southeast Alaska Conservation Council
Southern Environmental Law Center
Swan View Coalition
The Enviro Show
The Wilderness Society
Umpqua Watersheds, Inc.

US Green Building Council Redwood Empire Chapter
Watershed Protection
Wendell State Forest Alliance
Western Environmental Law Center
Wild Heritage
Wild Nature Institute
WildEarth Guardians
Wilderness Watch
WildWest Institute
Winter Wildlands Alliance
Yaak Valley Forest Council
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