

Data Submitted (UTC 11): 12/18/2019 9:00:00 AM

First name: Kim

Last name: Crumbo

Organization: Rewilding Institute

Title:

Comments: Dear Folks,

I attempted numerous times this evening (Tuesday, 12/17/2019) to electronically submit the enclosed comments on the Draft Environmental Impact Statement (DEIS) for the proposed Alaska state- specific roadless rule. I am sending them via FedEx on behalf of The Rewilding Institute. FedEx does not deliver to Post Office Boxes, so I was not able to send them directly to the Juneau address. Please forward to the responsible officer and note they have been sent prior to the comment deadline.

Kim Crumbo

Dear Secretary Perdue:

The Rewilding Institute is a national organization whose mission is to develop and promoted the ideas and strategies to advance continental,-scale conservation in North America and beyond, particularly the need for large carnivores and permeable landscape for their movement, and to offer a bold, scientifically-credible, practically achievable, and hopeful vision for the future of wild Nature and human civilization.

We are writing on behalf of our members and supporters to voice our strong opposition to the Forest Service's selection of the "full exemption" alternative (Alternative #6) contained in the Draft Environmental Impact Statement (DEIS) for the proposed Alaska state- specific roadless rule. We instead urge you to select the "no action" alternative (Alternative #1) that would leave intact existing protections for the over 9 million acres of the Tongass National Forest currently protected by the National Roadless Area Conservation Rule, or Roadless Rule.

The Tongass NF roadless areas, representing 16% of all undeveloped areas within the entire national forest system, is also one of the most biologically diverse and relatively intact temperate rainforests on earth. Although researchers note that roughly half of the Tongass large old-growth trees had been logged last century, the remaining big trees provide critical habitat for brown bears, northern goshawks, Sitka black-tailed deer, bald

eagles, all five species of Pacific salmon, and other species² which include the distinct Alexander Archipelago wolves that roam the islands and coastal mainland in the Alexander Archipelago, a network of more than 1,000 islands, glaciated peaks and deep river valleys in remote southeast Alaska. These wolves and their rainforest home are under continued threats from industrial logging, road building, overharvest from hunting and large-scale habitat loss as the U.S. Forest Service continues to plan big timber sales in key wolf habitats. A variety of other species are dependent upon salmon to survive, such as brown (grizzly) bears, wolves, and the endangered Southern Resident killer whales that eat almost exclusively salmon. ³ About 40 percent of wild salmon that make their way down the West Coast spawn in the Tongass. ⁴ Returning salmon bring nutrients that sustain forest growth, while intact stands of trees keep streams cool and trap sediment.⁵

The Forest Service estimates that the salmon industry generates \$986 million annually. The endangered Southern Resident Killer Whales (SRKW) of Washington State's Puget Sound and Salish Sea, are a critical part of the Northwest ecosystem and economy.⁶ They inhabit the coastal waters of Oregon, Washington, and Vancouver Island. In fact, SRKW have been spotted as far south as the coast of central California and as far north as the coast of Haida Gwaii (formerly Queen Charlotte Island), just south of Prince of Wales Island (Tongass NF).⁷ While scientists have identified three main causes of decline for SRKWs today-lack of sufficient prey, toxins, and vessel noise-it is the lack of an adequate prey base throughout the year, however, that is broadly recognized as the most important factor and one that must be urgently addressed in order to protect this apex predator from extinction.^a

Preserve Old Growth Forest

The most critical of all forest types is primary forest, known as old-growth, including the Tongass and its sister forest, the Great Bear Rain Forest of British Columbia. The Tongass National Forest is the largest national forest in the U.S. and encompasses some of the

largest remaining stands of old-growth, temperate rainforest in the world. 9 Research

shows that once intact primary forests begins to be logged, even under so-called

sustainable forest-management systems, it leads to biological degradation.¹⁰

The Union of Concerned Scientists estimates that U.S. forests absorb between one

million and three million metric tons of carbon dioxide each year, perhaps offsetting

between 20 percent and 46 percent of the country's greenhouse-gas emissions.¹¹ Intact

forests help stabilize the climate by regulating ecosystems, protection of biodiversity, and

playing an integral part in the carbon cycle. Halting the loss and degradation of natural

systems and promoting their restoration have the potential to contribute over one-third of

the total climate change mitigation scientists say is required by 2030. 12 In a recent

scientific paper, the authors, along with more than 11,000 scientist signatories from 153

countries, declare a climate emergency. The scientists point to six areas in which humanity

should take immediate steps to slow down the effects of a warming planet, including

protection and restoration of ecosystems such as forests, grasslands, and wetlands,

allowing a larger share of these ecosystems to reach their ecological potential for

sequestering atmospheric carbon dioxide, a key greenhouse gas. 13

Forests comprise one of the most important natural climate solutions at our disposal to

combat climate change, a fact that the DEIS itself acknowledges, and carbon sequestration

via forest preservation can be a viable climate change mitigation strategy.¹⁴ Preserving

intact forests such as the Tongass contributes to climate change mitigation and the

preservation of biodiversity¹⁵ and offers a cost-effective strategy to avoid and mitigate CO₂

emissions by increasing the magnitude of the terrestrial carbon sink in trees and soil by

preserving biodiversity and sustaining additional ecosystem services.¹⁶

Recent research identifies forests in the western conterminous United States with high

potential carbon sequestration and low vulnerability to future drought and fire, 17 while

additional research emphasizes the unique significance of the Tongass in this regard. 18

Scientists found that high carbon priority forests in the western U.S. exhibit features of older, intact forests with high structural diversity, 19 including carbon density and tree species richness. Forest resilience and adaptive capacity increase with increasing plant species richness,20 indicating that preserving the high carbon priority forests like the Tongass would provide an added buffer against potential ecosystem transformation to future climate change.21

The Tongass National Forest holds approximately 8 percent of the carbon stored by all U.S. forests. 22 When forests-and in particular old-growth forests-are cut down, most of the carbon stored in the trees and soil is released into the atmosphere as a greenhouse gas pollutant. In fact, the carbon emissions from deforestation and associated land use change are estimated to be 10-15 percent of the world's total.23 Stopping deforestation and restoring forests could offset up to one-third of all carbon emissions worldwide.24 The Intergovernmental Panel on Climate Change's (IPCC) recent report on climate change found that the single biggest source of carbon emissions from the land use sector is global deforestation and forest degradation. That report stated that the most immediate actions to reduce impacts carbon pollution include the conservation of high-carbon ecosystems such as peatlands, wetlands, rangelands, and forests. 25 At a time when the climate crisis and biodiversity crisis are each approaching a point of no return, and parts of Alaska are warming at twice the rate of the U.S. average, it is reckless and irresponsible for the administration to be pushing forward with a proposal that will exacerbate a primary cause of climate change.26

Economic Significance of Roadless Areas

Maintaining strong roadless protections is also important from an economic perspective.

The potential annual economic value of carbon sequestration with management maximizing carbon storage in the Tongass is comparable to revenue from annual timber

sales historically authorized for the forest.²⁷ The region's thriving subsistence and fishery-based economies depends on old-growth forests and roadless areas remaining intact.²⁸

The Roadless Rule saves taxpayers millions of dollars by limiting expensive new road building, which has some of the highest costs in Southeast Alaska because of its remoteness and rugged terrain. Rather than fragmenting wildlife habitat with a network of new roads, the Forest Service should instead direct its limited resources toward addressing the existing 371,000-mile network of National Forest System roads and its approximately \$3.2 billion maintenance backlog. Further, contrary to claims made by its proponents, the proposed rule is unlikely to reverse Southeast Alaska's move away from industrial-scale logging as a necessary industry. Instead, attempts to return the unsustainable practice of old-growth logging to its peak could have serious consequences for the region's robust tourism and fishing industries, which collectively contribute 26 percent of jobs and 21 percent of earnings annually. Removing Roadless Rule protection, especially from the two million acres of inventoried roadless areas within Development Land Use Designations, as called for by Alternative 6, could gravely threaten these industries and the economic vitality of the region as a whole.

Thank you for consideration of our comments.

Sincerely,

Dave Parsons

Carnivore Conservation Biologist

The Rewilding Institute

1 Scientists Call on Forest Service to Uphold Roadless Protections on Tongass Rainforest, Southeast Alaska. October 16, 2019. <http://forestlegacies.org/press-room/press-releases/scientists-call-on-forest-service-to-uphold-roadless-protections-on-tongass-rainforest-southeast-alaska/>.

2 Trump Pushes to Allow New Logging in Alaska's Tongass National Forest. Juliet Eilperin and Josh Dawsey. August 27, 2019. Washington Post. <https://www.washingtonpost.com/climate-environment/trump-pushes-to-allow-new-logging-in-alaskas-tongass-national-forest/2019/08/27/>.

allow-new-logging-in-alaskas-tongass-national-forest / 2019 / 08 / 27 / b4ca 78d6-c832-11 e9-be05-f76ac4ec618c story.html.

3 Orcas and Salmon: Making the Connection. Monica Wieland. Wild Orea <https://www.wildorca.org/orcasandsalmon/> . Accessed December 6, 2019.

4 Trump Administration Proposes Expanding Logging in Alaska's Tongass National Forest. Juliet Eilperin, October 15, 2019. https://www.washingtonpost.com/climate-environment/trump-administration-proposes-expanding-logging-in-alaskas-tongass-national-forest/2019/10/15/92e47db8-ef77-11e9-8693-f487e46784aa_story.html

5 Trump Pushes to Allow New Logging in Alaska's Tongass National Forest. Juliet Eilperin and Josh Dawsey. August 27, 2019. Washington Post. https://www.washingtonpost.com/climate-environment/trump-pushes-to-allow-new-logging-in-alaskas-tongass-national-forest/2019/08/27/b4ca78d6-c832-11e9-be05-f76ac4ec618c_story.html.

6 Protecting Orea by Restoring Salmon <https://www.wildsalmon.org/projects/protecting-orca/> .

7 Southern Resident Killer Whales. Wikipedia https://en.wikipedia.org/wiki/Southern_resident_killer_whales. Accessed December 6, 2019.

8 Protecting Orea by Restoring Salmon <https://www.wildsalmon.org/projects/protecting-orca/> .

9 Tongass National Forest: The Tongass is Home to Some of the Last Remaining Old-Growth Temperate Forests in the World. Audubon Alaska. <https://ak.audubon.org/conservation/tongass-national-forest>. Accessed December 7, 2019.

10 Hawken, Paul (editor), 2017, Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming, Penguin Books: New York. Page 109.

11 Deforestation and Greenhouse-Gas Emissions. Toni Johnson. 2009. <https://www.cfr.org/backgrounders/deforestation-and-greenhouse-gas-emissions>.

12 Forests and Climate Change. IUCN. <https://www.iucn.org/resources/issues-briefs/forests-and-climatechange>

13 Ripple, William J., Christopher Wolf, Thomas M Newsome, Phoebe Barnard, William R Moomaw. 2019. World Scientists' Warning of a Climate Emergency. BioScience, 2019; DOI: 10.1093/biosci/biz088

14 Buotte, Polly C., Beverly E. Law, William J. Ripple, and Logan T. Berner. 2019. Carbon Sequestration and Biodiversity Co-Benefits of Preserving Forests in the Western USA Ecological Applications 29(8): <https://doi.org/10.1002/eap.2039>.

15 MEA. 2005. Ecosystems and Human Well-being: Biodiversity Synthesis. Washington, D.C. <https://www.millenniumassessment.org/documents/document.356.aspx.pdf>.

16 Griscom, B. W., J. Adams, P. W. Ellis, R. A. Houghton, G. Lomax, D. A. Miteva, W. H. Schlesinger, D. Shoch, J. V. Siikamäki, P. Smith, P. Woodbury, C. Zganjar, A. Blackman, J. Campari, R. T. Conant, C. Delgado, P. Elias, T. Gopalakrishna, M. R. Hamsik, M. Herrero, J. Kiesecker, E. Landis, L. Laestadius, S. M. Leavitt, S. Minnemeyer, S. Polasky, P. Potapov, F. E. Putz, J. Sanderman, M. Silvius, E. Wollenberg, and J. Fargione.

2017. Natural climate solutions. *Proceedings of the National Academy of Sciences of the United States of America* 114:11645-11650.

17 Buotte, Polly C., Beverly E. Law, William J. Ripple, and Logan T. Berner. 2019. Carbon Sequestration and Biodiversity Co-Benefits of Preserving Forests in the Western USA *Ecological Applications* 29(8): <https://doi.org/10.1002/ea.p.2039>.

18 Krankina, O. N., D. A. DellaSala, J. Leonard, and M. Yatskov. 2014. High-Biomass Forests of the Pacific Northwest: Who Manages Them and How Much is Protected? *Environmental Management* 54:112-121; see <https://www.sierraclub.org/sites/www.sierraclub.org/files/top2Scarbondense.pdf>.

19 Keith et al. 2009b; and Krankina et al. 2014.

20 Morin, X., L. Fahse, H. Jactel, M. Scherer-Lorenzen, R. Garcia-Valdes, and H. Bugmann. 2018. Long-term Response of Forest Productivity to Climate Change is Mostly Driven by Change in Tree Species Composition. *Scientific Reports* 8:5627. DOI:10.1038/s41598-018-23763-y; and Watson, J.E. M., T. Evans, O. Venter, B. Williams, A. Tulloch, C. Stewart, I. Thompson, J.C. Ray, K. Murray, A. Salazar, C. McAlpine, P. Potapov, J. Walston, J. G. Robinson, M. Painter, D. Wilkie, C. Filardi, W. F. Laurance, R. A. Houghton, S. Maxwell, H. Grantham, C. Samper, S. Wang, L. Laestadius, R. K. Runting, G. A. Silva-Chavez, J. Ervin, and D. Lindenmayer. 2018. The exceptional value of intact forest ecosystems. *Nature Ecology & Evolution* 2:599- 610.

21 Buotte, Polly C., Beverly E. Law, William J. Ripple, and Logan T. Berner. 2019. Carbon Sequestration and Biodiversity Co-Benefits of Preserving Forests in the Western USA *Ecological Applications* 29(8):<https://doi.org/10.1002/ea.p.2039>.

22 Scientists Call on Forest Service to Uphold Roadless Protections on Tongass Rainforest, Southeast Alaska. October 16, 2019. <http://forestlegacies.org/press-room/press-releases/scientists-call-on-forest-service-to-uphold-roadless-protections-on-tongass-rainforest-southeast-alaska/>.

23 Hawken, Paul (editor), 2017, *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming*, Penguin Books: New York. Page 110.

24 Hawken, Paul (editor), 2017, *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming*, Penguin Books: New York. Page 110.

25 IPCC, 2019: Summary for Policymakers. In: *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* [P.R. Shukla et al., (eds), Section 8.1.2. In press. https://www.ipcc.ch/site/assets/uploads/sites/4/2019/11/02_Summary-for-Policy-makers-SPM.pdf.

26

27 Effects of Management on Carbon Sequestration in Southeast Alaska. *Ecosystems* 9(7): 1051-1065. https://www.researchgate.net/publication/225169208_Effects_of_Management_on_Carbon_Sequestration_in_Forest_Biomass_in_Southeast_Alaska.

28 Effects of Management on Carbon Sequestration in Southeast Alaska. *Ecosystems* 9(7): 1051-1065. https://www.researchgate.net/publication/225169208_Effects_of_Management_on_Carbon_Sequestration_in_Forest_Biomass_in_Southeast_Alaska.

[POSITION]