SOUTHEAST ALASKA CONSERVATION COUNCIL * ALASKA WILDERNESS LEAGUE * CENTER FOR BIOLOGICAL DIVERSITY * EARTHJUSTICE * WOMEN'S EARTH AND CLIMATE ACTION NETWORK * SIERRA CLUB ALASKA CHAPTER

February 24, 2025

VIA TONGASS PLAN REVISION COMMENT SITE

Erin Mathews Tongass Plan Revision Coordinator U.S. Forest Service, Alaska E: erin.mathews@usda.gov

Re. Tongass Land Management Plan Revision Draft Assessment

Dear Plan Coordinator Mathews,

On behalf of Southeast Alaska Conservation Council, Alaska Wilderness League, Women's Earth and Climate Action Network, Center for Biological Diversity, Earthjustice, Sierra Club Alaska Chapter, and our thousands of members and supporters throughout southeast Alaska and nationwide, we submit the following comments on the Tongass Land and Resource Management Plan Draft Assessment.

The Tongass National Forest is of vital importance for local community subsistence as well as regional, national and global biodiversity, carbon sequestration, and recreation. We appreciate the Forest Service's recognition in the draft assessments of some of the Tongass' incredible values and hope to see the final assessments and need for change build on these values. In particular, we appreciate and support the Forest Service's recognition of the importance of the Tongass to the Indigenous people who have lived in and been sustained by the forest for thousands of years; the need to better coordinate with Tribes and consider opportunities for costewardship; the temperate rainforest as a "rare and important" ecosystem globally; the importance of salmon as both a cultural and ecological keystone species; the forest's role in supporting the prized commercial fisheries of the region; the value as a "carbon reservoir of national significance; the need to protect its healthy old-growth ecosystems; and its global recognition as a recreation resource. Building a revised plan around protecting and supporting these key values by preserving intact land and water resources that sustain fish, wildlife, and

³ Draft Assessment: User Guide at 5.

¹ The Tongass as an Indigenous Place Draft Assessment.

² *Id*.

⁴ Draft Assessment: User Guide at 5; Draft Aquatic Ecosystems Resource Assessment at 10; Subsistence and Other Harvest (Non-Commercial) Resource Assessment at 23.

⁵ Draft Aquatic Ecosystems Resource Assessment at 10.

⁶ Draft Carbon Stocks Assessment at 7.

⁷ Draft Terrestrial Ecosystems Resource Assessment at 6.

 $^{^8}$ Draft Recreation & Tourism Resource Assessment at 6.

forest biodiversity, particularly in the face of climate change, would support the needs of communities in the region and the global values of the forest. We welcome the opportunity to work with you toward that vision.

At the same time, there are significant gaps in the draft assessments that need to be rectified in the final assessments to better inform development of the need for change. In particular, the 2012 Planning Rule requires assessments to provide a discussion of existing conditions, possible future conditions and trends, and the sustainability of the social, economic, and ecological systems in the plan area. With the notable exception of *The Tongass as an Indigenous Place* draft assessment, the draft assessments provide general descriptions of forest resources without assessing whether the current plan components have succeeded in maintaining the integrity of the ecosystem or considering whether possible future conditions warrant changing plan direction to improve protection for those resources. Further, some draft assessments identify uncertainties and data gaps, but others do not. Important new science about species on the Tongass is ignored in several assessments and many fail to provide the underlying analysis upon which conclusions are drawn. These and other gaps are discussed in more detail with respect to specific chapters of the draft assessment. While not all chapters of the assessment are discussed, those not addressed are also lacking in an analysis of how current conditions—assessed at an appropriate geographic scale—compare with forest plan goals and objectives and whether the current plan is protecting the sustainability of forest ecosystems and supporting the communities that depend on it.

THE TONGASS AS AN INDIGENOUS PLACE

The Tongass is the traditional homeland of the Tlingit, Haida, and Tsimshian peoples and we appreciate the Forest Service's recognition of the central role of Indigenous people and perspectives in the management of the forest. The *Tongass as an Indigenous Place* draft assessment is an important first step in centering Tribes and indigenous knowledge in a revised forest plan. The 2012 Planning Rule and the federal government's legally-enforceable trust responsibility to Tribes both mandate that the Forest Service continue to engage and consult with Tribes throughout the planning process and seek their input regarding tribal priorities, indigenous knowledge, land ethics, cultural issues, and sacred sites. ¹⁰ We encourage the Forest Service to keep this section in the final assessment and develop a need for change that recognizes the tribal priorities identified in the assessment.

In particular, we encourage the Forest Service to include recommendations in the need for change that are tied to providing greater opportunities for co-stewardship and co-management, building stronger relationships and partnerships with Tribes, enhancing government-to-government consultation, and improving knowledge and understanding of the history of Indigenous peoples of the region and the agency's historical relationship with them. Important

⁹ 36 C.F.R. § 219.5(a)(1).

¹⁰ See, e.g., 36 C.F.R. § 219.4(a)(2); see also Haaland v. Brackeen, 599 U.S. 255, 274 (2023). The trust responsibility is independent of any executive orders, but is reinforced by Executive Order 13175: Consultation and Coordination with Indian Tribal Governments, 65 Fed. Reg. 67249 (Nov. 6, 2000), and President Biden's Memorandum on Uniform Standards for Tribal Consultation (Nov. 30, 2022), which remain in effect.

considerations discussed in the assessment that should be carried forward into the Need for Change and revised plan include:

- 1. Historical Connection: The Tlingit, Haida, and Tsimshian people have lived in the area now known as the Tongass National Forest for over 10,000 years, with a deep cultural, spiritual, and subsistence connection to the land.
- 2. Stewardship and Management: Alaska Native Tribes have historically practiced sustainable stewardship of the Tongass, emphasizing respect for natural resources. They seek co-stewardship and co-management roles in forest management to ensure their perspectives and priorities are integrated into the revised forest plan and all management going forward.
- 3. Cultural Significance: The Tongass is considered the traditional homelands of these Indigenous groups, with numerous sacred sites, traditional harvesting areas, and culturally significant resources like cedar trees, salmon, and deer.
- 4. Food Security and Sovereignty: Protecting traditional hunting, fishing, and gathering areas is crucial for the food security and sovereignty of Indigenous communities. This includes managing deer habitat and restoring anadromous streams.
- 5. Climate Change: Climate change poses significant threats to the Tongass ecosystem, affecting subsistence resources and traditional practices. Tribes have developed climate adaptation plans and seek proactive management strategies.
- 6. Consultation and Trust: Tribes emphasize the need for early and meaningful consultation in all management and project planning within their traditional territories. Building trust and understanding the historical context of federal policies and their impacts on Indigenous communities are essential.
- 7. Cultural Use Wood: Access to cultural use wood, particularly cedar for totem poles and canoes, is a top priority. Tribes seek a long-term management plan and funded harvest program to meet current and future cultural needs.
- 8. Economic and Workforce Development: Tribes and Alaska Native corporations prioritize coordinated land management, workforce development, and economic opportunities that align with their cultural and community values and protection of the Tongass's natural resources.

TERRESTRIAL ECOSYSTEMS

The assessment of terrestrial ecosystems provides a broad, generalized analysis of the types of ecosystems on the Tongass (e.g., 10 million acres of forest land) but does not include an assessment at a spatial scale that is appropriate to inform development of a need for change. The Tongass is a naturally fragmented island ecosystem and logging has focused disproportionately on certain areas of the forest. In the final assessment, the Forest Service should describe and consider the current status of terrestrial ecosystems at a more appropriate scale. This would provide a better assessment of the integrity of terrestrial ecosystems and the need to improve forest plan components to protect and improve integrity. For example, on north Prince of Wales Island, contiguous old-growth landscapes have been reduced by 77.5 percent. Because the draft assessment only looks at conditions on a forest-wide basis, it does not consider differences

¹¹ D. Albert, Conservation Significance of Large Inventoried Roadless Areas on the Tongass National Forest at 13 (Dec. 2019).

in ecosystem integrity that are relevant to endemic species or species with a limited range. In addition, although the draft assessment summarizes the old-growth habitat conservation strategy ¹² that is a central feature of the current forest plan, it does not provide an assessment of whether current conditions are meeting the objectives of that strategy or whether the strategy has been effective. There have been significant critiques of this strategy since it was adopted, and more analysis is needed here. ¹³

In addition, the final assessment should provide an assessment of existing conditions related to invasive species for all terrestrial ecosystems. Eradicating invasive species has long been identified as a priority for the Forest Service, but the draft assessment does not reflect that priority. Invasive species are only discussed with respect to wetlands near Petersburg, but they are certainly an issue in other regions of the forest and across other ecosystem types. The final assessment should provide a more comprehensive assessment of conditions related to invasive species and the need to make changes to address them.

AQUATIC ECOSYSTEMS

We appreciate the recognition in the *Aquatic Ecosystems* draft assessment that the Tongass is a salmon forest ¹⁶ and hope to see a more detailed final assessment that addresses the extent to which current conditions and possible future conditions are supporting the resilience of this keystone species. Unfortunately, the draft does not provide the basis for that assessment or for developing a need for change that focuses, in part, on supporting this salmon forest. The draft assessment recognizes that the forest plan did not evaluate the ecosystem integrity of the Tongass as a whole, and this draft assessment does not rectify that failing. Instead, it provides a general analysis of the potential effects of logging and mines on aquatic ecosystems, but does not provide a specific assessment of the state of the Tongass' aquatic ecosystems or whether the plan is adequately protecting them. For example, with respect to karst, the draft assessment discusses the importance of karst and acknowledges there are cumulative effects on epikarst, but does not say how much karst has been logged or assess whether goals, objectives, standards, and guidelines have protected those important ecosystems. ¹⁷ The assessment also acknowledges that there has been no attempt to assess the effects of riparian harvest on lakes. ¹⁸ These gaps should be addressed in the final assessment.

¹² Draft Terrestrial Ecosystems Resource Assessment at 13.

¹³ See Alaska Wilderness League *et al.*, Letter to K. Tu, Interdisciplinary Team Leader, U.S. Forest Service, Re: Alaska Roadless Rule Petition at 25-27 (Dec. 16, 2019).

¹⁴ See U.S. Department of Agriculture, Forest Service National Strategic Framework for Invasive Species Management (Aug. 2013).

¹⁵ See Draft Terrestrial Ecosystems Resource Assessment at 49-50.

¹⁶ Draft Aquatic Ecosystems Resource Assessment at 10.

¹⁷ See id. at 16-19.

¹⁸ *Id.* at 20.

FEDERALLY RECOGNIZED SPECIES: THREATENED, ENDANGERED, PROPOSED, AND CANDIDATE SPECIES

We provide the following comments to improve and strengthen the *Federally Recognized Species* draft assessment section:

- The Forest Service should list the specific activities or operations the agency permits that could impact federally recognized species and describe potential effects of those permitted activities to endangered species and the ecological conditions necessary for their survival.
- The Forest Service should plot and analyze overlap between Steller sea lion rookeries and haulouts with proposed and current activities within the Tongass, including timber harvest, timber transfer facilities, mineral extraction, docks, and other human activities. The Forest Service should create specific protections to ensure that Steller sea lion rookeries and haulouts are not disrupted and ecological conditions are maintained to support the species' continued undisturbed use of these key areas.
- Marine estuarine ecosystems within the Tongass archipelago are vital habitat for key food sources and foraging grounds for species protected under the Endangered Species Act, including Steller sea lions, humpback whales, and minke whales. These listed species forage on lower trophic level marine species, many of which depend upon healthy estuary ecosystems. Critical to healthy estuary ecosystems are the upland streams that feed the estuaries, providing spawning and rearing habitat for anadromous fish, nutrient flows and fresh water, and supporting niche habitat such as eelgrass. The Forest Service has management authority over human activities that can significantly impact the health of these streams. In particular, logging within the stream watersheds upland of estuaries can alter the ecological conditions of estuarine ecosystems in the Tongass archipelago that support federally recognized species. The Forest Service must analyze the impacts of logging and other terrestrial and riparian disturbance on freshwater streams and the marine estuaries they feed into, and any downstream harms to endangered marine mammals, including reduced prey availability. The Forest Service should include this analysis in the draft assessment for public review prior to finalizing the assessment. The Forest Service must also consider specific plan components that protect the health of the watersheds of feeder streams that flow into estuary ecosystems, providing the ecological conditions needed to support these threatened and endangered marine mammals.
- The assessment also does not consider Chinook salmon populations that are candidates for listing. A petition was recently submitted to list Gulf of Alaska Chinook salmon, which includes some salmon stocks that spawn in the Tongass. Chinook salmon are a candidate species that should be discussed in the assessment and the final assessment should provide an analysis of how well the plan protects this species to ensure against the need to list them under the ESA. ¹⁹

SPECIES OF CONSERVATION CONCERN

Overall, the *Species of Conservation Concern* draft assessment is incomplete and lacks any underlying analysis for its findings for the public to review. It is essentially a list of potential

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¹⁹ 89 Fed. Reg. 45,815 (May 24, 2024).

species with many still under review and just the baseline preliminary finding for those evaluated; it provides no information or analysis to understand why or how the Forest Service came to any of its findings, nor does it assess whether the current plan is adequately protecting these species. This is especially concerning for species that were evaluated and the Forest Service states that "threats do not appear substantial." For many of the species with this preliminary finding, best available science shows substantial threats to their ability to persist over the long-term in the Tongass. Worryingly, these conclusions appear to be drawn from merely 13 cited references. This is unacceptable and clearly shows that the Forest Service did not undertake a thorough review of the best available science prior to undertaking this draft assessment and ignored prior comments from SEACC and the Center for Biological Diversity that provided additional references not included in the draft assessment. The Species of Conservation Concern final assessment must be based on best available science and the Forest Service must undertake a full review of the available literature pertaining to species, ecosystems, climate, and more to assess species of conservation concern.

Moreover, the Species of Conservation Concern draft assessment notes that "a high proportion (65%) of the species in the list of Species Under Review" that the Forest Service has reviewed so far lack even "basic scientific information" to determine whether they are a species of conservation concern, including their ecological requirements, habitat trends, and responses to climate change. 23 While the Forest Service states that the Species of Conservation Concern final assessment will "document[] information gaps" in its species evaluations to "help inform and prioritize targeted inventories, plan monitoring, or research needs," there are no follow-up activities identified in the draft assessment indicating that the Forest Service has any plans to address these information gaps.²⁴ The Forest Service should provide a detailed program of inventories, monitoring, and research activities for potential species of conservation concern in its final assessment, including identifying priorities, describing the activities, and creating timelines for the studies allowing for their completion prior to advancing the land management plan beyond the assessment stage. A recent paper by Androski et al. (2024) provides additional recommendations for the land management plan revision regarding addressing information gaps, particularly for endemic species in the Tongass.²⁵ The Forest Service should implement the Androski et al. recommendations.

We urge the Forest Service to conduct a thorough literature review, address information gaps, and provide a full analysis for each species to the public for comment prior to finalizing the

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²⁰ Draft Species of Conservation Concern Assessment at 16, 18-21.

²¹ *Id.* at 23.

²² See Center for Biological Diversity, Comments on the Draft Table of Contents for the Tongass Plan Revision Assessment (Nov. 27, 2024); SEACC, Comments on Tongass National Forest Plan Revision Assessment Phase (May. 15, 2024).

²³ Draft Species of Conservation Concern Assessment at 12.

²⁴ Id.

²⁵ A. Androski *et al.*, *Phylogeography of mammals in Southeast Alaska and implications for management of the Tongass National Forest*, 88 J. of Wildlife Mgmt. e22627 (2024).

assessment. Addressing these issues will lead to drastically improved assessments and allow the public to provide meaningful, informed comments.

Despite the limited data and analysis in the *Species of Conservation Concern* draft assessment, we provide the following list of species where we disagree with the preliminary finding, species that lack basic scientific information that should be included as species of conservation concern, as well as species that were not on the list but should be evaluated. We agree with all species where the preliminary finding was that threats may be substantial.

Species where we disagree with the preliminary finding:

- Prince of Wales flying squirrel (Northern flying squirrel), *Glaucomys sabrinus griseifrons*
- Alexander Archipelago wolf, Canis lupus ligoni
- Alaska-cedar (Yellow cedar), Callitropsis nootkatensis
- Marbled murrelet, Brachyramphus marmoratus

There is abundant information showing that, particularly on Prince of Wales Island the Alexander archipelago wolf meets the criteria for a species of conservation concern. Recently, the U.S. Fish and Wildlife Service found that the Alexander Archipelago wolf on Prince of Wales Island "is projected to decline in resiliency under most scenarios, and under one scenario, projections indicate possible extirpation." In addition, we urge the Forest Service to incorporate the standards and guidelines described in the Interagency Wolf Habitat Management Program: Recommendations for Game Management Unit 2 to address necessary forest management approaches for sustained wolf populations. ²⁷

Other species also meet the criteria for a species of conservation concern. A 2023 review paper provides extensive information showing that current forest management practices threaten the Prince of Wales flying squirrel.²⁸ The decline and imperilment of yellow cedar is well documented, including in other sections of this draft assessment.²⁹ And marbled murrelets, which depend on old-growth nesting habitat, are at risk under the inadequate protections of the current forest plan, especially if the Tongass is exempted from the Roadless Rule.³⁰

²⁶ 88 Fed. Reg. 57,391 (Aug. 23, 2023).

²⁷ Wolf Technical Committee, *Interagency Wolf Habitat Management Program: Recommendations for Game Management Unit 2*, Management Bulletin R10-MB-822 (2017). ²⁸ W.P. Smith *et al.*, *Wildlife studies on the Tongass National Forest challenge essential assumptions of its wildlife conservation strategy*, 87 J. of Wildlife Mgmt. e22450 (2023). ²⁹ C. Mercer *et al.*, *Contrasting impacts of climate warming on coastal old-growth tree species reveal an early warning of forest decline*, 4 Frontiers in Forests and Glob. Change 775301 (2022).

³⁰ P. Cotter & M. Kirchoff, *Marbled Murrelet*, *in* The Coastal Forests and Mountains Ecoregion of Southeastern Alaska and the Tongass National Forest: A Conservation assessment and Resource Synthesis (*J. Schoen and E. Dovichin eds*, 2007).

Species the Forest Service claims lacks basic scientific information but that we believe best available science shows are species of conservation concern:

• Kittlitz's murrelet, *Brachyramphus brevirostris* Chinook salmon (all subspecies), *Oncorhynchus tshawytscha*

Species that should be evaluated and included as species of conservation concern:

- Red-throated loon, Gavia stellata
- Yellow-billed loon, Gavia adamsii
- Sockeye salmon, Oncorhynchus nerka
- Coho salmon, Oncorhynchus kisutch
- Pink salmon, Oncorhynchus gorbuscha
- Chum salmon, Oncorhynchus keta
- Steelhead trout, Oncorhynchus mykiss
- Black-legged kittiwake, ³¹ Rissa tridactyla
- Green sturgeon, ³² Acipenser medirostris
- Pink-footed Shearwater, ³³ Ardenna creatopus
- Western bumble bee, ³⁴ Bombus occidentalis
- Little brown bat, 35 Myotis lucifugus

As the Forest Service considers moving towards a need for change statement for the plan revision, it is clear that for species of conservation concern and ecological integrity to be maintained on the Tongass, the plan revision must focus on ending all cutting of old-growth trees (with an exception for traditional cultural practices). This change is necessary to maintain the old-growth ecosystems so many of the species of conservation concern are dependent upon. Preserving the Tongass's old-growth forests, which are globally significant carbon sinks, will also help mitigate climate change, a direct threat to many potential species of conservation concern. The assessment should also evaluate restoration practices focused on the specific and general habitat needs of species of conservation concern, as well as the need for some second-growth areas to undergo natural restoration. These evaluations will inform plan components focused on habitat restoration to support the maintenance and recovery of species of conservation concern.

³¹ IUCN Red List of Threatened Species (2025) (IUCN 2025) (Black-legged kittiwake listed as Vulnerable).

³² NatureServe Explorer (2025) (Green sturgeon listed as G2: imperiled); IUCN 2025 (Green sturgeon Northern DPS subpopulation listed as Vulnerable).

³³ IUCN 2025 (Pink-footed Shearwater listed as Vulnerable).

³⁴ IUCN 2025 (Western bumble bee listed as Vulnerable).

³⁵ IUCN 2025 (Little brown bat listed as Endangered).

³⁶ DellaSala, D.A., et al., The Tongass National Forest, Southeast Alaska, USA: A natural climate solution of global significance, 11 Land 717 (2022).

CARBON STOCKS

We support the Forest Service's recognition, in the *Carbon Stocks* draft assessment, of the Tongass' importance as a nationally significant carbon sink and look forward to a need for change focused on maintaining those critical carbon stocks. This assessment of carbon stocks, a clear requirement under the 2012 Planning Rule,³⁷ provides helpful context in describing carbon stocks and considering the potential vulnerability of forest carbon to changing environmental conditions, but could be improved with a more balanced assessment of the carbon life cycle.

However, the assessment could be strengthened by further contextualizing carbon storage within the broader ecological framework of associated ecosystem services such as variable habitat provision, biodiversity, and water filtration. Carbon sequestration is a vital function of the Tongass, and the *Carbon Stocks* final assessment could benefit from presenting carbon storage in relation to how it operates in concert with other ecosystem functions. This analysis would further demonstrate the need to protect old-growth stands of trees, both for their carbon storage and other ecosystem services they provide.

One key area requiring further elaboration is the impact of logging on both above-ground and below-ground carbon storage. While the draft assessment acknowledges that logging is the dominant disturbance on the Tongass, its discussion of carbon loss primarily focuses on aboveground biomass. The impact of these disturbances on increased erosion and loss of soil carbon is underexplored, despite its importance as a significant carbon pool in the forest. Deforested and eroded soils measure marked increases in sand particles, bulk density, soil temperature, pH, and electrical conductivity, and significant decreases in total porosity and organic carbon storage. The average organic carbon content of deforested and eroded soils has been found to be more than five times lower than that of soils under forest vegetation. The conservation of soil organic carbon and microbial biomass is closely tied to the preservation of vegetation and soil integrity.³⁸ The draft assessment should more explicitly address how timber harvest, particularly in old-growth forests, affects soil carbon stability over time. Given that soil carbon loss can be a long-term consequence of disturbance, incorporating a more detailed analysis of post-harvest soil carbon dynamics would provide a clearer picture of the full impact of logging activities. Studies undertaken in similar ecosystems in British Columbia required up to 200 years of forest regeneration before carbon returned to pre-clearcut levels³⁹.

In addition, the draft assessment overstates the carbon storage value of short-lived wood products like furniture. The carbon storage in these products pales in comparison to the carbon storage value of old-growth trees on the Tongass.⁴⁰

³⁷ 36 C.F.R. § 219.6(b)(4).

³⁸ T.A. Ontl & L. A. Schulte, *Soil Carbon Storage*, 3(10) NATURE EDUCATION KNOWLEDGE 35 (2012).

³⁹ J. Pojar, Old-growth forests of Fairy Creek, Vancouver Island, British Columbia (2021).

⁴⁰ Wild Heritage, Comments on Tongass Land Management Plan Revision at 2-3 (Jan. 10, 2025).

TIMBER RESOURCES

Despite recognizing changes in timber economics since demand was last assessed in 2016, the *Timber Resources* draft assessment does not include an updated market demand analysis. That updated analysis is important to inform the need for change. The economy of southeast Alaska today is rooted in industries that depend on intact ecosystems to support healthy salmon stocks and the needs of the visitor and recreation industries. It is no longer based on logging. While the draft assessment states that an updated market demand analysis is underway, the assessment is incomplete without that analysis.

In addition, the timber resources analysis presents a monochromatic view of trees as a timber resource without providing a full picture of the Tongass's collective contribution to a broader social, ecological, and cultural system. The draft assessment provides only high-level, general statistics about remaining lands suitable for logging without considering forest conditions at an appropriate geographic scale. For example, the statistic that four percent of the total forest and eight percent of the productive forest has been harvested lacks context, particularly regarding the disproportionate impact on lowland old-growth forests, which comprise only about two to three percent of the Tongass. These lowland areas—particularly high-volume Class 7 timber stands—have been preferentially targeted for logging. Historically, Volume Class 7 forests covered approximately 491,000 acres, representing about four percent of the forested area. Due to extensive logging, over two-thirds of these high-volume stands have been harvested, leaving approximately 163,000 acres intact, which is about 1.3 percent of the forested area. Additionally, the extensive logging of floodplain forests—where 20 to 40 percent has been harvested since 1954—should be explicitly acknowledged⁴¹.

Ecologically, high-volume lowland old-growth forests are critical not only for their role in carbon sequestration and watershed protection but also for providing specialized habitat for numerous species. For instance, these mature forests offer essential nesting and foraging habitats for bald eagles and marbled murrelets, both of which require large, old trees with suitable structural features for nesting. Additionally, the complex canopy structure and associated floodplain areas benefit Pacific salmon species by maintaining water quality and providing rich, nutrient-dense environments crucial for spawning. Other species, such as black bears and Sitka black-tailed deer, also depend on the diverse and interconnected habitats of these lowland forests for survival and reproduction. 42

Similarly, logging has targeted some areas of the forest much more extensively than others, leaving little intact habitat remaining in those areas. These disproportionate effects are particularly apparent in portions of Prince of Wales Island, for example, where extensive large-scale, old-growth logging has focused, resulting in significant fragmentation of the forest. An analysis of existing conditions should describe these conditions with a focus on heavily targeted landscapes and regions. It should also discuss the old-growth habitat conservation strategy in more detail rather than simply summarizing it. The old-growth habitat conservation strategy is

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⁴¹ B. Higman et al., Logging the Tongass National Forest, Ground Truth Alaska (Aug. 12, 2019).

⁴² Melanie A. Smith, ed., *Ecological Atlas of Southeast Alaska* (2016) at 150—54, 164-67.

⁴³ D. Albert, Conservation Significance of Large Roadless Areas on the Tongass (Dec. 2019).

⁴⁴ See supra, p. 3 (terrestrial ecosystems).

a key feature of the current forest plan and its effectiveness in protecting biodiversity on the Tongass should be considered somewhere in the assessment.

A more complete assessment of high-graded ecosystems and areas of the Tongass would demonstrate a need to protect the remaining old growth on the Tongass to support viable wildlife populations as well as the needs of communities.

Economic analyses should also be more thorough and include the full costs of road-building for timber extraction, as these costs frequently render projects financially unviable. A review by Taxpayers for Common Sense found that between 1980 and 2019, the Forest Service's timber sale program in the Tongass resulted in a net loss of approximately \$1.73 billion, averaging \$44.5 million per year. 45 In 2019 alone, the program operated at a \$16.1 million deficit, a pattern that has been consistent over multiple decades. 46 These losses are exacerbated by infrastructure costs, with over 40 percent of expenditures between fiscal years 2000 and 2019 attributed to road construction and maintenance for logging operations.⁴⁷

A fundamental economic issue that should be addressed by the assessment is the inherent fallacy of round log exports as an economic benefit to the state. A paper prepared by the Forest Service notes that "the Tongass National Forest is unique because its Limited Export Policy makes it the only national forest west of the 100th meridian of the United States authorized to export unprocessed timber to international destinations."48

Furthermore, the discussion of economics in the *Timber Resources* draft assessment does not confront the reality that timber is no longer an important economic driver for the region. Table 3 in the draft assessment represents the declining harvests, sales, and offers since the mid-90s, ⁴⁹ and the chapter also addresses the declining workforce related to timber, 50 demonstrating the substantially decreased role of logging in the region. Logging is assessed primarily through the lenses of cost and harvest limits, homogenizing variables into an overly simplistic economic viewpoint. The final assessment of viable timber should include the economic impact on other industries that rely on the health of the Tongass, such as fisheries and tourism, which contribute significantly more to the state economy. In 2023, the timber industry contributed only 0.6 percent to the State of Alaska's economy and continues to shrink in workforce, whereas the visitor industry has grown substantially and accounts for 13 percent of total employment earnings in the region.⁵¹ The commercial fishing industry provides over 4,400 local jobs in the

⁴⁵ Taxpayers for Common Sense, Timber Report: Cutting Our Losses after 40 Years of Money-Losing Timber Sales in the Tongass September (Sept. 2020). ⁴⁶ *Id*.

⁴⁷ *Id.*; see also Draft Timber Resources Assessment.

⁴⁸ J. Daniels et al., Tongass National Forest: 2022 Sawmill Capacity and Production Report, Report to Ecosystem Planning and Natural Resources, Forest Service, Alaska Region (Sept. 2023).

⁴⁹ *Draft Timber Resources Assessment* at 12.

⁵⁰ *Id.* at 24-25

⁵¹ Southeast Conference, Southeast Alaska by the Numbers 2024 at 2 (Sept. 2024).

region, accounting for 15 percent of regional employment.⁵² With 75 percent of the salmon caught by commercial fisheries in the region hailing from Tongass rivers, these significant economic contributions rely on intact, healthy ecosystems to sustain salmon populations.⁵³ This shift in economic trends indicates that other markets, which are directly affected by the ecological impact of the timber industry, provide a greater economic benefit to the state overall.

The discussion of the transition from old-growth to young-growth timber would benefit from additional discussion. In particular, the discussion should explain the extent to which that transition has been accomplished. In addition, although the assessment describes acreages of young growth that are ready for commercial logging, it does not assess where those lands are located and whether logging them again is consistent with the sustainability of the forest and desired ecological conditions. Further discussion of infrastructure improvements necessary for young-growth processing should also be explicitly outlined to ensure a viable and sustainable transition.

As a transversal theme, this draft assessment, in particular, could benefit from deeper integration of Indigenous perspectives. While the cultural significance of timber resources is mentioned, the analysis would benefit from further discussion of Indigenous knowledge and co-management strategies, Indigenous approaches to selective harvesting, partner organization programs, and the protection of culturally significant tree species, such as western red cedar and Alaska yellow cedar. Additionally, the economic and cultural importance of traditional wood uses—including the carving and raising of totem poles and the construction of dugout canoes—should be explicitly recognized along with an estimate of the demand for trees for cultural uses, something the *Tongass as an Indigenous Place* draft assessment recognizes Tribes have requested. The final assessment should further describe whether demand for cultural use is currently being met and, if not, describe the barriers to meeting that demand. More research is needed to understand how traditional wood use supports community well-being and cultural preservation.

Updating the final assessment to consider declining market demand alongside other values of the forest, including biodiversity, carbon storage, and Indigenous and community uses, would better support a need for change that is focused on supporting these values—values the Forest Service recognizes as important throughout the assessment.

SUBSISTENCE

While we appreciate the recognition of the importance of subsistence and of salmon as a keystone species, both ecologically and culturally, the *Subsistence and Other Harvest* draft assessment does not provide an adequate discussion of whether and how the current forest plan meets subsistence needs for all Tribes in the region. Nor does it integrate the information in the *Tongass as an Indigenous Place* draft assessment to describe whether the forest plan is meeting the subsistence needs described in draft assessment. If it included this information, the final assessment would show that subsistence needs are not met under the current forest plan, which

⁵² Alaska Sustainable Fisheries Trust, 2024 SeaBank Annual Report at 83-84 (2024).

⁵³ A.C. Johnson & J.R. Bellmore, Quantifying the Monetary Value of Alaska National Forests to Commercial Pacific Salmon Fisheries (2019); USDA, Tongass National Forest: Salmon Factsheet (2021).

lacks specific direction on how to protect these resources effectively. Current guidance primarily summarizes the requirements set forth in the Alaska National Interest Lands Conservation Act (ANILCA), without detailing distinct subsistence practices, resources, or community-specific goals. To ensure that subsistence is a priority in forest management, the final assessment should be revised to provide a clear description of the extent to which subsistence needs are being met under existing conditions. This will inform a need for change to develop a forest plan that goes beyond compliance with ANILCA and integrates comprehensive management strategies informed by local knowledge and Indigenous perspectives.⁵⁴

A. Declining Fish and Wildlife Populations

Salmon, particularly Chinook, have experienced significant population declines, with multiple stocks listed as Stocks of Concern by the Alaska Department of Fish and Game. Changes in spawning location and timing have disrupted traditional harvest practices, affecting both ecological systems and subsistence users. The U.S. Department of Agriculture Climate Hub notes the multifaceted importance of salmon for southeast Alaska, reaching the nexus of subsistence, cultural heritage, and economic importance. For instance, the Tlingit believe that salmon are a sacred people as well as a food source, and that respectful treatment of salmon ensures they will return to their natal streams. Salmon also contribute to food security for Alaska Natives and rural residents. In rural areas, salmon make up 29% of harvested wild foods in those communities.

Subsistence salmon harvests have declined, with decreasing state-issued permits reflecting shifting participation. The current assessment acknowledges that many subsistence communities rely on stocks with little to no monitoring, raising concerns about whether these populations are truly stable or if insufficient data masks potential issues.⁵⁷

Similarly, deer populations on Prince of Wales and Kuiu islands have been negatively affected by logging and road construction, which have fragmented habitats and made it more difficult for subsistence hunters to meet their needs. Additionally, increased algal blooms in marine environments, exacerbated by climate change, have raised toxin levels in shellfish, reducing their availability for subsistence harvesters.⁵⁸

The Subsistence and Other Harvest draft does not address the extent to which these declines in salmon and deer populations are affecting subsistence and whether changes in the forest plan to ensure adequate habitat protections are needed to better address these issues.

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⁵⁴ Forest Service, Helena-Lewis and Clark National Forest, 2021 Land Management Plan, at 185-186 (Oct. 2021).

⁵⁵ Sealaska Heritage Institute, *Shanyaak'utlaax: Salmon Boy Told in Tlingit* (Feb. 2019), https://www.youtube.com/watch?v=iGH8cmKKZ78.

⁵⁶ Forest Service, *Tongass National Forest: Salmon Factsheet* (undated); State of Alaska's Salmon and People (SASAP), Southeast Alaska (undated).

⁵⁷ L. Welch, *Alaska 2024 Salmon Season Tanks in Both Total Catch and Value*, NATIONAL FISHERMAN (Nov. 26, 2024).

⁵⁸ Melanie A. Smith, ed., Ecological Atlas of Southeast Alaska (2016).

B. Logging and Road Development Impacts

The draft assessment acknowledges that past timber harvest practices have harmed aquatic ecosystems, particularly anadromous fish populations. Watersheds degraded by logging and road construction prior to 1990 have suffered from erosion, sedimentation, and reduced water quality. The Tongass Timber Reform Act and subsequent 1997, 2008, and 2016 forest plans introduced increased protections, including buffer zones, to mitigate these effects. However, legacy damage persists, and ongoing restoration efforts must be rigorously evaluated to ensure they meet conservation objectives.⁵⁹

The draft assessment states the Forest Service is working on stream improvement projects, such as replacing culverts and increasing large wood in streams to enhance fish habitat. The final assessment should describe the scope and benefits of these projects as well as plans to address remaining red culverts and other adverse effects of roads. This would help to support the need for change and to describe a framework, in the revised plan, for prioritizing fish passage improvement projects and evaluating their success.

ENERGY AND MINERALS

The Forest Service is required to identify and evaluate information about "renewable and nonrenewable energy and mineral resources" relevant to the plan area, but the *Energy and Minerals* draft assessment does not fully meet that obligation because it leaves out important information. The agency should utilize such information to determine whether the current plan is meeting objectives and adopt plan components that are "collaborative and science-based" and that allow mineral and renewable development on the Tongass to be managed so that the Tongass is "ecologically sustainable and contribute[s] to social and economic sustainability; consist[s] of ecosystems and watersheds with ecological integrity and diverse plant and animal communities; and ha[s] the capacity to provide people and communities with ecosystem services and multiple uses that provide a range of social, economic, and ecological benefits for the present and into the future."

C. Minerals

In evaluating conditions related to mineral resources on the Tongass, the Forest Service must analyze information relevant to existing and potential impacts from mining exploration and development, but it has acknowledged areas in which it lacks information. Critically, the Forest Service acknowledges that "the incorporation of Indigenous Knowledge and Traditional Ecological Knowledge has been lacking or absent in previous planning efforts regarding

⁵⁹ See Forest Service, Roadless Area Conservation Final Environmental Impact Statement (Nov.2000); C. Clark et al., Evaluation of the removal of impassable barriers on anadromous salmon and steelhead in the Columbia River Basin, FISHERIES MANAGEMENT AND ECOLOGY 27(1), 102-110 (2020).

⁶⁰ 36 C.F.R. § 219.6(b)(11).

⁶¹ *Id.* at § 219.1(c).

⁶² *Id*.

renewable and non-renewable energy and minerals." The agency should remedy this by prioritizing energy and minerals as an area for continued consultation with Tribes in the region as the Forest Service finalizes the assessments.⁶⁴

The assessment of existing conditions is inadequate because it leaves out important information about current mines, does not provide a discussion of the extent to which mining activities have affected competing forest uses and priorities, or the extent to which the current forest plan has protected forest resources. While the assessment includes a minimal description of existing mines, it does not provide an assessment of the effectiveness of plan standards or existing conditions at those mine sites. It discusses contamination and spills at legacy mines, but it does not discuss, for example, the recent spill at Kensington mine, violations by Greens Creek mine, or concerns with contamination of subsistence resources in the area of the Greens Creek mine. ⁶⁵

The Forest Service also acknowledges unknowns about future market demand for mineral sources on the Tongass. ⁶⁶ While demand for leasable minerals on the Tongass is anticipated to remain low, ⁶⁷ and demand for locatable and salable minerals is subject to significant variables, ⁶⁸ demand should not dictate how the Forest Service determines which areas should be managed for mineral development. Instead, the Forest Service should base its decisions on whether mineral development in a particular area meets forest objectives, as described in the 2012 Planning Rule, National Forest Management Act, and Multiple-Use Sustained Yield Act. Mineral development is often not consistent with numerous other forest objectives such as sustainable ecosystems and watersheds and social, economic, and ecological benefits for people and communities. ⁶⁹ Thus, demand for minerals may be relevant for decisions about how the forest is managed, but it is not the only factor and should not be elevated at the expense of other forest objectives. ⁷⁰

The Forest Service must also ensure it provides accurate information about best mining practices and the feasibility of reclamation of mineral development so that the agency can determine surface management requirements that will meet its multiple use mandate and maintain ecological, economic, and social sustainability on the Tongass, as required by the planning rule and the agency's applicable surface management rules.⁷¹

⁶³ Draft Energy and Minerals Assessment at 18.

⁶⁴ 36 C.F.R. § 219.6(a)(2).

⁶⁵ See B. Gestring, Earthworks, Alaska Metal Mines: The track record of impacts (Mar. 2020); A. Canny, Kensington Gold Mine near Juneau reports 105,000-gallon tailings spill, KTOO (Mar. 27, 2024); C. Larson, Hecla Greens Creek Mine agrees to \$143K fine after 2019 EPA violations, JUNEAU EMPIRE (June 14, 2023); Friends of Admiralty Island, Evaluation of Stable Isotope Ratios and Lead Concentrations in Clam Shells Over Time in Hawk Inlet (Dec. 12, 2022).

⁶⁶ Draft Energy and Minerals Assessment at 18.

⁶⁷ *Id.* at 16-17 (describing anticipated low demand for leasable minerals).

⁶⁸ See id. at 18, 20.

⁶⁹ 36 C.F.R. § 219.1(c).

⁷⁰ See id. (prioritizing sustainable development that maintains ecological and aquatic integrity).

⁷¹ *Id.*; 36 C.F.R. § 228.

The Forest Service recognizes climate change may affect mineral prospects and demand over time. The Tongass provides an irreplaceable carbon sink that is critical to our nation's efforts to slow the rate of climate change. It would be illogical to sacrifice stands of old-growth trees that are part of this important carbon sink in pursuit of mineral production purportedly aimed at reducing reliance on climate-change-driving fossil fuels.

D. Renewables

The Forest Service has identified many benefits of renewable energy, including: lower energy costs, job creation, improved health, enhanced quality of life, reduced carbon footprint, preservation of natural habitats, and protection of biodiversity through sustainable energy practices. The 2016 Plan Amendment environmental impact statement recognized the disparities in electricity costs throughout southeast Alaska, which could be alleviated by bringing more communities renewable power options. Businesses and communities alike have expressed interest in increased renewable energy projects. However, as with mineral resources, the Forest Service must ensure it analyzes information relevant to developing renewable energy sources and has historically failed to incorporate traditional ecological knowledge. Not only should the Forest Service incorporate such knowledge as it analyzes potential development of renewable energy sources in the Tongass, the agency should consult with Tribal governments more broadly about the effects of such development on their communities.

As the Forest Service states, renewable energy projects may be of the most benefit in rural southeast communities where current energy costs are high and current energy production is more reliant on fossil fuels and other non-renewable sources. ⁷⁶ In the final assessments, the Forest Service should analyze how existing renewable energy projects affect the Tongass, demand for additional renewable projects, and the potential benefits to communities. It should also consider the extent to which the current forest plan has facilitated these projects while still protecting healthy ecosystems and community uses.

SOCIOECONOMIC CONDITIONS

The Socioeconomic draft assessment overemphasizes the historic importance of timber in the region without fully acknowledging that it no longer holds the same cultural or economic importance. The draft assessment understates the importance of fishing—including commercial and subsistence fishing—to the region and the Tongass's role in supporting healthy fish populations. Seventy-five percent of the commercially caught salmon in southeast Alaska are from the Tongass, and these fisheries bring in over \$800 million in annual revenue for the region

⁷² Draft Energy and Minerals Assessment at 18.

⁷³ See supra p. 7; see also Comment letter from Wild Heritage re: Tongass Land Management Plan Revision #64039 (Feb. 20, 2025).

⁷⁴ Draft Energy and Minerals Assessment at 5.

⁷⁵ Forest Service, Tongass Land and Resource Management Plan Amendment Final Environmental Impact Statement at 3-124 (June 2016).

⁷⁶ Draft Energy and Minerals Assessment at 10-11.

and provide more than 5,000 jobs.⁷⁷ Likewise, the importance of salmon, deer, cedar, and other forest resources to subsistence cannot be overstated and the *Socioeconomics* final assessment should incorporate and expand on the discussion of subsistence uses in other sections.

In addition, the draft assessment includes only limited information relating to the tourism industry. In 2022, the visitor industry provided \$242 million in wages and 6,600 jobs in the region. The Tongass' strong draw as a tourism destination brings millions of visitors to the region who go on to visit other parts of Alaska, bringing economic benefits to the state as a whole. While the draft assessment acknowledges that the forest plan influences visitation to various communities and provides a list of priorities identified by forest users for addressing conflicts with tourism uses of the forest, it does not assess how well the plan currently is, or is not, supporting these priorities.

LANDS: STATUS, OWNERSHIP, AND USES

Land exchanges have resulted in significant loss of old-growth forests and fragmentation of the Tongass. Although the *Lands: Status, Ownership and Uses* draft assessment acknowledges that land exchanges have shaped the Tongass, it does not provide an assessment of existing conditions related to these exchanges or how these exchanges and other land status and ownership actions affect the forest plan objectives and sustainability. Nor does it address what protections exist under the current plan and whether they have been effective in mitigating the impacts of land exchanges. The final assessment should include a discussion of existing conditions related to land exchanges that will better inform decisions about whether a new plan should include changed management direction. While some of these actions may be beyond the Forest Service's control, the Forest Service could, for example, consider discouraging land exchanges in areas that are already fragmented by logging or past exchanges or acquiring particular lands in other areas to mitigate the loss.

In addition, the draft assessment briefly summarizes the goals of the Hoonah Native Forest Partnership, Keex Kwaan Community Forest Partnership, and Klawock Indigenous Stewards Forest Partnerships, but does not describe the work these partnerships have performed and how it has benefitted the forest or helped to achieve forest goals and objectives. Nor does the assessment describe whether the current forest plan facilitates these partnerships or their goals or could be changed to do so.

⁷⁷ Alaska Sustainable Fisheries Trust, *2024 SeaBank Annual Report* at 83-84 (2024); USDA, *Tongass National Forest: Salmon Fact Sheet* (2021).

⁷⁸ Alaska Sustainable Fisheries Trust, *2024 SeaBank Annual Report* at 101-02 (2024).

⁷⁹ See, e.g., J. Resneck et al., The Roadless Rule is Supposed to Protect Wild Places. What Went Wrong in the Tongass National Forest?, COASTALASKA, EARTHRISE, GRIST, & KRBD (April 27, 2022).

⁸⁰ See 36 C.F.R. § 219.5(a)(1) requiring an assessment to include a discussion of "existing and possible future conditions and trends of the plan area" and its sustainability.

INFRASTRUCTURE

The *Infrastructure* draft assessment appropriately focuses on the importance of maintaining "environmentally sustainable transportation and infrastructure system that is responsive to ecological, economic, and social concerns." This focus is consistent with the Planning Rule. As the Forest Service's Planning Handbook explains, infrastructure "can have a substantial impact on social, cultural, economic, and ecological conditions both within the plan area and in the broader landscape." Accordingly, the agency must consider the impacts of infrastructure on ecological integrity and species diversity, and the infrastructure's contribution to social and economic sustainability. 83

The final assessment nevertheless should do more to assess the existing state of infrastructure in the context of stressors related to climate change and related increased precipitation and geological hazards. The *Infrastructure* draft assessment only briefly notes that precipitation is projected to increase, resulting in the need for larger culverts and bridges. The draft assessment suggests, but does not explicitly acknowledge that climate change is increasing the risk of hazards such as landslides. And it fails to fully describe the current state of infrastructure already stressed by changing climate and inadequate maintenance. For example, the aquatic resources assessment notes that there are already approximately 1,200 culverts that inhibit water flow and fish passage. Climate change and the increased risk it poses for infrastructure in the Tongass are facts that should underly and inform the Forest Services' assessment of infrastructure. This is especially important to support the final assessment's purpose of identifying "a preliminary need to change the existing plan and to inform the development of plan components and other plan content.

As it completes the final assessment, the Forest Service should continue to engage with local communities and Tribes to understand and incorporate local priorities for maintaining existing infrastructure, especially roads used for community access, subsistence, and recreation, as well as priorities for decommissioning unnecessary infrastructure. As the draft assessment notes, some roads originally built to support timber harvest have "gained value as they provide access for other uses such as recreation, harvest and gathering, as well as to provide critical community access to private lands." On the other hand, many roads and other infrastructure may no longer be serving any important need. Continuing to maintain such infrastructure may waste resources and cause environmental harm. The Forest Service should assess whether

⁸¹ Draft Infrastructure Assessment at 5; 36 C.F.R. § 219.6(b)(11) (requiring assessment of infrastructure)

⁸² Forest Service, Land Management Planning Handbook, Ch. 10 at 13.13 (2015) (Planning Handbook).

⁸³ *Id.*, Ch. 10 at 13.6

⁸⁴ *Draft Infrastructure Assessment* at 12.

⁸⁵ *Id*.

⁸⁶ Draft Aquatic Ecosystems Resource Assessment at 15.

⁸⁷ Draft Geology and Geologic Hazards Assessment at 7, 16, 22-23, 26.

^{88 36} C.F.R. § 219.7(c)(2)(i); See also Planning Handbook, Ch. 10 at 11.3.

⁸⁹ Draft Infrastructure Assessment at 6.

⁹⁰ *Id.* at 8.

infrastructure should continue to be maintained, and it should ensure that it has a sufficient understanding of community priorities for infrastructure maintenance and decommissioning.

Finally, the *Infrastructure* draft assessment states that infrastructure cannot be adequately maintained because there is less funding available as a result of fewer timber sales, but this is in conflict with the *Socioeconomics* draft assessment. That draft assessment shows Tongass forest receipts have remained relatively stable over time, even with a decrease in large timber sales. ⁹¹ The *Infrastructure* draft assessment does not adequately explain why it is no longer possible to maintain infrastructure with the same amount of funding available.

DESIGNATED AREAS

Although the *Designated Areas* draft assessment describes existing designations, it does not provide an assessment of how well current standards are meeting the goals for those designations, whether additional lands should be added or recommended for addition to certain designations, or whether the existing designations are adequate to meet forest needs and community priorities.

As an example of what is missing from the analysis of current conditions and forest plan standards, although the assessment recognizes that portions of wilderness areas are increasingly viewed as overcrowded, 92 it does not explain whether this is a result of a failure to provide adequate protections for wilderness characteristics through current plan direction. Descriptions of other designations are entirely lacking in an assessment of whether current conditions on the forest meet the goals and objectives for those designations. In the description of inventoried roadless areas, for example, the Forest Service recognizes the local and national importance of protecting roadless characteristics, 93 but does not evaluate whether those characteristics are fully protected under the plan.

With respect to the need for additional designations, the draft assessment recognizes that a wilderness review and wild and scenic inventory will be part of the planning process, but does not incorporate any information from that ongoing review into this assessment. The final assessment should incorporate available information from these reviews and the revised plan should include recommendations for additional wilderness areas and wild and scenic rivers.

With respect to wilderness designations, research suggests that protecting large forests from deforestation and disturbance is one of the best things humans can do to promote carbon sequestration, and that "forests least affected by human activity have the highest conservation value in terms of the range of ecosystem services they provide." Another reason is that as more people seek out solitude and outdoor recreation, existing wilderness areas are being used more, especially during certain months of the year. They have more visitors, and the increased

⁹¹ Draft Socioeconomics Assessment at 36

⁹² Draft Designated Areas Assessment at 11.

⁹³ *Id.* at 34.

⁹⁴ See P. Potapov et al, The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000-2013, 3:1 Science Advances Magazine (Jan, 13, 2017); see also M. Ryan, Forests and Carbon Storage, Climate Change Resource Center (2008).

use is having a greater impact. This trend is only expected to continue⁹⁵ and means that protecting additional areas becomes even more important, particularly on the Tongass as the cruise ship industry has been rapidly expanding its operations in southeast Alaska over the last decade.

Similarly, recommending rivers for protection under the Wild and Scenic Rivers Act would benefit salmon populations that the Forest Service recognizes are a keystone species, subsistence, recreation, and other important uses of the forest. Currently, the Tongass has no rivers designated under the Act.

Finally, the draft assessment could be strengthened with a discussion of whether the existing designations adequately meet community and tribal priorities. Other sections of the assessment discuss interest in a greater role for Tribes in stewardship of their traditional lands. ⁹⁶ Those priorities could be carried through to the *Designated Areas* final assessment to determine whether additional types of land use designations might be beneficial in meeting tribal needs or community priorities.

DRIVERS, STRESSORS, AND CLIMATE CHANGE

The *Drivers and Stressors of Climate Change* draft assessment lacks a discussion of whether the current plan is meeting the challenges climate change and other stressors. Assessing the plan's ability to address these drivers is critical and the final assessment should provide a discussion of the current plan's effectiveness to inform the need for change. While the assessment provides a three-sentence summary of the plan's "ability to adapt," it then simply asserts that the majority of the Tongass is intact. As discussed above in these comments, that assertion overlooks the naturally fragmented nature of the Tongass' island ecosystem, the disproportionate impact of logging on certain areas of the forest, and the potential for logging and other activities to affect endemic species and other species with limited ranges. It does not provide a discussion of the effectiveness of the plan standards or the need to consider more precautionary management to better protect the forest ecosystem in light of the effects of a rapidly changing climate.

The lack of measures in the current forest plan to respond to climate change strongly supports a need to include standards in the plan to directly address climate change and its effects on the Tongass, including landslides, disease and insect infestations, yellow cedar decline, salmon declines, and other observed effects of climate change. These changes might include, for example, prohibiting logging in the remaining old growth of the Tongass, with exceptions for cultural use, to protect carbon stocks and biodiversity. They may also include adopting measurable, enforceable standards to address changes as they occur and to respond to priorities identified by Tribes and communities. This would include identifying key drivers (e.g., rising

⁹⁵ See E. White et al., Federal outdoor recreation trends: effects on economic opportunities (2016).

⁹⁶ See supra, pp. 2-3.

⁹⁷ For example, the *Open Standards for the Practice of Conservation* provide guidance for a structured framework that could be considered to guide adaptive management options when the Forest Service develops alternatives for the revised plan. *See* Conservation Measures Partnership, *Open Standards for the Practice of Conservation* at 12 (2020).

temperatures), stressors (e.g., decreased snowpack), impacts (e.g., yellow cedar decline), and responses (habitat protection). While the final assessment need not identify all of the adaptive responses for consideration in an environmental impact statement for a revised plan, it should better assess the current plan's responsiveness to key stressors to help inform the next steps in the planning process.

FINAL RECOMMENDATIONS

On behalf of Southeast Alaska Conservation Council, Alaska Wilderness League, Women's Earth and Climate Action Network, Center for Biological Diversity, Earthjustice, and Sierra Club Alaska Chapter, we appreciate your thoughtful consideration of our comments in further strengthening the draft assessment into a more actionable and comprehensive final assessment. We hope that incorporating these substantive insights will support the Forest Service in planning activities that enhance the predictive validity of management outcomes for the communities that rely on our forests while ensuring protection for old-growth forests, respect for the needs and priorities of Tribes, supporting keystone species like salmon, and benefitting fisheries and recreation in a changing climate.

Sincerely,

Nathan Newcomer Andy Moderow

Federal Campaigns Manager Senior Director of Policy

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