*ALASKA RAINFOREST DEFENDERS*

Box 6064 Sitka, Ak 99835
defenders@akrainforest.org

May 5, 2023

Larry Edwards, President
Alaska Rainforest Defenders
P.O. Box 6064
Sitka, AK 99835

Ben Case
Attn: Thomas Bay Young-Growth Timber Sale
Petersburg Ranger District
P.O. Box 1328
Petersburg, Alaska 99833
Submitted electronically at:
https://cara.fs2c.usda.gov/Public//CommentInput?Project=60639

Mr. Case:

I submit these comments on behalf of Alaska Rainforest Defenders ("Defenders") regarding the Thomas Bay Young-Growth Timber Sale Project Environmental Assessment and Finding of No Significant Impact (EA/FONSI). The Forest Service proposes to sell 12.6 million board feet (MMBF) of timber from 561 acres of second growth forest.[1] The potential purchaser could extract most of this timber through clearcuts of up to 30 acres in size.[2] Timber industry supporters believe the smaller project is infeasible and support a larger alternative aimed at export markets that would extract 19.3 MMBF from 841 acres through clearcuts of up to 100 acres in size.[3]

We request that you cease planning on this large timber project. Our members use the project area and surrounding environment for recreation, scenic values, commercial fisheries, subsistence, hunting, wildlife viewing, scientific research and other activities. The proposed action would adversely impact these other multiple use values.

---

[1] USDA Forest Service. 2023. Thomas Bay Young-Growth Timber Sale Environmental Assessment and Finding of No Significant Impact. Alaska Region, Tongass National Forest, Petersburg Ranger District. R10-MB-880a. April 2023.

[2] *Id.* at 3.

[3] *Id.* at 24-25. US Forest Service NEPA Project Public Reading Room - View Letter (usda.gov) (Ted Sandhofer comment); https://cara.fs2c.usda.gov/Public/DownloadCommentFile?letterid=3925624&project=60639 (Dixon Entrance Chapter of the Society of American Foresters).

## Contents



### *I. Introduction*

Our major concerns about this project pertain to adverse impacts to wildlife and fish and further loss of socio-economic benefits resulting from short-rotation clearcut harvests for recovering second-growth forests. The new clearcuts will prevent recovering forests from achieving old-growth characteristics, and reduce long-term habitat values for wildlife by prolonging the stem exclusion phase of forest succession. Winter deer habitat and project area watersheds have already been seriously impacted due to past industrial scale logging. Any additional impacts to remaining habitat, even if of lesser quality, will exacerbate an already bad situation for deer, wolves and subsistence hunters, harm forest dependent species such as goshawks, and pose unjustifiable risks to project area watersheds and fishery values.

Our scoping comments requested that the analysis for this project:

(1) evaluate and disclose significant adverse environmental impacts to wildlife associated with the second-growth logging rotation, including long-term impacts caused by delaying forest succession;

(2) identify the project area as providing unique habitat conditions and exceptional multiple use values on the Southeast Alaska mainland;

(3) take a hard look at impacts to aquatic habitat and fish populations given the cumulative risks of climate change and short-rotation timber management, which prevents watershed recovery;

(4) disclose public health and safety risks associated with the increased introduction of invasive species in the project area and plans to treat such outbreaks with Glyphosate, a known carcinogen; and

(5) consider the extent to which this project establishes a precedent for short-rotation management of federally-owned recovering forestlands that favors non-local timber exporters over small local mills and recreation providers.

The EA:

- never mentions climate change;
- entirely omitted analysis of impacts to many resource values; and
- failed to take a hard look at the few project issues considered, such as wildlife impacts and timber sale economics.

Agencies that reach a conclusion that a project has not significant effects must still meet the National Environmental Policy Act's (NEPA) hard look requirement, consider relevant factors, and "provide[] a convincing statement of reasons to explain why a project's impacts are insignificant."[4] The EA failed this standard, in violation of NEPA. Defenders submits that an EIS is necessary if you continue planning on this project.

### *II. The Forest Service should re-scope this project and prepare an EIS*

The environmental impacts caused by clearcutting large areas requires analysis in an EIS. Alternative 2 would clearcut 841 acres and remove 19.3 MMBF of timber.[5] Clearcuts would be up to 100 acres in size.[6] The preferred alternative would remove 12.6 MMBF of timber, mostly through clearcuts of up to 30 acres in size.[7] This project proposes clearcutting over the course of the 21st century so that each action alternative would remove over 50 MMBF from at least 1,300 acres.[8]

NEPA requires federal agencies to analyze the foreseeable environmental impacts, including direct, indirect, and cumulative impacts, of "major Federal actions."[9] If the action *may* cause degradation of some human environmental factor, the agency must prepare an EIS.[10] In other words, for determining whether or not to prepare an EIS the threshold issue is not whether significant effects *will* in fact occur. **Instead, the trigger is if there are substantial questions about whether a project will have a significant effect on the environment**.[11]

The proposed action is a large timber sale that the agency intends to clearcut, and that triggers questions about significant environmental effects. In the 2019 Central Tongass Project DEIS the Forest Service described the proposed commercial clearcutting of Petersburg Ranger District second-growth forests, including Thomas Bay, as a "*large-scale habitat alteration.*"[12] It seems impossible that a "large-scale

---

[4] *Bark et al. v. U.S. Forest Service,* 958 F.3d 865, 869 (9th Cir. 2020)(citations omitted)

[5] EA/FONSI at 24.

[6] *Id.* at 25.

[7] *Id.* at 26.

[8] *Id.* at 28, Table 5.

[9] 42 U.S.C. § 4332(2)(C).

[10] *Idaho Sporting Congress v. Thomas,* 137 F.3d 1146, 1149 (9th Cir. 1998); *Foundation for N. Am. Wild Sheep v. United States Dep't of Agric.,* 681 F.2d 1172, 1178-79 (9th Cir. 1982)(emphasis added); *see also Blue Mountains Biodiversity Project v. Blackwood,* 161 F.3d 1208, 1212 (9th Cir. 1998).

[11] *Idaho Sporting Congress v. Thomas,* 137 F.3d 1146, 1150 (9th Cir. 1998).

[12] USDA Forest Service. 2019. Central Tongass Project Draft Environmental Impact Statement at 3-115. R10-MB-832a. Tongass National Forest, Petersburg Ranger District and Wrangell Ranger District. July 2019 (emphasis added)(hereinafter Central Tongass Project DEIS).

habitat alteration" could occur without causing adverse environmental impacts. The analysis in the EA/FONSI unlawfully reverses the agency's own findings without providing a reasoned explanation, violating the Administrative Procedure Act.[13]

The Tongass National Forest's own past environmental analyses indicate the need to produce an EIS. The agency has consistently prepared an EIS for timber sales that entail industrial scale clearcutting large amounts of timber. In between 1998 and 2006, the agency produced 10 timber project EAs for timber volumes that ranged between 2.6 and 8.7 MMBF, or an average volume of approximately 5.5 MMBF.[14] Between 1998 and 2011 the agency produced an EIS for each of 19 projects that proposed to extract similar or even considerably smaller amounts of forest (in some cases less than half) compared to the proposed action.[15]

The only similar Tongass National Forest project analyzed in an EA was the Kosciusko Vegetation Management EA. We filed a formal objection to that project based primarily on the need to prepare a full EIS because the project was a large timber project that authorized large-scale clearcutting.[16] The Kosciusko project EA and the findings in this EA/FONSI are inconsistent with the widespread recognition that large-scale clearcutting causes significant, adverse environmental effects. In *Wyoming Outdoor Coordinating Council v. Butz,* the Forest Service refused to prepare an EIS analyzing a 15 MMBF sale.[17] The court concluded that the agency needed to prepare an EIS, recognizing that *"[t]he clearcutting of the timber planned obviously will have a significant effect on the environment for many years*."[18]

In 1995, a federal district court in Vermont considered a Forest Service project that would remove 3.2 MMBF of timber through 300 acres of clearcuts.[19] The court determined that "[o]n its face, the proposed action, which includes clearcutting of over 300 acres and its admitted attendant effects such as intrusion into bear and neotropical bird habitats, is 'significant' under any reasonable construction of the term."[20] In 1997, a Pennsylvania federal district court required the Forest Service to prepare an EIS for a project that would remove over 20 MMBF through clearcutting

---

[13] *Organized Village of Kake v. Dept. of Agriculture*, 795 F.3d 956 (9th Cir. 2015).

[14] These projects were the 1998 Nemo, Todahl and Twin Creek projects, the 2000 Doughnut and Polk projects, the 2004 Boundary and Shady projects, and the 2006 Goose Creek, Overlook and Soda Nick projects.

[15] These projects include the 1998 Crane and Rowan Mountain and Crystal Creek Projects (24 and 13 MMBF); the 1999 Canal Hoya Project (13 MMBF); the 2000 Kuakan, Luck Lake and Skipping Cow Projects (12, 12.9 and 19 MMBF); the 2001 – 2003 Woodpecker Project (16.3 MMBF); the 2003 Finger Mountain, Licking Creek and Madan Projects (21.4, 17 and 27 MMBF); the 2004 Three Mile Project (19.5 MMBF); the 2005 Couverden and Emerald Bay Projects (23 and 16.4 MMBF); the 2006 Scott Peak and Tuxekan Projects (8.3 and 18.3 MMBF); the 2007 Scratchings and Traitors Cove Projects (21 and 17.1 MMBF); the 2008 Baht Project (4.3 MMBF) and the 2011 Central Kupreanof Project (26.3 MMBF).

[16] *See* https://www.fs.usda.gov/project/?project=45037

[17] *Wyoming Outdoor Coordinating Council v. Butz,* 484 F.2d at 1247, 1251, n. 5 (10th Cir. 1973).

[18] *Id.* at 1250-1251 (emphasis added).

[19] *National Audubon Society v. Hoffman,* 917 F.Supp. 280, 287-288 (D. Vt. 1995).

[20] *National Audubon Society v. Huffman,* 917 F.Supp. 280, 288 (D. Vt. 1995).

in an area where, like Thomas Bay, the agency had planned future timber extraction.[21] The court identified a number of relevant factors that are applicable to this Project: (1) a large number of acres; (2) the predominant use of clearcutting; (3) the presence of sensitive species and (4) the proximity of the project to old-growth forest and to important watershed.[22]

9th Circuit courts also require that timber agencies prepare an EIS for large timber projects. The Forest Service had to prepare an EIS for the Crystal Clear Restoration Project, a large project that primarily involved experimental variable density thinning.[23] An EIS was necessary to analyze the Forest Service's Goose Project which sought to improve stand conditions, reduce hazardous fuels and provide timber through commercial and non-commercial thinning.[24] One issue these cases share with the Thomas Bay project involved controversy over clearcutting maturing forests.

In sum, the area directly and indirectly affected is large under every alternative, ranging from 351 to 841 directly-affected acres and 1,098 to 1,781 indirectly-affected acres.[25] It is unreasonable, and incomprehensible that this amount of clearcutting could occur without raising substantial questions about environmental impacts.

## *III. Comments on the Purpose and Need and Range of Alternatives*

### *A. The Actual Purpose and Need is Overly Narrow*

The EA states that the project purpose is to provide an economic supply of timber that supports the local economy while also addressing restoration needs.[26] In particular, the project would support second-growth timber processing capacity.[27] This is a large volume timber sale that by far exceeds local timber processing capacity. It also reduces the value of these maturing forests for wildlife – the proposal to use smaller clearcuts in Alternatives 3 and 4 does not make them benign.[28]

We request that any further planning on this project include a revised purpose and need statement that more clearly directs the agency to accommodate non-timber forest resource values and downscales the proposed volume to amounts that are realistic for local operators. Forest Plan goals include "*maintaining* or improving habitat conditions for wildlife and fish" and supporting a variety of mill sizes and operators, *through small and micro sales*.[29] The agency should "maintain, prolong,

---

[21] *Curry v. Forest Service,* 988 F.Supp. 541 (W.D. Penn. 1997).

[22] *Id.* at 551-552.

[23] *Bark et al.,* 958 F.3d at 868; *see also Oregon Wild v. Bureau of Land Management,* Case No. 6:14-CV-0110AA (D. Or. 2015)(requiring the Forest Service to prepare an EIS for the 6.4 MMBF White Castle Project in large part because the agency proposed to clearcut 180 acres of "mature forest" – stands over 80 years old, which had wildlife habitat values).

[24] *Cascadia Wildlands v. U.S Forest Service,* 937 F.Supp.2d 1271, 1274, 1284 (D. Or. 2013).

[25] EA/FONSI at 23, Table 3.

[26] *Id.* at 1.

[27] *Id.* at 1.

[28] *Id.* at 3.

[29] Tongass Land and Resource Management Plan at 5-2-5-3.

and/or improve understory forage production and ... increase the development of old growth characteristics in young-growth timber stands for a variety of wildlife species."[30] There is a particular emphasis on ungulate winter range and areas that are important and accessible for human consumptive and non-consumptive uses.[31]

***B. NEPA requires a broader range of alternatives***

We request that you develop substantially downscaled alternatives that: (1) eliminate clearcutting in the Scenic Viewshed LUD to reduce adverse impacts to hikers, hunters and other visitors and (2) exclude clearcutting (noting here that clearcutting and "two-aged management" as described and proposed in the EA are the same thing but with different descriptors) and (3) tailor timber volume to local mills.

NEPA imposes an obligation to "[r]igorously explore and objectively evaluate all reasonable alternatives."[32] An agency must "consider such alternatives to the proposed action as may partially or completely meet the proposal's goal," meaning that it is reasonable to consider alternatives that meet other objectives, even if the alternative does not provide sufficient volume to meet the Forest Plan/Tongass Advisory Committee timber targets.[33] A "reasonable" range of alternatives includes alternatives "that are practical or feasible" and not just those alternatives preferred by the agency.[34] The key criterion for determining whether a range of alternatives is reasonable "is whether an EIS's selection and discussion of alternatives fosters informed decisionmaking and informed public participation."[35]

The EA incorrectly states that the Forest Service developed additional alternatives with no clearcuts in response to public comments.[36] *Alternative 2* proposes to clearcut 841 forested acres over 5 to 10 years and remove 19.3 MMBF of timber.[37] *Alternative 3*, the preferred alternative, would use "two aged management" that would remove 12.6 MMBF of timber from 561 acres, mostly through clearcuts up to 30 acres in size.[38] Two-aged management is a variation of clearcutting.[39] It is

---

[30] *Id.* at 4-93.

[31] *Id.* at 4-93.

[32] 40 C.F.R. § 1502.14(a); *see also Barnes v. U.S. Dep't. of Transp.,* 655 F.3d 1124, 1131 (9th Cir. 2011)("Congress created NEPA to protect the environment by requiring that federal agencies carefully weigh environmental considerations and consider potential alternatives to the proposed action before the government launches any major federal action").

[33] *City of New York v. U.S. Dep't of Transp.,* 715 F.2d 732, 742-742 (2nd Cir. 1981).

[34] Council on Environmental Quality (CEQ), Forty Most Asked Questions, Questions 2A and 2B; 40 C.F.R. §§ 1502.14, 1506.2(d); *available at* http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm.

[35] *Westlands Water Dist. V. U.S. Dep't of Interior,* 376 F.3d 853, 872 (9th Cir. 2004)(citations omitted); *New Mexico ex rel. Richardson,* 565 F.3d 683, 708 (10th Cir. 2009)(citations omitted).

[36] EA/FONSI at 3.

[37] *Id.* at 3.

[38] *Id.*

[39] *Ohio Environmental Council v. US Forest Service*, No. 2: 21-cv-04380 (S.D. Ohio Mar. 30, 2023); Bakos, T. 2023. Wildlife Report/Biological Evaluation/Subsistence Assessment Thomas Bay Young-Growth Timber Sale at 1-2 (describing the 30 and 10 acre openings as clearcuts).

misleading to describe it otherwise; it just means that the Forest Service intends to clearcut forests adjacent to the immediately planned clearcut at some point in the future.[40] *Alternative 4* also uses "two aged management" to remove 7.9 MMBF of timber from 351 acres but with smaller clearcuts of up to 10 acres.[41]

The Forest Service needs to consider a different and downscaled action alternative.[42] There have been several recent cases recognizing that the mandate to "examine all viable and reasonable alternatives" means that timber agencies must develop multiple alternatives for timber projects – particularly alternatives that include retaining higher volumes of older and larger trees.[43] The Forest Service also has an obligation under NFMA to consider alternatives to clearcutting for this project.[44] The only applicable Forest Plan justifications for clearcutting are to achieve timber production objectives or where there is a risk of infection or disease, or high risk of windthrow.[45] Timber production considerations do not justify clearcutting. Uneven-aged management (generally, 67% forest retention) would produce more timber from the area over time.[46] Windthrow risks do not justify clearcutting as the agency has also stated that uneven-aged management, whether group or single tree selection, creates a mostly wind firm retention level.[47] Finally, the commercial young-growth stands in the Petersburg Ranger District "are mostly healthy and growing well with no foreseeable insect or disease issues."[48]

Due to the general lack of forested habitat on the mainland and potential for higher snowfall accumulations, the Forest Service needs to consider alternatives to clearcutting that aim solely at wildlife habitat objectives in the development LUDs. Prior planning on this project as part of the larger, cancelled Central Tongass Project and other recent research shows that it is possible to develop a downscaled alternative that would reduce wildlife impacts relative to clearcutting.[49] The project could consider uneven-aged management through group or single tree selection that would provide timber to smaller operators while retaining 67 percent of the stand area.[50] Retention areas could advance from late stem exclusion to understory re-

---

[40] EA at 3.

[41] *Id*.

[42] *See Curry,* 988 F.Supp. at 553-554 (explaining that NEPA requires the Forest Service to consider reasonable alternative that use more extensive alternative management techniques).

[43] *See Conservation Congress v. U.S. Forest Service,* 235 F.Supp.3d 1189, 1210-12 (E.D. Cal. 2017); *Oregon Wild v. Bureau of Land Management,* Case No. 6:14-CV-0110AA (D. Or. 2015).

[44] *See* 16 U.S.C. § 1604(g)(3); *Avers v. Espy*, 873 F.Supp.455 (D. Colo. 1994); *Curry,* 988 F.Supp. at 554.

[45] Tongass Land and Resource Management Plan at 4-68.

[46] Central Tongass Project Draft Environmental Impact Statement at 3-230.

[47] *Id.* at 3-233.

[48] *Id.* at 3-227.

[49] *Id.* at 3-62, Table 11; Bennetson, B. 2020. Tongass National Forest young-growth management guidelines for stands with a wildlife management objective. Exh. 3 of the Tongass Young-Growth Management Strategy, USDA Forest Service, Tongass National Forest, Juneau, AK. 86 pp.

[50] Central Tongass Project Draft Environmental Impact Statement at 3-221.

initiation structure over the next three decades.[51] This alternative could provide flexibility for future forest managers to defer or cancel future planned cutting and better provide for long-term wildlife needs as the retention areas would be trending toward old-growth structure by that time.[52] Other treatments would use very small openings "designed to improve the development and diversity of understory plants for wildlife including deer, create more structural diversity, and enhance snow interception by promoting tree crown development.[53]

The EA failed to consider other treatments that can improve recovering forest characteristics for old-growth associated wildlife – both in the short term and the long term. As noted in the agency's own reports, the relevant time frames for analysis should be "years to decades and multiple decades to centuries, respectively."[54] Short-term benefits may pertain to understory vegetation and plant species diversity, while long-term objectives could be more rapid attainment of old-growth conditions.[55] Local wildlife managers have indicated that habitat enhancement is the only way to prevent further decline of moose habitat.[56] The Alaska Department of Fish and Game recommends cutting deciduous vegetation in order to provide shorter browse plants as a better enhancement measure for moose forage than clearcutting conifers.[57] The identification of major browse areas and winter browse areas could inform the selection of potential enhancement sites. In sum, there is a need for a downscaled, no-clearcut alternative.

### *C. The timber economic analysis is misleading – and sufficiently controversial to warrant an EIS*

NEPA requires federal agencies to take a hard look at environmental impacts and disclose sufficient information as needed to ensure "informed decisionmaking and informed public participation."[58] NEPA analyses cannot serve this essential function if they reflect misleading economic assumptions "by skewing the public's evaluation of a project."[59] Further, a project is highly controversial — such that an EIS may be required — if there is a 'substantial dispute about the size, nature, or effect of the major Federal action rather than the existence of opposition to a use.'"[60] This can occur when there is considerable evidence that a project will not meet its goal, or the effects are highly controversial and uncertain.[61]

---

[51] *Id.*

[52] *Id.*

[53] *Id.* at 3-85.

[54] *Id.*

[55] *Id.*

[56] Lowell, R.E. 2018. Moose management report and plan, Game Management Unit 1B.

[57] *Id.*

[58] 40 C.F.R. § 1502.1

[59] *Hughes River Watershed Conservancy v. Glickman,* 81 F.3d, 437, 446 (4th Cir. 1996).

[60] *Native Ecosystems Council v. US Forest Service*, 428 F.3d 1233, 1240 (9th Cir. 2005).

[61] *Bark et al.,* 958 F.3d at 870-71.

Part of this project's purpose is to "increase the viability of young-growth harvest and processing capacity."[62] But the EA failed to include a low volume alternative aimed at providing timber to local mills. The omission appears to be based on the agency's belief that larger volumes for larger operators were necessary to meet market demand.[63] The EA never identifies any local interest in processing the large volume of timber authorized under this sale.[64] Further, the EA identifies significant negative economic values associated with domestic processing (-23.3/MBF to -$63.3/MBF) and positive economic values for export ($47.6/MBF to $65.1/MBF).[65] The negative values are higher in the two Alternatives that implement smaller clearcuts and the positive value is highest for Alternative 2.[66] Logging costs drive the value disparity.[67]

These data suggest that the larger volumes are only viable for the region's largest timber sale purchaser, Alcan/Transpac — a company that does not have any processing capacity in the region.[68] Timber sale planners have informed the Forest Service that there is no domestic manufacturing or market for these logs.[69] The recent Vallenar Project EA assumed 100% export of young growth timber due to the high cost of logging in the region and "absence of young growth manufacturing infrastructure."[70]

The Forest Service's decision to propose large-scale clearcutting for timber that will be exported is controversial in the context of the project's stated purpose. The Petersburg Ranger District recently anticipated export of all second growth because there are no markets for domestically sawn young growth and no local mill designed to handle second-growth logs.[71] Moreover, the agency projected that raw log exports would provide the only available markets for at least a decade or more.[72] The decision to proceed with action alternatives that are intended to implement 500 to 800 acres of clearcuts for "local mills" establishes a "substantial dispute" about project effects — necessitating an EIS.

For example, a small logging company interested in selective cutting of second-growth expressed significant disappointment in the proposed action:

---

[62] EA/FONSI at 1.

[63] *Id.* at 16.

[64] *Id.*; *see also* US Forest Service NEPA Project Public Reading Room - View Letter (usda.gov) (Ted Sandhofer comment); https://cara.fs2c.usda.gov/Public/DownloadCommentFile?letterid=3925624&project=60639 (Dixon Entrance Chapter of the Society of American Foresters)(both questioning whether there is a local operator capable of undertaking this project).

[65] EA/FONSI at 33, Table 6.

[66] *Id.*

[67] *Id.*

[68] USDA Forest Service. 2016. Tongass Land and Resource Management Plan Final Environmental Impact Statement at 3-490.

[69] *See* Vallenar Young Growth planning record document #s 820_0050; 820_0187.

[70] Vallenar Young Growth Project Draft Decision Notice, Finding of No Significant Impact (FONSI) and Environmental Assessment (EA) at 12.

[71] Central Tongass Project Draft Environmental Impact Statement at 3-66.

[72] *Id.*

> "Unbelievable. Apparently, you still see the forest as a crop to be mowed down. ... What a joke: maybe you should be highlighting the "transition" away from clearcutting as a practice: this is not Forestry; it is habitat destruction and deforestation."[73]

A second local business, Second Growth Homes LLC, interested in local development of second-growth echoed the same concerns in an e-mail to the agency – that the Forest Service would "make the same mistakes they made in past harvest" by clearcutting second growth stands with negative effects on the environment and communities.[74] The operator wrote that: "This is appalling. This is not the way to harvest this Timber. There is a need to leave timber stands for wildlife."[75]

There has been no recent local activity to suggest a conversion to processing even Alternative 4's volume of 8 MMBF of second growth timber:

- the two mills in Petersburg processed 0.035 MMBF of timber in 2021.[76]
- Three other small mills in Kake and Tenakee Springs processed 0.063 MMBF.[77] The largest nearby operator in Wrangell processed 0.35 MMBF.[78]
- Three of these mills processed 0.043 MMBF of second-growth trees and the remaining volume was old-growth.[79]
- In total, Southeast Alaska mills processed 0.3 MMBF of second growth timber in 2021.[80]

These data suggest that the range of the alternatives in the EA all propose volumes aimed at raw log export and are inconsistent with the stated purpose. The Forest Service must prepare downscaled alternatives if you proceed with this project, or the agency needs to restate the purpose in an EIS so that it is clear to the public that the agency intends to supply Alcan.

Also, because the volume is too large for local processors, the range in the number of domestic processing jobs disclosed in the EA is misleading. Further, it is unclear why the Forest Service believes that purchasers of large sales of smaller diameter trees would remove them using *loggers*. If you proceed with the large volume alternatives, the analysis should evaluate whether Alcan would be more likely to use *mechanized equipment* – a feller buncher - to replace loggers. If a small number of workers using a feller buncher can clearcut hundreds of acres in a short period of time, it is possible that this project may generate a very small number of

---

[73] August 20, 2021 e-mail from Tenakee Logging Company to Petersburg Ranger District silviculturist Ben Case. DownloadCommentFile (usda.gov)

[74] August 20, 2021 e-mail from Second Growth Homes LLC, to Petersburg Ranger District silviculturist Ben Case. DownloadCommentFile (usda.gov)

[75] *Id.*

[76] Daniel, J., P. Morris & D. O'Leary. 2022. 2021 Sawmill capacity and production report. USDA Forest Service, Alaska Region. Report to Ecosystem Planning and Natural Resources. August 2022.

[77] *Id.*

[78] *Id.*

[79] *Id.*

[80] *Id.*

jobs. It is likely that the EA grossly overestimated potential employment and income.[81]

Finally, reducing the project volume would save the public at least a million dollars in administrative costs.[82] The Tongass timber sale program has a long history of generating taxpayer losses which increase in proportion to timber sale volumes.[83] Defenders requests that any further planning on this project improve the analysis of timber economics and include downscaled alternatives.

### *IV. The EA/FONSI failed to take a hard look at context and the NEPA intensity factors*

The determination of a significant effect on the environment requires consideration of "context and intensity."[84] The context is the scope of the agency's action, including affected interests.[85] When considering context, agencies must look at "several contexts, such as society as a whole (human, national), the affected region, the affected interests, and the locality."[86] In a site-specific action, significance ... usually depend[s] upon the effects in the locale rather than in the world as a whole."[87] For considering the environmental effects of the project's 841 acres of clearcutting, the FONSI limited its analysis to a 3,474 acre project area that includes 2,851 acres of federal forests.[88] The FONSI concluded that there would both be short-term and long-term effects limited locally to the project area.[89] Defenders requests that you broaden the context for this project to the broader Thomas Bay area in any further analysis. This project will impact one of the most popular hiking trails in Southeast Alaska, impact wildlife that move between the project area and the surrounding environment, and occur near a residential area at Point Agassiz.

*Intensity* is the degree to which the agency action affects the locale and interests identified in the *context* part of the inquiry.[90] Intensity requires evaluation of various factors, including:

> "[t]he degree to which the proposed action affects public health or safety[,]" ... "[u]nique characteristics of the geographic area, such as ... ecologically critical areas[,]" ... "[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial[,]" ... "[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks[,] ... "[t]he degree to which the

---

[81] EA/FONSI at 33.

[82] *Id.* at 33.

[83] https://www.taxpayer.net/energy-natural-resources/upcoming-and-ongoing-taxpayer-losses-from-timber-sales-in-the-tongass-natio/ ; https://www.taxpayer.net/energy-natural-resources/u-s-forest-services-tongass-timber-plan-proposes-increased-costs-for-taxpa/

[84] 40 C.F.R. § 1508.27.

[85] *National Parks & Conservation Ass'n v. Babbitt,* 241 F.3d 222, 731 (9th Cir. 2001).

[86] 40 C.F.R. § 1508.27(a).

[87] *Id.*

[88] EA/FONSI at 54.

[89] *Id.* at 55.

[90] *Id.*

> action may establish a precedent for future actions with significant effects[,]" and "[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts."[91]

Any one of these factors may suffice to warrant an EIS.[92] Timber sales can have multiple effects so that even if none of the significance factors considered individually requires an EIS, for this project the factors do collectively require an EIS, because of the controversies, uncertainties and other factors.[93] The FONSI concluded that no impacts were significant.[94] Defenders submits that clearcutting pursuant to the action alternatives will have significant, adverse impacts and requests that you produce an EIS if you insist on further consideration of the action alternatives.

***A. The project entails unique or unknown risks to terrestrial wildlife***

This project may have significant adverse impacts to project area wildlife that vary by species. The NEPA analysis must consider "[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique and unknown risks."[95] The EA concludes that Alternatives 3 and 4 would reduce impacts to wildlife habitat and connectivity relative to Alternative 2.[96] Smaller clearcuts may have lower impacts but that does not mean, as concluded in the FONSI, that those impacts are insignificant. All of the alternatives propose clearcuts that are large enough to restrict deer, moose and marten foraging and their movements during winter.[97]

Over 16,000 acres of the limited amount of forested habitat in Unit 1B have been logged to date.[98] The moose population is declining due to reductions in carrying capacity caused by post-logging habitat changes.[99] The same changes "have and will continue to further reduce deer carrying capacity" in the area.[100] Black bears benefit temporarily from short-term forage increases but timber harvest is "the most serious threat" to their habitat in the project area over the long-term. [101]

---

[91] 40 C.F.R. § 1508.27(b).

[92] *Ocean Advocates v. U.S. Army Corps of Eng'rs*, 402 F.3d 846, 865 (9th Cir. 2005).

[93] *Cascadia Wildlands v. U.S Forest Service,* 937 F.Supp.2d 1271, 1274 (D. Or. 2013).

[94] EA/FONSI at 55.

[95] 40 C.F.R. §1508.27(b)(5)

[96] EA/FONSI at 16, 26,40.

[97] *Id.* at 41-43.

[98] Lowell, R.E. 2014. Unit 1B black bear management report. Chapter 2, Pages 2-1 through 2-14 in P. Harper and L.A. McCarthy, editors. Black bear management report of survey and inventory activities. 1 July 2010-30 June 2013. Alaska Department of Fish and Game. Juneau, Alaska.

[99] Lowell, R.E. 2018. Moose management report and plan, Game Management Unit 1B: Report period 1 July 2010-30 June 20-15, and plan period 1 July 2015-30 June 2020. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&P-2018-3, Juneau.

[100] Lowell, R.E. 2015. Unit 1B deer. Chapter 2 pages 2-1 through 2-9 [*In*] P. Harper, editor. Deer management report of survey and inventory activities 1 July 2012-30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-3, Juneau.

[101] Lowell, R.E. 2014. Unit 1B black bear management report.

The NEPA analysis must analyze the risks associated with logging recovering forests prior to the re-initiation of old-growth forest characteristics. Sacrificing substantially regenerated second growth forests is a significant cumulative impact because the project area has already been heavily impacted by past logging. This is a particular concern for mainland areas where snow interception capacity is much more critical to the viability of project area wildlife. As previous Forest Service analyses recognized, clearcutting could increase short-term deer forage, but that forage "may not be available to deer during winter if covered by snow."[102] Further:

> In the long-term, commercial harvest of young growth would preclude these stands progressing toward old-growth habitat conditions that would again provide snow interception and forage within the stand. The forage created by clearcutting young-growth would only last for the short-term until the stand again reaches stem exclusion stage (around 25 years).[103]

Alaska Department of Fish and Game wildlife managers also believe clearcutting will have adverse long-term effects on project area wildlife populations. Clearcuts create a temporary forage enhancement that last for just the first 25 years of a 100 to 150 year timber harvest rotation.[104] After 25 years, the recovering forest shades out and eliminates forage species.[105] Local wildlife managers explain that "[t]he short-term advantages of clearcutting for moose may be offset by the longer period of reduced forage in the second-growth conifer forest and the loss of shelter habitat for moose during the time when the area is clearcut."[106]

The removal of older second-growth trees raises substantial questions about impacts to deer given mainland habitat conditions. Deer in the project area are highly susceptible to fluctuations caused by severe winter weather, and the deep-snow winter during 2006-2007 reduced already low populations in unit 1B.[107] Forest Service researchers have found that older stands "appear to provide some snow interception" and other features that may provide wildlife habitat values over the next few decades.[108] The importance of snow interception is much higher in "areas closer to the mainland that have greater snowfall" and "[i]ncreased snow depths also intensify deer preference for older young-growth forests, likely due to facilitated movement from snow interception from the closed canopy despite low forage."[109]

One of the most significant adverse impacts to deer thus pertains to the need for varying habitat needs within seasons or even over periods of years, particularly for

---

[102] Central Tongass Project Draft Environmental Impact Statement at 3-85.

[103] *Id.*

[104] Lowell, R.E. 2018. Moose management report and plan, Game Management Unit 1B.

[105] *Id.*

[106] *Id.*

[107] Lowell, R.E. 2015.

[108] Bennetson, B. 2020.

[109] *Id.*

snow interception.[110] The Forest Service's myopic focus on forage in clearcuts arbitrarily fails to address key winter habitat needs:

> For ungulates at temperate and higher latitudes, winter is often the limiting season for survival, when cold temperatures and snowfall restrict the availability of forage and increase costs of movement. In addition, vulnerability of ungulates to predators can be higher in snow-covered landscapes because of reduced nutritional condition and increased cost of movements for prey relative to predators. Subsequently, habitat selection of ungulates in winter can be strongly shaped by the landscapes of energetic costs and risk of death. *As snow depth increases, values of habitat to wildlife may be completely reversed from low-snow conditions.* As habitat types with abundant forage but little canopy cover to intercept snow become unusable, habitats with adequate forage and good canopy cover become preferred.[111]

There is little the Forest Service can do to address the need for forest cover to reduce snow accumulation other than allow juvenile trees to mature.[112] As Person and Brinkman, explain, even if climate change results in milder winters, precipitation and extreme storm probabilities may increase, increasing risks of deep snow events that can substantially reduce deer numbers to low levels for extended periods of time.[113] Because project area deer are susceptible to both predation from wolves and bears and severe winter die-offs, the Forest Service's failure to plan for long-term winter range needs presents serious species-specific risks.

The cutting units consist mostly of larger trees in contiguous forested areas logged between fifty and seventy years ago.[114] While most stands do not have the larger canopies and high snow interception capacity of old-growth forests, they do have large trees which provide some winter wildlife habitat values and ground structure for small mammals and some forest birds.[115] Thinning and pruning treatments have accelerated understory reinitiation in most of the stands.[116] If left alone, these forests would continue to develop overstory canopies, understory vegetation, connectivity to old-growth stands during winter, and retain other attributes that allow deer, moose and marten to survive severe winters.[117] The

---

[110] Gilbert, S.L., Hundertmark, K.J., Person, D.K., Lindberg, M.S. and Boyce, M.S., 2017. Behavioral plasticity in a variable environment: snow depth and habitat interactions drive deer movement in winter. *Journal of Mammalogy*, *98*(1), pp.246-259.

[111] *Id.* (emphasis added)(internal citations omitted).

[112] Hanley, T.A., 1989. Forest habitats and the nutritional ecology of Sitka black-tailed deer: a research synthesis with implications for forest management.

[113] Person D. & T. Brinkman. 2013. Succession Debt and Roads: short and long term effects of timber harvest on a large-mammal predator-prey community in southeast Alaska. In: G. Orians & J. Schoen, eds. North Pacific Temperate Rain Forests, Ecology and Conservation.

[114] EA at 34.

[115] *Id.* at 36.

[116] *Id*.

[117] *Id.* at 37, 40.

second-growth forests also reduce deer susceptibility to predation. [118]

Alternatives 2 and 3 in particular would reverse forest succession in twenty to 30 percent of project area second-growth forests through large clearcuts between 30 acres and 100 acres.[119] There would be a temporary increase in forage, but the removal of overstory trees will make it inaccessible to wildlife during winters when extended periods of snow accumulation bury the forage.[120] During deep snow winters, the new clearcuts will also reduce connectivity to important wildlife corridors, residual patches of old growth and the old-growth reserve that are currently provided by the older second-growth forests.[121] Other species, such as wolves and bears, may be increasingly vulnerable to harvest pressures or long-term loss of prey or forage.[122]

The EA describes the alternatives as "trade-offs" between increased forage and less mitigation against the effects of severe winters.[123] Lower impact treatments, such as precommercial thinning and pruning, while intended primarily for forest growth, do provide "some" or "secondary" and short-lived benefits to wildlife by increasing production of understory forage plants and berries.[124] But since the Forest Service is instead planning much larger cuts, only the no-action alternative provides wildlife habitat connectivity and retains understory forage. With the action alternatives, the Forest Service is gambling against the likelihood of future severe winters in one of the colder portions of Southeast Alaska in the context of a changing climate that promises precipitation increases in fall and winter.[125] This gamble will undertake a risk of presently unknown scale, and thereby requires analysis in an EIS.

### *B. The project entails unknown and uncertain risks for Queen Charlotte goshawks*

There are no "tradeoffs" for Queen Charlotte goshawks that forage in mature forests, contrary to the EA's claim, because clearcuts are useless for them. The EA needed to – but didn't – consider, analyze, or respond to risks associated with the loss of recovering forested habitat for Queen Charlotte goshawks.[126] There are two Queen Charlotte goshawk nesting areas on the Thomas Bay mainland, including one

---

[118] *Id.* at 41.

[119] *Id.* at 37-38.

[120] *Id.* at 37-38 (adding that there would be no hiding cover, increasing vulnerability to predators and hunters and reduced ground level structure).

[121] *Id.* at 39.

[122] *Id.* at 42; Robbins, W.F. 2021. Black bear management report and plan, Game Management Unit 1B: Report period 1 July 2013-30 June 2018. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&-2021-47, Juneau.

[123] EA/FONSI at 39-40.

[124] Robbins, W.F. 2021; Lowell, R.E. 2021. Deer management report and plan, Game Management Unit 1B: Report period 1 July 2011-30 June 2016 and plan period 1 July 2016-30 June 2021. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&-2021-18, Juneau.

[125] Lader, R., U. S. Bhatt, J. E. Walsh & P. A. Bieniek. 2022. Projections of Hydroclimatic Extremes in Southeast Alaska under the RCP8.5 Scenario. Earth Interactions. 26:1: 180–194.

[126] *Seattle Audubon Society v. Moseley*, 798 F.Supp. 1473, 1482 (W.D. Wash. 1992).

near the proposed clearcuts.[127] The EA acknowledges that clearcutting may impact goshawks foraging in the project area but provides no further analysis.[128] Forest-wide population levels are unknown; Southeast Alaska may support just a few to several hundred breeding pairs.[129] There likely only 33 or fewer nesting areas in the Petersburg Ranger District.[130] Clearcut logging has caused extensive habitat loss and fragmentation and goshawk population declines.[131]

The potential for localized effects, and uncertainties about impacts to a smaller population creates significant uncertainties about significant environmental impacts that trigger the need for an EIS.[132] There is uncertainty about the effectiveness of Forest Plan conservation measures to provide sufficient habitat.[133] Because of the low population level, any activity that reduces survival or reproductive rates implicates species viability risks.[134]

Queen Charlotte goshawks rely primarily on forest-dwelling prey, and adequate amounts of suitable forest cover are critical.[135] They use mature second-growth forests but clearcuts and early seral stage habitats do not provide any useful habitat features.[136] Further fragmentation reduces the potential value of mature second growth for goshawk habitat needs.[137] For this reason, the U.S. Fish and Wildlife Service recommends maintaining mature and older forests through timber rotations of at least 200 years.[138]

This project proposes to immediately clearcut some of the oldest second-growth forest in the region, and it projects second-growth forest removals in the project area through the end of the century. The plan to log project area second growth forests under such short rotations will remove usable habitat for both foraging and nesting.[139] The EA failed to adequately explain or provide convincing reasons in

---

[127] EA/FONSI at 50.

[128] *Id.* at 45.

[129] U.S. Fish & Wildlife Service, Alaska Region. 2007. Queen Charlotte Goshawk Status Review.

[130] EA/FONSI at 45.

[131] Smith, W.P. 2013. Spatially explicit analysis of contributions of a regional conservation strategy toward sustaining northern goshawk habitat. *Wildlife Society Bulletin*, *37*(3), pp.649-658.

[132] *Anderson v. Evans,* 371 F.3d 475, 490, 493 (9th Cir. 2004); *see also Fund for Animals v. Norton,* 281 F.Supp.2d 209, 234 (D.D.C. 2003)(holding that "uncertainty as to the impact of a proposed action on a local population of a species ... is 'a basis for a finding that there will be a significant impact' and setting aside a FONSI").

[133] Smith, W.P. 2013; *see also* Mclaren, E.L. et al. 2005. Northern Goshawk (*Accipiter gentilis laingi*) post-fledgling areas on Vancouver Island, British Columbia. J. Raptor Res. 39(3): 253-263.

[134] U.S. Fish & Wildlife Service, Alaska Region. 2007.

[135] Doyle, F., and T. Mahon. 2003. Do goshawk management strategies have to be tailored to specific ecosystems? Lessons we can learn from studying goshawks in different ecosystems (abstract). Page 39 in Proceedings of Annual Meeting, Raptor Research Foundation, Anchorage, Alaska.

[136] U.S. Fish & Wildlife Service, Alaska Region. 2007.

[137] *Id.*

[138] *Id.*

[139] Iverson, G.C., 1996. Conservation assessment for the northern goshawk in southeast Alaska. US Department of Agriculture, Forest Service, Pacific Northwest Research Station.

support of the effects determinations for Queen Charlotte goshawks and further failed to provide the information necessary to understand and evaluate project impacts, in violation of NEPA.[140]

### *C. Impacts to recreation, scenery and tourism require analysis in an EIS*

Thomas Bay is a primary destination for both local and guided recreation activities – with "some of the finest paddling and hiking in Southeast Alaska."[141] The EA recognizes that people use the Thomas Bay mainland for recreation, hunting, outfitting and guiding.[142] The EA omitted any analysis of impacts to scenery, recreation or guided visitor activities. Three resource reports a single page in length provided brief, conclusory statements asserting that the clearcuts cause no significant effects to scenery, recreation and special uses. The FONSI concluded that recreation, scenery and special uses were either not present or would not be directly or indirectly impacted.[143] The reports do not meet NEPA's requirement to take a hard look at environmental impacts.

The Forest Plan designates most of the area as a Scenic Viewshed and directs the agency to "modify timber harvest practices" and "seek to reduce clearcutting" in recognition of scenic values.[144] When planning timber sales, the Forest Service must perform a viewshed analysis that considers "retaining or creating a scenically attractive landscape over time."[145] Rotations should be extended, clearcuts are to be small, mature forests should be predominant, and there should be a range of recreation and tourism opportunities.[146]

A project is highly controversial and necessitates analysis in an EIS if there is a 'substantial dispute about the size, nature, or effect of the major Federal action rather than the existence of opposition to a use.'"[147] This can occur when the effects are highly controversial and uncertain.[148] Clearcutting is also controversial because of its effects on recreation and tourism. The Forest Service had previously determined that second-growth logging would have adverse scenic impacts and projects "would need to be carefully sited and designed in order to maintain the existing scenic integrity of the area, and compliance with the [Scenic Integrity

---

[140] *Ecology Center, Inc. v. Austin*, 430 F.3d 1057 (9th Cir. 2005).

[141] Alaska Department of Natural Resources, Division of Mining, Land & Water. 2000. Central/Southern Southeast Area Plan at 3-127 (explaining that the area is used extensively for fishing and hunting); UnCruise Alaska 7 Night Cruise - Fjords & Glaciers | UnCruise Adventures; Thomas Bay - Alaska Traveler Stories (adventure-life.com)

https://npca.s3.amazonaws.com/documents/3522/81638447-a0f6-4a41-9a4d-6e5da0d680ea.pdf?1541438238

[142] EA/FONSI at 46.

[143] *Id.* at 48.

[144] Forest Plan at 3-103.

[145] *Id.*

[146] *Id.* at 3-103-104.

[147] *Native Ecosystems Council*, 428 F.2d at 1240.

[148] *Bark et al. v. U.S. Forest Service,* 958 F.3d 870-71 (9th Cir. 2020).

Objective] may be difficult to achieve."[149]

Clearcutting will result in harm to local recreationists and the visitor products industry: displacement by timber operations, loss of scenic values, and harm to fish and wildlife. Local and regional visitor products providers need access to multiple locations across the landscape in order to disperse and provide remote recreation opportunities. The primary activities sought by the guided public and independent recreationists are remote outdoor hiking and wildlife viewing opportunities. The clearcuts would significantly reduce the quality of these visitor experiences and result in unusable recreational habitat for decades.

Further NEPA analysis needs to recognize recreational values associated with standing forests. Log transfer operations and upland timber extraction will destroy the currently remote, non-industrial character of the area. The Forest Plan FEIS recognizes that:

> ...demand for scenic quality can best be represented by the increase in tourist-related travel to the Tongass, as well as a heightened awareness and sensitivity of Alaskan residents to scenic resource values. These facts result in a strong indirect connection between scenic resource values and the economy of Southeast Alaska. For example, Southeast Alaska's Inside Passage is advertised and promoted by the Division of Tourism, cruise ship operators, and the Southeast Alaska Tourism Council. Their marketing strategy focuses on the scenery of the Tongass National Forest as a major attraction. The visitors to Southeast Alaska would, therefore, arrive with expectations and an image of the environment and scenery awaiting them. If current trends continue, demand for viewing scenic landscapes will increase.[150]

The Forest Plan FEIS anticipated rising visitor numbers due to increased demand for viewing scenic landscapes - a finding consistent with research showing that landscape quality generates real economic value.[151] According to Pacific Northwest forester John Bliss:

> Social research focused on public aesthetic judgments of forest practices has overwhelmingly concluding that Americans find clearcutting aesthetically offensive. Most research on scenic beauty assessment finds that forest scenes rated high in aesthetic quality contain large trees, low to moderate stand densities, grass and herb cover, color variation, and multiple species. Scenic beauty is reduced by small trunks, dense shrugs, bare ground, woody debris, and evidence of fire or other disturbance.[152]

---

[149] Central Tongass Project Draft Environmental Impact Statement at 3-293.

[150] TLMP FEIS at 3-389-3-390.

[151] Ahtikoski et al. 2011. Potential trade-offs between nature-based tourism and forestry, a case study in northern Finland. Forests 2011, 2, 894-912.

[152] Bliss, J.C. 2000. Public perceptions of clearcutting.

Bliss' findings are consistent with academic studies that consider the growth of nature-based tourism in areas formerly dominated by timber development:

> Forest preference studies conclude that people appreciate mature forests with good visibility, some undergrowth and a green field layer with no signs of soil preparation. Forests are thought to be in their natural state, or that look natural and bear no visible traces of human activity are usually preferred. Correspondingly, the view after clearcuts is the least preferred environment. In particular, the large size of the regeneration area and direct traces of cutting, such as signs of soil preparation and logging residues, have a negative impact. Furthermore, on average, people do not prefer dead or fallen trees.[153]

Nature-based tourism (wildlife viewing, hiking, kayaking, fishing and hunting) generates substantial revenues in the region's tourism industry.[154] Scenery – particularly more natural-appearing forest scenery in coastal settings – is a major driver of destination choices.[155] The scenic environment also has high local value for resident recreation, and other amenity values that extend well beyond revenues from tourism.[156] Whether using the forest for subsistence, sport fishing, hunting or recreation, Southeast Alaskans have long held a deep commitment to protecting the forest for its scenic value.[157]

Clearcutting and logging activities degrade the quality of the forest recreation experience for both residents and visitors.[158] Forest visitors and recreators prefer

---

[153] Tyrvainen, L, H Silvennoinen & Ville Halliakainen. 2016. Effect of the season and forest management on the visual quality of the nature-based tourism environment: a case from Finnish Lapland. In: Scandinavian Journal of Forest Research 2017. Vol 32, No. 4, 349-359

[154] Alaska Sustainable Fisheries Trust. 2023. 2022 SeaBank Annual Report. https://drive.google.com/file/d/1fbRDNqBNWbNt8uX1KCu9EnCUrWDfqD80/view

[155] Ahtikoski, A. et al. 2011. Potential trade-offs between nature-based tourism and forestry, a case study in northern Finland. In: Forests 2011(2), pp. 894-912; Horak, S., Marusic, Z. 2004. The role of forests in view of coastal destination attractiveness. In: Reinventing a Tourism Destination. Facing the Challenge. Eds. S. Weber & R. Tomljenovic. Institute for Tourism, Zagreb, pp. 261-269; Karjalainen, E. 2006. The visual preferences for forest regeneration and field afforestation – four case studies in Finland. University of Helsinki, Faculty of Biosciences. Dissertations Forestales 31; Picard, P. & Sheppard, S. 2001. The effects of visual resource management on timber availability: ar review of case studies and policy. BC Journal of Ecosystems and Management.1(2): 1-12; Ribe, R. 2004. Aesthetic perceptions of green-tree retention harvests in vista views: the interaction of cut level, retention patterns and harvest shape. Landscape and Urban Planning 73:277-293.Ribe, R. 2006. Perceptions of forestry alternatives in the US Pacific Northwest: information effects and acceptability distribution analysis. Journal of Environmental Psychology. 26:100-115; Tyrvainen, L. et al. 2008. Evaluating the economic and social benefits of forest recreation and nature tourism. Ch. 2 in: European Forests.

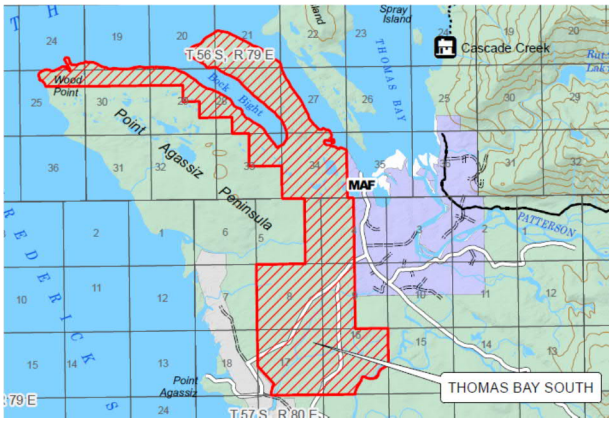
[156] USDA Forest Service. 2004. Social acceptability of alternatives to clearcutting: discussion and literature review with emphasis on southeast Alaska. Pacific Northwest Research Station. PNW-GTR-594. January 2004; USDA Forest Service. 2003. Social implications of alternatives to clearcutting on the Tongass National Forest. Pacific Northwest Research Station. PNW-GTR-575. March 2003. Ribe, R. 2004.

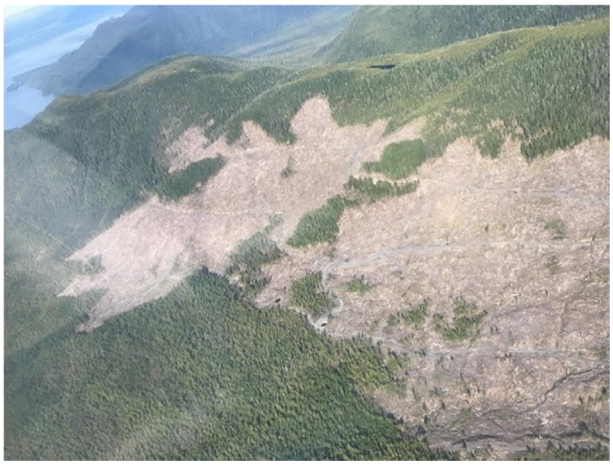
[157] *Id.*

[158] Tyrvainen, L, H. Silvennoinen & V. Halliakainen. 2016. Effect of the season and forest management on the visual quality of the nature-based tourism environment: a case from Finnish

diverse, mature forests in their natural state with little trace of human activity.[159] They generally avoid the visual disturbance of industrial logging.[160] If the Forest Service intends to permanently reduce the high value of forested lands in the Thomas Bay area for recreation, it needs to analyze those impacts in an EIS.

### *D. Potential cumulative effects require analysis in an EIS*



The NEPA analysis will also need to consider activities by other landowners in the areas. The analysis must do more than merely list other projects, but instead provide specific factual findings.[161] In part to address new legislation proposed in Congress that would significantly alter ownerships of land in the project area currently managed by the Forest Service, the Forest Service prepared the map shown to the left. This would include transfer of second-growth forests currently managed by the Forest Service.[162] Often, lands legislatively removed or exchanged from the Tongass National Forest receive even more intensive land management than federal timber LUDs, such as recent activity on Cleveland Peninsula shown in the photo to the left.[163] Defenders requests that you redo the cumulative impacts analysis to account for potential changes in the project area and in areas adjacent to it.

Also, cumulative impact analyses are insufficient when they cover only the direct effects of a project on a small area.[164] There

---

Lapland. In: Scandinavian Journal of Forest Research 2017. Vol 32, No. 4, 349-359; Hunt, L., Twyman, G.D., Haider, W. & Robinson, D. 2000. Examining the desirability of recreating in logged settings. Society and Natural Resources. 13:717-734; Picard, P. & Sheppard, S. 2001. The effects of visual resource management on timber availability: a review of case studies and policy. BC Journal of Ecosystems and Management.1(2): 1-12; Ahtikoski, A. et al. 2011; Hilsendager, K. 2014. Tourists' visual perceptions of forest management in Vancouver Island and Tasmania; Shrestha, R.K. et al., 2006. Valuing nature-based recreation in public natural areas of the Apalachicola River region, Florida. Journal of Environmental Management (2007); Horak, S., Marusic, Z. 2004; Karjalainen, E. 2006.

[159] *Id.*; *see also* Bliss, J.C. 2000. Public perceptions of clearcutting. *Journal of Forestry*, Volume 98, Issue 12, December 2000.

[160] Bliss, J.C. 2000.

[161] *Bark et al. v. U.S. Forest Service,* 958 F.3d 865, 872-73 (9th Cir. 2020).

[162] 8B1EA6FA-7E17-4E1E-8A29-81210F3681C6 (senate.gov)

[163] Resneck, J., E. Stone, E. Boyda & C. Aldern. 2022. Road to Ruin: The Roadless Rule is supposed to protect wild places. What went wrong in the Tongass National Forest? Grist. March 29, 2022.

[164] *Bark et al. v. U.S. Forest Service,* 958 F.3d 865, 872 (citations omitted).

are over 11,192 forested acres of second growth, spruce and hemlock in the larger area.[165] Timber operators had previously clearcut roughly a third of those acres.[166] The environmental analysis needs to expand in scale and address impacts on the larger area. For example, will loading and transporting barge loads of logs disrupt recreational uses, displace crabbers or disturb estuarine habitat? Are the nearby state lands part of the Southeast State Forest, which guarantees eventual logging? Might Alcan ask the state to combine Southeast State Forest Lands with federal lands in order to make the project economically viable, as was done with recent federal/state Vallenar timber sales?

Finally, the FONSI does not identify significant cumulative effects in part because the project will not reduce old-growth habitats important to wildlife species.[167] But the sale design aims at future logging and would prevent maturing forests in the project area from ever attaining old-growth conditions.[168] This is a cumulative impact occurring later in time and a clear reduction in old-growth habitat. Because of the extended time frame for logging, need to consider project impacts at an appropriate scale, and potential for clearcutting by other landowners, the cumulative impacts of this project must be analyzed in an EIS.

### *E. The EA ignored other applicable intensity factors that should trigger the need to prepare an EIS*

#### *1. Public health and safety*

The Thomas Bay project area is nearly weed free but entails a "high risk" of introducing invasive plant infestations due to road use which will add to the acreage already affected in the project area.[169] The EA did not discuss how this added risk and the Forest Service's controversial plans to treat infestations with glyphosate affects public health and safety and adds to the cumulative impacts caused by this project. The Wrangell-Petersburg Invasive Plant Management project authorizes the Forest Service to spray herbicides anywhere in the Petersburg Ranger District with no annual treatment limit. The Forest Service would use three herbicides, including a carcinogenic, non-selective herbicide, glyphosate. Forest workers would spray herbicides in riparian areas, estuaries, on waterbodies, exposing the environment to harmful chemicals and themselves to significant cancer risks.

There are substantial questions about the environmental impacts associated with glyphosate. In 2015, the International Agency for Research on Cancer identified glyphosate as a human carcinogen and a likely cause of non-Hodgkins lymphoma. There are carcinogenic impacts on animals and other adverse effects to fish. Glyphosate is a non-selective herbicide that kills all plants, including native

---

[165] EA/FONSI at 17.

[166] *Id*.

[167] EA/FONSI at 46.

[168] *Id.* at 26.

[169] Central Tongass Project DEIS at 3-237.

plants.[170] The International Agency for Research on Cancer's 2015 monograph found that glyphosate:

- penetrates soil, air, surface waters, groundwater and food;
- breaks down in soil but does not break down in water;
- enters surface waters not just through direct application but also through atmospheric deposition and run-off;
- is detectable in tested fruits and vegetables;
- has immunosuppressive effects on studies fish species, meaning that it reduces their ability to fight infections and diseases; and
- is carcinogenic for animals.

Other summary reviews of scientific studies show that:[171]

- glyphosate taken in by plants moves to the part of the plant used for food, such as wild blueberries;
- juvenile fish are up to four times more susceptible to toxicity associated with glyphosate than adults;
- vegetation killed by glyphosate also increases stream temperature, which results in a corresponding increase in toxicity to fish such as juvenile salmon sensitive to temperature;
- glyphosate use exacerbates the displacement effect of clearcutting on birds and small mammals; and furthermore
- the agency needs to re-evaluate the effectiveness of herbicide treatments. According to researchers, "[g]iven the paucity of published information and regular use of non-selective herbicides, there is a critical need for land management agencies to assess non-target effects of the herbicide treatments they are implementing."[172]

***2. Thomas Bay is a unique ecological area***

Thomas Bay has "unique" characteristics under 40 C.F.R. § 1508.27(b)(3) as a Southeast Alaska mainland area that supports diverse wildlife and fish species and human activities. Most of the clearcutting occurred between 1958 and 1975 and the area has some of the oldest and most extensive stands of second-growth in the Petersburg Ranger District.[173] The area is by far one of the most important ecological

---

[170] International Agency for Research on Cancer, World Health Organization. 2017. IARC Monographs on the evaluation of carcinogenic risks to humans. Some organophosphate insecticides and herbicides Volume 112. Lyon, France. *Available at:* https://publications.iarc.fr/549

[171] We can provide a reference list or documents supporting these findings.

[172] Wagner, V., P.M. Antunes, M. Irvine & C.R. Nelson. 2017. Herbicide usage for invasive non-native plant management in wildland areas of North America. Journal of Applied Ecology 54, 198-204. *Available at:* https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2664.12711

[173] Central Tongass Project Draft Environmental Impact Statement at 3-62, Table 11; Lowell, R.E. 2018. Moose management report and plan, Game Management Unit 1B.

areas supporting Game Management Unit 1B wildlife populations.[174] Most of the high quality habitat in Unit 1B is the narrow area of forested landscape between the saltwater and coastal mountains. The large river valleys, including the Thomas Bay drainage, are the limited areas that support larger salmon runs and bears.[175]

Sitka black-tailed deer inhabit mainland areas in low densities except for isolated pockets, which include Thomas Bay.[176] Thomas Bay hosts an isolated moose population which occupies some of the most heavily logged areas.[177] Petersburg residents rely on deer hunting opportunities in the project area due to the earlier closure of Unit 3 islands west of the mainland and because of recent population and harvest declines in the northern Unit 3 islands.[178] Petersburg residents also rely on moose hunting in the project area, although declining populations are forcing moose hunters to seek out other areas.[179]

***3. The EA must consider whether the action establishes a precedent for future actions with significant effects or represents a decision in principle about a future consideration***

The EA failed to evaluate "[t]he degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration."[180] The proposed action for this project represents a commitment as to how the Forest Service will manage recovering, second-growth forests in the Petersburg Ranger District. This proposed action opts for intensive clearcutting rather that allowing most of the federal second growth succeed to an old-growth state.

Defenders requests that the Forest Service reconsider its aggressive approach to second growth logging and assess the value of allowing those forests to recover to the point of attaining some old-growth habitat features of value for wildlife. Uncut or lightly treated second-growth forests can have some value for wildlife despite the limited availability of biological characteristics associated with old-growth forests. In particular, wildlife will utilize second-growth forests in areas where there is a deficit of preferred habitats. Maintaining these recovering forests would have multiple benefits to wildlife by reducing edge effects, extending the size of forested acres, enhancing interior habitat, reducing blowdown risks, reducing disturbances of nesting and breeding areas and providing refugia.

Plans for massive clearcutting of maturing second growth forest fail to meet the long-term wildlife viability need to allow for a mix of forested habitats. The delay of

---

[174] Lowell, R.E. 2017. Wolf management report and plan, Game Management Unit 1B: Report period 1 July 2010-30 June 2015, and plan period 1 July 2015-30 June 2020. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&P-2017-6, Juneau.

[175] Lowell, R.E. 2014.

[176] Lowell, R.E. 2015.

[177] Lowell, R.E. 2018.

[178] Lowell, R.E. 2015. Unit 1B deer.

[179] Lowell, R.E. 2018.

[180] 40 CFR § 1508.27(b)(6).

the forest recovery process, displacement caused by logging activities and impairment to travel corridors will have significant long-term adverse effects.

Many older second-growth stands would recover fully into the understory re-initiation stage over the next 40 to 50 years. However, this project would delay this recovery process so that clearcut second-growth forests would require another half century to reach the same inhospitable stand conditions present today, and at least a century to recover into understory re-initiation structure. The NEPA analysis needs to disclose and consider whether this planned plantation rotation at age 100 to 110 years (or less) would prevent the development of quality wildlife habitat and thus increase long-term species extirpation risks.

#### *4. Intensive second growth logging entails unknown and uncertain risks to recovering watersheds*

The NEPA analysis also needs to identify uncertainties and unknown risks regarding potential impacts on project area salmon populations. This project would adversely impact salmon production through road construction activities in fish habitat accompanied by intensive clearcutting of second growth recovering forests – and do so at a time when the region's salmon production capacity is highly variable due to multiple environmental factors.

The Forest Service's 1995 Anadromous Fish Habitat Assessment made numerous findings and recommendations related to reducing the impacts of second-growth logging on salmon habitat in southeast Alaska. The Assessment explained that:

> The cumulative effects of frequent disturbances in the Pacific Northwest have been shown to substantially reduce the quality of freshwater fish habitats resulting in negative consequences for species, stocks, and populations of fish that depend on them, even if coniferous cover is left in buffer strips along the fish-bearing streams. Fish-bearing streams represent only a small portion of stream mileage in any watershed. *Because recovery of fish habitat from the effects of extensive logging in a watershed may take a century or more, recovery may never be complete if forests are clearcut harvested and watersheds are disturbed extensively on rotation cycles of about 100 years. Few refuges remain in a watershed that fish can use during such widespread, intense, and recurrent disturbances*.
>
> ...Should freshwater habitats be degraded for long periods, salmon and steelhead stocks will eventually be confronted simultaneously with low marine productivity and degraded freshwater habitat. The likely result of such double jeopardy could be high, long-term risk of extinction.[181]

The EA relies on Best Management Practices (BMPs) to minimize effects to salmon, but fails to disclose the numerous studies questioning the

[181] U.S. Forest Service. 1995. Report to Congress: Anadromous fish habitat assessment. Pacific Northwest Research Station, Alaska Region. R10-MB-279.

effectiveness of BMPs and the limitations of other conservation measures (such as riparian buffers) in controlling sediment inputs and providing temperature regulation. In its cumulative impacts analysis the EA does not mention climate change as a relevant factor despite a large number of scientific studies that analyze climate change impacts to salmon in the region, state, and west coast. The Forest Service needs to redo its analysis of impacts to salmon.

### *V. Conclusion: request to cancel project or prepare an EIS*

For the above reasons, we request that you either cease further planning on this project or prepare an EIS that includes alternatives for a small or micro-sale program tailored to the actual needs of smaller local mills.[182] As currently proposed, an EIS is necessary to address significant adverse impacts.

Sincerely,

Larry Edwards, President
Alaska Rainforest Defenders

[182] *Cascadia Wildlands v. US Forest Service*, 937 F. Supp. 2d 1271 (D. Or. 2013).