



Alaska Chapter
American Fisheries Society
1614 Tanaga Ave.
Kenai, AK 99611

Joshua White, Acting Director, Ecosystem Management Coordination USDA Forest Service 201 14th Street SW, Mailstop 1108
Washington, DC 20250-1124

Submitted electronically via <https://www.regulations.gov>

Re: Docket No. FS-2025-0001, RIN 0596-AD66; Special Areas; Roadless Area Conservation; Proposed Rule and Draft
Environmental Impact Statement (91 Fed. Reg. 53827, August 20, 2026)

September 29, 2026

Dear Secretary Rollins and Acting Director White:

On behalf of the members of the Alaska Chapter of the American Fisheries Society (Alaska Chapter AFS), we respectfully submit these comments on the U.S. Department of Agriculture's (USDA) proposal to rescind the 2001 Roadless Area Conservation Rule (Roadless Rule) and on the accompanying Draft Environmental Impact Statement (DEIS) and cost benefit analysis (CBA).

The American Fisheries Society, founded in 1870, is the oldest and largest professional society of fisheries scientists. The Alaska Chapter was formed in 1971 and represents more than 200 fishery scientists and resource managers working in the private sector, academic institutions, and Tribal, state, and federal agencies. Our mission is to improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science. In submitting these comments, we seek to ensure that the best available science informs this proposed rulemaking.

The Alaska Chapter AFS has commented previously on roadless area management in Alaska. In 2019, we opposed exempting the Tongass National Forest from the Roadless Rule and, in 2022, we supported reinstating those protections. Our conclusions have not changed for the Tongass, and the proposed nationwide rescission raises the same concerns at a larger scale. The Alaska Chapter AFS offers this letter to address issues specific to Alaska.

Summary of our position. Based on our expertise in fishery science and our review of the relevant literature, the Alaska Chapter AFS recommends that USDA adopt Alternative 1 (No Action) and retain the Roadless Rule on all National Forest System lands, including the Tongass and Chugach National Forests. We oppose Alternative 2 (full rescission) and Alternative 3, which would remove protections from all inventoried roadless areas on the Tongass. Our concerns are that:

1. Inventoried roadless areas in Alaska are among the most productive and intact salmon habitat remaining in the United States.
2. The scientific record linking roads and timber harvest to degraded fish habitat is extensive and consistent.
3. The stated rationale for rescission, centered on wildfire and forest health, is not appropriate for Alaska's coastal temperate rainforests.
4. Land management plans are not an adequate substitute for a durable, national standard of protection.
5. The DEIS and cost benefit analysis understate risks to fish, fisheries, and fishing communities, and do not adequately address cumulative effects or climate change.
6. The comment period is too short for meaningful scientific review of an action of this scale and consequence, and USDA has neither completed a current subsistence evaluation nor analyzed a watershed-based alternative.

1. Alaska's national forests are the nation's most important salmon forests

Alaska holds one third of all inventoried roadless acreage covered by the 2001 rule: about 14.8 million of 44.7 million acres, including 9.3 million acres on the Tongass and the balance on the Chugach (DEIS p. 3; Appendix 1, Table 54). Alaska's 12.6 million acres of potentially affected inventoried roadless areas (IRAs) are the largest share of any Forest Service region, 31 percent of the national total (DEIS Appendix 1, Table 54). No other region has as much at stake for fish.

The cost benefit analysis agrees that effects on commercial fisheries "occur most notably in Southeast Alaska where the seafood industry relies heavily on the Tongass National Forest" (CBA p. 15). By the agency's own figures, the Southeast Alaska commercial harvest was worth \$261 million in 2023, salmon accounted for 54 percent of that value, and seafood harvesting and processing supported about 5,000 regional jobs (CBA p. 15).

The Tongass and Chugach together contributed an estimated 25 percent of Alaska's commercial Pacific salmon harvest, while Alaska supplies roughly 12 to 15 percent of the global Pacific salmon supply (Johnson et al. 2019). The Tongass produces 95 percent or more of Southeast Alaska's commercial pink salmon harvest and about two thirds of its coho harvest (Johnson et al. 2019). The Forest Service estimates that salmon support about 1 in 10 jobs in Southeast Alaska, including 4,682 commercial salmon fishing jobs, and that commercial, sport, and subsistence salmon fishing and hatchery operations in the region were valued at \$986 million in 2007 (USDA Forest Service 2021). The Chugach supports salmon runs central to the Copper River and Prince William Sound fisheries.

These forests also sustain subsistence and personal use fisheries that are central to the food security and cultural survival of Alaska Native and rural communities, and sport fisheries that anchor local visitor economies.

The Forest Service has long recognized why this matters. The 2000 Roadless Area Conservation Final EIS found that streams and lakes in inventoried roadless areas function as biological strongholds for many fish species, that watersheds with fewer roads are often associated with healthier fish populations, and that roads may have unavoidable effects on streams regardless of how well they are located, designed, or maintained (USDA Forest Service 2000, at 1-1, 3-160). The underlying science has only strengthened since.

2. The science linking roads and timber harvest to fish habitat loss is well established

The 2000 Roadless FEIS identified numerous negative direct, indirect, and cumulative effects to aquatic and riparian habitat from road building and clearcutting in roadless areas, and concluded these activities had the greatest potential for adverse effects to fisheries (USDA Forest Service 2000, at 3-169, 3-285 to 3-287). The mechanisms are well documented:

- Sediment. Roads are a primary source of chronic, accelerated sediment delivery to spawning and rearing habitat, and sedimentation alone has reduced salmon productivity in numerous studied watersheds (Trombulak and Frissell 2000; Everest and Reeves 2006; USDA Forest Service 2000, at 3-166).
- Road density and productivity. Watersheds that are roadless or have low road density are two to three times as likely to support strong salmon populations as heavily roaded watersheds (USDA Forest Service 2000, at 3-161). Scientists working in Southeast Alaska have documented strong negative correlations between logging road density, timber extraction, and salmon productivity (Halupka et al. 2000).
- Stream crossings and fish passage. On the Tongass, an Alaska Department of Fish and Game (ADF&G) survey found only about one third of road crossings on fish streams passed both adult and juvenile fish (Flanders and Cariello 2000). More than two decades later, approximately 1,200 red culverts that impede fish passage remain inventoried on the Tongass road system, even after about 700 were removed, replaced, or retrofitted since 1998 (USDA Forest Service 2024). Forest-wide, 32 percent of fish stream crossings on Forest roads do not meet current fish passage standards; within the area covered by the Forest Service's 2023 fish passage restoration decision, 693 such crossings impair an estimated 154 miles of upstream fish habitat, including 33 miles of anadromous habitat (USDA Forest Service 2023a). Culvert replacement is among the most effective restoration actions available; in one study coho smolt abundance tripled after

replacement (Anderson et al. 2019). It is also costly: individual fish passage projects on the Tongass have recently required federal grants of \$3.7 million to \$4.5 million each (USDA Forest Service 2023b). New roads in roadless watersheds would add to a fish passage backlog the agency has struggled to reduce for more than 25 years.

- Riparian buffers are not enough. Buffers along Southeast Alaska streams are often narrow and prone to windthrow, and small headwater streams that are not buffered make up most of the stream network while strongly influencing downstream habitat (USDA Forest Service 1995; USDA Forest Service 2000, at 3-160). Coho salmon, which rear one to two years in small streams, are especially vulnerable (Halupka et al. 2000).
- Riparian function, hydrology, and slope stability. Harvest and road networks alter stream temperature and peak flows, with effects on incubation, growth, and survival (USDA Forest Service 2000, at 3-163). Long-term monitoring on the Tongass shows that harvest legacies persist for decades: the largest instream wood is declining, with little replacement from regrowing riparian forests (Moore et al. 2024), and streams 30 to 40 years after riparian harvest have finer substrates and face a declining future supply of large wood (Ross et al. 2019). On moderately steep Southeast Alaska slopes, clearcuts produced significantly more landslide erosion per unit area than old-growth forest, and nearly half of landslides in harvested areas occurred within a year of cutting (Johnson et al. 2000).

The DEIS does not dispute this science. It states that "roads pose the greatest risk to fish resources on the Tongass, partly because they pose the largest risk of management-caused sediment input to streams" (DEIS p. 235). It reports that landslides and debris flows are 6 to 9 times more likely next to forest roads (DEIS p. 112, citing Goetz et al. 2015). It also concedes that for aquatic species, "complete elimination of adverse effects may not be possible" and that these effects "could be more likely to occur" over the long term as road building and harvest increase (DEIS pp. 151 to 153).

New roads also carry a permanent maintenance obligation the agency cannot meet today. The DEIS reports a \$6.9 billion deferred maintenance backlog for Forest Service roads and bridges, counting passenger car roads only, and a nearly 70 percent decline in appropriated road funding over twenty years (DEIS p. 43). Road construction in Alaska costs four to five times as much as in the lower 48 states, before bridges and slope stabilization (DEIS p. 42). Avoiding growth in that backlog was an explicit purpose of the 2001 rule (USDA Forest Service 2000, at 1-5). Unmaintained roads are where culverts fail, crossings wash out, and fish passage is lost.

3. The stated rationale does not fit Alaska's coastal rainforests

The proposed rule justifies rescission mainly by the need for flexibility to address increasing wildfire, drought, insect and disease outbreaks, and risks in the wildland-urban interface (91 Fed. Reg. at 53828). Those concerns are real in much of the interior West. The DEIS's own data show they have almost no bearing on Alaska:

- Of 12.6 million acres of potentially affected IRAs in Alaska, 0.1 percent burned between 1984 and 2024, compared with 20.5 percent nationally (DEIS Table 20, p. 89).
- Alaska has no mapped high-priority firesheds on National Forest System lands (DEIS pp. 93, 102).
- None of the large-fire perimeters in Alaska from 2014 to 2023 aligned with roads, so roads played no containment role (DEIS Table 25, p. 98).
- The 2020 Alaska Roadless FEIS, on which the DEIS relies for the Tongass, did not discuss fire and fuels at all (DEIS p. 234).

The Tongass and most of the Chugach are coastal temperate rainforests where wind and landslides, not fire, are the dominant disturbances. The Kenai Peninsula portion of the Chugach is an exception, with drier forests, beetle-killed spruce, and communities in the wildland-urban interface. Even there, rescission is unnecessary. The 2001 rule already allows cutting of generally small-diameter timber to reduce the risk of uncharacteristic wildfire, and road construction where an imminent threat of fire endangers public health and safety (36 CFR 294.12(b), 294.13(b) (2001)). If more flexibility is needed, a targeted state-specific rule, like those USDA adopted for Idaho and Colorado, could address local conditions without removing protections from the Tongass and the rest of the Chugach.

The timber rationale is also weak in Alaska. The DEIS finds that on the Tongass, rescission would not change the Projected Timber Sale Quantity, overall harvest levels, or timber employment (DEIS pp. 232, 237 to 238). What would change is where harvest occurs. Suitable old growth would increase by about 168,000 acres, or 74 percent, and "roads and timber harvest are likely to penetrate much farther into roadless areas, resulting in a greater degree of fragmentation" (DEIS p. 233). In other words, rescission on the Tongass shifts the same harvest into intact watersheds without producing new jobs.

Nationally, the agency describes the benefits as "modest and localized" (DEIS p. 22), with \$9.9 to \$22.0 million per year in timber benefits (CBA Table 1, p. 5). Those benefits are small next to a Southeast Alaska seafood harvest worth \$261 million in 2023 alone (CBA p. 15).

We also note that Executive Order 14153 directed reinstatement of the 2020 Alaska Roadless Rule for the Tongass. That direction is a policy choice, not a scientific finding,

and it does not relieve USDA of its obligation to evaluate the consequences for fish and fisheries.

4. Land management plans are not an adequate substitute

USDA proposes that individual forest plans would govern inventoried roadless areas after rescission (91 Fed. Reg. at 53829). From a fisheries perspective, this replaces a stable, national standard with protections that local officials may amend or revise at their discretion. The proposal concedes that later plan amendments could expand the area open to roads and timber harvest, with impacts beyond those it summarizes, but it treats those changes as outside the scope of this rule (91 Fed. Reg. at 53830).

Durability matters for fish because habitat damage is slow to recover. Forested aquatic ecosystems can take many decades to a century to recover from intensive logging and road building, and repeated entries on short rotations leave few refuges for fish (USDA Forest Service 1995; Everest and Reeves 2006). A protection that can change with each plan cycle cannot safeguard habitat on that time scale.

The Tongass shows the problem concretely. The DEIS's finding that fish effects would be minimal rests on "the strong protections to fish habitats provided by Forest Plan direction and the riparian management strategy" of the 2016 Tongass Forest Plan (DEIS p. 235). Yet that plan is now being revised. The Forest Service published a notice of intent on February 18, 2026, and says the revision EIS will analyze alternatives "that do not include IRA designations" so the plan can align with this rulemaking (DEIS Appendix 4, p. 33). The DEIS then declines to consider what the revision might change, calling it "speculative" (DEIS Appendix 4, p. 33).

USDA cannot rely on a plan's protections to find no significant effect while that same plan is being rewritten to remove roadless protections. The cost benefit analysis goes further back still: its conclusion that commercial fisheries will not be affected rests on the 1997 Tongass Forest Plan FEIS, which two later plans have replaced (CBA pp. 24 to 25). Existing riparian standards were designed to work alongside the Roadless Rule. Their adequacy for currently unroaded watersheds, especially small headwater streams that are not buffered, has not been evaluated.

5. The DEIS and cost benefit analysis understate risks to fish and fisheries

The DEIS covers 44.7 million acres, one third of them in Alaska, but it contains no new analysis of effects on Alaska's fish and fish habitat. We identified the following gaps:

1. The Tongass analysis is borrowed, not updated. The DEIS incorporates the 2020 Alaska Roadless Rule FEIS by reference and repeats its conclusion that effects to fish habitat "are expected to be minimal whether the Roadless Rule is in place or not" (DEIS pp. 230, 235; Appendix 4, p. 33). The review of new information in

Appendix 4 addresses executive orders, a mine expansion, cruise tourism, and insect outbreaks. The only fisheries item it considers is the Gulf of Alaska Chinook listing petition (Appendix 4, pp. 31 to 34). It does not consider the salmon declines, drought, and marine heatwaves described in Sections 5 and 6.

2. Alaska is missing from the national watershed analysis. The watershed condition tables for soils, road sediment delivery, slope stability, water quality, and water quantity include every Forest Service region except Alaska (DEIS Tables 30 to 34, pp. 113 to 121). Drinking water data were "not available for Alaska" (DEIS p. 121, n. 52). The region with the most potentially affected acreage received no watershed-scale analysis at all.
3. The Chugach is not analyzed. Apart from acreage totals, the DEIS mentions the Chugach National Forest only in passing (DEIS pp. 3, 74). There is no analysis of the Copper River Delta, Prince William Sound, or Kenai Peninsula watersheds, or the salmon fisheries they support.
4. The aquatic analysis is generic. The section on aquatic species lists road and harvest effects in general terms, drawing its examples from crayfish, steelhead, and bull trout in the lower 48 (DEIS pp. 151 to 153). It does not estimate new stream crossings, sediment delivery, or miles of anadromous habitat exposed, for Alaska or anywhere else.
5. Forest-wide averages hide watershed-scale effects. The DEIS reports that average Tongass road density would rise from 0.19 to 0.23 miles per square mile, and that most subwatersheds would stay below 1 mile per square mile (DEIS p. 234). Fish respond to conditions in individual watersheds. An average across 17 million acres says little about the particular roadless watersheds where new roads would be built.
6. Essential Fish Habitat analysis is deferred. The DEIS states that analysis of Essential Fish Habitat under the Magnuson-Stevens Act "is not required at this stage" and will occur project by project (DEIS p. 159). It later states that Essential Fish Habitat was "analyzed under Alternative 2" but reports no finding (DEIS p. 162). A rule that removes a national protection over the freshwater habitat of Alaska's salmon warrants programmatic consultation with NOAA Fisheries (50 CFR 600.920(j)).

We ask that USDA prepare a revised or supplemental DEIS with an Alaska-specific aquatic analysis, covering both the Tongass and the Chugach, that:

1. Maps overlap between inventoried roadless areas and ADF&G anadromous waters and primary salmon-producing watersheds and identifies where that overlap coincides with plan-allowed timber or operable ground.
2. Describes current salmon stock status rather than outdated baselines. Southeast Alaska pink salmon harvest fell to 18.4 million in the 2016 federal disaster year and 7.3 million in 2018, the lowest since 1976 (Piston and Fish 2024). In 2025,

the Southeast Alaska pink salmon harvest of 21.4 million fish fell well short of the preseason forecast of 29 million and was the poorest odd-year harvest since 2019 (ADF&G 2025; Gleason and Munro 2026). Coho marine survival across Southeast Alaska indicator stocks averaged 13 to 41 percent below long-term averages from 2010 to 2019 (Priest et al. 2021), and in 2018 the Alaska Board of Fisheries designated the Unuk, King Salmon, and Chilkat river Chinook stocks as stocks of management concern after forecasts projected record-low runs (ADF&G 2017).

3. Quantifies expected new stream crossings, sediment delivery, and fish passage risk, and ties road construction to realistic maintenance funding.
4. Evaluates landslide and peak-flow risk from roads on steep, saturated terrain.
5. Includes the cost of lost fish habitat in the cost benefit analysis. The CBA quantifies forgone recreation and passive use values but assigns no value to fish habitat or fisheries (CBA Table 1, p. 5). Published estimates value freshwater salmon habitat on the order of thousands of dollars per mile of spawning stream (Knowler et al. 2003).

Response to USDA's request for comments on commercial fisheries. The CBA concludes that rescission is not expected to significantly change the commercial fishing industry and "request[s] comments on effects related to commercial fisheries" (CBA p. 25). We offer three responses.

First, the conclusion rests on outdated sources. It relies on the 1997 Tongass Forest Plan FEIS and on harvest levels projected for that plan (CBA pp. 24 to 25).

Second, the CBA reasons that small operable acreage means small effects. But current plans already allow road construction on 5.1 million acres of potentially affected IRAs in Alaska and timber harvest on 2.3 million acres (DEIS Appendix 1, Table 54). Operability also changes as roads are built. And the DEIS itself expects roads to "penetrate much farther" into Tongass roadless areas (DEIS p. 233).

Third, the CBA states that the fishing industry "more likely depends upon conditions outside of the national forests such as hatchery production, offshore harvest levels, and changes in ocean conditions" (CBA p. 25). This misreads salmon life history. Wild Pacific salmon, which make up most of the Southeast Alaska commercial harvest, depend on freshwater spawning and rearing habitat, and national forest streams produce a large share of them (Johnson et al. 2019). When ocean conditions are poor, intact freshwater habitat is what buffers these populations. It does not make that habitat less important.

Effects beyond Alaska. As a chapter of a national society, we also note the DEIS's preliminary finding that rescission "may affect and is likely to adversely affect" 327 listed species and 71 critical habitats (DEIS pp. 25, 161). They include 28 listed populations of

Pacific salmon, steelhead, and eulachon, plus bull trout and several native trout (DEIS Appendix 5, Table 58, pp. 40 to 42). A finding of this scale is not consistent with the modest benefits the agency describes.

6. Cumulative effects and climate change make intact watersheds more valuable

Past industrial logging in Southeast Alaska was concentrated in the most productive, low-elevation watersheds and large-tree forests (Albert and Schoen 2013). Logging continues on state and private lands. As a result, remaining roadless watersheds now carry a disproportionate share of the region's aquatic productivity and biodiversity, a point the 2000 FEIS already recognized (USDA Forest Service 2000, at 3-160). The DEIS should evaluate rescission against this landscape, not in isolation.

The DEIS identifies several reasonably foreseeable actions on the Tongass but does not evaluate their combined effect on fish. These include the Greens Creek North Extension, a mine expansion into an inventoried roadless area approved in 2024 (DEIS Appendix 4, p. 34). The Tongass plan revision discussed in Section 4 is another. Each of these would add roads or development in watersheds that are unroaded today. Together with rescission, they call for a cumulative effects analysis at the watershed scale.

Climate change compounds these risks. Southeast Alaska watersheds are shifting from snow- to rain-dominated hydrology, with higher winter peak flows, lower and warmer summer flows, and elevated snowlines (Shanley and Albert 2014; Shanley et al. 2015). Higher peak flows increase streambed scour of incubating eggs and could eliminate a meaningful share of coho spawning habitat (Sloat et al. 2017). Summer drought and warm water can produce pre-spawning mortality and stressful temperatures in Southeast Alaska streams (Bellmore et al. 2023). Roads and culverts sized for past hydrology are increasingly vulnerable to these flows (Gaines et al. 2022).

Marine conditions add a further stressor. Warm ocean conditions persisted across the Gulf of Alaska from late 2013 through 2016 and returned in 2018 and 2019. Southeast Alaska pink salmon that went to sea from 2014 to 2018 returned below expectations (NOAA Fisheries and ADF&G 2018, 2019), and coho marine survival averaged 13 to 41 percent below long-term averages from 2010 to 2019 (Priest et al. 2021). Forest Service scientists warned three decades ago of "double jeopardy": salmon facing low marine productivity and degraded freshwater habitat at the same time face a high, long-term risk of decline (USDA Forest Service 1995). Reducing non-climate stressors such as roads, and protecting intact habitat, are among the most effective adaptation tools available (Mantua and Raymond 2014).

7. The process does not allow adequate scientific review

This is an economically significant rule affecting about 44.7 million acres, accompanied by a multi-volume DEIS, an economic analysis, and a Tribal summary impact statement. A comment period of roughly 45 days, even with the extension to October 6 (91 Fed. Reg. 57841), does not give fisheries and aquatic scientists enough time to review the analysis carefully. As we requested in 2019, we ask USDA to provide at least 90 days for review of any revised or supplemental analysis.

Subsistence. The proposed rule states that the Forest Service "will hold public subsistence hearings" under ANILCA Section 810 (91 Fed. Reg. at 53830). The DEIS says the opposite: that no Section 810 evaluation is required for this rulemaking, and that the 2020 FEIS evaluation and the hearings held in 2019 remain adequate (DEIS p. 238; Appendix 4, p. 34). Subsistence salmon fisheries are among the resources most directly at risk. We urge USDA to hold the promised hearings in affected Southeast and Southcentral Alaska communities, and to complete and disclose a current Section 810 evaluation before any final decision. Alaska Native Tribes asked for the same during consultation (Tribal Summary Impact Statement, p. 5).

Range of alternatives. The DEIS analyzes no alternative that would keep protections for the watersheds most important to fish. The 2020 FEIS analyzed intermediate Tongass alternatives, including one that kept roadless protections for Tongass 77 (T77) watersheds and conservation priority areas. The DEIS rejected all of them solely because they would not comply with Executive Order 14153 (DEIS p. 29; Appendix 4, p. 30). Twelve Southeast Alaska Tribes proposed a traditional homelands alternative, and other Tribes asked for intermediate Tongass options (Tribal Summary Impact Statement, p. 4). A watershed-based alternative is a reasonable alternative that the DEIS should analyze, so the Secretary can weigh the fisheries tradeoffs this letter describes.

Recommendations

The Alaska Chapter AFS respectfully recommends that USDA:

1. Adopt Alternative 1 (No Action) and retain the 2001 Roadless Rule on all National Forest System lands, including the Tongass and Chugach National Forests.
2. Should USDA proceed, retain Roadless Rule protections at a minimum for inventoried roadless areas in Alaska's national forests and for all inventoried roadless areas containing anadromous waters or primary salmon-producing watersheds.
3. Prepare a revised or supplemental DEIS with the Alaska-specific aquatic analysis described in Section 5, covering the Tongass and the Chugach, current salmon stock status, cumulative effects, climate change, and a watershed-based alternative. Complete programmatic Essential Fish Habitat consultation with

NOAA Fisheries and a current ANILCA Section 810 evaluation, with hearings, before any final decision.

4. Account for the costs of fish habitat loss and road maintenance in the cost benefit analysis.
5. Prioritize the existing deferred maintenance and fish passage backlog before authorizing new road construction in roadless watersheds.

Closing

The watersheds of Alaska's Tongass and Chugach National Forests, and the commercial, sport, personal use, and subsistence fisheries they sustain, are resources of national and global importance. Roadless Rule protections support some of the most productive wild salmon habitat remaining in the world, and their value will grow as climate change and marine variability intensify. Removing them would accept real, long-term risk to fish and fishing communities in exchange for modest and uncertain benefits.

Thank you for the opportunity to comment.

Sincerely,

Andy Seitz

President

On behalf of the Alaska Chapter of the American Fisheries Society

Literature Cited

- 91 Fed. Reg. 53827 (August 20, 2026). Special Areas; Roadless Area Conservation. Proposed rule.
- 91 Fed. Reg. 57841 (September 11, 2026). Special Areas; Roadless Area Conservation. Proposed rule; extension of comment period.
- Special Areas; Roadless Area Conservation; Final Rule. 66 Fed. Reg. 3244 (January 12, 2001). Includes the 2001 regulatory text at 36 CFR 294.12(b) and 294.13(b) cited in text.
- Alaska Department of Fish and Game (ADF&G). 2017. Alaska Department of Fish and Game announces 2018 Southeast Chinook salmon forecasts and draft Board of Fisheries action plans. Press release, December 22, 2017. Juneau.
- Alaska Department of Fish and Game (ADF&G). 2025. 2025 Southeast Alaska salmon purse seine fishery announcement. Division of Commercial Fisheries advisory announcement, September 2, 2025.
- Albert, D.M., and J.W. Schoen. 2013. Use of historical logging patterns to identify disproportionately logged ecosystems within temperate rainforests of southeastern Alaska. *Conservation Biology* 27(4):774-784.
- Anderson, J.H., et al. 2019. Coho salmon and habitat response to restoration in a small stream. *Transactions of the American Fisheries Society* 148(5):1024-1038.
- Bellmore, J.R., C.J. Sergeant, R.A. Bellmore, J.A. Falke, and J.B. Fellman. 2023. Modeling coho salmon (*Oncorhynchus kisutch*) population response to streamflow and water temperature extremes. *Canadian Journal of Fisheries and Aquatic Sciences* 80(2):243-260.
- Everest, F.H., and G.H. Reeves. 2006. Riparian and aquatic habitats of the Pacific Northwest and southeast Alaska: ecology, management history, and potential management strategies. Gen. Tech. Rep. PNW-GTR-692. USDA Forest Service, Pacific Northwest Research Station, Portland, OR.
- Flanders, L.S., and J. Cariello. 2000. Tongass road condition survey report. Alaska Department of Fish and Game, Habitat and Restoration Division, Technical Report 00-7. Juneau, AK.
- Gaines, W.L., et al. 2022. Climate change and forest management on federal lands in the Pacific Northwest, USA: managing for dynamic landscapes. *Forest Ecology and Management* 504:119794.
<https://doi.org/10.1016/j.foreco.2021.119794>
- Gleason, C.M., and A.R. Munro, editors. 2026. Run forecasts and harvest projections for 2026 Alaska salmon fisheries and review of the 2025 season. Alaska Department of Fish and Game, Special Publication No. 26-08, Anchorage.
- Goetz, J.N., R.H. Guthrie, and A. Brenning. 2015. Forest harvesting is associated with increased landslide activity during an extreme rainstorm on Vancouver

Island, Canada. *Natural Hazards and Earth System Sciences* 15:1311-1330.
<https://doi.org/10.5194/nhess-15-1311-2015>

- Halupka, K.C., M.D. Bryant, M.F. Willson, and F.H. Everest. 2000. Biological characteristics and population status of anadromous salmon in southeast Alaska. Gen. Tech. Rep. PNW-GTR-468. USDA Forest Service, Pacific Northwest Research Station, Portland, OR.
- Johnson, A.C., D.N. Swanston, and K.E. McGee. 2000. Landslide initiation, runout, and deposition within clearcuts and old-growth forests of Alaska. *Journal of the American Water Resources Association* 36(1):17-30.
- Johnson, A.C., J.R. Bellmore, S. Haught, and R. Medel. 2019. Quantifying the monetary value of Alaska National Forests to commercial Pacific salmon fisheries. *North American Journal of Fisheries Management* 39(6):1119-1131.
<https://doi.org/10.1002/nafm.10364>
- Knowler, D.J., B.W. MacGregor, M.J. Bradford, and R.M. Peterman. 2003. Valuing freshwater salmon habitat on the west coast of Canada. *Journal of Environmental Management* 69:261-273.
- Mantua, N.J., and C.L. Raymond. 2014. Climate change, fish, and fish habitat in the North Cascade Range. In Raymond, C.L., D.L. Peterson, and R.M. Rochefort, eds. *Climate change vulnerability and adaptation in the North Cascades region*. Gen. Tech. Rep. PNW-GTR-892.
- Moore, M.J., R. Flitcroft, E. Tucker, K.K. Prussian, and S.M. Claeson. 2024. Same streams in a different forest? Investigations of forest harvest legacies and future trajectories across 30 years of stream habitat monitoring on the Tongass National Forest, Alaska. *PLoS ONE* 19(7):e0301723.
<https://doi.org/10.1371/journal.pone.0301723>
- NOAA Fisheries and Alaska Department of Fish and Game. 2018. 2019 NOAA Fisheries–Alaska Department of Fish and Game Southeast Alaska pink salmon harvest forecast. ADF&G Division of Commercial Fisheries advisory announcement, November 15, 2018.
- NOAA Fisheries and Alaska Department of Fish and Game. 2019. 2020 Southeast Alaska pink salmon harvest forecast. ADF&G Division of Commercial Fisheries advisory announcement, November 20, 2019.
- Piston, A.W., and T.M. Fish. 2024. Pink salmon stock status and escapement goals in Southeast Alaska through 2023. Alaska Department of Fish and Game, Special Publication No. 24-16, Anchorage.
- Priest, J.T., S.C. Heintz, and L.D. Shaul. 2021. Coho salmon stock status in Southeast Alaska: a review of trends in productivity, harvest, and abundance through 2019. *Pacific Salmon Commission Technical Report No. 45*. Vancouver, B.C.

- Ross, J.A., D.M. Infante, D.J. Martin, and M. Rey. 2019. Effects of riparian timber harvest on Southeast Alaska stream habitat after 30-40 years: insights for management. *North American Journal of Fisheries Management* 39(2):328-342. <https://doi.org/10.1002/nafm.10270>
- Shanley, C.S., and D.M. Albert. 2014. Climate change sensitivity index for Pacific salmon habitat in southeast Alaska. *PLoS ONE* 9(8):e104799.
- Shanley, C.S., et al. 2015. Climate change implications in the northern coastal temperate rainforest of North America. *Climatic Change* 130:155-170.
- Sloat, M.R., G.H. Reeves, and K.R. Christiansen. 2017. Stream network geomorphology mediates predicted vulnerability of anadromous fish habitat to hydrologic change in southeast Alaska. *Global Change Biology* 23(2):604-620.
- Trombulak, S.C., and C.A. Frissell. 2000. Review of ecological effects of roads on terrestrial and aquatic communities. *Conservation Biology* 14(1):18-30.
- USDA Forest Service. 1995. Report to Congress: Anadromous fish habitat assessment. R10-MB-279. Pacific Northwest Research Station and Alaska Region.
- USDA Forest Service. 2000. Forest Service Roadless Area Conservation Final Environmental Impact Statement, Vol. I. Washington, D.C.
- USDA Forest Service. 2020. Final Environmental Impact Statement: Rulemaking for Alaska Roadless Areas. Alaska Region, Juneau. September 2020. Cited in text as "2020 Alaska Roadless FEIS."
- USDA Forest Service. 2021. Salmon factsheet, Tongass National Forest. Alaska Region. March 2021. <https://www.fs.usda.gov/sites/nfs/files/r10/tongass/publication/SalmonFactsheet2021.pdf>
- USDA Forest Service. 2023a. Decision memo: Tongass National Forest fish passage restoration. Tongass National Forest, Alaska Region. <https://www.fs.usda.gov/r10/tongass/projects/63618>
- USDA Forest Service. 2023b. Alaska celebrates success in aquatic passage upgrades, interagency collaboration. *Inside the Forest Service*, September 7, 2023. <https://www.fs.usda.gov/inside-fs/delivering-mission/sustain/alaska-celebrates-success-aquatic-passage-upgrades-interagency>
- USDA Forest Service. 2024. Draft Aquatic Ecosystems Resource Assessment, Tongass National Forest Plan Revision. Alaska Region. December 2024. <https://www.fs.usda.gov/media/199143>
- USDA Forest Service. 2026a. 2001 Roadless Area Conservation Rule Rescission Draft Environmental Impact Statement, Vol. I, and Vol. II (State Maps). August 2026. Docket FS-2025-0001. Cited in text as "DEIS."

- USDA Forest Service. 2026b. Proposed Rule: Special Areas; Roadless Area Conservation; National Forest System Lands. Cost Benefit Analysis and Consideration of Impacts on Small Entities. Docket FS-2025-0001. Cited in text as "CBA."
- USDA Forest Service. 2026c. Tribal Summary Impact Statement, Proposed Rule to Rescind the 2001 Roadless Area Conservation Rule. August 20, 2026. Docket FS-2025-0001. Cited in text as "Tribal Summary Impact Statement."