

Social and Economic Monitoring of the Tongass National Forest and Southeast Alaska Communities

Appendices A, B, C, and I

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About the Ecosystem Workforce Program:

The Ecosystem Workforce Program is a bi-institutional program of University of Oregon's Institute for a Sustainable Environment and the College of Forestry at Oregon State University. We conduct applied social science research and extension services at the interface of people and natural resources. Our publications aim to inform policy makers and practitioners, and contribute to scholarly and practical discourse.

More information available at:
<http://ewp.uoregon.edu/about/intro>.



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Appendix A. Tongass Transition History and Timeline of Key Events

TONGASS TRANSITION HISTORY

The history of the southeast Alaska timber industry after the transfer of Alaska to the United States in 1867 can be understood in terms of distinct periods.ⁱ In the first period from 1867 until the passage of the Tongass Timber Act in 1947, logging targeted single trees or stands of trees for ready markets. Logging occurred on both Tongass NF and other forested land in the region. The second period marked the growth of the industry and communities in the region. With the passage of the Tongass Timber Act, Congress authorized long-term timber contracts to support pulp mills. A third period beginning in the 1970s began when the Forest Service and the timber industry shifted to actively logging and exporting timber, saw timber, and pulp. Active logging also occurred on lands transferred from the Tongass NF to private Native corporations established by the Alaska Native Claims Settlement Act of 1971 (ANCSA).

The fourth period began with passage of the Tongass Timber Reform Act, shifting the Forest Service's relationship with the timber companies, creating new protected areas, and requiring that the Forest Service "seek to meet" market demand for Tongass timber. Despite the "seek to meet" statutory obligation, Southeast Alaska's timber industry peaked in summer 1991 when the total number of timber jobs in southeast Alaska reached its historical record high (3,543 year-round jobs, or 4,200 timber workers).ⁱⁱ The timber industry then began to decline. The pulp mills in Sitka and Ketchikan closed permanently, with the last pulp wood pulp coming out of Alaska in 1997,ⁱⁱⁱ marking the true beginnings of transition for the rural and remote communities of the Tongass NF. The closure of these mills had far-reaching effects for former mill workers, businesses that supplied products to the mills, timber industry workers, businesses frequented by mill and industry workers (auto parts, restaurants, stores), school districts, and for small towns in southeast Alaska where workers were living and raising families. An estimated 2,200 direct jobs were lost between 1990 and 2004 as a result of the dramatic decrease in the amount of Tongass National Forest-related logging and timber processing.^{iv}

The Tongass NF tried to buffer the decline and fulfill its "seek to meet" mandate by passing the 1997 Tongass Land and Resource Management Plan which directed the Forest to "*develop procedures to ensure that annual timber sale offerings are consistent with market demand.*"^v However, demand for southeast Alaska timber continued to decline following a Japanese banking crisis, an increase in Scandinavian and Canadian timber productions, and depressed economic conditions in international markets.^{vi} The federal Roadless Rule was adopted in 2001, further limiting the suitable timber land base despite ongoing legal sparring that opened Roadless areas for a period of time. By the early 2000s, demand for and supply of Tongass NF timber were rapidly declining, and over the course of the next decade the southeast Alaska timber industry had shrunk by 89 percent.^{vii}

Timeline of key events related to the Tongass Transition

- **1947:** Congress passes the Tongass Timber Act, authorizing up to five pulp timber sales with 50-year contracts.
- **1951, 1953:** USFS signs 50-year contracts with the Ketchikan Pulp Company and the Alaska Lumber and Pulp Corporation. Together, these contracts obligated the USFS to provide 13.5 billion board feet of timber to the companies. Timber was planned for harvest in five-year allotments, and pulp mills led selection of harvest areas along with backup or contingency areas. Timber prices were set by residual appraisal, and the USDA awarded purchaser road credits.

- **1971:** Congress passes the Alaska Native Claims Settlement Act, returning lands to Alaska Native shareholders via village and regional corporations statewide.
- **1979:** The Tongass NF publishes its first Tongass Land Management Plan (TLMP). The TLMP has been revised and challenged in court multiple times since its publication.
- **1990:** Congress passes the Tongass Timber Reform Act, setting aside lands for conservation purposes and stipulating that the US Forest Service “seek to meet” market demand for Tongass timber.
- **1992, 1997:** Pulp mills in Sitka and Ketchikan close.
- **2011:** Alaska District Court vacated Tongass exemption to Roadless Rule and reinstated the 2001 Roadless Rule.^{viii}
- **2012:** 2012 Planning Rule for land management planning for National Forest System was published.
- **2013:** US Secretary of Agriculture Vilsack endorsed Transition Framework to provide jobs and community stability.
- **2015:** Conveyance of 70,075 acres of the Tongass NF to Sealaska to fulfill land claims under ANCSA.
- **2016:** Record of Decision for 2016 Tongass Land and Resource Management Plan Amendment.
- **2017:** Land exchange between Alaska Mental Health Trust and US Forest Service opened ~20,000 acres of land near Naukati on Prince of Wales and Shelter Cove for timber harvest.
- **2017-2019:** development of the Prince of Wales Landscape Level Analysis Project (POW LLA).^{ix} In September 2019, the Twin Lakes Timber Sale of the POW LLA was placed under injunction, with a decision to be issued by March 2020.
- **2018-2019:** In response to a petition from the State of Alaska, the USDA began development of a state-specific roadless area management direction for the Tongass.^x In October 2019, the USDA published a Draft Environmental Impact Statement with six alternatives ranging from no action to the removal of the Tongass from the 2001 Roadless Rule. The USDA has identified Alternative 6 as its preferred alternative which is a full exemption from the Roadless Rule. Many stakeholders have already publicized their serious concerns over the process, and the potential impacts of a full exemption on the habitat, conservation fisheries, and other aspects of the Tongass NF, bringing to the surface many long-standing conflicts. Six tribal governments in Southeast Alaska issued a statement about their disappointment in what they deemed an unfair and inequitable process as well as concerns about impacts on their ancestral lands. A final decision on roadless area management for the Tongass NF is expected by June 2020.

ⁱ Sisk, J. (2007). The southeastern Alaska timber industry: Historical overview and current status. *The Coastal Forests and Mountains Ecoregion of Southeastern Alaska and the Tongass NF: A Conservation Assessment and Resource Synthesis*. http://courses.washington.edu/env450b/pdfs/SchoenandDovichin_Ch9,6. Available at: https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/alaska/seak/era/cfm/Documents/9.6_TimberIndustry.pdf

ⁱⁱ Southeast Conference website (<http://www.seconference.org/timber>) and SE AK#s report, 2019

ⁱⁱⁱ Mackovjak, J. Tongass Timber: A History of Logging & Timber Utilization in Southeast Alaska. 2010. Forest History Society, Durham, North Carolina.

^{iv} Mackovjak, J. Tongass Timber: A History of Logging & Timber Utilization in Southeast Alaska. 2010. Forest History Society, Durham, North Carolina, page 269.

^v Forest Service. 1997. Tongass Land and Resource Management Plan. Available at:

<https://www.fs.usda.gov/detail/tongass/landmanagement/planning/?cid=stelprdb5445359>

^{vi} Sisk, J. (2007). The southeastern Alaska timber industry: Historical overview and current status. *The Coastal Forests and Mountains Ecoregion of Southeastern Alaska and the Tongass National Forest: A Conservation Assessment and Resource Synthesis*. <http://courses.washington.edu>

edu/env450b/pdfs/SchoenandDovichin_Ch9, 6 . Available at:

https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/alaska/s_eak/era/cfm/Documents/9.6_TimberIndustry.pdf

^{vii} Southeast Conference website <http://www.seconference.org/timber-development-sustainability>

^{viii} United State District Court – District of Alaska. 2011. Organized Village of Alaska v. United States Department of Agriculture, et al., and State of Alaska and Alaska Forest Association. 1:09-cv-00023 JWS. Available at: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3801451.pdf

^{ix} <https://www.fs.usda.gov/detail/tongass/landmanagement/projects/?cid=fseprd529245>

^x <https://www.fs.usda.gov/roadmain/roadless/alaskaroadlessrule>

APPENDIX B. Key resources for future Tongass social and economic monitoring

Below are some of the resources that we found useful while compiling information for this report. This is not an exhaustive list; rather, it is meant to be a catalogue of resources to consider reviewing for future monitoring work on the Tongass NF.

Select organizations collecting social or economic data about the Tongass NF

Alaska Timber Jobs Task Force

- Alaska Timber Jobs Task Force Final Report To Governor Sean Parnell, Administrative Order 258
- Alaska Timber Jobs Task Force Quarterly report on Tongass timber sales
- Alaska Timber Jobs Task Force Recommendations and Status

Government Accountability Office

- Tongass National Forest: Forest Service's Actions Related to its Planned Timber Program Transition

Juneau Economic Development Council

- Juneau and Southeast Alaska Economic Indicators Reports
- Southeast Alaska Economic Asset Map

McDowell Group Studies

- Impacts of Nonresident Sportfishing on the Ketchikan Economy
- The Economic Value of Alaska's Seafood Industry
- Economic Impacts of Private Nonprofit Aquaculture Associations in Southeast Alaska
- Sea Otter Impacts on Commercial Fisheries in Southeast Alaska
- Alaska Native Interests reports and work
- Summary of the Economic Costs of Substance Use Disorders in Alaska: 2019 Update
- Summary of the Economic Benefits of Alaska's Construction Industry
- Economic Benefits of Southeast Alaska's Mining Industry
- Southeast Alaska Youth Behavioral Health Gaps and Needs Assessment

Southeast Conference

- Southeast Alaska by the Numbers reports
- Southeast Alaska 2020 Economic Plan

Sustainable Southeast Partnership

- Community Indicators Monitoring Plan

The Wilderness Society

- Seeing the Tongass for the Trees: The Economics of Transitioning to Sustainable Forest Management

Tongass National Forest Resources

- Central Tongass Project Draft Environmental Impact Statement
- Prince of Wales Landscape Level Analysis Project (POW LLA)
- Schedules of Proposed Action

South Reveilla Integrated Resource Project
Tongass Advisory Committee Final Recommendations
Tongass National Forest Timber Task Force
Tongass Land and Resource Management Plan – Monitoring Plan
Tongass National Forest Annual Reports
Tongass National Forest Annual Monitoring and Evaluation Reports
Tongass National Forest Sawmill Capacity Annual Reports
USDA State of the Tongass Reports

University of Montana Bureau of Business and Economic Research
Forest Products Industry and Timber Harvest Reports

USDA Forest Service

Alaska National Interest Lands Conservation Act Reports

Select social and economic monitoring resources from other contexts

Fenner School of Environment and Society

Monitoring the social and economic impacts of forestry: Recommended indicators for monitoring social and economic impacts of forestry over time in Australia

Front Range Roundtable

Collaborative Forest Landscape Restoration Project: 2017 Ecological, Social, and Economic Monitoring Plan

Puget Sound Partnership

Vital Signs Reports

Sierra Institute for Community and Environment

Monitoring socioeconomics within collaborative forestry projects: trends in practices and challenges

USDA Forest Service

Four Forest Restoration Initiative Monitoring Plan
Northwest Forest Plan Socioeconomic Monitoring Results

University of Oregon's Ecosystem Workforce Program

Working Papers #20, #36, #52, #55, #59, #60, #64, #74, #75, #78, #82, #83

Other resources for understanding historical context of Tongass NF management

Mackovjak, J. Tongass Timber: A History of Logging & Timber Utilization in Southeast Alaska. 2010. Forest History Society, Durham, North Carolina.
Nie, Martin. 2006. Governing the Tongass: National forest conflict and political decision making. *Environmental Law* 36 (2006): 385.
Porter, Diana. An Opportunity to End the Timber Wars: How Collaboration in Southeast Alaska has Helped to Dissipate Conflict. *Humboldt Journal of Social Relations*, Vol. 40, Special Issue 40: *The American West after the Timber Wars* (2018), pp. 45-53.

APPENDIX C. Additional potential monitoring metrics suggested by interviewees and considered for inclusion

THEME	INDICATOR	POTENTIAL METRICS
Socioeconomic	Demographics	# youth returning # retirees # seasonal/# year-round residents
	Cost of living	Cost of housing # new home starts Energy costs
	Services available	Availability of high-speed internet Budget for schools Hospitals/clinics Retirement facilities Restaurants State budget
	Transportation resources	# miles roads (paved and unpaved) Commercial flight/jet service Ferry service Car rentals # helicopters/float planes/bush planes in use
	Tongass NF Priorities and Capacity	Tongass NF allocations by program area FTEs by area of expertise (fish and wildlife, recreation, restoration)
	Economy and workforce	% seasonal employment Average and median income/wage Level of job satisfaction Economic contribution of different industries to communities
	Business climate	Businesses enrolled in Chambers of Commerce Access to credits for small businesses Job/vocational training/trade programs in schools and communities (i.e., welding, carpentry, HVAC support for fishing boats) Top barriers for operating businesses Overall business climate in SE AK Economic outlook for business/industry # new business start-ups

		Average cost of entry into different economic sectors
		Magnitude of new infrastructure investments made in different economic sectors
Forest uses/economic opportunity	Restoration	Miles of stream restored Other stream restoration activities
	Subsistence	# deer tags sold (or # deer harvested) # pounds collected (berries, seaweed, mushrooms) Ability to pursue cultural subsistence practices Ability to pursue desired way of life # fishing permits given to local people (especially small permits for subsistence and small commercial uses) # special forest products permits issued
	Commercial fishing	# commercial fishermen and women Commercial fishing catches Fish tax received by communities Catch quotas (especially for halibut and salmon)
	Sport fishing and hunting	# lodges Length of the season for lodges # outfitter/guide permits # guided fishing/hunting clients
	Recreation infrastructure and use	# miles of trail # picnic areas # cabins # recreation/tourism businesses # bed and breakfasts Size of recreation groups # visitors # visitor days Purpose of visits # Births/docks for cruise ships # cruise passengers # cruise ships Size of cruise ships
	Mining	# active mines # employed in mines

		<p>Average wage of miners</p> <p>Amount of over-run on timber sales</p> <p># acres of pre-commercial thinning accomplished</p> <p>Price per board foot of old- and young-growth timber</p>
	Timber/Wood products	<p>Value-added products</p> <p>Type of products being developed</p> <p>Support services (shipping, transportation, supplying)</p> <p># business licenses for sawmills/wood products</p> <p># people employed in small/large mills</p> <p># and type of contractors available</p>
	Timber/Wood products, continued	<p>Average wage of contractors working on the forest</p> <p>Profit margins of businesses</p> <p>Volume of second growth timber purchased by state and federal agencies (i.e., for building cabins, picnic areas, other facilities)</p> <p># of public construction projects using Tongass wood</p> <p>Value of wood used in public construction projects</p> <p>Scale of biomass facilities</p> <p># people employed by biomass facilities</p> <p>Timber volume consumed by biomass facilities</p> <p>Wages generated by biomass facilities</p> <p>Economic impact/jobs created from timber sales and restoration contracts (TREAT/IMPLAN model)</p>
Collaborative governance of Tongass NF	Distribution of resource ownership/control	<p>Community-based ownership over resources</p> <p>Whether or not people feel they have influence over how resources are managed</p>
	Stakeholder concerns	<p>Appeals, objections, and litigations of Tongass NF planning projects</p> <p>Whether or not tribes feel an increasing or decreasing sense of sovereignty and ability to pursue their desired traditions and ways of life</p> <p>Community resolutions/tribal resolutions about Tongass NF management</p> <p>Public comments about Tongass NF decisions (i.e., Roadless Rule, Central Tongass Project, POW LLA)</p>

Appendix I. Semi-structured interview protocols

Interviews were conducted under University of Oregon's human subjects research protocol 04142017.026. Potential interviewees were identified by key informants in the region. We selected a purposeful sample from this list, attempting to include stakeholders with diverse perspectives and experiences. Interviewees were added through snowball sampling throughout the project.

We recorded and transcribed the interviews with the full awareness and consent of participants. For both recorded and non-recorded interviews, researchers took detailed notes during the interview. In all cases, audio files and data reporting did not have identifying information attached to them to protect participant confidentiality.

Data were analyzed using standard qualitative analysis techniques. We labeled and sorted interview notes according to interview question and reviewed and coded notes in order to generate themes from the transcripts.

Below are examples of the types of questions we asked. Interviews took place in a conversational style, so the order and exact wording changed from interview to interview. Interview questions were adapted based on the role of each key informant.

Background

- To start, could you please say your name, current position, and explain briefly your current role(s).
- How is your work related to the Tongass National Forest?

Your community

- What has changed in your community in the time you have been here?
 - What has impacted the social and economic wellbeing of communities?
 - Are different people moving in or out? Have schools or the number of families changed?
 - Are there more or fewer forestry related jobs and work occurring? Why?
 - What changes have you seen in other industries in your area (i.e., tourism, fishing, mining)? Other employment changes?
- What concerns do you have for the well-being of your community for the future?
- What concerns do you hear from other members of your community about the well-being of your community for the future?

The TNF and transition

- What do you think is the status of the Tongass transition to young growth? Where is it in the process? How is it going?
- What do you think a successful transition would look like?

- Do you think social and economic conditions in (your area) have changed due to the transition? If so, how?
- How do you think the POWLLA (or Central Tongass) planning processes have gone?
- Have you seen changes in the types of timber sale or stewardship contracts that the Forest is able to offer? How have the contracts changed?
- What do you think you would measure if you were measuring impacts of the transition?

Broader impacts and trends on SE Alaska

- Are there other changes in recent years that have impacted the social and economic conditions of your community?

Concluding questions and thoughts

- Is there anything else you'd like to share on this topic, or anything else you think we should know about?
- Is there anything else that we didn't talk about that you think is relevant to this topic?
- Who else would you recommend I talk to about the Tongass National Forest's timber program?
- Can I contact you again if we have other questions or if I need to clarify any details of our conversation?

