YOUNG GROWTH FOREST MANAGEMENT IN SOUTHEAST ALASKA

Spring 2020 Briefing Paper

Forest management in Southeast Alaska has been a hotly debated topic for decades. In recent years, however, federal and state agencies and local and regional stakeholders have joined forces to achieve ecological, economic, and social health in the region for years to come. In their <u>2015 recommendations</u>, the Tongass Advisory Committee (TAC) emphasized agency culture change, shared approaches to management, coordinated investments, improved transparency in decision-making, and workforce training and development, many of which have seen significant progress over the intervening years. This trend of collaboration continued in fall 2019 with the Southeast Alaska Young Growth Forest Symposium – an event that brought together Southeast Alaska stakeholders, agency staff, and community members with the purpose of identifying tangible opportunities for the future of the Tongass National Forest and surrounding communities. (See the <u>Symposium summary</u> for more information.) This paper represents a synopsis of those opportunities, outlining a path forward for forest management.

Photo: Sustainable Southeast Partnership

Working Together: Collaborative Forest Planning and Management

The Challenge Cost-Share Agreement between the US Forest Service (USFS) and State of Alaska Division of Forestry to fund the inventory and workforce development programs was not only the most tangible outcome from the TAC recommendations, but also represented a partnership of its own, cementing a path for state and federal agencies to work together for common objectives. The inclusion of Good Neighbor authority also facilitated a number of recent projects, opening the doors for state and tribal entities to work directly with the USFS.

Current landscape-level community planning processes, including the Hoonah Native Forest Partnership (HNFP), Keex' Kwaan Community Forest Partnership (KKCFP), and Joint Chiefs Landscape Restoration Initiative, are examples of collaborative planning and land management processes piloted by regional stakeholders. As evidenced by the launch of the KKCFP, each new collaborative initiative builds on the lessons learned by existing partnerships. For additional information, see the report, <u>Hoonah Native Forest Partnership: Best Practices and</u> <u>Lessons Learned</u>.

TANGIBLE OPPORTUNITIES

- Institutionalize and stabilize collaborative groups in the region. This may include renewing the Tongass Transition Collaborative to encourage participation by existing members and adding new partners/members where additional expertise is needed.
- Convene a collaborative assessment process for the Central Tongass region. While this will be challenging due to the dispersed geography of the area, such an approach could build off the success of the Prince of Wales process.
- Build collaborative environments on a project-byproject basis, so that interested stakeholders can be engaged throughout the stages of the planning processes (as opposed to only during large-scale planning).

Mapping It Out: Forest Inventory and Data Analysis

One of the primary objectives of the Challenge Cost-Share Agreement was to conduct a comprehensive young growth inventory, particularly on older stands of young growth. Through a combined approach of LiDAR (Light Detection and Ranging) and field validation, data was improved for a subset of stands, allowing more accurate estimates at larger scales. To gain a better understanding of how forest inventory outcomes will translate into young growth sale planning and implementation, the USFS is conducting a Young Growth Suitability Analysis. This GIS mapping exercise applies current Forest Plan Standards and Guidelines and other directives to historical harvest areas to determine availability of future harvest acres. Given the high level of "fall down acres" – of the 12,000 acres analyzed, only 54% are operable – the USFS will need to consider the economic tradeoffs associated with a young growth transition timeline. If the goal is to maximize *absolute volume*, the better harvest strategy is to wait for continued growth; if the goal is *near-term economic* impact, the better approach is to harvest sooner, even if it results in reduced volume at the time of harvest.

TANGIBLE OPPORTUNITIES

- Complete young growth stand-typing and integrate stand-typing with activity layers. This may involve modernizing the GIS system and use of new data to build more accurate maps.
- Continue old growth inventory efforts, with the goal of gaining a solid understanding of the on-theground reality for old growth supply and how to most strategically offer existing old growth during the young growth transition.
- Identify future LiDAR needs. LiDAR can be used to improve stream inventory efforts. Near-term LiDAR data acquisition could prioritize geographic areas surrounding Shelter Cove, Revilla Island, and Ketchikan.
- Complete and communicate infrastructure inventory. This will provide a clear understanding of existing forest infrastructure and maintenance needs, such as roads and log transfer facilities.



Figure 1. Additional information about Tongass inventory efforts can be accessed at the <u>Tongass Young Growth Inventory Portal</u>, a site dedicated to providing stand-level information for stakeholders and decision makers.

Identifying Markets: Export, Local Manufacturing, and Other Creative Opportunities

Alaska is not alone in its challenges in identifying and pursuing markets for young growth timber. In general, "low value" markets are challenging, even where supply of timber is not – there are costs associated with gaining access, pulp and paper demand is decreasing, and biomass energy has become less competitive as wind, solar, and natural gas gain traction. In Southeast Alaska, while new technologies, such as the hew-saw, show promise, tight margins for mill operators limit the possibility of retrofitting operations.

Even with these realities, though, there are opportunities to harness local manufacturing and alternative timber outlets. Pilot projects, for example, offer a lower risk option to showcase what is possible working with young growth. A recent small-scale young growth milling project on Prince of Wales Island served as a pilot for future young growth sales, harvesting a small 65-year-old stand. Though margins were thin, the timber sold as quickly as it could be milled, indicating that there is local demand for young growth lumber, if the price is right. To help make larger operations feasible, mill operators will need to find connections with residual markets for waste streams and outlets for multiple species and log sizes. A growing local demand for biomass could serve as a valuable in-region residual market. Additionally, displacing some of the commodity lumber imports from Canada may be an opportunity to build a value -added young growth industry.

While recognizing the important role of a timber industry in Southeast Alaska, other aspects of a forest economy could include milling for local consumption and an expanding role for the carbon offset market to generate supplemental private landowner income.

BIOMASS IN ACTION

The Southeast Island School District manages 6,500 square feet of biomass-heated greenhouses year-round. To meet current local demand beyond small-scale firewood production, Viking Lumber manufactures bio-bricks from its mill residuals and a number of small operators source wood chips and commercial cordwood. Bio-char and commercial pellet production may be options to explore further.

TANGIBLE OPPORTUNITIES

- Implement young growth pilot projects. This could include a pilot milling project to expand local capacity on the manufacturing side. Pilot planting projects could also encourage selective species management on high productivity sites.
- Diversify the range of sales offered. Land managers should design sales ranging from micro- and smallscale opportunities for smaller mills to long-term contracts for larger operations. A future sale schedule could be informed by USFS stand-typing.
- Invest in the wood products industry. USFS investment in research at the Wood Products Lab could help identify products and markets for young growth timber. In addition, attracting investors and entrepreneurs in support of small local mills – for example through an entrepreneur incubator program – could bring capital and creative energy.
- Conduct a demand analysis and economic impact assessment. An analysis of non-timber/non-cash values of a young growth industry could help illuminate local timber demand and other economic drivers.
- Cater to market demands. There are various opportunities to make Tongass timber more marketable, including sourcing wood for local industries, sustainability certification for lumber, strength-test studies for second growth products, improved lumber grading practices, and matching local building codes to local wood products.
- Address on-the-ground management needs. An aggressive approach to address the 80,000 acre backlog of young growth stands in the ideal age class window for pre-commercial thinning (PCT) treatment (e.g., up to 8,000 acres/year) could speed the transition significantly. A multi-stakeholder PCT Task Force is being convened to develop a tactical plan and policy recommendations for addressing PCT needs in a timely manner.

Employing Southeast: Workforce Development and Sustainable Economics

Workforce and capacity challenges are common across the western US, as are concerns about industry transitions in rural communities facing similar timber

environments. According to <u>Southeast Alaska by the</u> <u>Numbers 2019</u>, this reality has been reflected in the region by a continued decrease of timber-related jobs – resulting in 337 remaining timber jobs, mostly located on Prince of Wales Island. Researchers from the University of Oregon are working to supplement this data through a <u>social and</u> <u>economic monitoring study</u> that explores the implications of a transition to young growth-based forest management, including levels of employment/unemployment, business health/longevity, and collaborative capacity, among others.

Through the Sustainable Southeast Partnership (SSP), workforce development initiatives have increasingly gained traction throughout the region. Common themes across workforce development initiatives included the power of interconnection, collaboration, and strong partnerships. Since 2016, the SSP and other partners have hosted several forestry/natural resource trainings on Prince of Wales Island to grow capacity to accomplish inventory and other work associated with the young growth transition. Future trainings may focus on building a transferable skillset among trainees that goes beyond timberrelevant trades. Since the forest is important to communities in more ways than just timber, such trainings could help stabilize local economies, while keeping communities tied to the land.

TANGIBLE OPPORTUNITIES

- Utilize existing programs and facilities to provide trainings and teaching modules like the Prince of Wales Vocational-Technical Center in Klawock or integrating trainings into high school curricula.
- Align trainings with current forest management needs to address visitor industry needs, tribal cultural and heritage resources, infrastructure maintenance and construction, computer technology, and administrative management, among others.
- Identify and utilize creative funding and contracting mechanisms such as public-private partnerships, agency-to-agency agreements, 8(a) Minority Owned Business contracting, and village corporation shareholder hiring processes.
- Look outside of agencies for employment opportunities such as working directly with industry (timber, fisheries, visitor services, etc.) and other non-profit routes such as the Student Conservation Association.
- Incentivize participation with certification or college credit with existing training programs like the Fire Academy or ABC Faller program.
- Incorporate "soft skills" training to develop critical life skills like mentoring and resume-building.

Making Progress: Supporting Implementation of Tangible Opportunities

The tangible opportunities outlined in this briefing paper represent a path forward for achieving ecological gains for the Tongass National Forest, as well as socioeconomic benefits for surrounding communities. Continued funding, public-private partnerships, and stakeholder collaboration will be essential in achieving these opportunities. The Challenge Cost-Share Agreement between the USFS and State of Alaska, a funding mechanism and partnership arrangement that has led to significant progress over the past few years, is set to expire in October 2020. A similar future partnership, and the funding to back it, will be essential to completing the next phase of activities.

To learn more about forest management on the Tongass, visit <u>tongasslandmgmt.org</u>. To get involved in implementing the opportunities outlined here, contact the planning team via the <u>Contact Us</u> page.