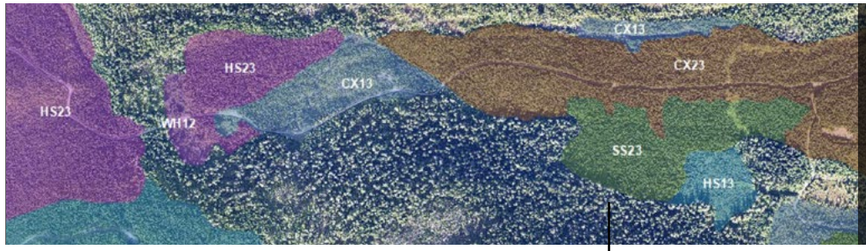


Terra Verde, Inc. used LIDAR and young-growth forest inventory data to create a new young-growth timber stand map covering the Forest.

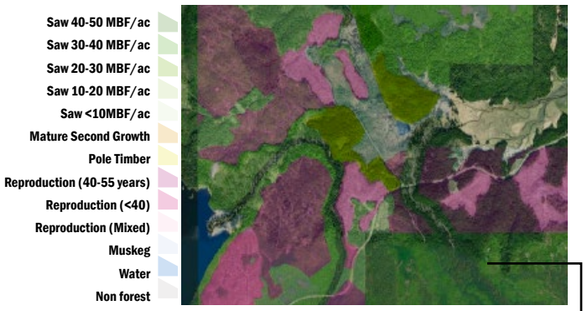
This map, together with the newly updated stand database, supports modeling of growth and yield projections for young-growth timber stands across the entire Tongass National Forest.

Timber Type Key

RA	Alder dominant	75% Alder
SS	Spruce dominant	>60% Spruce
WH	Hemlock dominant	>75% Hemlock
CD	Strong cedar	>40% Red and Yellow cedar
HS	Spruce-Hemlock mix	SS and WH in other proportions
CX	Mixed species	Other combinations
4	Large size	>95 ft height of overstory
3	Medium size	70-94 ft height of overstory
2	Small size	45-69 ft height of overstory
1	Saplings	15-44 ft height of overstory
0	Regen	0-14 ft height of overstory
3	Well stocked	70-100% Crown closure
2	Mostly stocked	40-69% Crown closure
1	Poorly stocked	10-39% Crown closure
0	Non-Forest	<10% Crown closure

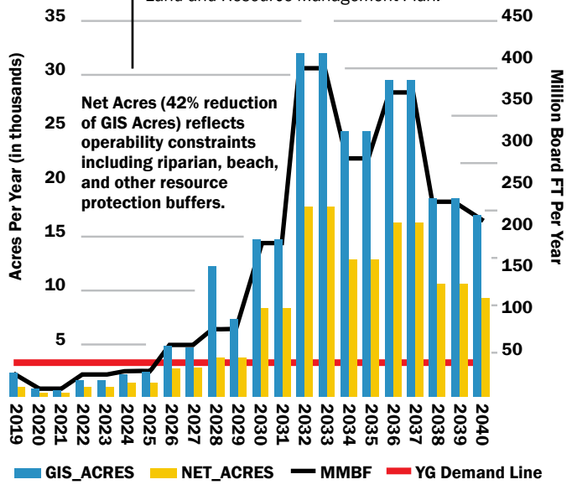
Young-growth forest inventory data is used to create new forest planning tools for Tongass and Southeast State Forest managers. Learn more at bit.ly/3h3VMWT.

AK State Inventory Polygons



Division of Forestry inventory *crews collected field data from more than 1,200 sample plots located on State lands in Southern Southeast (SSE) Alaska. The Division used inventory results to create a new timber stand map and to update the Annual Allowable Cut for State lands in SSE Alaska. Learn more at bit.ly/3xcMLQP.*

Future growth and yield from young-growth timber stands and an example of predicted future flow of commercial volume. The ***Young Growth Demand Line*** *(41 MMBF per year) was estimated in the 2016 Tongass Land and Resource Management Plan.*



Understanding the predicted future flow of young-growth timber volume over time enhances the ability of Tongass managers to more efficiently identify and plan future young-growth projects and timber sales to meet forest management objectives.

Legend: Meets 2Log Rule Young Growth

Growth and yield analysis was also used to produce a GIS time-lapse map showing aggregations of individual TYG timber stands expected to present economic harvest opportunities, over the next 40 years.

Continuing to Advance the Tongass Transition

Through this effort the Forest Service and Alaska Division of Forestry worked with 30 partners and implemented Tongass Advisory Committee recommendations to help transition the Tongass to a young-growth forest economy.

The stakeholders in this effort propose to focus attention on the below areas if resources and funding are made available. This will leverage the strong working relations that have been built over the last five years.

Map, Analyze and Describe Young-Growth across Ownerships

This project's goal is to provide a better understanding of young-growth forest resources to Public, Trust, and Alaska Native Corporation landowners in southeast Alaska. It also highlights opportunities for restoration and climate mitigation, and informs industry of regional opportunities related to young-growth management, harvesting and manufacturing.

Tongass Transition Collaborative & All-Landowners Group

A broad spectrum of southeast Alaska stakeholders are working toward a young-growth forest economy through production and management of sustainable woody biomass for forest products and wood energy across all forest ownerships. Climate mitigation, coordinated use of infrastructure, market and product feasibility studies, and new pilot projects are priorities.

Continued Workforce Development

Training across natural resource fields and disciplines, and employment of local Alaskans serves local communities and lands on which they depend, while providing regional landowners and managers with a skilled local workforce.

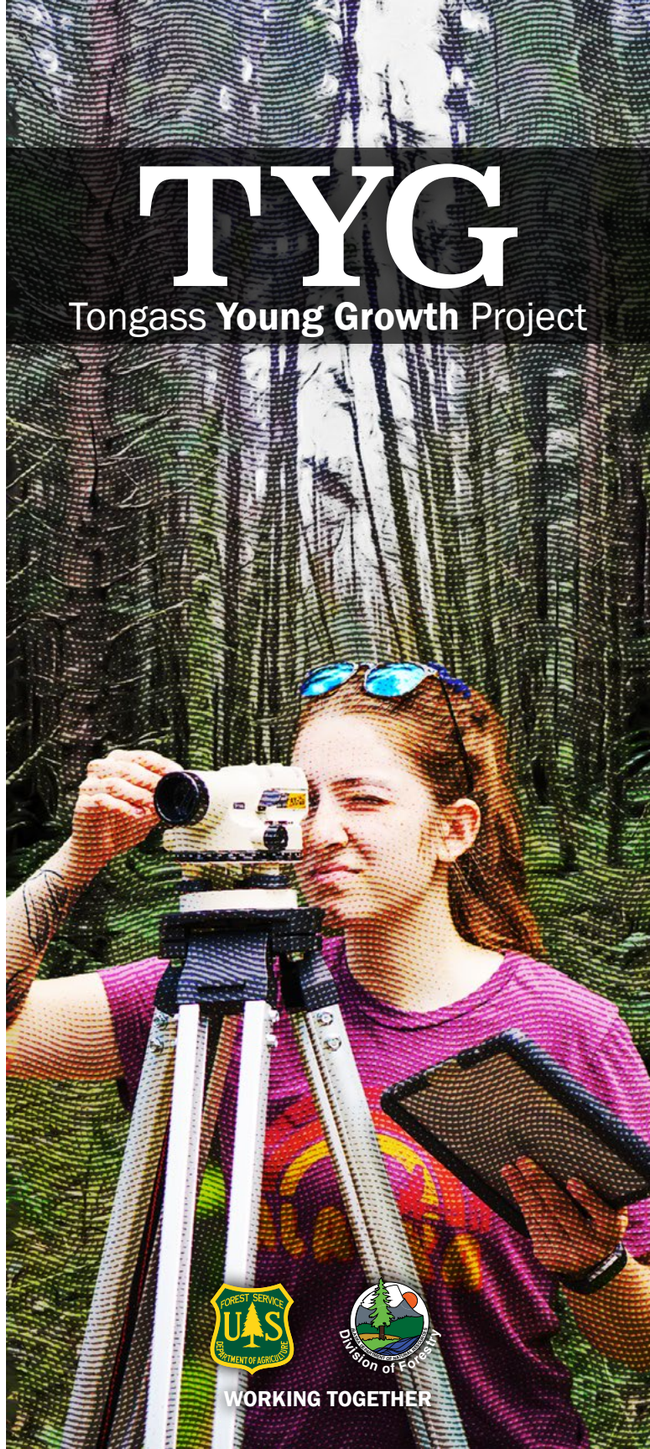
PROJECT AGENCIES/PROJECT PARTNERS

Tongass National Forest • State and Private Forestry • Alaska Division of Forestry • Alaska Division of Economic Development • Alaska Division of Mining, Land and Water • Kai Environmental Consulting Services, LLC • Southeast Alaska Resources • Alaska Forest Association • Meridian Institute • Forest Biometrics Research Institute • Terra Verde, Inc. • Haa Aani Community Development Fund • The Nature Conservancy • Spruce Root • University of Oregon • University of Alaska Southeast • University of Alaska Statewide Office of Land Management • Tatoosh School • Prince of Wales Vocational and Technical School • Hanson Maritime • Sitka Conservation Society • POW Landscape Assessment Team • Hydaburg Cooperative Association • Organized Village of Kasaan • The Daniyel Group • Southeast Conference • City of Tanana • Alaska Mental Health Trust Land Office • US Geological Survey
Natural Resources Conservation Service

forestry.alaska.gov • fs.usda.gov

TYG

Tongass **Young Growth** Project



WORKING TOGETHER

TRAINING THE NEXT GENERATION OF NATURAL RESOURCE MANAGERS

Agency staff collaborated with workforce development partners to train rural Alaskans in procedures to collect important young-growth forest resource data and information. Find out more at bit.ly/2UR7awL

The Aquatics Resources Academy *trained local residents in techniques used to survey, map and classify streams according to various stream attributes, including the presence of resident or anadromous fish species.*

The Forestry Academy *trained local residents in forest inventory procedures including tree species identification and methods for obtaining and recording young-growth timber stand data and individual tree height and diameter measurements.*

COLLECTING FOREST RESOURCE INVENTORY DATA AND INFORMATION

Newly trained, local Alaskans were hired to work in field crews to collect a variety of valuable forest resource data and information.

Learn more at bit.ly/3qH1n8U.

Over three field seasons, Division of Forestry young-growth forest inventory crews hiked to and collected data from more than 12,000 sample plots covering over 31,000 acres of young-growth forest stands age 55 years and older. Forest Service check cruisers verified the accuracy of the field data.

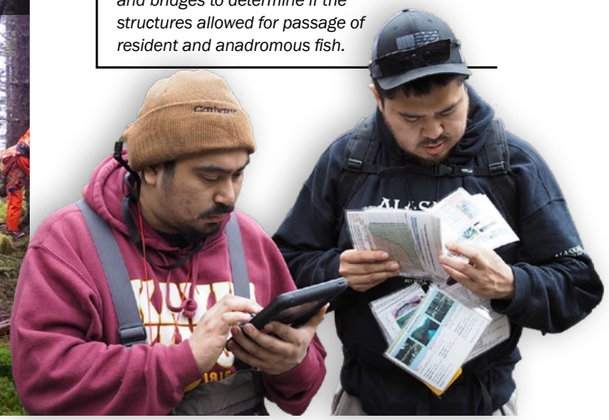
Vegetation Dominance Typing Key

Map Unit	Map Unit Symbol
Developed	DEV
Water	WA
Barren/Sparse Vegetation	BR/SV
Sitka Spruce	SS
Mountain Hemlock Mix	MHmix
Western Hemlock	WH
Dwarf Conifer	DC
Cedar	CE
Mixed Conifer	MC
Spruce_Hemlock	SS-WH
Mixed Species	MS
Unnamed Conifer	UC
Red Alder	RA
Cottonwood	CW
Sitka Spruce-Cottonwood	SS-CW
Sitka Spruce-Alder	SS-RA
Undetermined mix of conifer and hardwood	UHC
Alder Shrub	AS
Tall Shrubs	TS
Low Shrubs	LS
Aquatic Herbaceous	AHB
Wet Herbaceous	WHB

The U.S. Forest Service *used tree and vegetation measurement data collected by the field inventory crews to refine computer modeled vegetation types in the process of creating a new vegetation classification map covering all land ownerships on Prince of Wales Island. Learn more at bit.ly/36b36tm.*

The Nature Conservancy and Division of Forestry *field crews collected tree and vegetation measurements from 249 sample plots to calibrate LiDAR data that was then used to model and map forest and other vegetation types.*

A U.S. Forest Service fisheries technician and the Hydaburg Cooperative Association Stream Survey Crew *completed 37 miles of new stream surveys in 25 conceptual young-growth units, and examined 80 individual road culverts and bridges to determine if the structures allowed for passage of resident and anadromous fish.*



TAKING THE MEASURE

Agency and project partner forest inventory crews collected vegetation measurements in the field to calibrate new LiDAR data. Learn more at bit.ly/3jAEwua.

This new data was used to refine vegetation modeling and produce new GIS vegetation maps, including a new map covering Prince of Wales Island.