

# Forestry Update

House Resources Committee

March 1, 2019



Chris Maisch, Director and State Forester  
Division of Forestry  
Alaska Department of Natural Resources



# Who Owns Commercial Forest Lands

## Alaska Forest Land by Ownership 126 million acres total

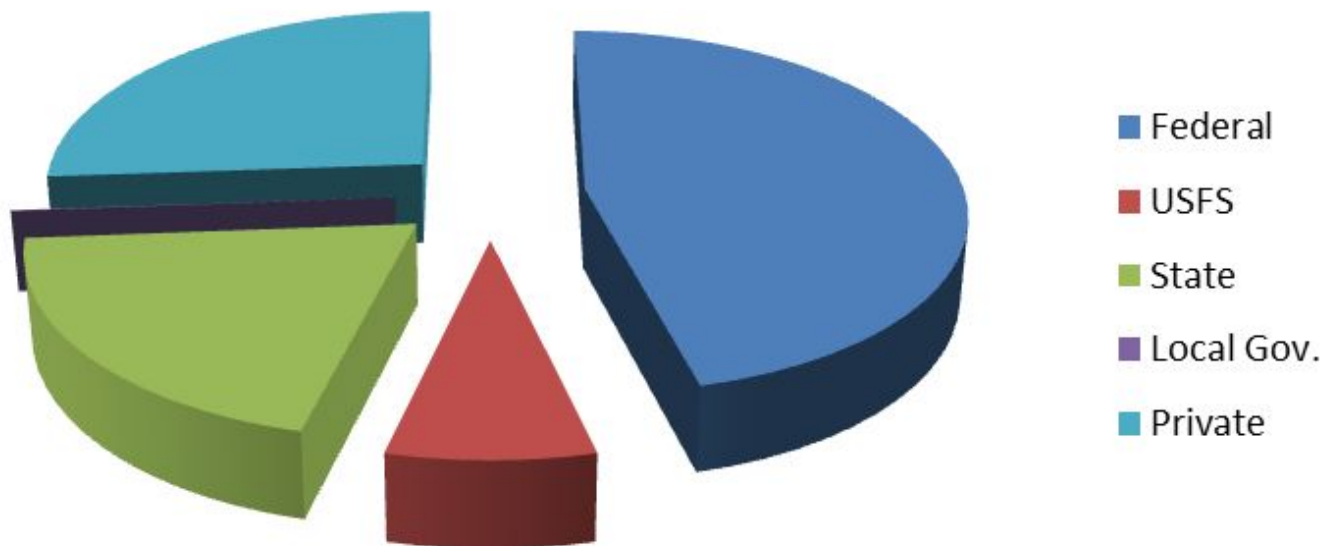
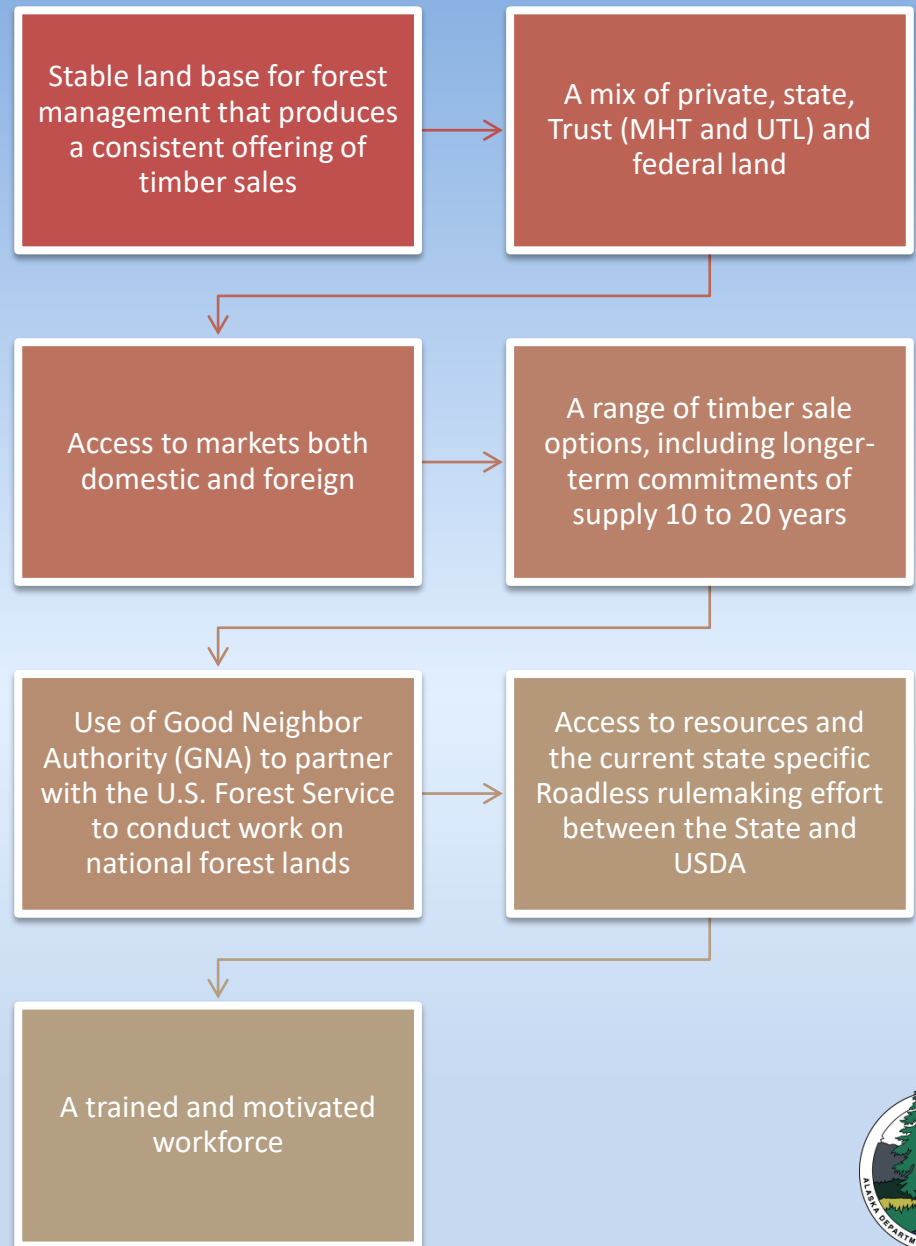


Figure 2 Alaska Forest Land Ownership



# What Conditions Maintain or Grow the Forest Products Sector in Alaska





# ALASKA FOREST RESOURCES & PRACTICES ACT

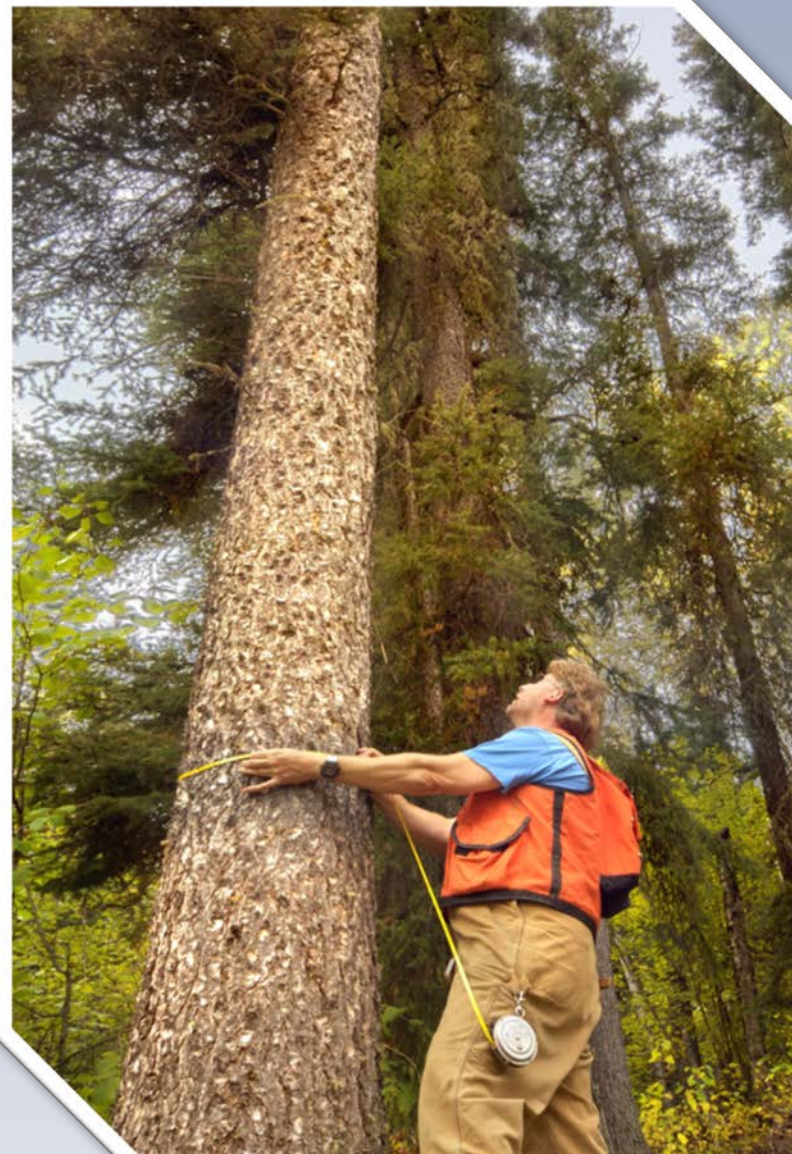
Effective July 1, 2006

► Reprinted June, 2007

DIVISION OF FORESTRY  
DEPARTMENT OF NATURAL RESOURCES

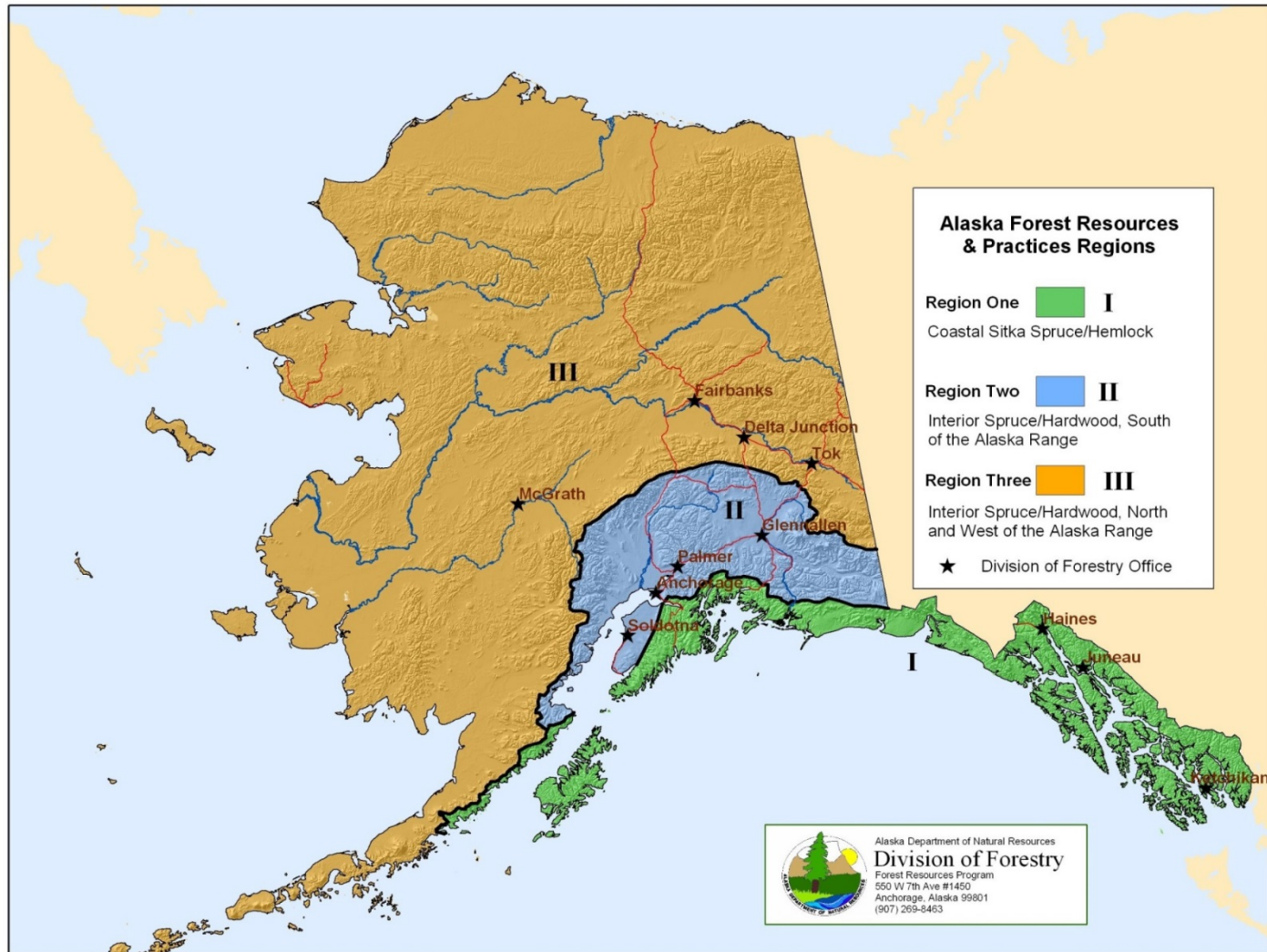


This booklet compiles the 1978 Forest Resources and Practices with amendments passed in 1981, 1982, 1983, 1984, 1988, 1990, 1995, 1996, 1998, 1999, 2003, and 2006, and 2007 Revisor changes. It does not include the attorney general's notes nor the history notes that are given in the official compilation. The Department of Natural Resources provides this booklet as a public courtesy. The department cannot guarantee the absolute accuracy of this reproduction of the Forest Resources and Practices Act (AS 41.17). For the official published version of the Act, please refer to the Alaska Statutes.





# Forest Resources and Practices Act and Forest Types Across the State

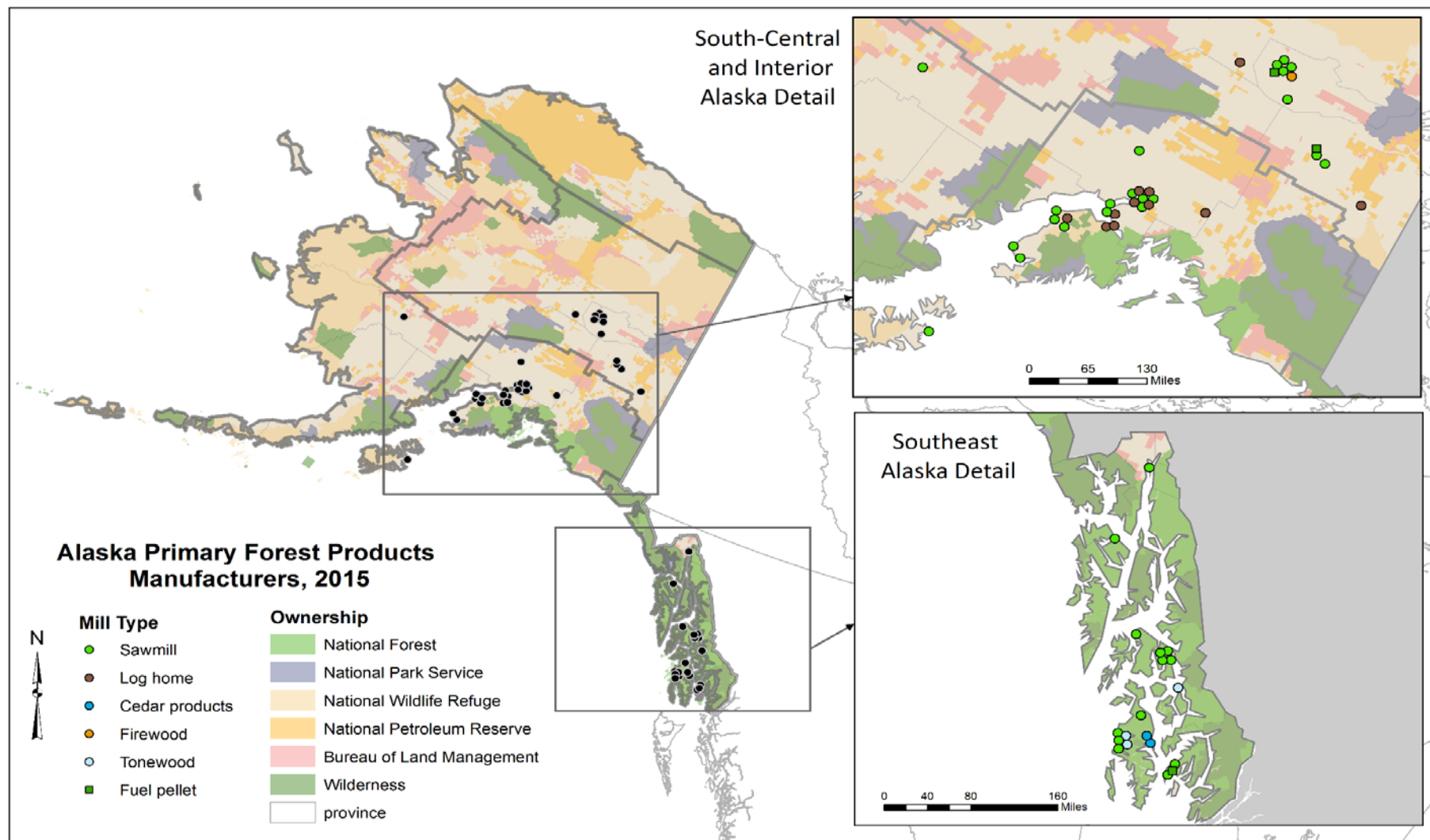


# Statewide Overview of the Forest Products Sector

- Regional differences in scale, markets, products and type of facilities
- Primary Manufacturing
- Log Export
- Secondary Manufacturing
- Non Timber Forest Products
- Woody Biomass Projects – scale and types of fuels



# PRIMARY FOREST PRODUCTS BUSINESS LOCATIONS





# Primary Manufacturing Facilities

**Viking Sawmill-Craig**



**Tidewater and Road Access**



# Primary Manufacturing Facilities

**Head Rig Cutting Old Growth Log  
Producing Lumber**



**By Products  
Chips and Sawdust**





# Primary Manufacturing Log Export

**Loading Bundles of Young Growth  
Logs for Export**



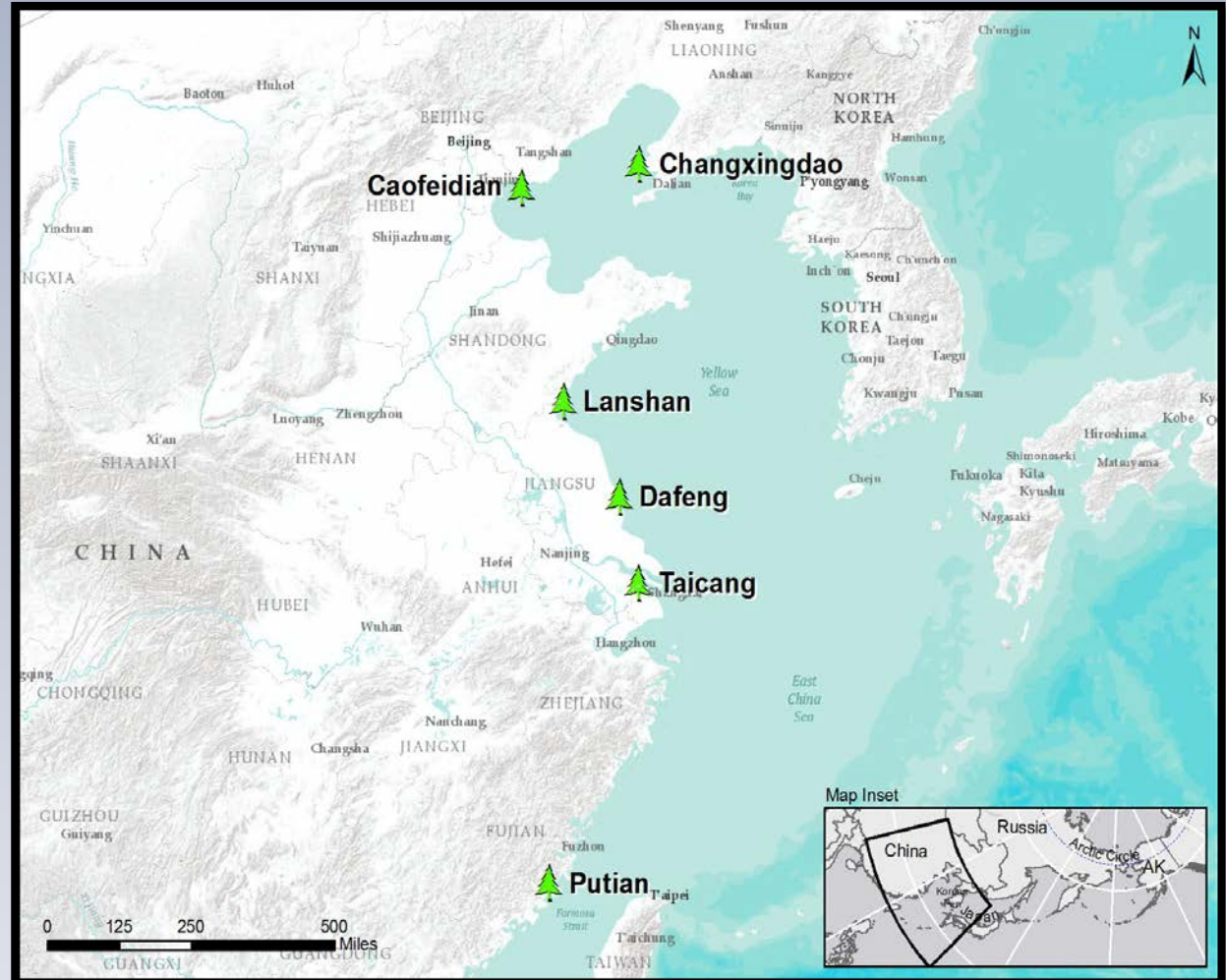
**Edna Bay Log Transfer Facility (LTF)  
And Young Growth Logs**





# Log Exports and Phytosanitary Inspection

- Agriculture program staff provides inspection service and third party fumigation inspections on-board ship in Korea for logs heading to China ports without on-shore facilities
- Industry pays travel costs
- On shore fumigation is now available in six ports
- Value last year \$74.3 million in exports
- Log tariff issue



# Primary Manufacturing Facilities

**Superior Pellet LLC- North Pole**



**Pellet Press Two Units**





# Primary Manufacturing Facilities

## Wood Pellets for Commercial and Residential Space Heating Markets





# Primary Manufacturing Facilities Smaller Scale

**Log Turning Mill**  
**Log Homes and Cabin Kits**



**Wood Miser Band Mill**  
**Lumber and Timbers**





# Secondary Manufacturing Facilities

## Fairweather Ski Works - Haines



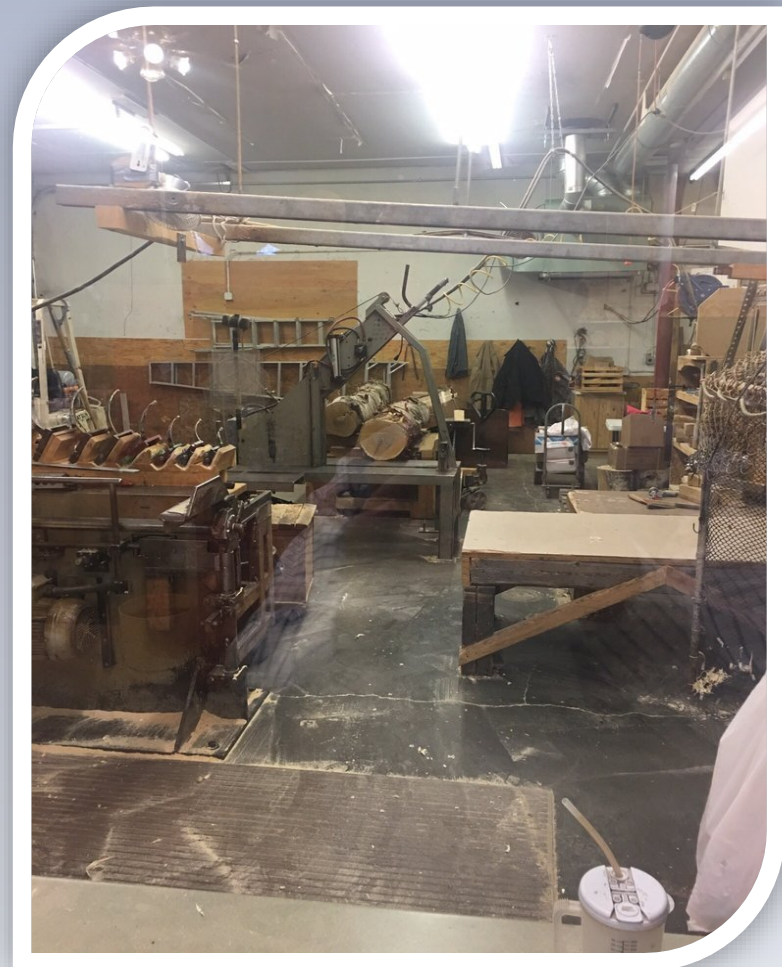
# Secondary Manufacturing Facilities

## Great Alaska Bowl Company - Fairbanks

### Nested Birch Bowls



### Production Floor





# Non Timber Forest Product Manufacturing Facilities

**Kahiltna Birch Works**



**Sap Evaporator**

**Sap to Syrup Ratio 70:1**



# Woody Biomass and Energy

- Types of Wood Fuels Used
- Scale of Operations From Commercial to Residential
- Space Heating - Most Common in AK
- Electrical Generation - Tentative Steps
- Combined Heat and Power - Larger Scale



Wood Chips



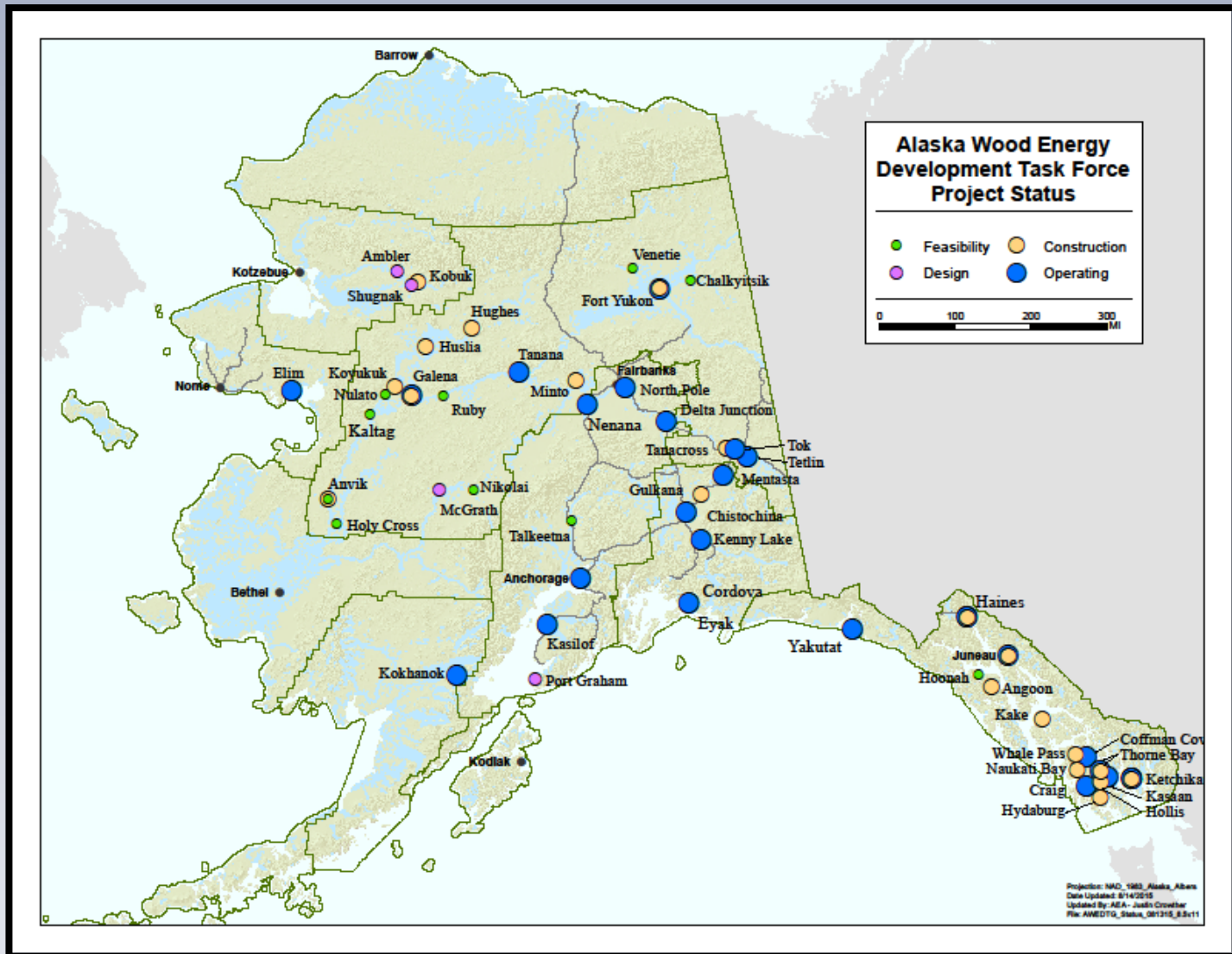
Solid Wood



Pellets



# Locations of Biomass Energy Projects



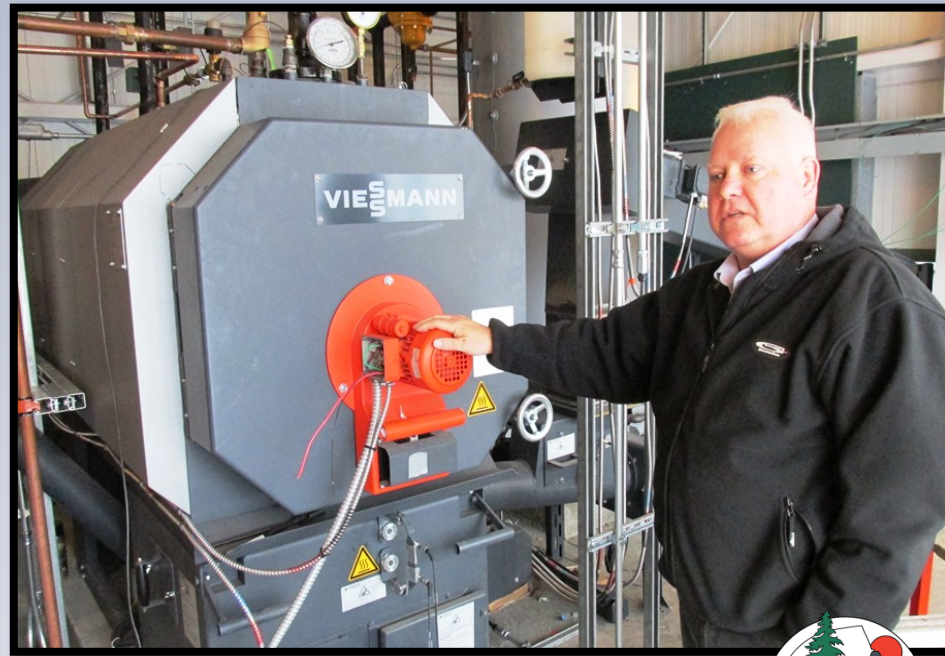


# Ketchikan Airport Pellet Fuel Heating Project

**Pellet Silo Next to Boiler Building**



**Pellet Boiler**

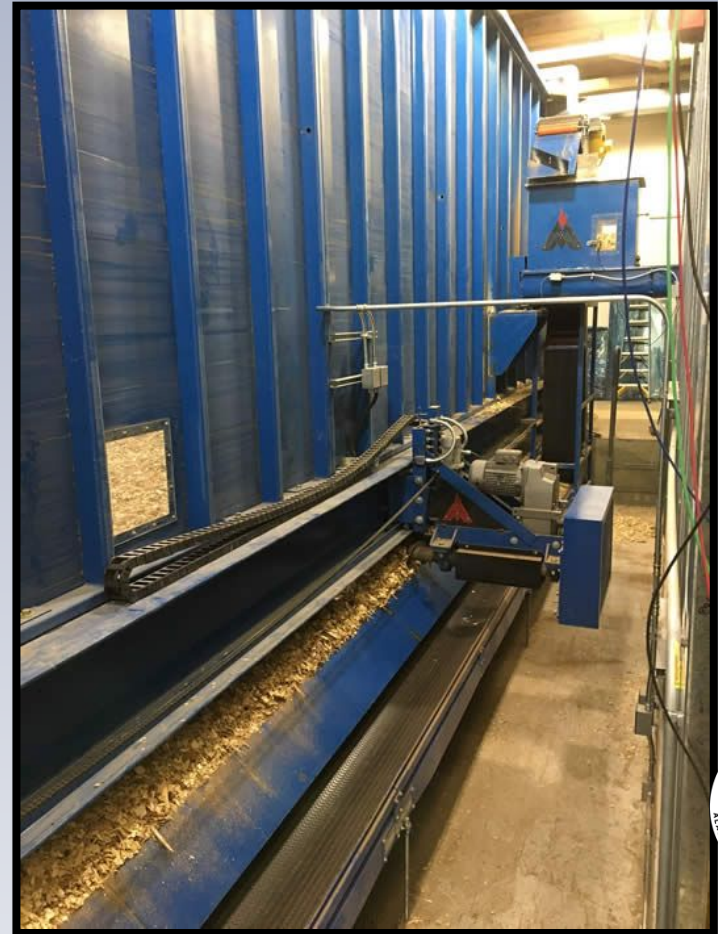


# Galena Woody Biomass Heating Project

**Wood Boiler**



**Chip Auger and Conveyor to Day Bin  
and Boiler**





# Galena Woody Biomass Heating Project

**Covered Storage for Chips**



**Timber Harvest Operations**



# Tanana Solid Wood Fuel Heating Project

**Garn Wood Fired Heating System  
Model 20000**

**Produces 450,000 BTUs per Hour  
Energy Stored in Water Jacket**






# Community Sustainability and Economy

**Tanana Resident Cuts and Hauls Wood to Sell to the City**



**Projects Create Jobs and Keeps More Dollars in the Community**





# Cross Laminated Timber (CLT)

- A Future Manufactured Product for Alaska?
- Young Growth Timber in Southeast
- Finished Buildings Asian Markets





- Significant cost savings over steel and concrete
- Environmental footprint
- Esthetics



# Seismic Test CLT 7-Story Building





# DOF Forest Health Program

## Spruce beetle efforts



**Adult spruce beetle**  
Photo: M. Schoofs, AKDOF



**A handful of spruce beetles**  
**Soldotna**  
Photo: H. Rinke, AKDOF





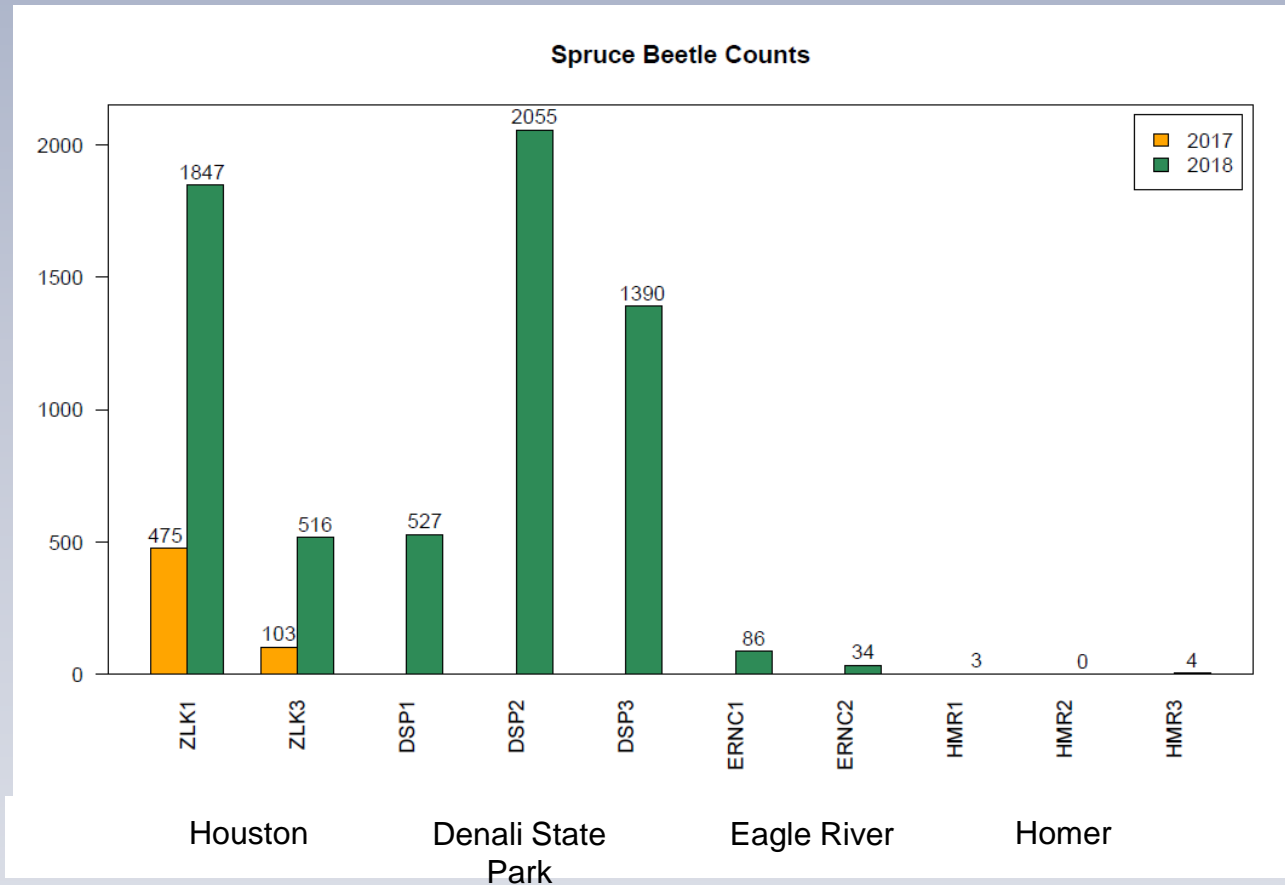
# Lindgren Funnel Trap- Population Monitoring





# DOF spruce beetle population monitoring, select locations

- Houston (2017-2018), Denali State Park (2018), Eagle River (2018), Homer (2018)



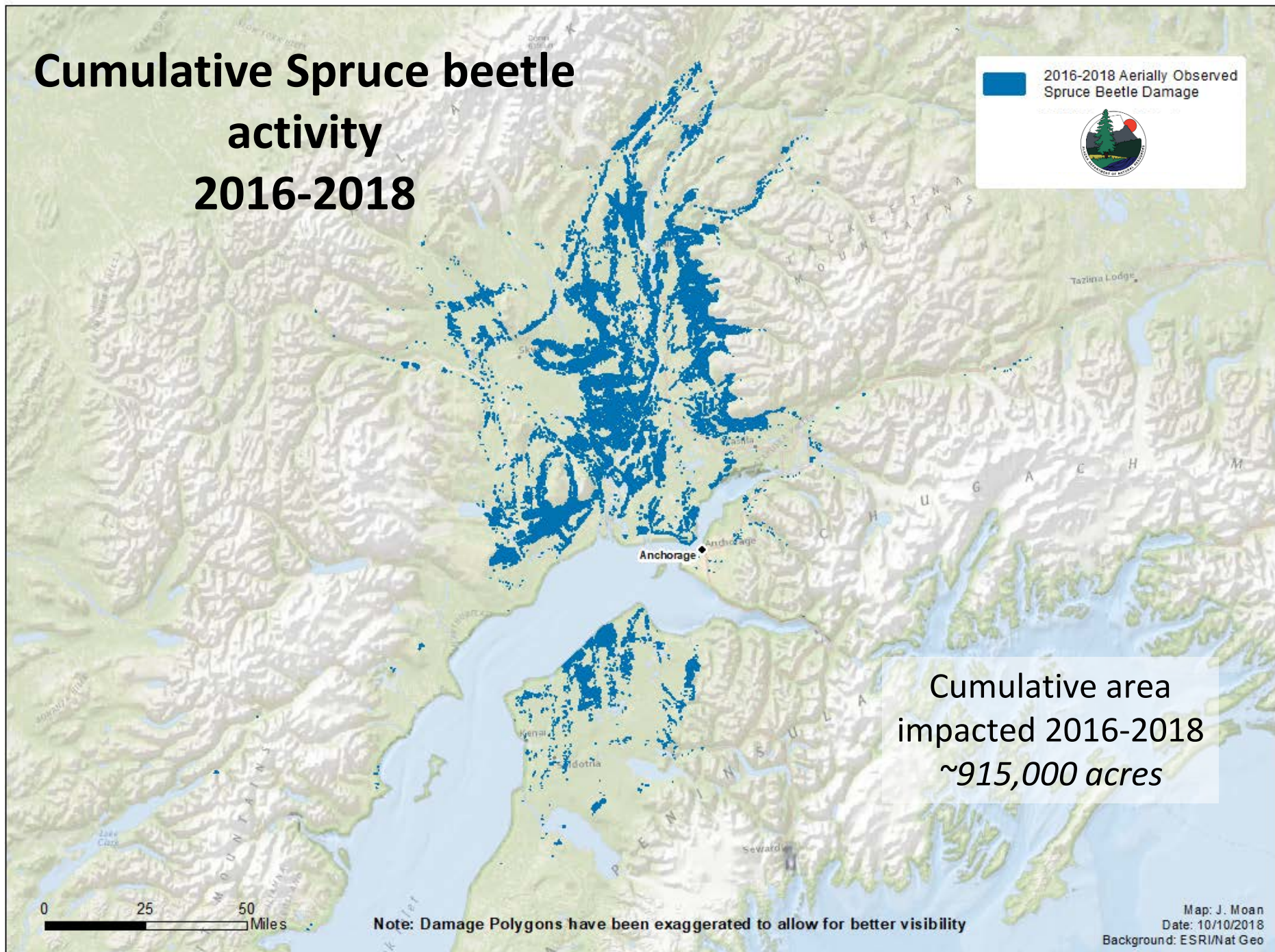
**Example of relative spruce beetle populations**

Figure: M. Schoofs, AKDOF



# Cumulative Spruce beetle activity 2016-2018

2016-2018 Aerially Observed  
Spruce Beetle Damage



Cumulative area  
impacted 2016-2018  
*~915,000 acres*

Note: Damage Polygons have been exaggerated to allow for better visibility

Map: J. Moan  
Date: 10/10/2018  
Background: ESRI/Nat Geo



# Actions Taken to Address Impacts of Outbreak

- Since 2017 the DOF has done significant outreach and education efforts with the public and communities being affected by the outbreak:
  - Public workshops held in: Palmer 2x, Big Lake 2x, Houston, Willow, Kenai 2x and Talkeetna
  - Made 19 presentations to various groups, with six more scheduled for 2019
- Working with DOP to assess and treat high priority locations (funding dependent):
  - A \$300.0 competitive grant through the Council of Western State Foresters was secured to treat DOP lands in the Soldotna area
  - Additional grants will be written for the next funding cycle in 2020 for DOP lands in the Susitna and Anchorage area
- The DOF is working to facilitate commercial opportunities to salvage large blocks of timber on state land, however the economics of such activity are marginal and to date, only preliminary interest has been expressed by two companies.

