

Alaska Energy Authority Status Update

Devany Plentovich
Program Manager

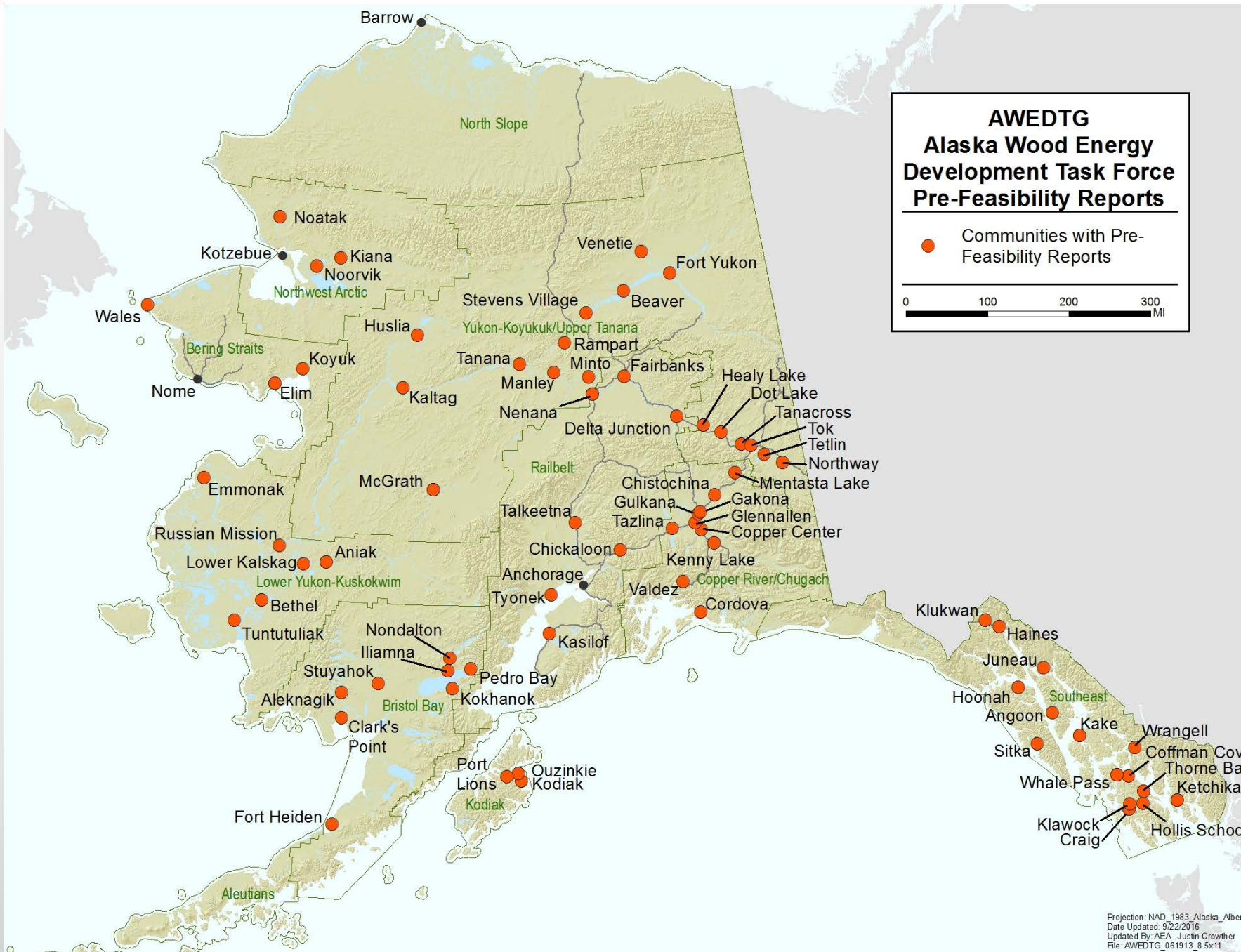
Western State Wood Energy Teams
Annual Meeting

November 14, 2017



Alaska Wood Energy Development Task Group

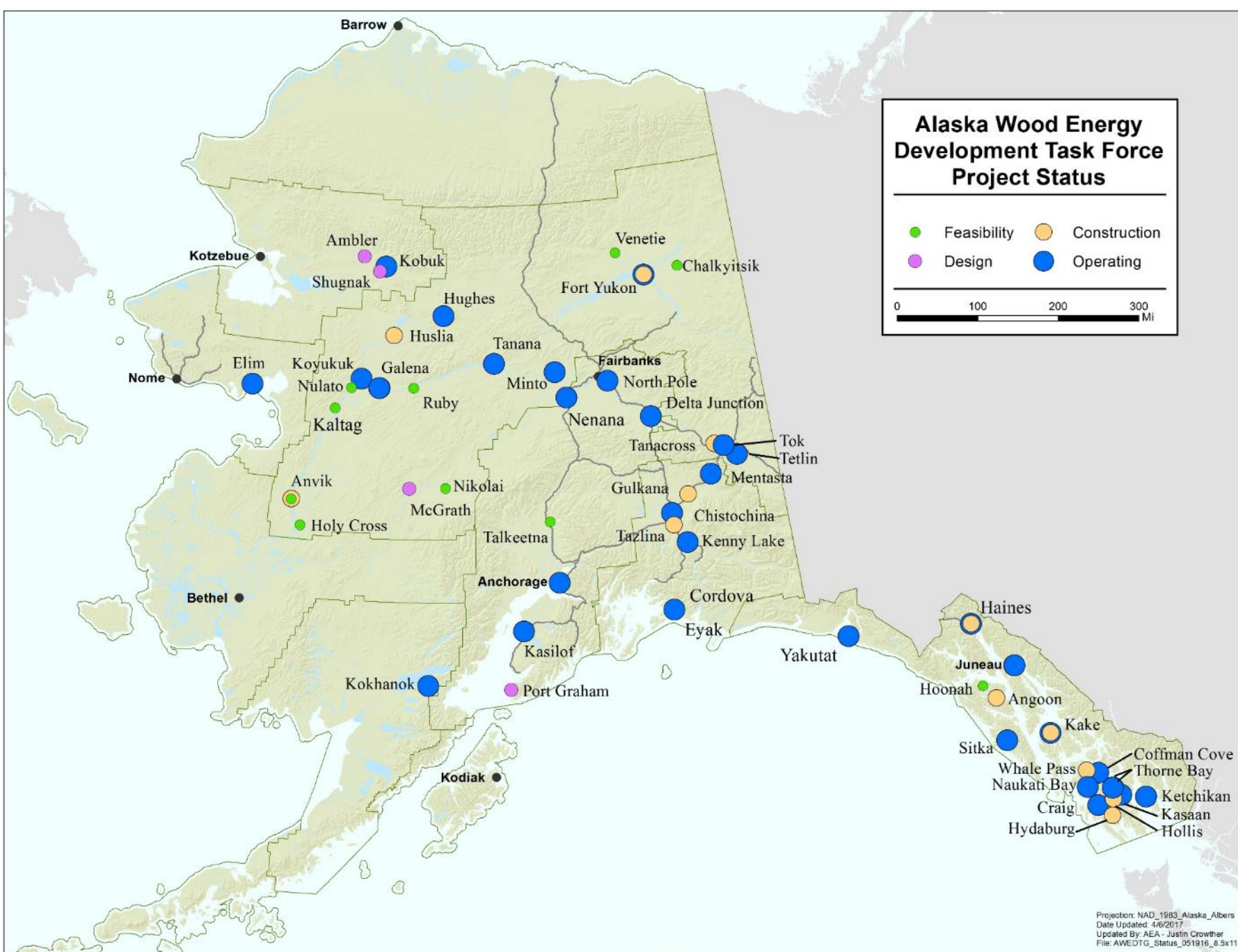
- Partnership of 20 State, Federal, Tribal, NGO
- Funded by US Forest Service and State of Alaska
- Provides 5 part-time jobs
 - University of Alaska – Fairbanks (1)
 - Southeast Conference (2)
 - AEA (2)
- Provides outreach and education to Alaska's communities
 - Technical Support provided to 35 communities
 - 20+ Site visits
 - 12+ Presentations/events



3 prefeasibility studies covering 7 different schools completed in 2017

- Fairbanks (4)
- Klukwan
- Aniak
- Kalskag

160 prefeasibility studies completed since 2005



39 Operational Systems

Wood Innovations

- 2 Design projects
 - Haines
 - Hydaburg

State of Alaska

- 1 Feasibility
- 1 Design
- 8 Design/Construction

USDA

Minto is Operational



- Heating the Lodge and Health Clinic
- Energy Efficiency Improvements
- \$303,600
- 11,000 gallons of fuel oil
- 100 Cords of wood annually

Galena Biomass is Operational



- The only remote, isolated chip system IN THE WORLD
- \$3.2 MM grant from AEA for the biomass system.
- Loans to replace the water, sewer, and fire piping. (\$4MM total)
- Displacing 220,000+ gallons of heating fuel annually in 14 buildings.
- Sustainable Energy Galena Alaska (SEGA) is the wood processor. ~1000 TPY
 - Collaboration of City of Galena, Galena Interior Learning Academy, and the Louden Tribal Council
 - 6 seasonal jobs with a payroll of \$175,000 annually
- 2 Full-time boiler operator jobs (existing) – VERY happy the steam system is gone!








2016 – 2017 Other Accomplishments

- Alaska Wood Energy Conference
 - Ketchikan, April 11 – 13
 - 125+ attendees
 - John Sigenthaler Hydronics Workshop
 - Ketchikan and POW Tours
- Biomass Fueled Greenhouse Handbook
- Small scale CHP demonstration project funded through AEA and USFS
- Community Biomass Handbook – Volume 3 – How Wood Energy is Revitalizing Rural Alaska
- Case Studies
- Quarterly Conference Calls

Save the Date!
APRIL 11-12, 2017
TED FERRY CIVIC CENTER, KETCHIKAN
OPTIONAL FIELD TRIP APRIL 12-13

 2017 ALASKA WOOD ENERGY CONFERENCE
"Chipping Away at Alaska's Energy Needs"

Registration information coming soon!

For more information, contact
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UAF is an AA/EEO employer and educational institution.

COOPERATIVE EXTENSION
UNIVERSITY OF ALASKA FAIRBANKS

2018 Goals

- Successful start-up of 6 construction projects
- Biomass Greenhouse Peer Network
- Fairbanks Pellet Demonstration Project development
- Decision Maker Tour
- Biomass Operator Training
- Alaska State Wood Energy Team Website





Photo by Chuck Berray

Alaska Energy Authority

Thank you!

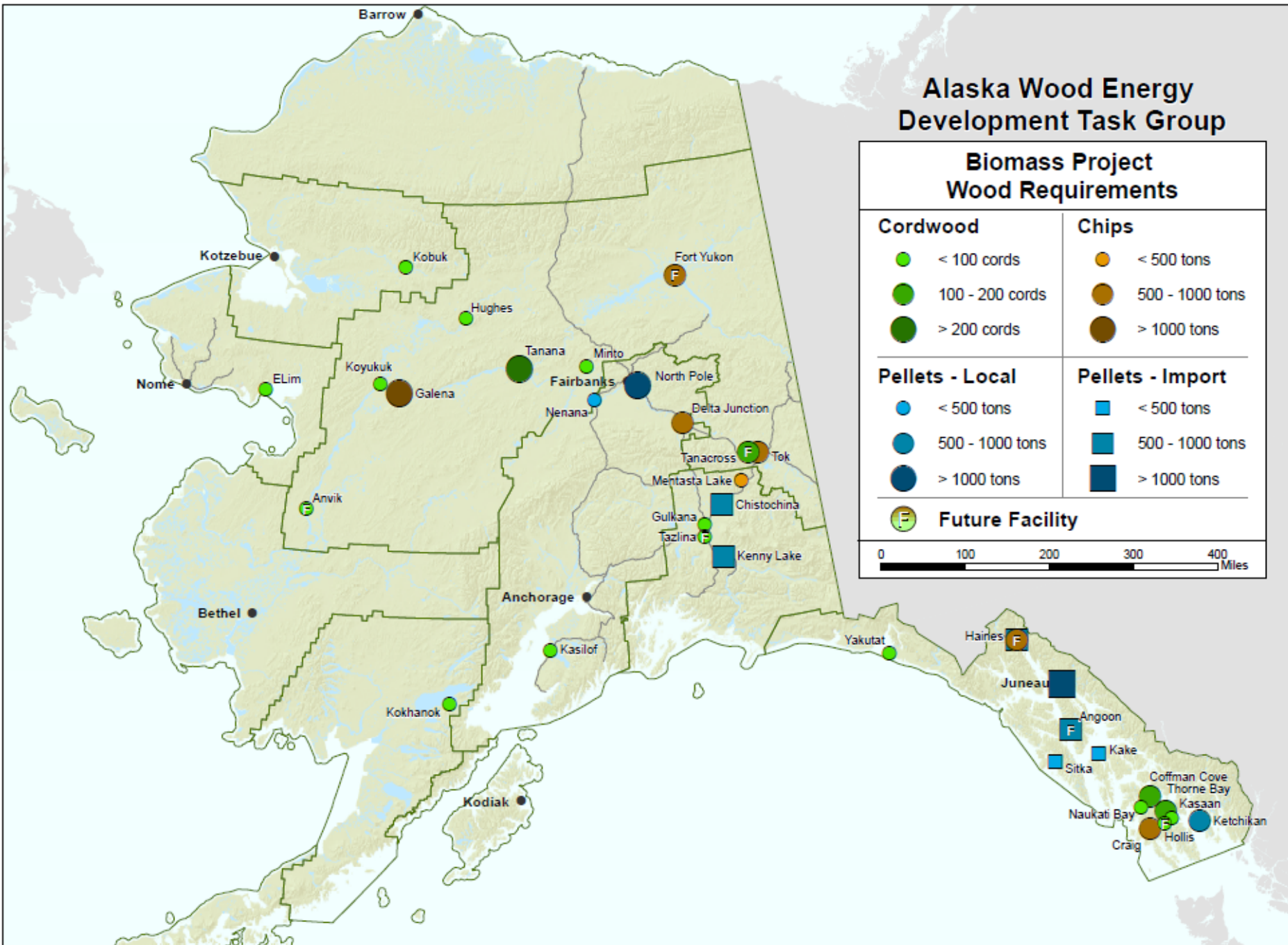


Alaska Wood Energy Development Task Group

Biomass Project Wood Requirements

Cordwood	Chips
● < 100 cords	● < 500 tons
● 100 - 200 cords	● 500 - 1000 tons
● > 200 cords	● > 1000 tons
Pellets - Local	Pellets - Import
● < 500 tons	■ < 500 tons
● 500 - 1000 tons	■ 500 - 1000 tons
● > 1000 tons	■ > 1000 tons
Ⓡ Future Facility	

0 100 200 300 400 Miles



Alaska Stats

- 39 system operational



BIOMASS-HEATED GREENHOUSES

A HANDBOOK FOR ALASKAN SCHOOLS AND COMMUNITY ORGANIZATIONS