

2022-2027 Fairbanks North Star Borough Comprehensive Economic Development Strategy

Forestry Summary

Strengths *Internal attributes that contribute to success*

Natural Resources & Environment

- Diverse recreation, cultural, and research opportunities in Tanana Valley State Forest (TVSF)
- Fungal pharmacological diversity in forests
- White spruce makes quality paper

Businesses, Organizations, & Government

- Forest management partnerships, including the TVSF Citizens Advisory Committee

Education & Workforce

- Availability of programs available to help communities install biomass; creating a locally-sourced heat source and creating local employment opportunities
- Traditional knowledge in forestry

Infrastructure

- Roads that can support both logging and recreation access

Weaknesses *Internal barriers to success*

Natural Resources & Environment

- Forests are managed for their historical uses more than for their future conditions and needs
- Long rotation of harvestable species (e.g., white spruce requires 125 years to grow from seedling to a tree with harvestable value)

Businesses, Organizations, & Government

- The region lacks sawmill operators
- Challenges with access and securing easements to access state forestry lands

Education & Workforce

- High staff turnover and loss of operational knowledge in communities installing biomass

Funding & Markets

- High energy costs create a barrier for affordable local lumber production

Infrastructure

- Limited infrastructure (roads, power), including some areas with winter-only access create challenges for accessing and harvesting forest resources

Other

- Conflicts between logging and recreation/trail users, and between different recreation users on forestry roads

Opportunities *External forces that contribute to success*

Natural Resources and Environment

- Salvage timber from disturbances (e.g., spruce bark beetles and wildfire)

Businesses, Organizations, & Government

- Apply proactive management strategies to combat landscape level change
- U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy's Conversion Research and Development Program is exploring how to improve and scale up biomass technology

Threats *External forces that could be barriers to success*

Natural Resources and Environment

- Climate change and increased wildfire risks
- Invasive species
- Loss of old growth forest
- Potential environmental impacts of logging and logging roads, including impacts on animals and insects
- Spruce bark beetle infestations

Funding & Markets

- Most lumber is imported

Where We Are	What measurements can we use to track progress? Where do we want to be in 5 years?	2027 Targets
224 (2019)	Employment – Total number of FNSB residents employed full or part time in forestry, fishing, or related activities <i>No change between 2018 and 2019</i>	235 (5% growth)
13 (2021)	Biomass Use for Energy Generation – The number of Interior Alaska communities with biomass projects installed to reduce heat (includes Southeast Fairbanks Census Area, Yukon-Koyukuk Census Area, and Fairbanks North Star Borough)	16
TBD*	Timber Sales and Harvest Data – <i>forthcoming</i>	TBD*

Sources: Employment numbers from the Bureau of Economic Analysis; Biomass installations from the Alaska Wood Energy Development Task Group projects page
TBD*: for forestry partners to identify



“Access can be a challenge. There is limited infrastructure, and some areas only have winter access.”

“We need continued forest management partnerships around shared priorities. For example, logging and recreation both need to consider fires, spruce beetles, access. Tanana Valley State Forest Citizens Advisory Committee is a positive example of collaboration.”



Forestry Objectives – Long term improvements and changes we want to see in five years or more



1. Interior Alaska forests are healthy, vibrant, and sustainably managed to support a productive balance of commercial, recreational, and personal activities.
2. Natural resources are preserved and protected for the enjoyment of current and future generations.

“We should consider establishing a Buy Local Wood program.”

“This is a working document and it’s important to acknowledge that things like harvest numbers and timber sales will change from year to year due to unknown events like wildfires. It’s important to leave room for change and adaptability.”

“We see opposition to timber harvests in areas with popular but unprotected trails.”


Strategies & Actions – Activities we will implement over the next five years to accomplish objectives & targets. See Chapter 3 for a detailed action plan.

Icon Key:  Capital Project  Military-related

1. Collaborate on Forest Management – Forestry stakeholders collaborate on management decisions. (Objectives 1, 2)

- a. Ensure that forest management activities are not excluded from the array of permitted uses within FNSB boundaries, including state forests.
- b. Encourage collaboration between user groups, including recreation user groups and subsistence users.
- c. Support continuation of existing partnerships including the TVSF Citizens Advisory Committee.
- d. Complete the update to the TVSF Management Plan.
- e. Support protection efforts such as educating visitors on Leave No Trace principles.
- f. Incorporate traditional ecological knowledge into management decisions.
- g. Encourage neighborhood-clustered development that provides open spaces for recreation, agriculture, fire protection, and efficient provision of services.
- h. Use FNSB platting authority to develop a rural road platting process to create legal emergency access to remote areas and subdivisions in FNSB.

2. Maximize Biomass Opportunities – Manage local forests to maximize long-term productivity of local biomass for heating and construction materials, to reduce threats from wildfires, and minimize environmental and community impacts. (Objectives 1, 2)

- a. Encourage Interior Alaska communities to explore wood-fired heat by conducting pre-feasibility studies, with support from the Alaska Wood Energy Development Task Group.
- b. Support communities with wood-fired heating systems with ongoing training and professional development for operators. 
- c. Proactively identify areas with high wildfire risk and support strategic fuel removal.
- d. Increase biomass education and awareness.
- e. Update the FNSB Community Wildlife Protection Program.

- 3. Develop Local Wood Products** – Develop and promote local wood products (e.g., furniture manufacturing and forest products). (*Objective 1*)
- Update the 2007 publication, “New Growth: Prospectus for Forest Products Industry of Interior Alaska,” summarizing the region’s timber potential and sale details for potential investors.
 - Create a Buy Local wood program.
 - Develop a wood grading system and certifying lab for local materials. 🔑
 - Increase food forests and commercial research into forest resources. 🔑
 - Increase sawmills in the region by providing education and training for sawmill operators, creation of a directory of local sawmills, and explore creation of a community sawmill. 🔑
 - Review liability insurance policies and facilitate a FNSB timber sale.

Other Relevant Resources

- FNSB Climate Action and Adaptation Plan.** Fairbanks North Star Borough. In progress. [View here.](#)
- Map of the Tanana Valley State Forest.** Alaska Department of Natural Resources Division of Forestry. December 2021. [View here.](#)
- 2020 Forest Action Plan.** Alaska Department of Natural Resources Division of Forestry. December 2020. [View here.](#)
- New Growth Prospectus for the Forest Products Industry of Interior Alaska.** State of Alaska. March 2007. [View here.](#)
- Tanana Valley State Forest Management Plan Revision.** Alaska Department of Natural Resources Division of Forestry. Current plan updated in 2001; update in progress. [View here.](#)
- Alaska Timber Jobs Task Force Report (2012) and Status Update (2018).** Alaska Department of Natural Resources Division of Forestry. [View here.](#)



Forestry Action Plan

See Appendix A for a list of acronyms.

Strategy #1: Collaborate on Forest Management – Forestry stakeholders collaborate on management decisions.

Capital Project?	Action	Lead	Support	Estimated Resources	Target Completion
	a. Ensure that forest management activities are not excluded from the array of permitted uses within FNSB boundaries, including state forests.	FNSB	Alaska Division of Forestry, TVSF Citizens Advisory Committee	n/a	Ongoing
	b. Encourage collaboration between user groups, including recreation user groups and subsistence users.	Alaska Division of Forestry	TVSF Citizens Advisory Committee, Alaska Division of Forestry	n/a	Ongoing
	c. Support continuation of existing partnerships including the Tanana Valley State Forest (TVSF) Citizens Advisory Committee.	Alaska Division of Forestry	TVSF Citizens Advisory Committee	n/a	Ongoing
	d. Complete the update to the TVSF Management Plan. Learn more here.	Alaska Division of Forestry	TVSF Citizens Advisory Committee, FNSB, Tanana Chiefs Conference (TCC), Doyon	unknown	Fall 2022
	e. Support protection efforts such as educating visitors on Leave No Trace principles.	Alaska Division of Forestry	Explore Fairbanks, TVSF Citizens Advisory Committee, TCC	n/a	Ongoing
	f. Incorporate traditional ecological knowledge into management decisions.	Alaska Division of Forestry	TVSF Citizens Advisory Committee, TCC	n/a	Ongoing
	g. Encourage neighborhood-clustered development that provides open spaces for recreation, agriculture, fire protection, and efficient provision of services.	FNSB	Alaska Division of Forestry	n/a	Ongoing
	h. Use FNSB platting authority to develop a rural road platting process to create legal emergency access to remote areas and subdivisions in FNSB.	FNSB		n/a	Ongoing

Strategy #2: Maximize Biomass Opportunities – Manage local forests to maximize long-term productivity of local biomass for heating and construction materials, to reduce threats from wildfires, and minimize environmental and community impacts.

Capital Project?	Action	Lead	Support	Estimated Resources	Target Completion
	a. Encourage Interior Alaska communities to explore wood-fired heat by conducting pre-feasibility studies, with support from the Alaska Wood Energy Development Task Group.	Alaska Wood Energy Development Task Group	Municipalities, Tribes, Department of Energy (DOE)	Varies	Ongoing

Capital Project?	Action	Lead	Support	Estimated Resources	Target Completion
✓	b. Support communities with wood-fired heating systems with ongoing training and professional development for operators.	Alaska Wood Energy Development Task Group	UAF, ANTHC, TCC, Doyon, Village Corporations	Varies	Ongoing
	c. Proactively identify areas with high wildfire risk and support strategic fuel removal.	Alaska Division of Forestry	TCC, Doyon, Village Corporations	Varies	Ongoing
	d. Increase biomass education and awareness.	Alaska Wood Energy Development Task Group	FEDC, Alaska Division of Forestry	Varies	Ongoing
	e. Update the FNSB Community Wildlife Protection Program.	FNSB	TBD	TBD	TBD

Strategy #3: Develop Local Wood Products – Develop and promote local wood products (e.g., furniture manufacturing and forest products).

Capital Project?	Action	Lead	Support	Estimated Resources	Target Completion
	a. Update the 2007 publication, “New Growth: Prospectus for Forest Products Industry of Interior Alaska,” summarizing the region’s timber potential and sale details for potential investors.	FEDC	Alaska Division of Forestry, Alaska Resource Development Council	TBD	TBD
	b. Create a Buy Local wood program.	TBD	FEDC	TBD	TBD
✓	c. Develop a wood grading system and certifying lab for local materials.	CCHRC	TBD	TBD	TBD
✓	d. Increase food forests and commercial research into forest resources.	Chaga Co-operative LLC	TBD	TBD	TBD
✓	e. Increase sawmills in the region by providing education and training for sawmill operators, creation of a directory of local sawmills, and explore creation of a community sawmill.	TBD	Alaska Resource Development Council, FEDC	TBD	TBD
	f. Review liability insurance policies and facilitate a FNSB timber sale.	FNSB		TBD	TBD