



# *Wood 'N' Ice*

*Presentation to the  
YK Energy, Environment, Economic Work Session*

*Bethel, Alaska August 6-7, 2019*

*Bringing our People, our local resources, and our natural environment together for:*

- *Economic Development*
- *Affordable Energy Alternatives*
- *Affordable Housing Alternatives*
- *Cheaper Transportation*



***Always with a focus on our Young People!***



According to 2010 Census data, the median age is 26.2 years in the Bethel Census Area and 21.9 years in the Kusilvak Census Area, significantly younger than the statewide median age of 34 years. Over 50% of the People in our region are under the age of 25.

*Our Region - The Lower & Middle Kuskokwim:  
Over 15,000 People connected by over 250 miles of ice road and winter trails - a  
region badly in need of economic development, affordable energy, affordable  
housing, and cheaper transportation*



***These ice roads and winter trails are our highways – our  
only highways - and they need to be treated as such with  
stable funding for annual establishment & maintenance***

# *Our People:*



*Chuathbaluk*

*Aniak*

*Napaimute*

*Kalskag*



# ***Our Local Resources - Wood:***

***Economic Development***

***Affordable Energy Alternatives***

***Affordable Housing Alternatives***

***A product of the Native Village of Napaimute in cooperation with the Kuskokwim Corporation & the villages of Upper & Lower Kalskag***

***\*Napaimute means: The People of the Trees***



***Napaimute Enterprises, L.L.C. is a tribally-owned subsidiary of The Native Village of Napaimute***

**Well Established Experience with Middle Kuskokwim Wood and Getting it to the Lower River Market:  
Napaimute's Wood is sold throughout the region**



**Wood for Tuntutuliak, Kasigluk, Kipnuk, Newtok & Toksook Bay**



**Wood enroute to Kipnuk & Kwigillingok**





2017  
Coming Full Circle:

*Through ICDBG Economic Development funding we are now expanding our firewood business into a commercial sawmill operation that will work to produce affordable lumber and housing packages in conjunction with providing additional employment opportunities for the region.*

*Thanks to HUD and the ICDBG program for this support!*

# Yukon-Kuskokwim Region Comprehensive Economic Development Strategy 2018 – 2023 :



## Housing

Lack of affordable housing in the Y-K region remains an ongoing challenge for regional residents and employers.

One of the barriers to meeting demand for housing is the high cost of construction: houses in the region are expensive to build, averaging \$420,000 per unit; about \$150,000 of this cost goes toward logistics and freight. In addition, there is minimal private sector investment in housing due to a combination of high construction costs, low wages, and limited access to land and financing.

## Timber

The Y-K region has limited forestry resources throughout the area, including white and black spruce and areas of birch. The timber industry, while currently modest in size, has potential to expand to reduce heating and building costs in the Y-K region. The Native Village of Napaimute operates a successful, growing timber harvest near Kalskag; they are purchasing a sawmill and hope to increase firewood sales and produce lumber for home construction, and are also working on a reforestation effort to support long-term sustainability of the resources.



**AVCP Regional Housing Authority only receives enough funding to build 15 houses in the region per year. Over 3,000 units are needed.**

***“It will take us 200 years to meet the housing needs in our region”***

**Mark Charlie, President/CEO AVCP-RHA  
In his address to the 2018 AVCP Convention**

# The Long Road to Completion: Saw Mill Update

- 1) Winter 2016-17 the Nelson Brothers Sawmill and associated infrastructure at Chuathbaluk is disassembled & transported via the ice road 40 miles downstream to our timber harvest site near Kalskag
- 2) 2) Summers of 2017 & 18 the sawmill is reassembled on a new welded steel foundation that sits on a raised earthen pad. Also a new office is built. The mill is used initially to produce lumber for the reassembly



***Completed sawmill funded through the Indian Community Development Block Grant (ICDBG)***

***The mill has been working steady throughout the spring and summer of 2019 producing lumber and cabin packages***



# *Our Environment ~ Ice:*

*Our Tradition:  
marking the beginning of Upriver Ice Road Route 1  
with a spruce tree*



# *“Working together so others may live”*

*10:25 AM, December 21, 2016 – the shortest day of the year – temperature minus 10 – Middle Kuskokwim Tribal Transportation Safety crew installs ice road markers in the growing light*



*Moving our newly acquired sawmill 40 miles from Chuathbaluk to the Kalskag Timber Harvest Site*



*Moving firewood to the Lower River*



***The Ice Gives Us  
Economic Development  
Opportunities &  
Cheaper Transportation***





DANGER  
GO SLOW →



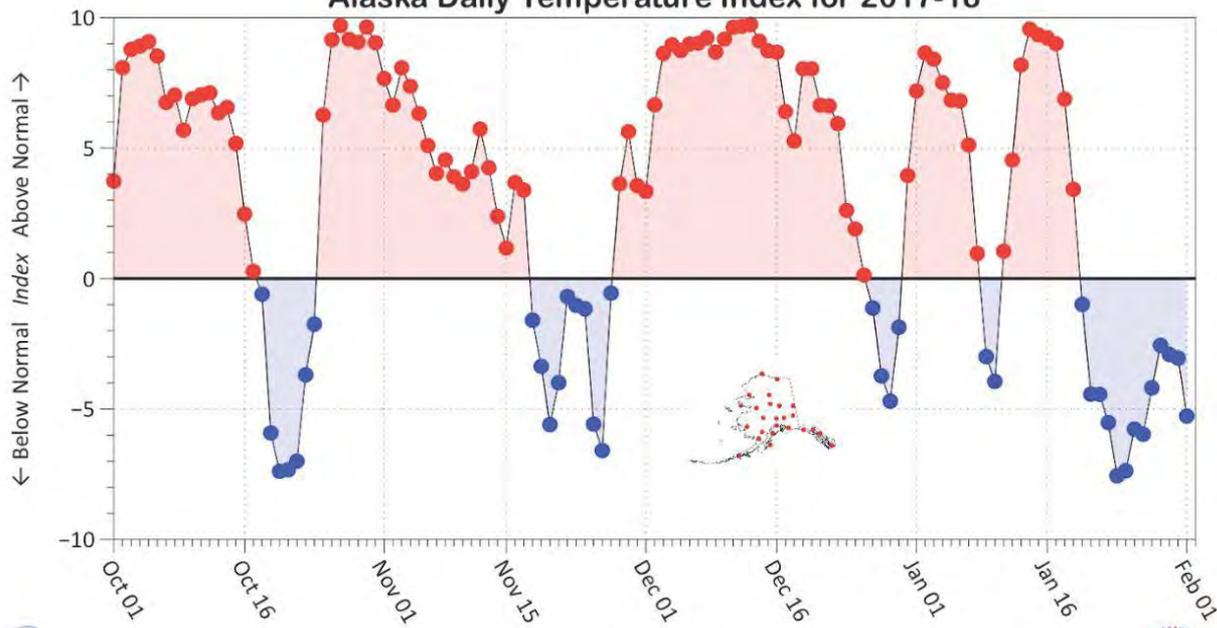
*Mile Post 110 along Upriver Route 2 – between Kalskag & Aniak  
Near Nulluq Hill*



*All the Good People that help us do  
what we do*



# Alaska Daily Temperature Index for 2017-18



Based on 25 state-wide locations  
1981-2010 reference period



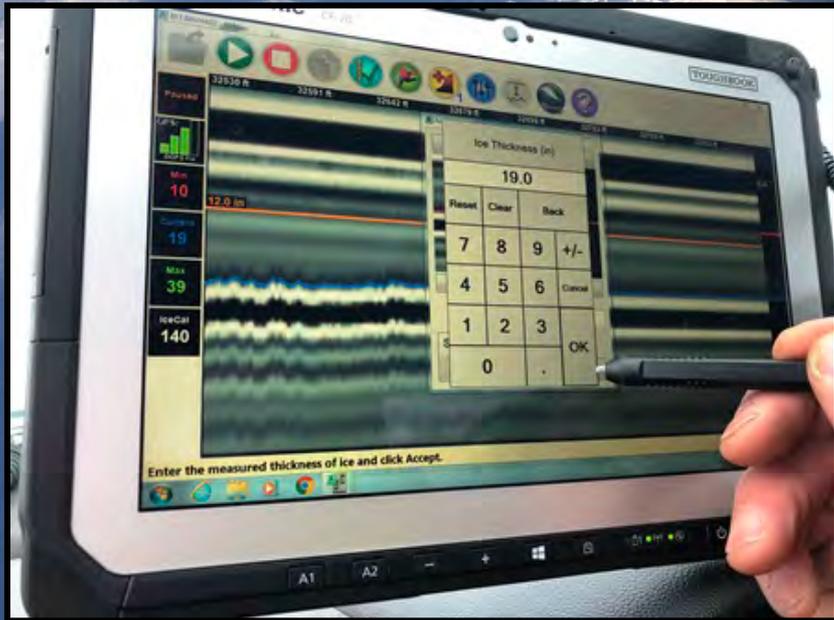
IceMap SmartTow™

# New for the Kuskokwim Ice Road in 2018-19

*NVN Tribal Transportation Program has invested in Ice Penetrating Radar with the goal of developing a smart phone application that can be used by anyone to check on current ice road conditions. This technology is already being used extensively in Canada and on Alaska's North Slope*



*Combining Traditional Knowledge & New Technology to Adapt Our Winter Travel Strategies to the Changing Climate*





*The Next Step  
for Us  
&  
The Final Piece  
of the Puzzle:*

*ownership and operation of  
a small freight vessel similar  
to the one in this picture  
made possible through:*

*The U.S. Department of Commerce  
Economic Development Administration  
Economic Adjustment Assistance  
Program*

A photograph of a weathered, split log lying horizontally. The log is heavily textured with deep grooves and a greyish-brown patina. In the foreground, several vibrant green plants, including a prominent one with large, pointed leaves, are growing from the base of the log. The background shows more of the log and some green grass. The entire image is framed with a dark, rounded border.

*Thank you for  
coming!*