



Wood 'N' Ice

*Presentation to the
Alaska - Yukon Wood Energy Conference*

Fairbanks, Alaska April 16, 2019

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

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

*This Presentation is Dedicated to
the Memory of:*

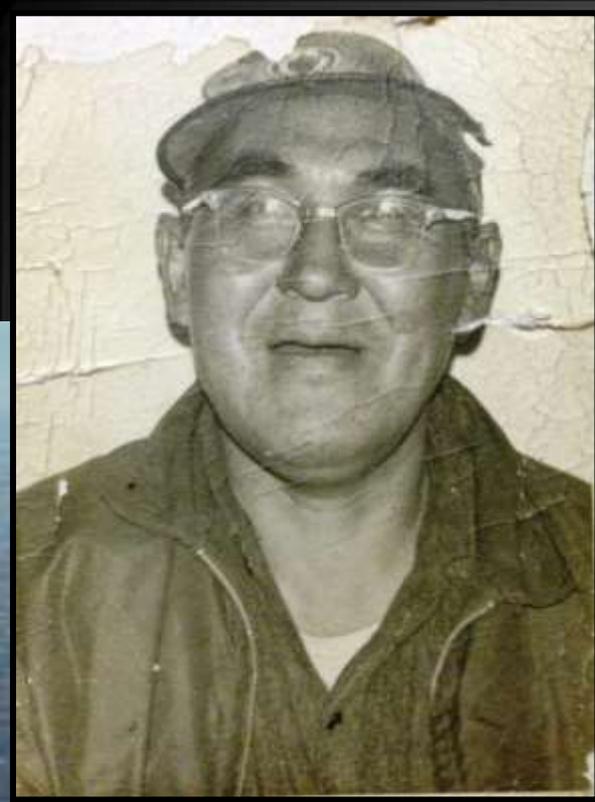




*Richard
"Dick"
Nash
Legendary
Middle
Kuskokwim
Trail & Ice
Road
Pioneer*

John "Coffee" Smith

This bend in the River is named after him. This bend likes to give us a hard time during break up, freeze up, and winter snow storms





*Joe Simeon
Lower
Kalskag
Trail Crew*



Oscar Samuelson, Jr.

We have lost two of our young employees to suicide during the off season. We strongly believe that employment ~ some thing to do, something to get up in the morning for is a key part of suicide prevention.

We continue to strive to provide year round employment for our People through the combination of Ice & Wood

*This Presentation Brought To
You By:*



*“Mad Max” – our 52 year old
plow truck,*



*the Middle Kuskokwim Road
Warriors,*



the NVN-KLG Timber & Trail Crew,



And the Napaimute Traditional Council!

L-R: President Devron Hellings, Vice President Marcie Sherer, Member Audrey Leary, Member Rachelle Rohde, Secretary Shelly Leary

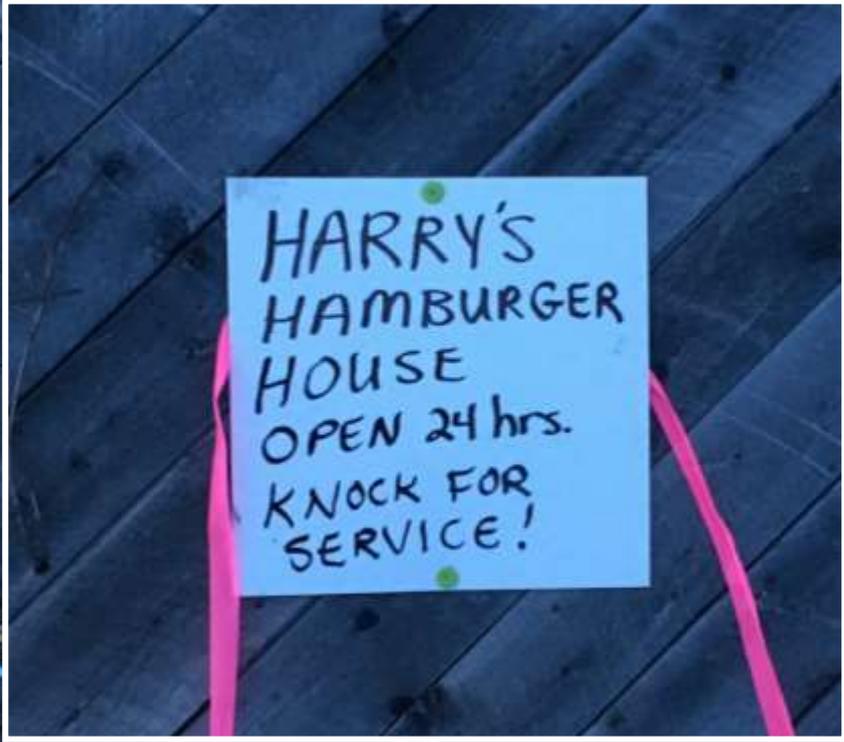
With additional sponsorship from:





Best pizza on
the Kuskokwim!

Aniak's Hound House Restaurant - Ester Diehl, Proprietor,



Murphy's Law, Inc. – "If anything can go wrong – it will"

Our trailer cracked. We left it sitting on the ice road for a couple of weeks below Aniak until we had time to repair it.

G.I. Joe's W.W. II Surplus!



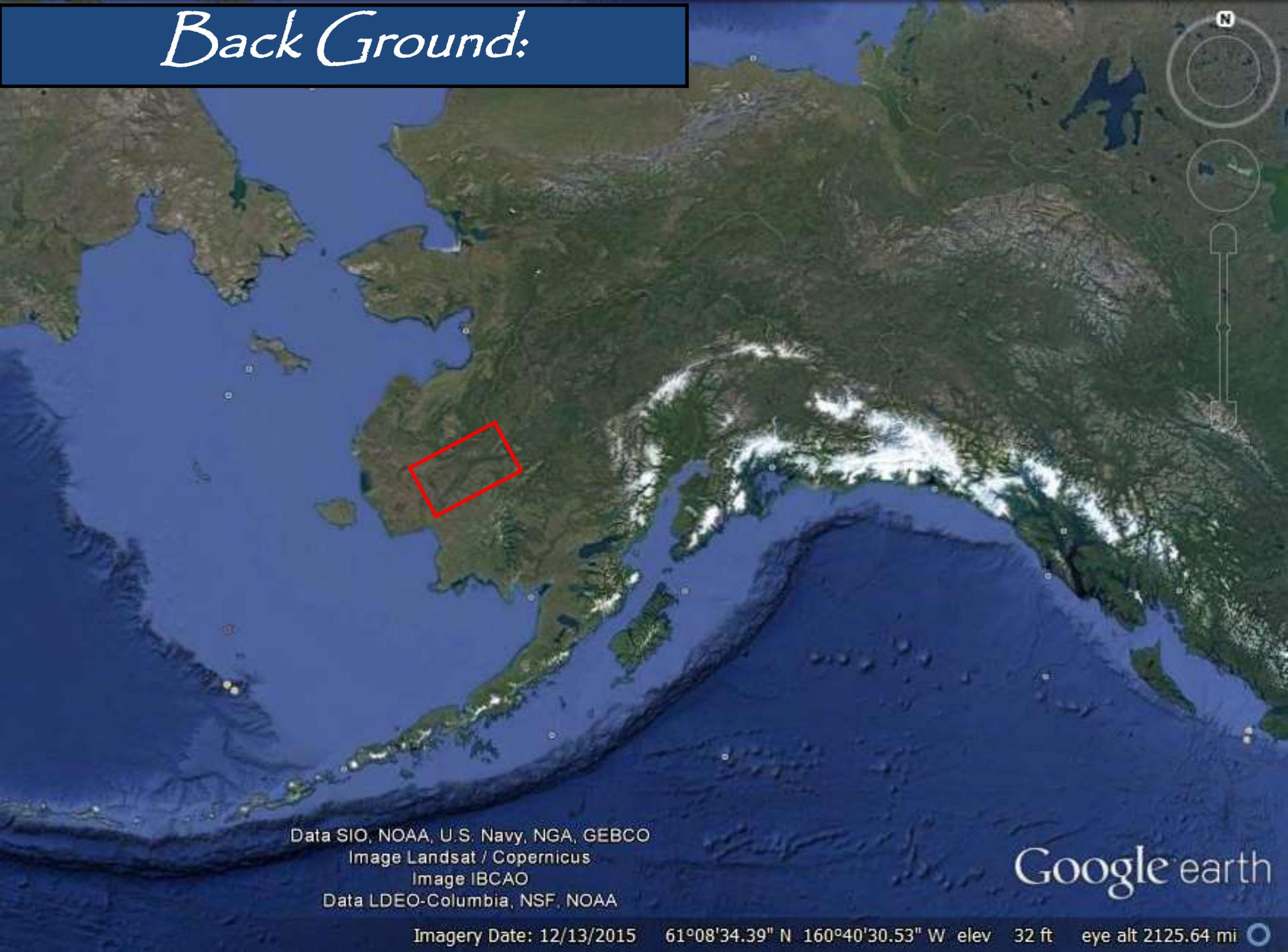


*Grey, Black, Green, & Brown Carhartt Jackets!
Also Wood's Logging & Industrial Supply,
Longview, Washington*

And Maqista's Hot Houses - "Hottest Steambaths on the Kuskokwim!"



Back Ground:



Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus
Image IBCAO
Data LDEO-Columbia, NSF, NOAA

Google earth

Imagery Date: 12/13/2015 61°08'34.39" N 160°40'30.53" W elev 32 ft eye alt 2125.64 mi

*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***

*They connect villages from
Nunapitchuk to...*



...Napaimute & beyond



Our People:



Aniak

Chuathbaluk

Napaimute

Kalskag

Joey Evan



Tim Alexie



Captain Allen Simeon



General Oscar Samuelson





Walter Morgan, Ken Morgan,
Stiffa Kameroff



Ice Road Chief In-Training: Nickolai Savage





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's
Background in Working
with Wood:*



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



***Napaimute Enterprises is a tribally-owned
subsidiary of The Native Village of
Napaimute***



Wood Gathering in the 1940's: Napaimute's leadership has always looked back to help us remember where we come from & to plan where we want to go in the future....

(photo used permission of Placid C. Joseph, Sr.)



In earlier times our wood resources were more heavily utilized not only for firewood but also for building homes, as fuel for steamboats and for locally produced lumber. There was even a sawmill at Bethel!





Log A.C. Store at Aniak



Steam powered sawmill



Log Post Office at Napaimute



Steamboat at McGrath with cordwood on deck



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.

Napaimute Community Plan



Prepared for:

Native Village of Napaimute

Prepared By:

ASCG Incorporated

June 2004



In Planning for our Community & Economic Development, Napaimute's Leadership has long recognized that our wood resources will play a key role...



Bringing out logs from cutting site



Delivering the logs to Napaimute



Logs await use along the Kuskokwim River bank



The State granted the Tribe a timber-cutting permit at this site 3 1/2 miles from Napaimute

Timber Sales

The Tribe has obtained a timber permit to harvest trees on State land located near Napaimute. The timber is intended to be used for local Tribal building projects. In the future, timber could be sold for other purposes. The Tribe is also considering applying to the Kuskokwim Corporation for rights to harvest timber on Corporation lands.

Lodging

The Tribe has a rental unit for visitors. Opportunities exist to build additional rental units or a lodge to accommodate tourists.

...these pages from the Napaimute Community Plan (2004) support that recognition.

- Mineral/Oil - Exploration and Development
- Sawmill Business - produces lumber and cabin packages for local use. There is also the potential for firewood sales to down-river communities.
- Consulting - various Tribal members have training and technical expertise that can be marketed.
- Environmental Oversight - with development occurring nearby, such as the proposed dock downriver from Crooked Creek and road from there to Donlin Creek Mine, Napaimute is uniquely situated to act as an environmental "watchdog" for the region, monitoring water quality and other related issues.

Just as communities along Alaska's highway system serve the needs of highway travelers, Napaimute proposes to serve the needs of travelers along the Kuskokwim River. The River links the area's communities providing the potential for a customer base of several thousand. Already, the fuel and snack food store serve these travelers. As the community grows, so will opportunities to tap into this market.

We have also been well aware of the historical demand for firewood in the Lower Kuskokwim River



Milling lumber for the Napaimute storage building



Logs for the multipurpose building wait in the staging area at the sawmill

But we had no idea what the true demand was!



Napaskiak

2005, Airport Site Before...



In further support of maximum use of our wood resources, all usable timber from community development projects is salvaged and stockpiled



Salvaging & Stockpiling Timber

100% tribally constructed airfield



...and After, 2007



Napaimute's Early Attempts at Meeting the Demand for Firewood in the Lower Kuskokwim



In 2008, with the key components of a successful firewood business in place, Napaimute forms the first organized firewood business on the Kuskokwim River:



Firewood Packages Now Available for 2010 Fall Delivery!

Cut, Split, & Palletized – Spruce & Birch

**For more information or to place an order call: (907)222-5058/222-6084 or 543-2016 (message)
email: napaimute@gci.net**

**Brrr – It's getting cold!
Don't forget to order your
firewood from Napaimute
Enterprises.**



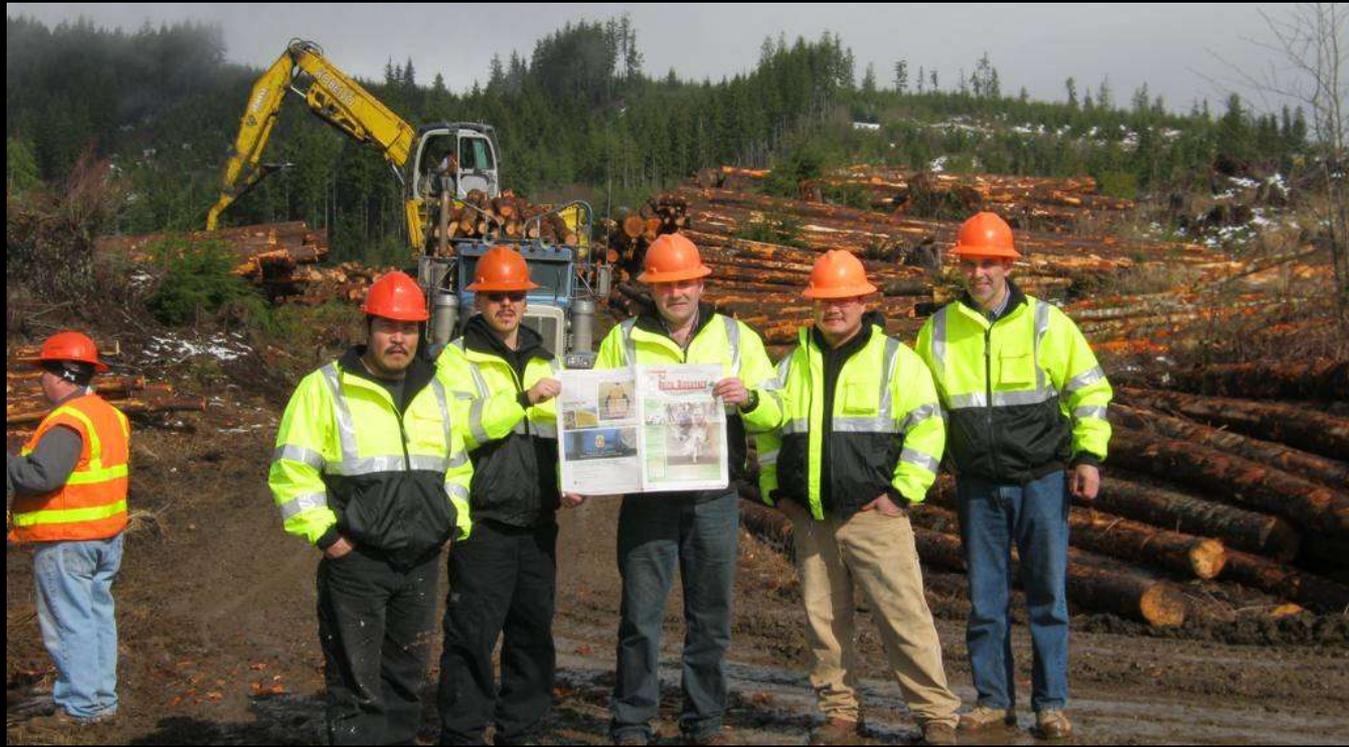
A product of Napaimute Enterprises, LLC (a tribally-owned business):

A Big Step: signing our life away at the bank



2012 Napaimute Timber Harvest ~ a 1,000 cord contract with CVRF -
the largest single timber harvest ever conducted on the Kuskokwim River:

Harvester Training in Washington



What did we learn from this high volume timber harvest at Napaimute?

- The expenses of operating from Napaimute are too high to sustain this opportunity for the Middle Kuskokwim over the long term*
- No permanent population to draw from for employees. Must bring employees in from neighbor villages and provide food, housing, and transportation - a very big expense*
- No regular air service. When ever we need parts, supplies, etc. have to go to Aniak by boat or snow machine*
- Distance from the Lower River & Coast Market is too far. Transportation is too high*

What Did We Need to Do to Keep this Opportunity for the Middle Kuskokwim People Alive?

- Move Closer to the Market (move down river)*
- Move Closer to a Full-time Community (where employees can go home at night and we can get fuel/supplies easier)*



Exploring All Options:

We worked with State and BLM Foresters to see what other areas are available for timber harvest closer to Kalskag and the Lower River Market

There is no BLM land available that is close to the River



There are two small parcels of State land near Kalskag, but they don't have much timber on them

The only available land that can be used to develop a sustainable Middle Kuskokwim Timber Industry is Kuskokwim Corporation Land



TIMBER SALE AGREEMENT

by and between
The Kuskokwim Corporation
and
Napaimute Enterprises LLC

This Timber Sale Agreement (herein, this "Agreement"), is made as of the ^{20th} day of ~~November~~ 2012 (the "Effective Date"), between The Kuskokwim Corporation, an Alaska corporation ("Seller"), and Napaimute Enterprises LLC, an Alaska limited liability company ("Purchaser") (collectively "the Parties").

RECITALS

WHEREAS, Seller owns certain merchantable timber located on property near Lower Kalskag, Alaska; and

WHEREAS, Purchaser is engaged in the business of acquiring timber, for harvesting, and marketing logs, firewood and related products; and

WHEREAS, Seller desires to sell and Purchaser desires to harvest and purchase such timber, subject to the terms and conditions hereof.

NOW THEREFORE, in consideration of the mutual promises and covenants herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Seller and Purchaser agree as follows:

1. Definitions. For purposes of this Agreement, unless the context clearly indicates otherwise, the following terms shall have the following meanings:

"Cultural Resources" means archaeological, historical or cultural sites and resources.

"Effective Date" is defined in the initial paragraph of this Agreement.

"Environmental Contamination" means contamination or pollution resulting from the Release of a Hazardous Substance.

"Hazardous Substances" means any hazardous substances or materials (as defined in Alaska Statutes 46.03.826 and 46.08.900 and in 42 U.S.C.A. § 9601-9657 (CERCLA) and in 40 C.F.R. part 302, as such statutes and regulations may be amended from time to

*Life Gets
Complicated:*

*27 page
Timber Sale
Agreement
between NVN
& TKC*

Drift

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Joey Davis with a pine cone seed pod for our Middle Kuskokwim Land Bank

Napaimute brings new industry, reforestation to the TKC Region

From the salmon running up our rivers, the moose foraging in our lands and the berries bursting from the tundra, people in the Middle Kuskokwim have long recognized the value of our natural resources. Our land is rich with resources and there are many opportunities to utilize these gifts if we exercise balance. With this spirit of understanding, the Native Village of Napaimute (NVN) discovered the benefit of wood resources to the development of economic opportunities for the Middle Kuskokwim and has used this resource to bring industry and reforestation to the area.

This economic opportunity started at a small sawmill and has since evolved into a timber harvesting project that has brought jobs, industry and affordable housing to our region. It has also led to a first of its kind reforestation program, a partnership between NVN, TKC and the Natural Resources

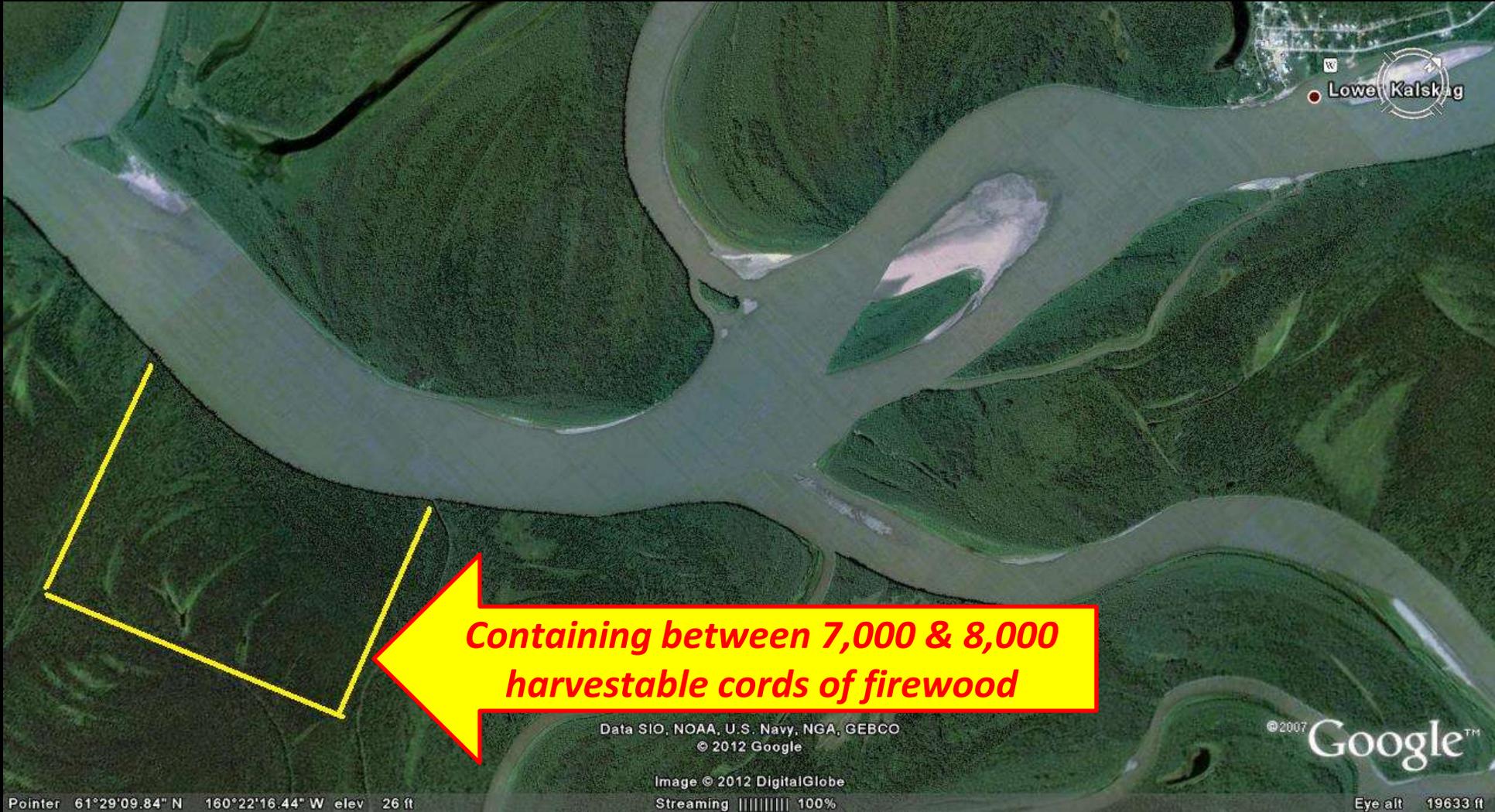
Conservation Service (NRCS), that will allow the seeds of the original forest to be harvested and used to plant new trees on TKC land. At the forefront of every decision on this project is the belief that the region's resources are meant to be managed to benefit The Kuskokwim Corporation (TKC) Shareholders while also protecting the environment.

When you look around the village of Napaimute, nearly all of the tribal buildings and homes have been built with the assistance of a small sawmill owned by the tribe. It is also used annually to fill small lumber orders in a weak attempt to meet the demand for locally produced lumber. This was the beginning of the project. For more than a decade, we focused on this most basic use of our Middle Kuskokwim wood

Continued on next page »

Including the requirement for stumpage fees, bonding, several types of insurance and reforestation work

This is the new timber harvest site 70 miles downstream that we moved to in 2013:



Containing between 7,000 & 8,000 harvestable cords of firewood

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
© 2012 Google

Image © 2012 DigitalGlobe
Streaming ||||| 100%

© 2007 Google™

Pointer 61°29'09.84" N 160°22'16.44" W elev 26 ft

Eye alt 19633 ft

February 2013: we move our timber harvest operation 70 miles down the River from Napaimute to below Kalskag. A journey that took 5 days





Convoy

Joey moves the 50,000 pound harvester to the site and...



We get back to working with wood!



Bruce Waskey on the firewood processor



*Constantine
Gregory*





Kevin Pitka







**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







Firewood,
firewood, always
firewood! – I wish
we could do
something else
with our wood



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 – 2022



Housing

Lack of affordable housing
and employment

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

for regional residents

One of the
the region are
toward logistics and
due to a complex
financing

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

houses in
of this cost goes
housing

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

Timber

The Y-K region has limited forestry resources through the area, including white and black spruce and areas of birch. The timber industry, while 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 business near Kalskagan; 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.







SCENIC VIEW



The Long Road to Completion: Saw Mill Update





Spring 2018 :

*working on the
log infeed system*



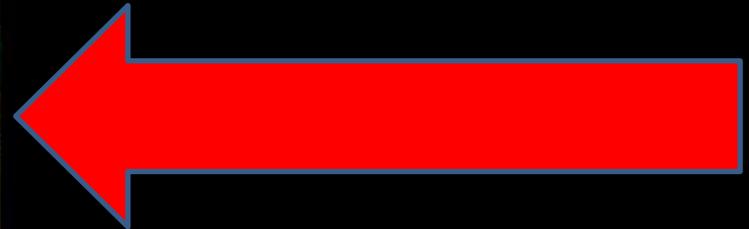


***Getting the outfeed properly aligned
and leveled***

*Starting to
look like a
saw mill*



Test cuts

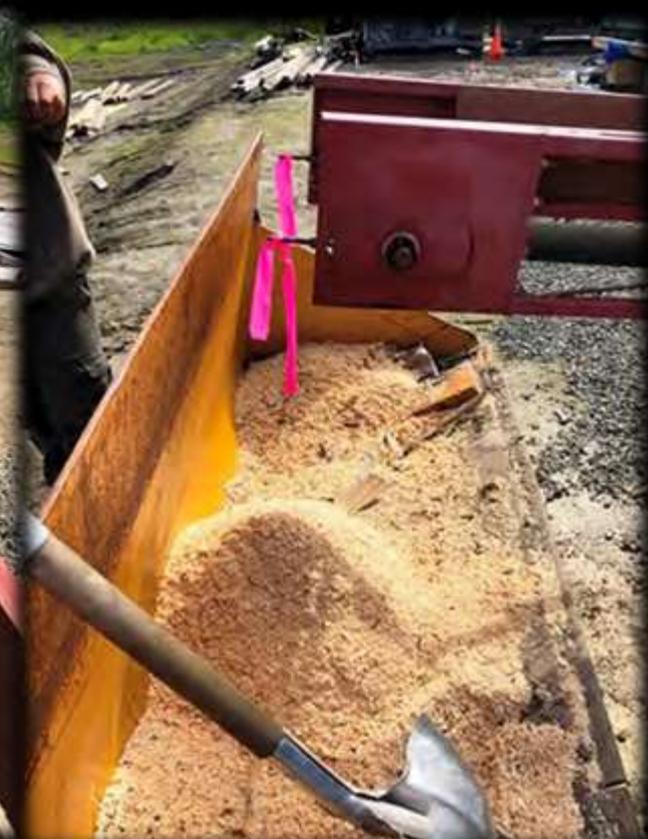




New catwalk from freshly milled lumber



Re-engineered saw dust conveyor



Sawdust falls into loader bucket for removal





Mill building goes up





New saw mill operator being trained by the former owner

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





Council President Devron Hellings addresses the harvest site crew in front of the new office then....



Moose's Tooth Pizza for lunch!



□ MENU

2019 NVN SAWMILL LUMBER & CABIN PRICES

January 10, 2019



An example of what can be built with one of our cabin packages – this is for the wood only

Now Taking Orders for the 2019 Building Season!

Napaimute Enterprises, LLC*

Serving the Region with Middle Kuskokwim Wood Products:

Firewood, Lumber, & Cabin Packages

*A page from
our web site:*

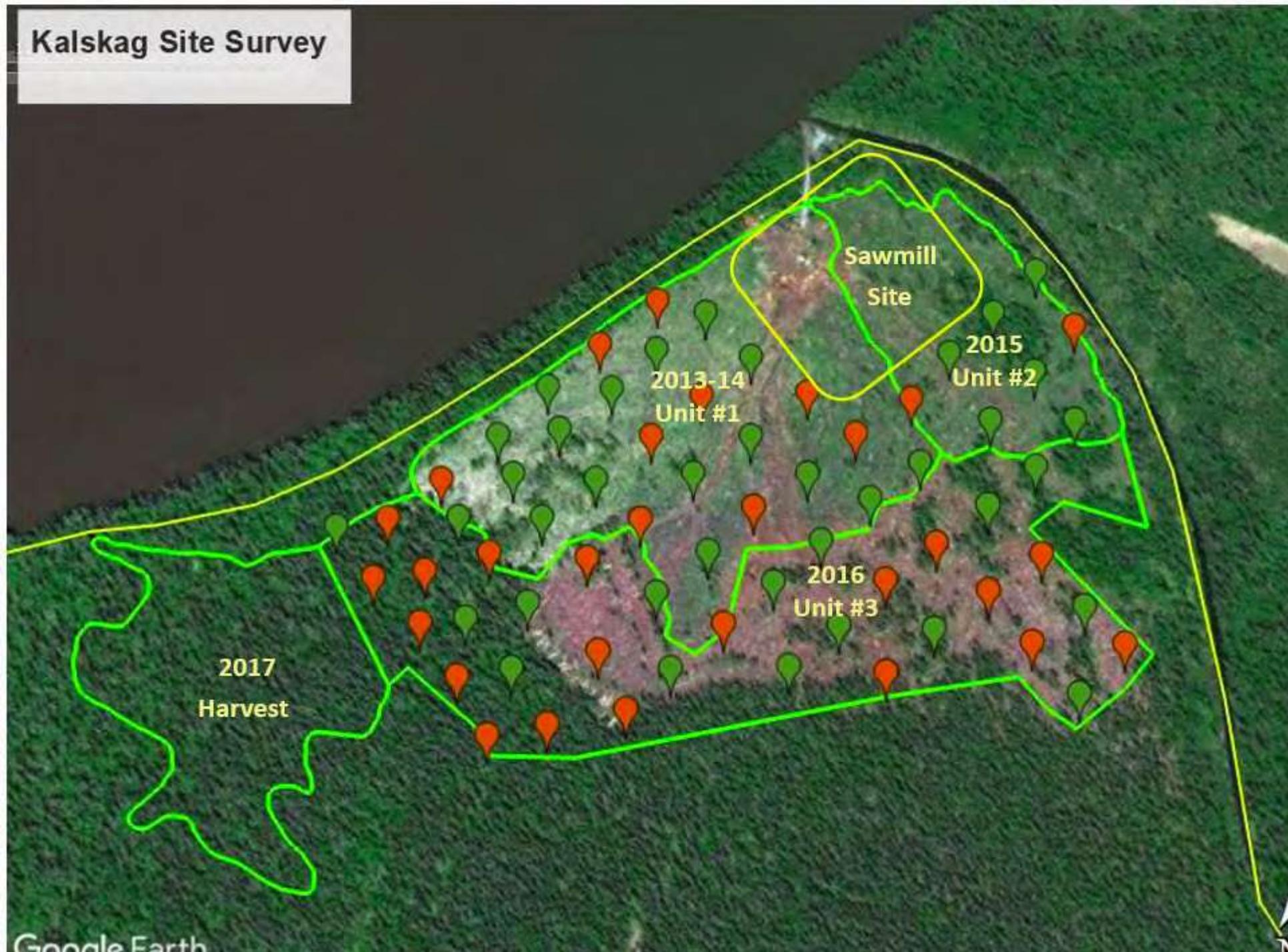
www.napaimute.org

Putting Back What We Take:



The 2018 NVN Reforestation Project

Kalskag Site Survey





Over 3,000 White Spruce Seedlings Planted by Hand – Hard Tedious Work!



That's never been done before in our region



2018 Equipment Upgrade: A new used skidder purchased through a conventional bank loan to support the overall wood operation

Our Natural 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*



WARNING
TRAIL CONDITIONS
CHANGE
TRAVEL AT YOUR
OWN RISK
TO REPORT TRAIL CONDITIONS
CALL 545-2877

KLG

IceMap SmartTow™

New for the Kuskokwim Ice Road in 2018-19?

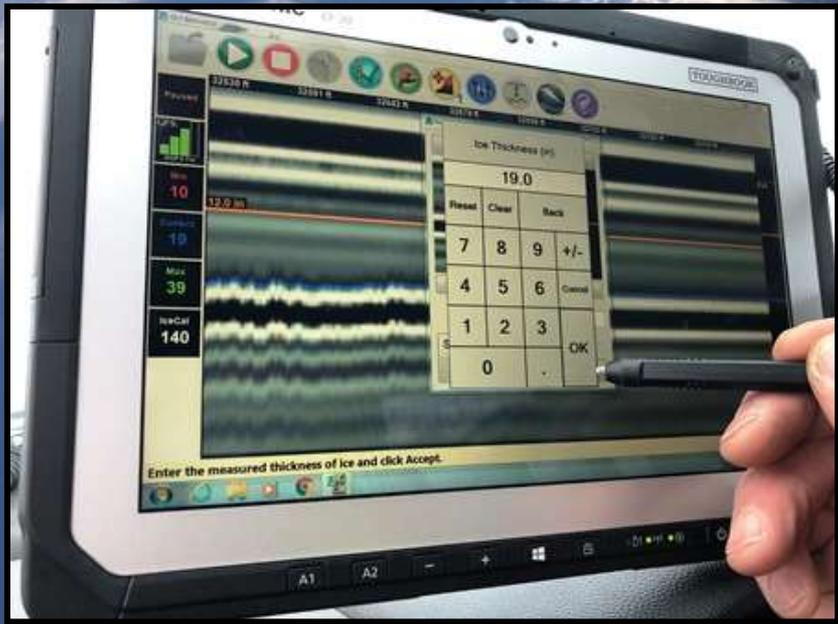


NVN Tribal Transportation Program has invested in Ice Penetrating Radar with the goal of developing a smart phone application that can be used by anyone to check on current ice road conditions
This technology is already being used extensively in Canada and on Alaska's North Slope

IceMap SmartTow



Real time ice thickness measurements







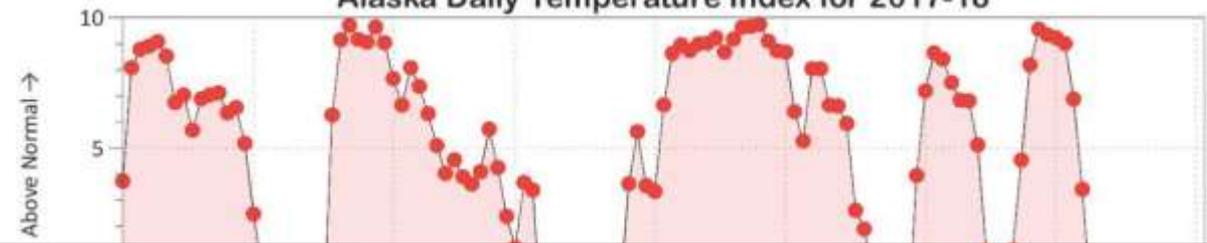
NORTHERN INDUSTRIAL TRAINING, LLC



21 Day Grader Maintenance & Operation Training for our employees – including a 5 day Kuskokwim Ice Road Component



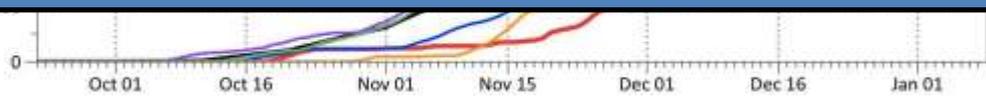
Alaska Daily Temperature Index for 2017-18



Warmer winters in recent years have shortened the ice road season while at the same time extended the summer shipping season.

2019 saw:

- A late freeze up
- Mild temperatures all winter
- 40% thinner Kuskokwim River ice
- The warmest February and March ever recorded for our region
- April 12 - the earliest break up ever recorded for Bethel



© 2018 Rick Thoman

Data source: NOAA/NCEI & NWS





*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.*

A photograph of a weathered, greyish-brown log with a prominent knot hole. The log is surrounded by vibrant green plants, including a large, spiky plant in the foreground and various leafy greens at the base. The text "Thank you for coming!" is overlaid in a white, italicized font with a blue outline.

*Thank you for
coming!*