Nenana – Totchaket Ag Project

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- Access & Data Collection
- Decisions, Survey & Appraisal
- Agricultural Land Goals
- First 10 years
- General Development
- The Future & Takeaways



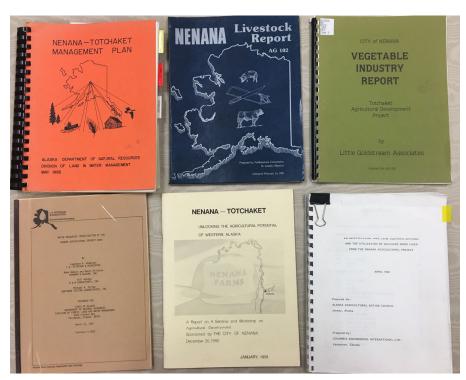
Presented By Erik "Moe" Johnson

Nenana-Totchaket History

The Nenana-Totchaket (Nen-Tot) region has been identified for agricultural development since the late 1970's. The Alaska Agricultural Action Council (AAAC) in 1982 reported "Nenana-Totchaket will play a particularly important role in the future of Alaskan agriculture." noting its access to the Parks Highway & Alaska Railroad; lower elevation than Delta; and not conflicting with other resource development.

Nen-Tot was the subject of multiple reports, plans, & studies since the early 1980's. Including:

- Nenana Totchaket Management Plan
- Nenana Livestock Report
- Vegetable Industry Report
- Water Resources Investigation
- Unlocking the Agricultural Potential of Western Alaska
- Investigation into Land Clearing Methods & the Utilization of Salvaged Wood Fiber
- Nenana Totchaket Transportation Report
- NRCS Nenana-Totchaket Soil Survey

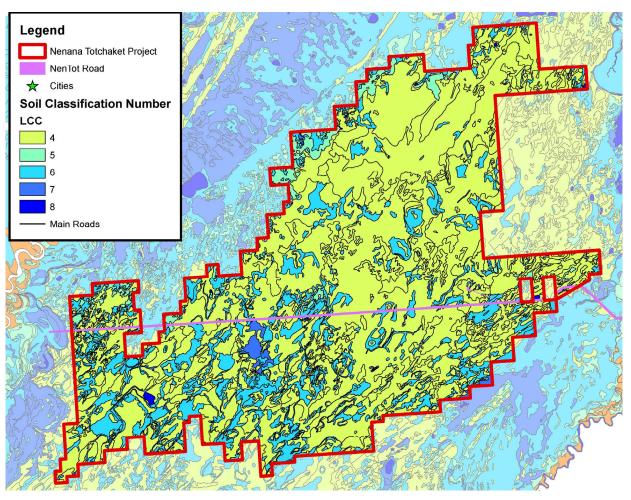


Nenana-Totchaket Ag Project Timeline:

- May 2020
 - ITB for project LiDAR & Imagery posted
- June 2020
 - Unofficial access to project area
 - o Uyerxyq \$\texampawarded LiDAR & Imagery contract
- July 2020
 - o Bridge open to public use
 - City of Nenana fixes "washout"
 - LiDAR data collected
- August 2020
 - Imagery data collected
 - NRCS soil survey agreement initiated (Now signed).
- December 2020
 - LiDAR and Imagery data delivered to DNR
- January 2021
 - Division and Agency Review
- January/February
 - Team (DMLW and DoAG) snowmachine survey of project area
- March/April 2021

- Preliminary Decision
- Public notice/public comment
- Public meetings (as available)
- May/June 2021
 - Final Finding and Decision
 - DoAg Lidar/Picture validation of vegetation
 - NRCS soil survey of 33K acres ("phase one" offerings)
- July November 2021
 - Preliminary Layout of Ag and General use area/parcels
 - Preliminary layout of road (continuation through project)
 - Determination of wildlife areas / corridor's (in consultation with ADF&G)
- December 2021-May 2022
 - Survey Contracting
- 2022, 2023, and continuing
 - Survey
 - o Appraisal
 - Brochure
 - Auction

Nenana-Totchaket Overview 2021

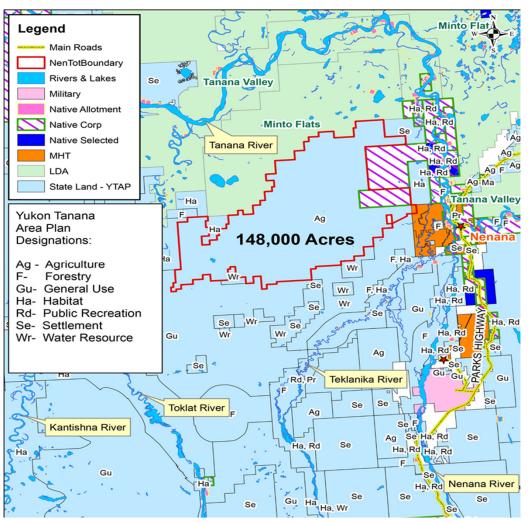


The Commissioner of the Department of Natural Resources approved the Yukon Tanana Area Plan in 2014. This plan places 148,502 acres in the Kantishna Region, unit K-32, and Classifies/Designates them for Agricultural development.

The City of Nenana has acquired an easement across the Nen-Tot project. The city also worked with oil exploration companies to leave infrastructure in-place. Including 11 miles of gravel road & 3 bridges.

The Nenana Native Association received a Federal grant to complete a bridge across the Nenana River.

Nenana-Totchaket Ownership Overview



The Kantishna Region of the Yukon Tanana Area Plan occupies an area of approximately 3 million acres and includes the drainage areas of 2 major rivers, the Teklanika and Kantishna. It extends from the Tanana River in the north to Denali National Park in the south. Portions of the Minto Flats State Game Refuge and Tanana Valley State Forest extend within the region. Native Corporations have approximately 20,000 acres of land.

State lands have been Classified and Designated for use as:

General Use: 1,365,983 acres
Habitat & Water Resources: 733,206 acres
Settlement: 212,672 acres
Agriculture: 148,502 acres

Forestry: 84,120 acres Minerals: 64,684 acres

Public Recreation: 1,920 acres

Access & Data Collection

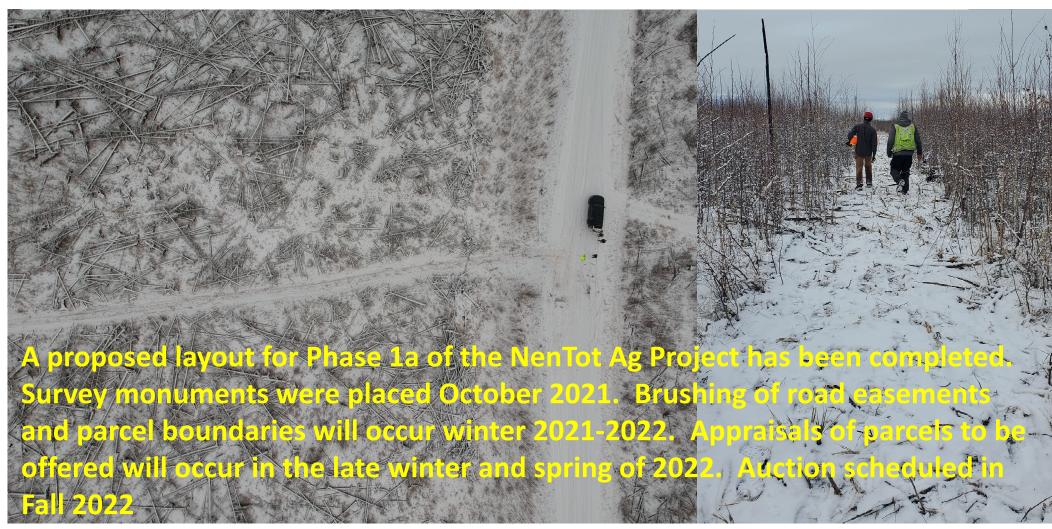
The Nenana River bridge project received additional funding in late 2018. Bridge construction was completed in spring 2020, and road access to the NenTot project area was open in July 2020.

LiDAR, Imagery, & Infrared data for 2020 has been collected.

Under a Corporative agreement, the USDA-NRCS began to collect soil and ecologic site information in June 2021, additional soil data collection will continue in 2022. Final report for the soil survey is due in September 2022. DNR will incorporate this data into project design and parcel layout. DAg is working on an online mapping service that will incorporate topography, imagery, soil data, & vegetive index data.



2021 & 2022 Survey & Appraisal

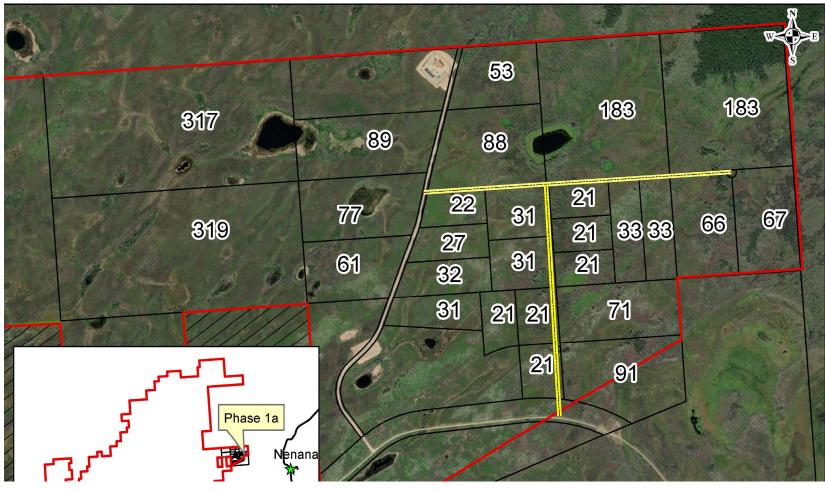


Agricultural Land Goals

Survey for phase 1a is occurring in winter 2021-22. Brushing of road easements has occurred, brushing of lot lines is currently out for bid. DNR is planning on offering 27 parcels with agricultural covenants.

14 parcels are "Less than 40 acres" and will be offered when statute changes are made. Legislative Bills SB 97 & HB120 contain language that modifies the current AS 38.05.321 to allow for smaller ag parcels.

NenTor Ag: Phase 1a proposed offerings



Agricultural Land Goals

DAg held meetings regarding future land sales in 2012 and 2013. DAg has also received comments regarding preferred parcel layout and size on an ongoing basis.

Some people believe that small "truck farms" focused on Farmer's Markets are the future of farming in Alaska. These people are interested in specialty crops like flowers, cole crops, or greenhouse fruits/vegetables. They may not have the capitol or need to purchase large tracts of land.

Some people are interested in large tracts of land in order to achieve efficiencies of scale. They may already own land in Delta and want to further utilize equipment on additional lands. Climate differences between Nen-Tot and Delta may extend their field season, provide fall forage for livestock or act as a hedge against crop failures.

Most farmers have needs somewhere between the two.

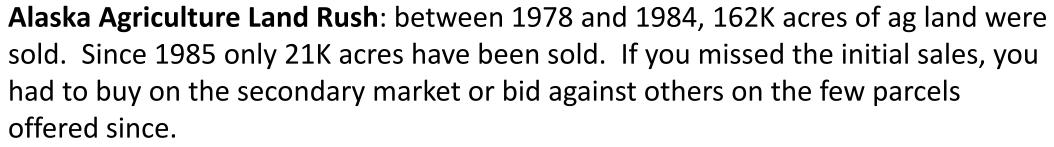
In response the DAg is considering several development strategies: Large Parcels, Traditional Parcels, & Phased Parcel Offerings.

Agricultural Land Goals

Large Parcels: 640- or 1280-acre parcels

Traditional Parcels: 40, 80, 160 acre parcels

Phased Parcel Offerings 20, 40, & 80 acre parcels offered over time



DNR is planning on offering 2,000 - 5,000 acres of land per year in the Nen-Tot area for the next 30 years. A blend of Large, Traditional, Phased, and non-agriculture restricted (Settlement or Commercial) lands every year. Allowing for stable sustainable development and opportunities for long term farm planning.

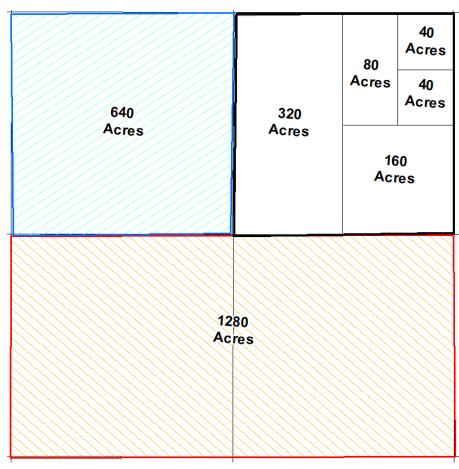
Agricultural Land Goals: Large Parcels & Traditional Parcels

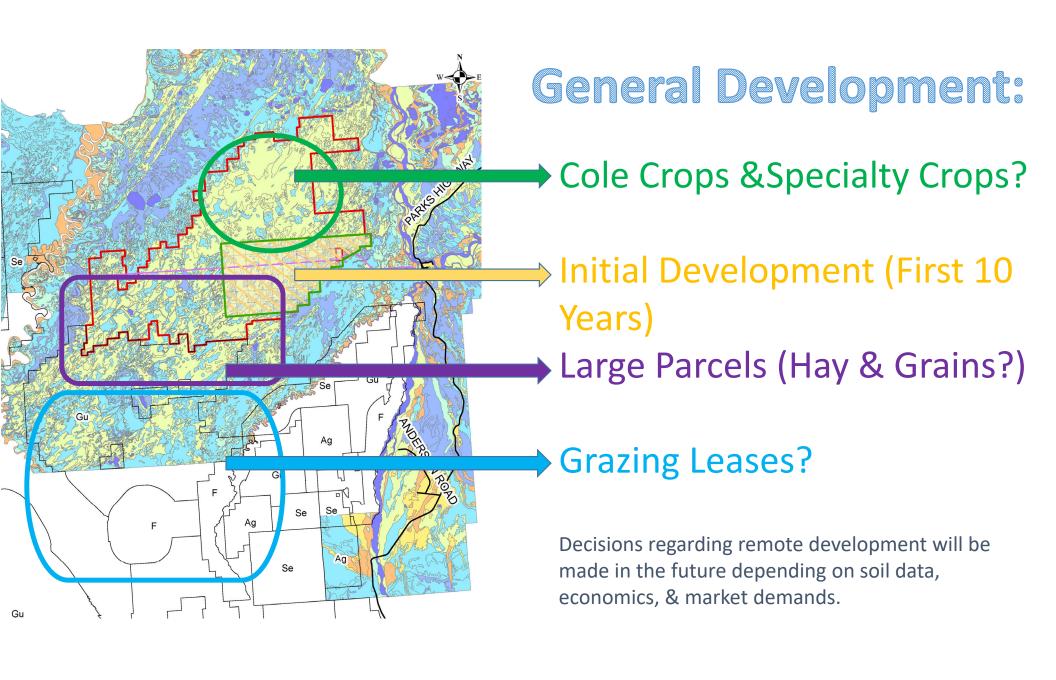
Large Parcels:

- 640 Acres (full section)
- 1280 Acres (double section)
- Grazing Leases –
 (lessee proposes lease size)

Traditional Parcels:

- 40 Acres
- 80 Acres
- 160 Acres
- 320 Acres





What Does the Future Hold? Next Peonies Con

Which grains grown at Nen-Tot consistently mature?
Starting point for a new road / railroad to Nome?
Industrial processing of hemp?

Biomass as a crop (willow or hemp)?

Global Climate Change?

How many head of livestock can the area sustain? National/International interest in "Virgin Land" for "Sustainable-Organic-[Buzzword]-Produce"?





Key Takeaways:





- Additional data regarding topography (LiDAR), soils, ecological sites, & hydrology is being collected
- New bridge is complete and road access is available.
- The Nenana Totchaket Agricultural Project Area will be developed over time in stages as infrastructure and roads are built.
- Land offerings will occur at a steady pace to minimize swings in land prices statewide and allow for future planning decisions.
- Non-agricultural development (Commercial, Settlement, & Public Facilities) on appropriate lands will occur.
- Decisions regarding remote areas will occur in the future.



New Lidar:

Points LAS v 1.4

All Classified Returns

Rasters 3.0 Foot GeoTiffs

Hydroflattened Bare Earth Model Highest Hit Digital Surface Model

>9.0 ft Canopy Model

1.5 Foot Geo Tiffs Intensity Images

Vectors Shapefiles (*.shp)

Area of Interest

LiDAR Tile Index

Water's Edge Breaklines

AutoCAD Drawing Files

Contours (2 ft)

Digital Imagery – 1 ft Geo Tiff: RGB & NIR

