Ahtna Tribal Energy Planning and Technical Assistance Project (ATEPTAP)

US Dept. of Energy- Office of Indian Energy Grant

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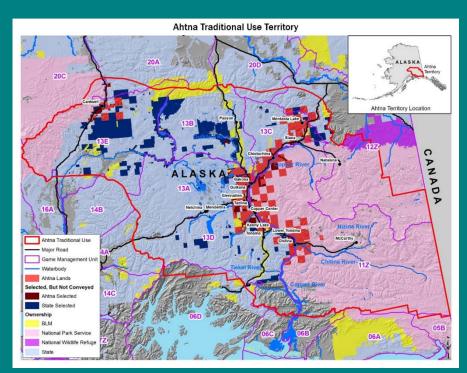
OVERVIEW

- Introduction
- About the Ahtna Region and Need
- About the Ahtna Intertribal Resource Commission (AITRC)
- ATEPTAP Project Goals and Objectives
- Project Work and Success in the first Year
- Outreach and Collaborations
- Expanded Opportunities Identified (Intertie)
- Summary

The Ahtna Traditional Use Territory – Land and Resources

The Ahtna Region is approximately 45,000 square miles of land (28,700,000 acres) The size of New York. Ahtna's total ANCSA land entitlement is 1.77 million acres – 1.53 million conveyed

- 5 mountain ranges
- 2 National Parks: Wrangell-St.
 Elias & Denali National Parks
- Chugach National Forest
- Tetlin National Wildlife Refuge
- The Copper River watershed is the 4th largest in Alaska
- Every species of Alaska fish represented
- 11 salmon runs
- Five major highways (500+ miles state road)
- Abundant wildlife
- Strong Ahtna Culture



Ahtna Traditional Use Teritory- Demographics

- There are eight federally recognized tribes in the region;
 Cantwell, Mentasta, Cheesh'na, Gakona, Gulkana, Tazlina,
 Kluti-Kaah and Chitina.
- Population for the Ahtna Territory is 3,682 (2010 Census Data)
 - 890 Tribal Members in the 8 villages
 - 1,512 The total population (all ethnicity) for these Villages
- Median household income for these villages ranges from: \$13,802 Chitina to \$104,375 in Gakona.
- Outmigration. School enrollment (CRSD) went from 800 to less than 400 since 2000
- Major employment Health Care, Pipeline Maintenance, Tribal, State and Federal Government.
- Average Poverty Rate 16%, Highest 42% (Mentasta), Lowest 2.5% (Cantwell)
- Average unemployment 10%, Highest 24% (Mentasta), Lowest 3.2% (Cantwell).

Ahtna Region Energy Costs

- Current Heating Oil Prices (2017) \$2.62, as high as \$5.15 (2012)
- Electrical 4 Isolated Electric Service Providers (or off grid systems DIY)
 - .38 /kW to .94/ kW commercial
 - .21-.74/ kW residential
- Gasoline Prices (2013) \$4.49 highest,
 (2017) \$3.09
- Cordwood \$150-\$250/ cord or DIY

Ahtna Intertribal Resource Commission (AITRC) Why We Formed



- We have to have a lawyer and surveyor to go hunting
- They are regulating us out of our way of life
- Forming the Tribal Conservation District was beginning of self-determination for customary and traditional harvest and use of natural resources
- The Ahtna Tribes are leading the fight for subsistence
- Incorporated September 26, 2011

AITRC Purpose and Mission

To be the governing body for Ahtna's customary and traditional natural resource use and conservation. (bylaws)

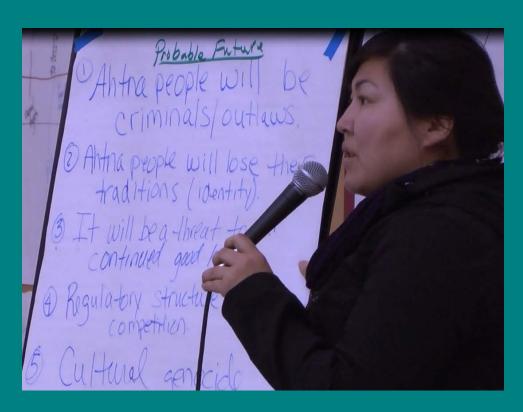
Core Purpose:

"Traditional resource stewardship."

Mission Statement:

"With self-determination we will conserve, develop and use our resources for the maximum sustained benefit of our people."

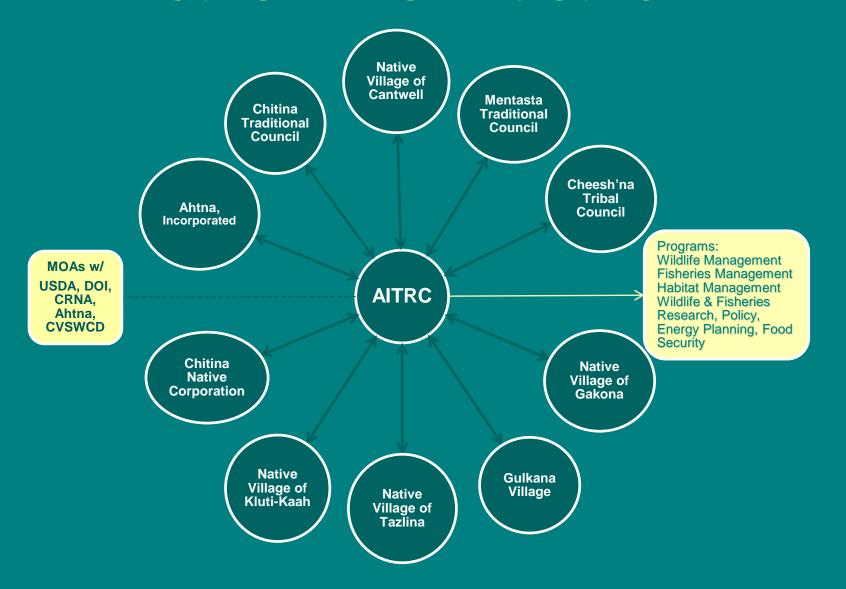
The Ideal Future



Search Conference, 2013

- Manage our own resources on our OWN homelands.
- Grow our own professionals to manage resources
- For all people to be supportive of our resource management

AITRC/CRITR Organization Structure: Our STRENGTH is Our UNITY



Ahtna Tribal Energy and Technical Assistance Project

- Goals:
- Reduce energy costs.
- Improve community wildfire readiness.
- Provide local food security.
- Create jobs and Reduce poverty.
- Reduce outmigration from Ahtna Villages.

Project Objectives

- Develop an Integrated Biomass/Moose Browse/Fire Protection Plan for Each Village
- Sponsor regional training sessions in community energy and resource stewardship planning.
- Develop an integrated Energy Plan for Each Village's High Priority Energy Opportunities as an Update to the Regional Energy Plan
- Develop a Regional Tribal Energy Technical Assistance and Outreach Program.

Integrated Moose Habitat - Biomass Overview

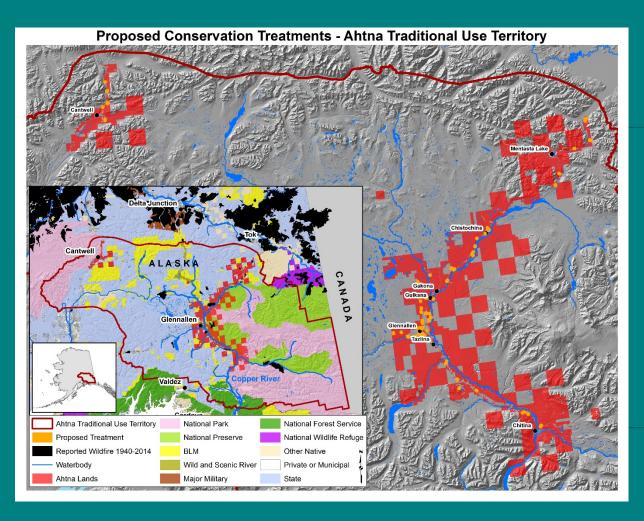
- Conservatively the Copper Basin contains 2,000,000 tons of accessible biomass. This is equal to approximately 220,000,000 gallons of heating oil, or enough fuel to heat the entire residences in the Copper Basin for 165 years.
- Cost of Delivered Fuel Prices
 - a) Cordwood \$150-\$250 per cord
 - b) Chips \$70-\$100 per ton
 - c) Pellets \$250-\$275 per ton
 - d) Fuel Oil +/- \$3.65 per gallon (?)
- Moose production on our land is .4 moose per square mile. We would like to build this to 4 moose per square mile.
- Moose browse enhancement through willow growth is a complimentary activity to biomass production and wildfire prevention.

Three ways to make Moose Habitat

- Fire
 - Wild Fire with let burn when appropriate
 - Safe prescribed fire
- Logging for biomass or timber
- <u>Mechanical Treatment</u> roller chopping/crushing

Best is to integrate all three – enhance village fire safety, produce biomass & create moose habitat

Biomass Implementation Plan 5 Year Ahtna Region.



Habitat & Fire Treatment Sites

1600 acres of PLODs

2754 acres of Habitat

70,902 tons of Biomass Produced

NRCS EQIP Supports PLODs & HABITAT

Specific Example Linking Habitat, Biomass & Fire Protection Glennallen – North Fuel Break Enhancement



Tribal Stewardship Planning

 An integrated, comprehensive, strategic plan for management of a traditional territory to provide for indigenous priorities, incorporating social, cultural, ecological, and economic factors.

Affordable energy is a big factor in this process.

Stewardship Planning Outcomes

- Self-Governance Enhanced
- Cultural Resources Protected
- Economic SecurityStrengthened
- Social Well-Being Improved
- Stewardship ProgramSustained
- Resource Management including Energy is in OUR Hands
- Relationships Expanded:
 Collaboration, Partnerships,
 Leveraged Resources.
- College Credit for participants



Sharla Huckabee, Faye Ewan, and Katherine McConkey of Kluti-Kaah

Practicing Power

Engagement of Tribal Energy Planning

Methodology

- 1. Meet with Tribal Administrator and Council for intro, ideas, and plan.
- 2. Identify resources available and prior studies applicable.
- Complete surveys with Tribal Council and Tribal Residents
- 4. Hold Tribal Community Meeting to discuss plan, results, data and direction.
- 5. Compile information and codify into plan.
- Meet with Tribal Council and Community to review/ revise Tribal Energy Plan.

Integrated Land Management Program

- Create fire safe communities
- Mechanically create moose habitat patches near villages
- Produce Biomass for village use
- •Grow and sequester carbon Ahtna Inc. has sold Carbon Credits
- •Work with Partners on a Landscape Fire Strategy
- Requires integration of funding programs
- •Results: FOOD-FUEL-Fire Protection-Jobs-Natural Res. Devel.

Challenges

- Small population with vast distances between economies of scale.
- Diverse range of socioeconomics for regional collaboration.
- Lack of building codes and standards
- Lack of skilled workforce for technical & renewable energy possibilities.
- High Electricity/ Heating Costs

Opportunities

- Energy is the tie that binds!
- Hi-light resource strengths and find gaps
- Identify potential energy projects by community and region
- Increased positive collaboration between regional stakeholders and energy resources available
- Implementation PLAN to reduce energy costs

Renewable Energy

- Plethora of stranded renewables with no where to go.
- Solar does work in AK (March-Oct.) but longer payback on systems, no net metering, O & M is costly or hard to find.
- Wind feasibility is sparse in region but areas for large scale but stranded.
- Small and large scale hydroelectric resource but stranded.
- Potential for geothermal, oil, gas and coal. All Stranded.

Integrating with other plans

- Tribal Energy Plans for each village.
- Tribal Stewardship Plans for each village.
- Ahtna Region Land and Resource Plan.
- Ahtna Forest Stewardship Plan.
- Copper River Valley Regional Energy Plan.
- Copper River Valley Area Plan.
- Alaska Affordable Energy Strategy.
- Alaska Statewide SEDS.

Outreach & Collaboration

- Communication between the Ahtna Tribes, ANCSA Corporations, communities, utilities, businesses, state/ fed agencies facilitates a better understanding of the regional needs, and mitigates factors of economic demise.
- Coordination with regional and statewide planning generally benefits all.

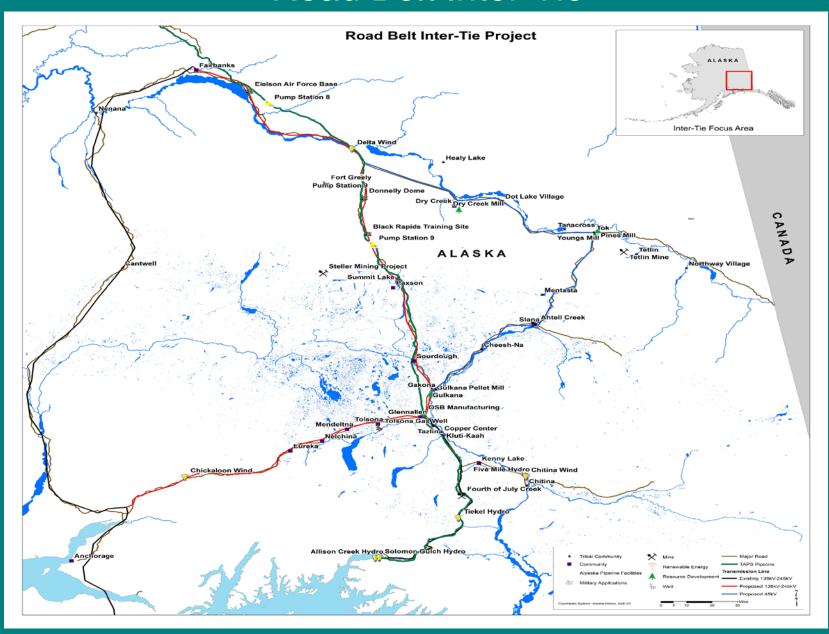
Collaborating Entities

- 8 Ahtna Villages (Tribes)
- Ahtna Incorporated (Regional ANCSA Corporation)
- Chitina Native Corporation (ANCSA Village Corporation)
- Copper Valley Development Association (AK Dept. of Commerce- Regional ARDOR Economic and Natural Resource Development.
- US DOE, Office of Indian Energy Policy.
- USDA NRCS/ RD
- Alaska Department of Natural Resources, Division of Forestry.
- US EDA

Road Belt Inter-Tie (RBIT)

- Identified in Regional/ Tribal Energy plans,
 Regional/ Statewide CEDS as #1 Priority
- 17 Self-Gov Tribes, 4 Native Corps, 18 Communities, 4 Regional Native Health Orgs. to benefit
- Will pencil out Natural Resource and Economic Development for Tribes.
- Military, Pipeline and other applications.
- Outlet for Large Scale Renewable Projects
- Electrification area the size of Montana

Road Belt Inter-Tie



THANK YOU

 We would like to thank the Department of Energy, Office of Indian Energy for the opportunity to complete the energy planning effort for our region. This is a huge benefit to our region.

Summary

- The Ahtna Region has vast resources scattered population, large area and high energy costs.
- Collaboration and a solid plan for each of our Villages tied to the regional energy plan will be very powerful tool to address energy costs and economic issues.
- The outreach and training provided by this project are empowering communities and individuals to accomplish goals.
- Connecting our communities on an intertie is an opportunity to reduce costs and provide a way to develop our vast stranded energy resources. This needs further study.

Questions?

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We have mountains.

 The previous slide is Mount Drum. It is a baby mountain by our standards at 12,000

feet.



Mount Wrangell – 14,000 feet



Mount Sanford 16,000 Feet



Mount Foraker 17,000 Feet



Mount St. Elias 18,000 Feet



Mount Logan 19,000 Feet



Mount Denali 20,000 Feet

