

# Ahtna Tribal Energy Planning

## FOOD, FUEL, JOBS

US Dept. of Energy- Office of Indian Energy Grant

USDA-NRCS & RD

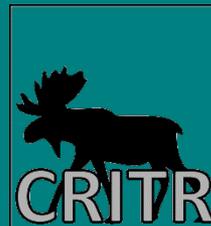
State of Alaska-DNR-DoF CWPP/WUI

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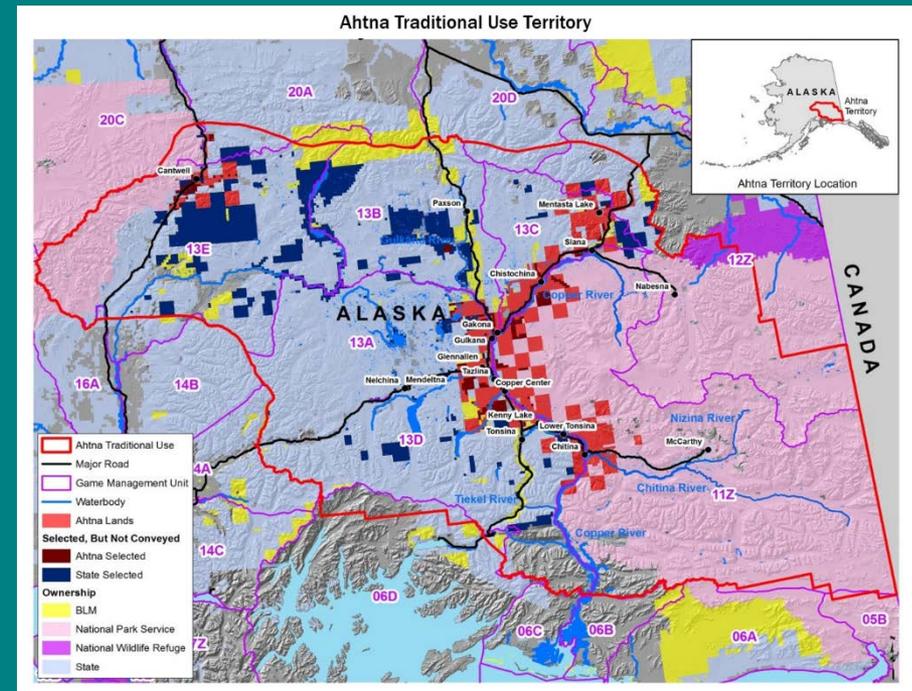
# Overview and Expectations

- You- Stay Awake and Ask Questions
- Me-Keep it rolling, no bunny trails, share info, and answer questions.
- Introduction
- About the Ahtna Region and Need
- Project Goals and Objectives
- Project Work and Success
- Outreach and Collaborations
- Summary

# The Ahtna Traditional Use Territory – Land and Resources

The Ahtna Region/ Copper Valley 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 4<sup>th</sup> largest in Alaska
- Every species of Alaska fish represented
- 11 salmon runs
- Five major highways (500+ miles state road)
- Abundant wildlife
- Ahtna Culture



# Ahtna Traditional Use Territory- Demographics

- There are eight federally recognized tribes in the region; Cantwell, Mentasta, Cheesh'na, Gakona, Gulkana, Tazlina, Kluti-Kaah and Chitina.
- Population for the Copper Valley/ 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 34% (Mentasta), Lowest 3.2% (Cantwell).

# Ahtna Region Energy Costs

- Current Heating Oil Prices (2018)+/-**\$3.12**, as high as **\$5.15** (2012)
- Electrical – 4 Isolated Electric Service Providers (or off grid systems DIY)
  - .48 /kW to .94/ kW commercial
  - .21-.74/ kW residential
- Gasoline Prices (2013) **\$4.49** highest, (2018) **\$3.69**
- Cordwood - **\$150-\$250/ cord** or DIY

# Ahtna Tribal Energy Food, Fuel, Jobs!

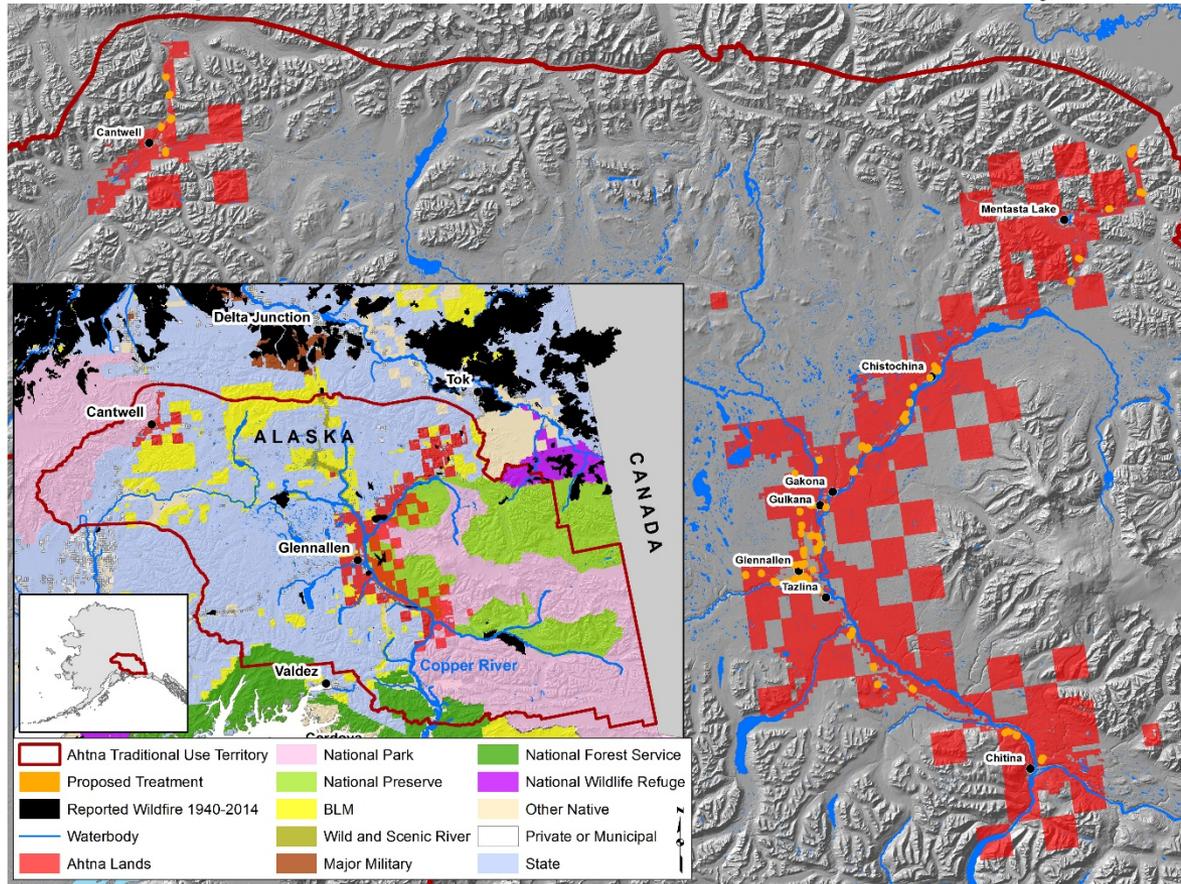
- Goals:
- Reduce energy costs.
- Improve community wildfire readiness.
- Provide local food security.
- Create jobs and Reduce poverty.
- Reduce outmigration from Ahtna Villages.

# 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.

# Biomass Implementation Plan 5 Year Ahtna Region.

Proposed Conservation Treatments - Ahtna Traditional Use Territory



Habitat & Fire  
Treatment Sites

1600 acres of PLODs

2754 acres of Habitat

70,902 tons of  
Biomass Produced

NRCS EQIP Supports  
PLODs & HABITAT

# 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 Biomass Utilization Plan
- Opportunities as an Update to the Regional Energy Plan
- Continued biomass energy planning and industry expansion.

# 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
- USDA NRCS/ RD
- Alaska Department of Natural Resources, Division of Forestry.
- US EDA

# USDA-RD

- USDA-RD assisted with a grant to purchase equipment to rent for harvest of timber and landscape resiliency.
- Equipment is for rent to small businesses or tribes or land owners for reduced cost.
- Hitachi Z200 with two buckets, harvester head, mulcher head and shear head.
- Training for jobs on machine to increase workforce development.

# Bruce's Baby Comes Home





# USDA-NRCS

- RCPP- Regional Conservation Partnership Program
- Utilizes EQIP program for landowners to incorporate NRCS practices
- Identify projects and need, write up practices required, post and award \$\$\$\$.
- NRCS staff and AITRC staff work to ensure quality and efficacy.

# 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-\$350 per ton
  - d) Fuel Oil +/- \$3.15 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
  - NOT really my choice...especially this year.
- Logging for biomass or timber
- Mechanical Treatment – roller chopping/crushing, and thinning.

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

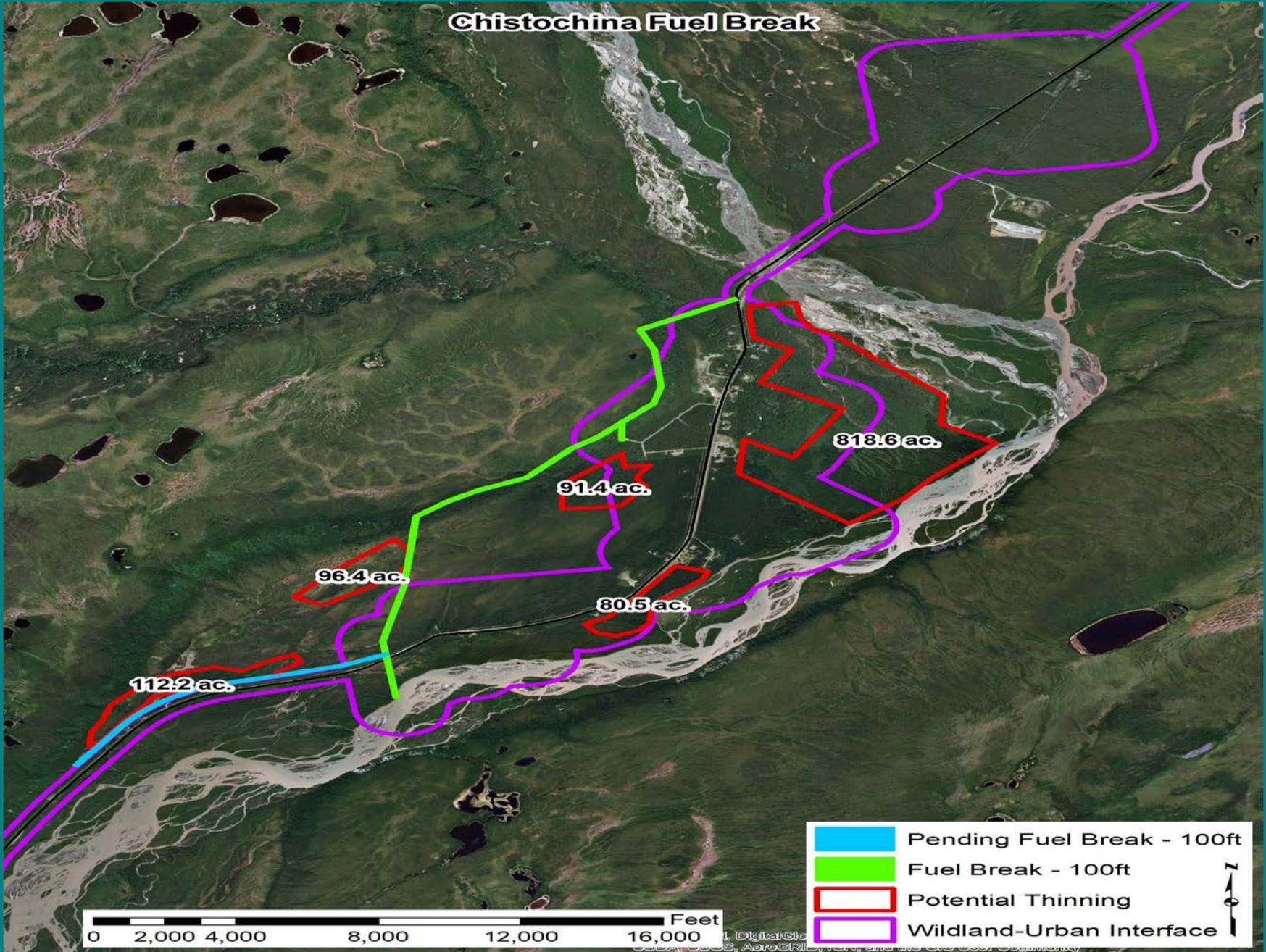
# Specific Example Linking Habitat, Biomass & Fire Protection Glennallen – Fuel Break Enhancement



# DNR-DoF CWPP/WUI

- You can't have **WUI** (Wildfire Urban Interface) without **CWPP** (Community Wildfire Protection Plan).
- CWPP also proscribes fuel breaks and thinning areas of protection through community mtgs.
- Community plans translate into **jobs** and work through WUI protecting critical structures, homes, shops, businesses, outhouses, etc.
- Cutting defensible space and thinning brush and trees.

# Chistochina Fuel Break



0 2,000 4,000 8,000 12,000 16,000 Feet

-  Pending Fuel Break - 100ft
-  Fuel Break - 100ft
-  Potential Thinning
-  Wildland-Urban Interface



# Chistochina Fuelbreak

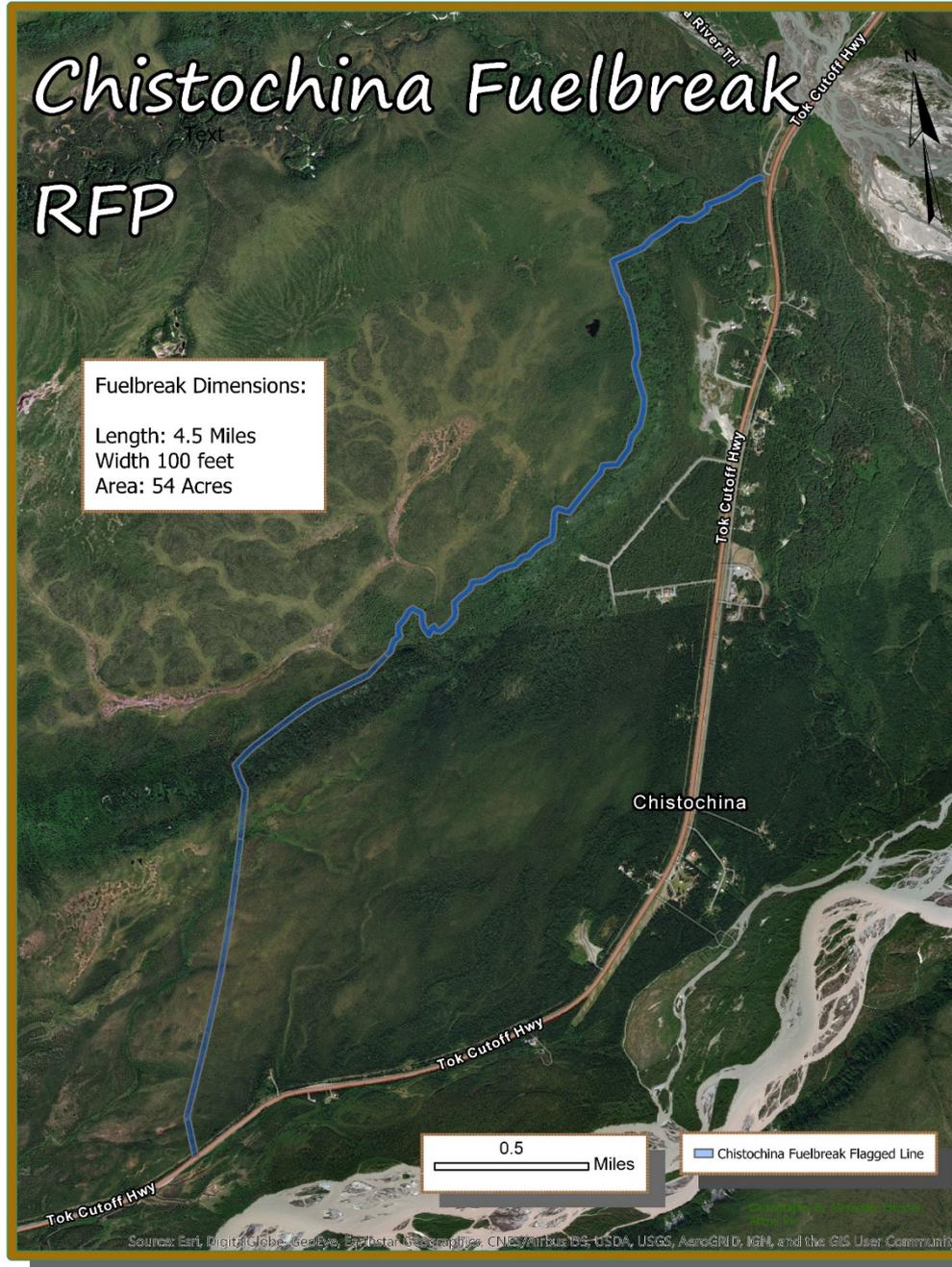
## RFP

Fuelbreak Dimensions:

Length: 4.5 Miles

Width: 100 feet

Area: 54 Acres







# Challenges

- Small population with vast distances between economies of scale.
- Diverse range of socioeconomic conditions 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**

# Integrating with other plans

- Tribal Energy Plans for each village.
- Tribal Stewardship Plans for each village.
- Ahtna 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 CEDS.

# Questions, Comments, Cries of Outrage?

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Commission.

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