Chikuminuk Lake Hydroelectric Project

Bristol Bay Public Outreach

October 9 - 11, 2012

Nuvista Light & Electric Cooperative, Inc.

Elaine Brown, Nuvista Executive Director

Chikuminuk Lake Hydroelectric Project

Western Alaska Energy Options
ISSUES, QUESTIONS, CONCERNS?




Nuvista Light & Electric Cooperative, Inc.

Who is Nuvista?

Our Mission: *To improve the energy economics in rural Alaska.*

Nuvista Light and Electric Cooperative is a non-profit cooperative guided and governed by a 12 member board of directors from the following organizations:

- Calista Corporation
- Alaska Village Council Presidents (AVCP)
- AVCP Regional Housing Authority
- Yukon Kuskokwim Health Corporation (YKHC)
- Alaska Village Electric Cooperative (AVEC)
- Middle Kuskokwim Electric Company (MKEC)
- Chaninik Wind Group
- Lower Yukon Representative

Why Chikuminuk?

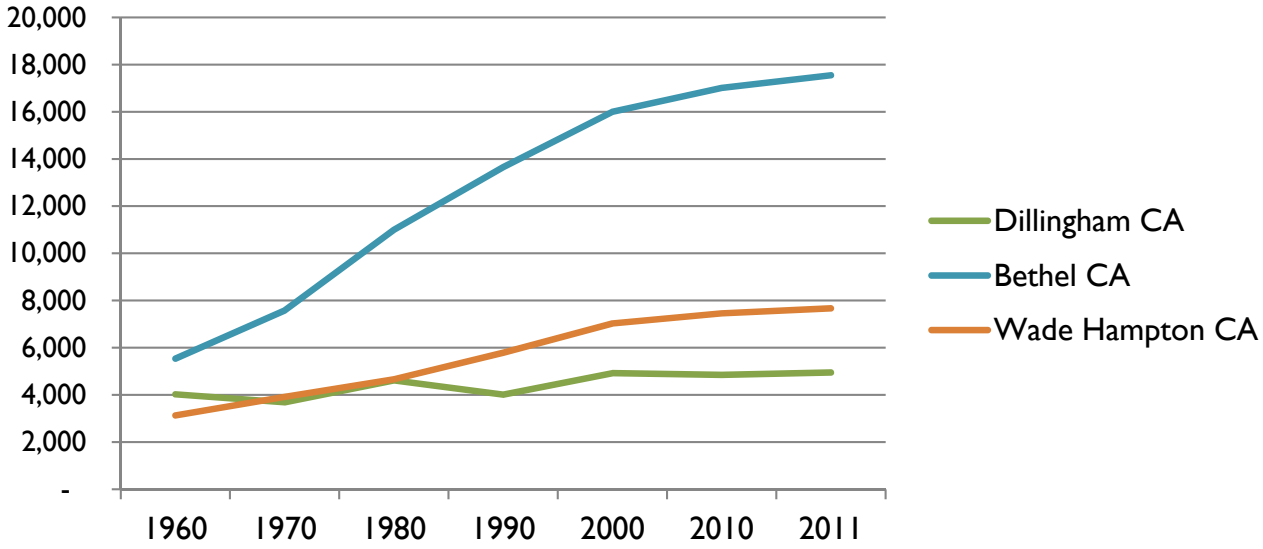
Western Alaska needs sustainable, affordable, and reliable energy solutions.

Energy conservation and alternative sources like hydro, wind, and biomass can help, but aren't sufficient on their own to meet energy needs.

We think Chikuminuk is worth looking at as one option to help our communities survive and thrive.

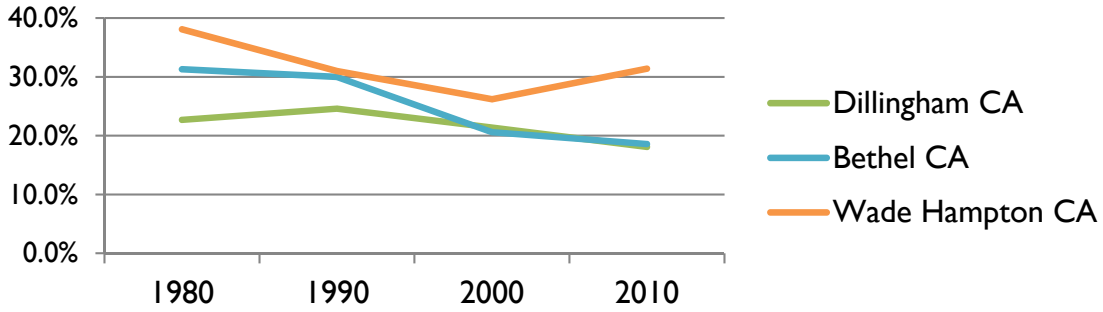
Changes in Population and Income

Population Change in Southwest Alaska, 1960-2011



Over the past 50 years population in the Wade Hampton, Bethel Census Area, and Dillingham Census areas has increased, without a matching increase in economic opportunities. This is not sustainable.

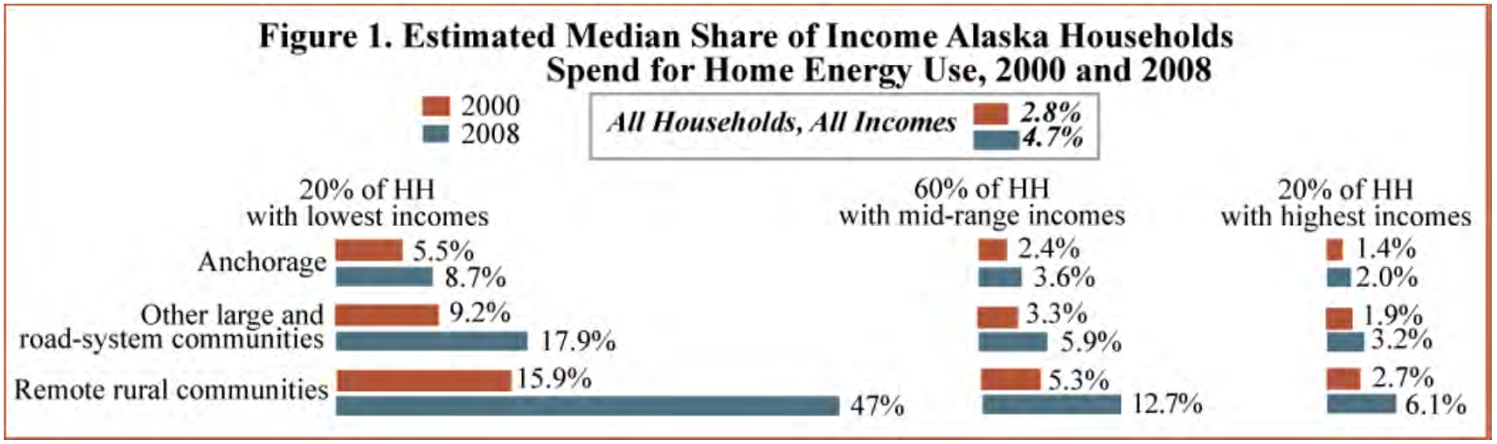
Poverty in Southwest Alaska, 1980-2010



After two decades of declines, poverty levels are trending upwards again. One primary cause is increasing costs for energy and the overall cost of living. According to the U.S. Census Bureau data released on September 13, 2011, the nation's poverty rate rose to 15.1 percent in 2010.

Energy in Rural Alaska

- Energy costs are eating up a steadily growing portion of the budgets of villages, organizations, families, businesses



Source: *Energy for a Sustainable Alaska: The Rural Conundrum*, Commonwealth North, 2012.

- Odds are good that fuel prices will continue to grow
- What to do about the situation?
  - Conservation and Efficiency - often the least costly, quickest alternative
  - New distribution options - inter-village electric transmission linkages
  - New sources of supply to create sustainable, stable prices

Purpose of our visit
We want to hear from you…

Begin a conversation with residents of Western Alaska about one energy supply solution - the potential Chikuminuk Lake Hydroelectric Project.

- Share basic background information.
- Learn from meeting participants about issues, concerns and opportunities. Answer questions.
- Discuss what you can expect in the near term, mid term, and long term.

Project is just getting started!

Getting Started

March-September 2011

Nuvista hired Executive Director • Chikuminuk Lake Hydroelectric Project (CLHP) selected by AVCP-RHA as the preferred candidate to address regional energy needs at their annual conference • Identified and read past energy reports • USGS installed stream gage in the Allen River

Gaining Momentum

October - December 2011

Signed an engineering agreement with Hatch Engineering Associates to assist with CLHP • Project Administrator joined the Nuvista team to help with CARE Plan coordination

Ramping Up

January-March 2012

Project Engineer joined the Nuvista team to work with Hatch on the CLHP • CLHP subcontractors join the team • Signed CLHP grant agreement with AEA • Filed preliminary permit application with FERC • Presented to the AK House Energy & Resources Committee • CLHP informational meetings held with DNR and USFWS • Hosted Agency Kick-off Meeting • Attended AVCP-RHA conference to update on year 1 • CLHP progress • Hosted a Community Open House in Bethel • Traveled to communities to discuss CARE Plan and their energy plans and needs

Data Gathering

April - June 2012

Attended hydro conference in Washington D.C.; met with FERC, DOI, DOE, and USFWS • Submitted State Park Special Use Permit • 30-day public review and two-week review extension of State Park Special Use Permit • FERC application comment period for Preliminary Permit • Presented to the Wood-Tikchik State Park Advisory Council • Hosted Community Open House in Dillingham • Special Use Park Permit delayed, planned field work delayed • Data gathering trip to Chikuminuk Lake area • Attended and displayed at the REAP Clean Energy Conference

On-going Efforts

July to October 2012

CLHP park special use permit denied, resubmitted for each study area topic to be approved individually • Field work not requiring a permit occurs (raptor studies, water analysis) • FERC grants Nuvista a preliminary permit for CLHP • Determined potential alignment of CLHP transmission line • First issue of Nuvista News mailed out • 2012 field season reports being filed • 2013 planning begins • Partnering with RuralCAP to bring energy wise program to Western AK

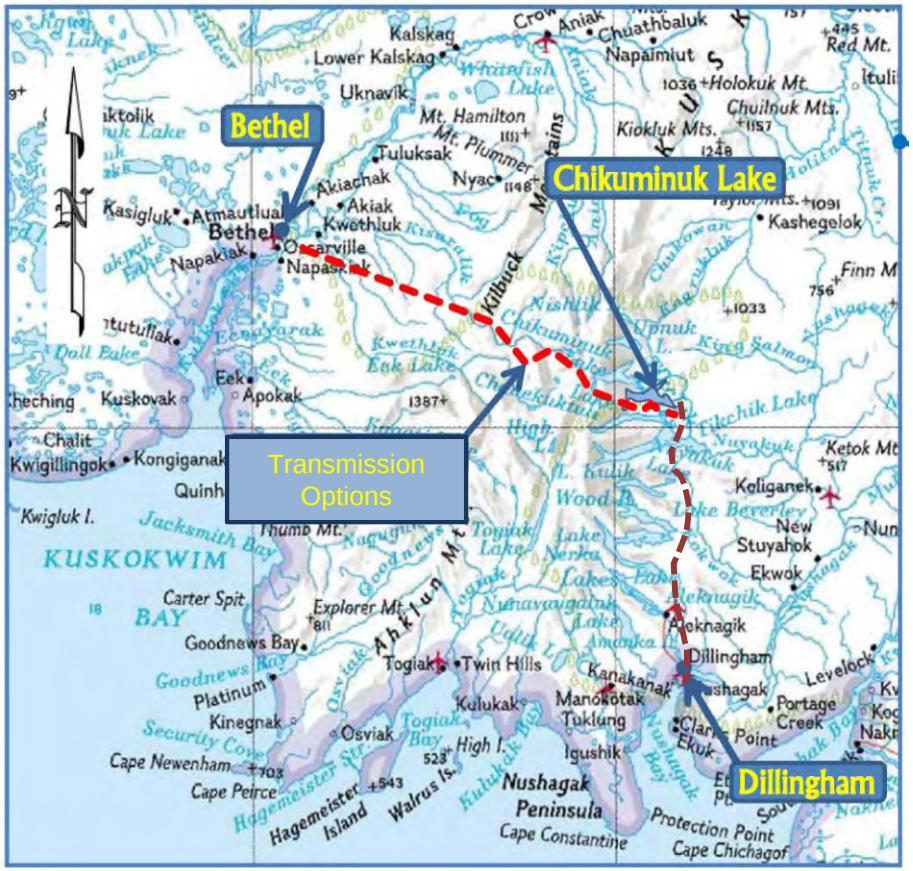
Project Issues…What we've Heard

- Concern about impacts on fish and wildlife.
  (3 stream gages in place to understand water flow. Wildlife studies in 2013 +)
- Is this project linked to any mine projects or other industrial development? (NO)
- Is it possible or appropriate to develop a hydro project inside Wood Tikchik State Park?
  (Grant and Elva are being studied. Chikuminuk requires state statute change.)
- Who will get the power?
  (Dillingham? Bethel?)
- How much will it cost, who will pay?
  (Currently, we don't know. Economic study to occur. Cost to be determined.)

Questions? What do you think?

Chikuminuk Project Process

- Where are we today?
  - Building on studies that began in 1954 to present
  - For the next 1-5 years we are gathering data on the project's potential benefits, service area, impacts, and costs
  - We will be coordinating with all state and federal agencies during this period
  - Our Goal: To determine if the project is desirable and feasible.



A Comprehensive Approach

- Look at all solutions: conservation, efficiency, distribution, and supply

- Develop a regional approach, western Alaska as a whole, for example,
  - Job training for locally based energy related jobs (wind, hydro, interties, weatherization)
  - Shared knowledge of wind power solutions
  - Regional supply and distribution alternatives
- Nuvista wants to explore all these options

Studying Project Feasibility

- FERC (Federal Energy Regulatory Commission) requires a thorough evaluation of the project impacts, with a clear public process
- 2012 – Initial information gathering, field trips to gain better understanding of project area
- 2013-2016 – Continuing data gathering/project studies, open communication – contact us anytime. Topics include
  - Hydrology: systems today, potential changes
  - Fish and wildlife: habitat and species today, potential changes
  - Subsistence & Cultural Resources: current and traditional use
  - Recreation and Aesthetics: current use, potential changes
  - Geotechnical: constraints and feasibility of dam construction
  - Socioeconomic: changes to economy, cost of living, services

  Workgroups will be developed for each study topic area.

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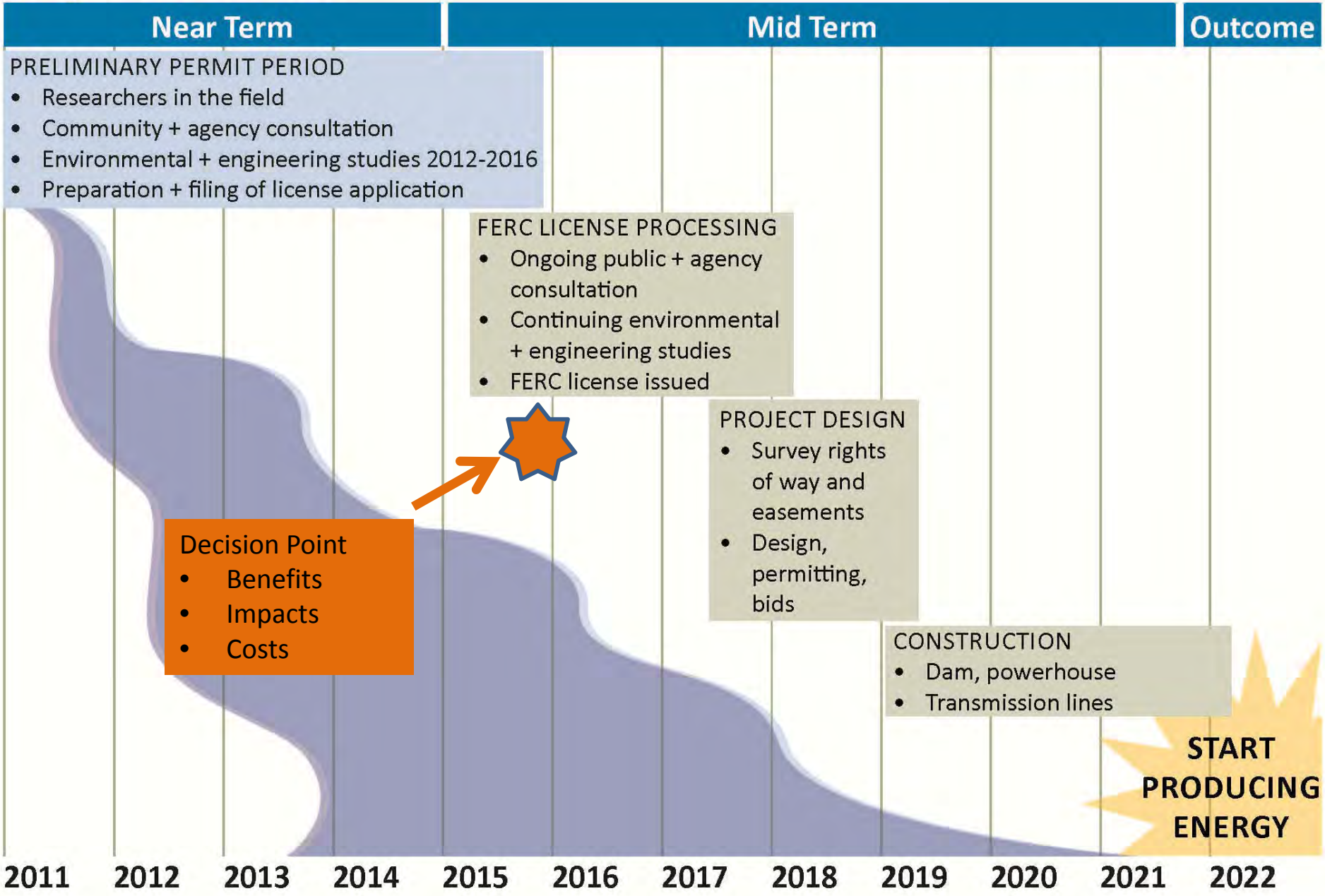
Project Timeline



How to Stay Involved

- www.nuvistacoop.org
- www.ferc.gov; Project # P-14369
- Sign-up for our mailing + e-mail list

Contact Information

- Chicky Brown: 868-2460
- Tanya Iden: 222-5424

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Thank-You

Alternative Energy for Southwest Alaska

Nuvista Light & Electric Cooperative, Inc.