

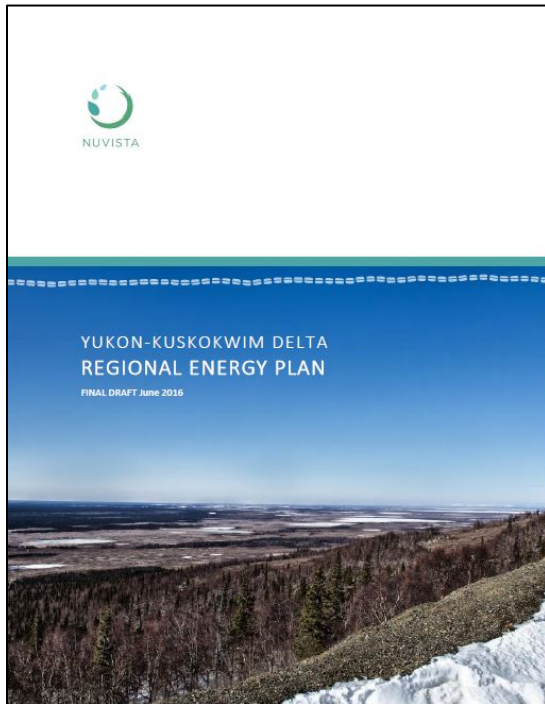


NUVISTA

2016 Year in Review

AND A LOOK FORWARD





Nuvista completed the final draft of the Yukon-Kuskokwim Delta Regional Energy Plan (YK Delta REP) at the end of the summer in 2016. The overarching goal of the Regional Energy Plan is to provide stable, sustainable energy to the YK Delta region; to help the communities become more energy efficient and reduce cost to the consumers. The vision is for the REP to become a tool for future decision makers and to provide a framework for future energy development in the region. The process began in 2014 when Nuvista awarded a contract to WHPacific, Inc. and Information Insights.

Working under a State of Alaska Designated Legislative Grant, managed by the Department of Community, Commerce, and Economic Development, Nuvista was tasked to complete a Regional Energy Plan and a Sub-Regional Wind and Intertie Project. To complete these tasks Nuvista first had to complete the YK Delta Regional Energy Plan and then engage in the following phases of the Wind/Intertie Project.

In 2015, a Stakeholder Advisory Group was formed which included representatives from Nuvista, the Alaska Center for Energy and Power (ACEP), Alaska Energy Authority (AEA), Alaska Native Tribal Health Consortium (ANTHC), Alaska Village Electric Cooperative (AVEC), the Association of Village Council Presidents (AVCP), the AVCP Regional Housing Authority (AVCP-RHA), Bethel Community Service Foundation (BCSF), the Calista Corporation, City of Bethel, Delta Western Fuel, the University of Alaska Fairbanks Kuskokwim Campus, Wells Fargo and Yuut Elitnaurviat. The advisory group held planning meetings identify energy issues and goals for the Yukon-Kuskokwim Delta region. Goals focused on five energy-related topics:

- Energy efficiency and conservation
- Maintenance and operations
- Planning
- Energy infrastructure
- Energy financing options

Community involvement was an essential part of the process in formulating the REP. Meetings were held in 12 sub-regional communities encouraging a grassroots approach to the planning process by involving the residents, engaged agencies and local entities. Nuvista also held an Energy Summit in April of 2016 at AVCP-RHA to ensure the final REP reflected the priority concerns of the people who inhabit the region.

During the planning process, the regional background of the YK Delta was considered—taking into account the physical conditions of the YK Delta from the vegetation to climate, hydrology to wind. Other factors like demographics, economic trends, housing, sanitation, and transportation were also important issues in developing the REP and finding practical solutions to the energy needs of the region.

The Yukon Kuskokwim Delta Regional Energy Plan creates an energy profile of the communities in the Yukon-Kuskokwim Delta region, identifying current energy issues and usage. It also identifies possible uses of alternative energy and measures to increase energy efficiency. Priorities for regional action are also outlined, as well as guidance for investigating alternative resource development and increased energy efficiency.

As of late 2016 and early 2017, Nuvista is poised to assist in obtaining funding to help defray the staggering energy costs of the YK Delta, aiming to increase the comfort of residents resulting from energy efficiency. Finding creative ways to educate residents, community leaders and business owners about energy efficiency and conservation efforts is also outlined in the REP.

Nuvista has entered into discussions with several different entities to begin the determination of the best course of action for a wind/intertie project or suite of projects that encompass the entire YK Delta region. There is a significant amount of research to be done in the initial stages of the project to ensure that the most appropriate wind/intertie project(s) will be pursued. Nuvista is eager to have the opportunity to offer some concrete solutions to the YK Delta region through wind generation and interconnection opportunities. The goal is to create better, more efficient energy solutions, reduce costs and phase out outdated equipment to provide reliable, sustainable and affordable energy to rural Alaska. *(Please see the related story.)*

There is also another project on the horizon, a Whole Village Energy Efficiency Retrofit Pilot Project that could make significant progress toward meeting the needs of energy efficiency improvements in the region. The goal of this initiative is to create a model for aggregated energy efficiency projects in rural Alaskan communities. *(Please see the related story.)*

With a multi-pronged approach, Nuvista and other stakeholders in the YK Delta region are committed to fulfilling the Nuvista mission: “To improve the energy economics in rural Alaska by creating energy generation and transmission infrastructure to serve, connect and enable the region to attain affordable, long term energy sustainability and self-sufficiency.”

WHOLE VILLAGE ENERGY EFFICIENCY RETROFIT PILOT PROJECT



The Whole Village Energy Efficiency Retrofit Project is modeled after the 2008 and 2009 pilot project under the Alaska Energy Authority’s (AEA) Village Energy Efficiency Program in Nightmute, AK. The intention of the project was “to test what would happen if all available energy cost saving resources were deployed in the same place at one time.” The project in Nightmute improved thirteen community buildings, 34 homes and an intertie to wind-powered Toksook Bay and installation of smart meters in all buildings.

Throughout August and early September 2015, Nuvista traveled to communities in three sub-regions of the YK Delta, gathering feedback on the draft Regional Energy Plan. It was during those visits that Nuvista was approached by the Native Village of Kwinhagak who had numerous energy audits completed, but no path forward to implementing the suggested energy efficiency measures laid out in the audits.

Quinhagak’s energy audits were completed through support provided by the Alaska Village Electric Cooperative (AVEC) and a Rural Business Enterprise grant from the U.S. Department of Agriculture (USDA) Rural Development office. The USDA grant incentivizes the implementation of energy efficiency

measures to non-residential building owners by providing funding for energy audits and technical assistance for the application of resultant project funding.

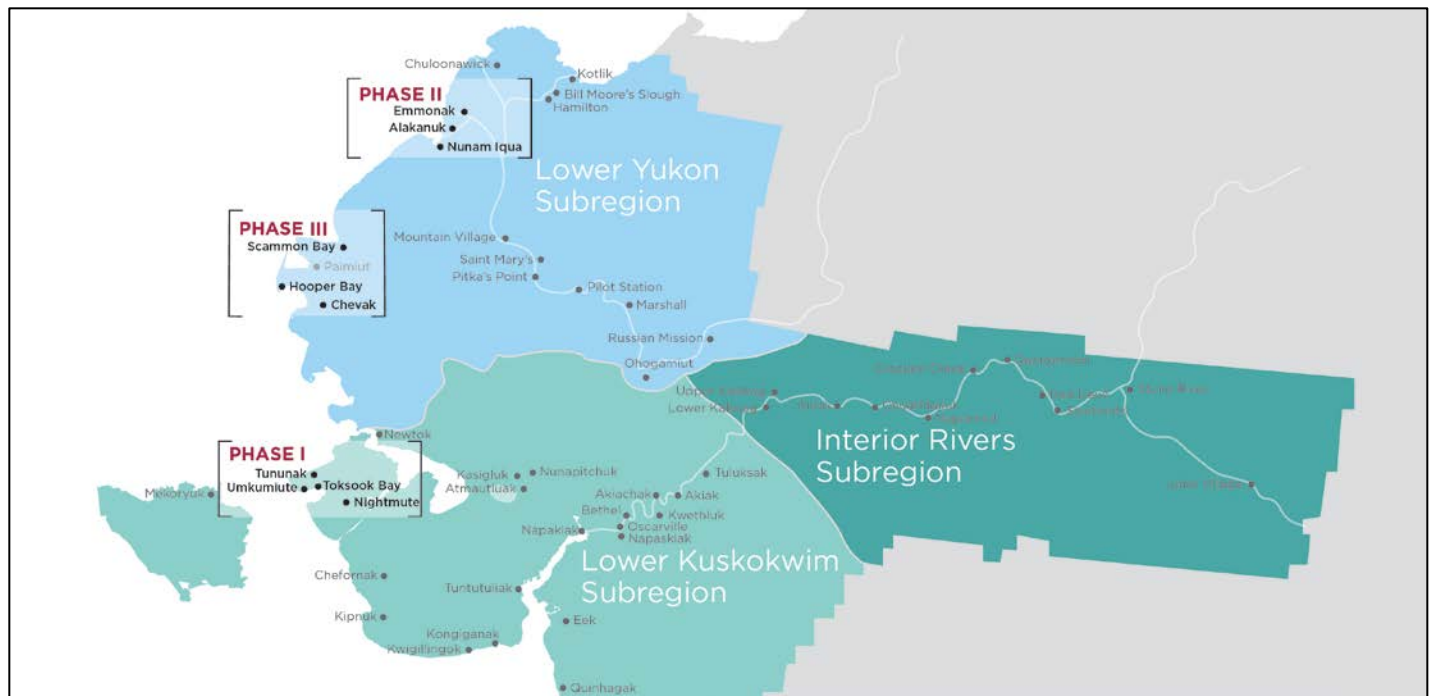
Several indicators suggested Quinhagak would be the best site to test Nuvista’s draft project and finance development work plan: upfront costs for energy audits were met; preliminary data collection had begun; and a strong political will to employ energy efficiency measures was made evident by community leaders at the Native Village of Kwinhagak (tribe), Qanirtuuq (village corporation), and the City of Quinhagak.

Nuvista is currently investigating the funding options to start an energy efficiency retrofit project in the Quinhagak community’s public-purpose buildings. If deemed appropriate, there is the possibility of extending the retrofits to residential buildings, as well.



The community sustainability project is a community planning effort that focuses on finding opportunities to better use and coordinate public infrastructure and services to support overall sustainability. This initiative is funded by a grant from the Department of Commerce, Community, and Economic Development and is managed by the Division of Community and Regional Affairs. The funding agency

identified three "clusters" of communities (one for each phase) that will participate in this project: the Nelson Island communities of Toksook Bay, Tununak, Nightmute, as well as the fishing camp site of Umkumiut (Phase I); Emmonak, Alakanuk and Nunam Iqua (Phase II); and Scammon Bay, Hooper Bay, and Chevak (Phase III).



In each phase of this project, options for consolidated services by sector and by community were researched keeping in mind the services that are currently being offered in each community. Additionally, the team determined the advantages and disadvantages for all of the service consolidation options and compiled all of the information into the final document. Potential for improved services was also explored in areas where basic services and infrastructure were not available. The end result of this initiative is a report containing recommendations for the communities and an implementation plan, along with funding opportunities for each sector.

The project team finalized and published the Phase I report for the Nelson Island communities. The Phase I report was completed in July of 2016 and can be found on Nuvista’s website (www.nuvistacoop.org/resource-library).

Per the original contract, Nuvista opted to extend the contract with WHPacific and Cold Climate Housing Research Center (CCHRC) to Phase II, which followed the same guidelines as Phase I but examined the lower Yukon River communities of Emmonak, Alakanuk, and Nunam Iqua. The final report for this study will be done in March of 2017.

Phase III of the Sustainable YK project will cover the communities of Chevak, Scammon Bay, and Hooper Bay. The project team will include Nuvista, Agnew::Beck and Summit Consulting Services. Phase III began in February of 2017 and will be completed by June of 2017.

NUVISTA'S NEW EXECUTIVE DIRECTOR



Natalie Hanson was hired as Executive Director of Nuvista in October of 2016. Natalie was formerly the Program Coordinator for Nuvista and held that position for over two years.

Natalie was born and raised in Bethel, AK. After graduating from Bethel Regional High School, she attended Boise State University where she earned a Bachelor's Degree in Geosciences with an emphasis in Hydrology.

Upon graduation, Natalie returned to her home state of Alaska. She comes with experience in program/project management, consulting and community planning. In addition to her well-rounded experience, she recently earned her Masters in Civil Engineering from the University of Alaska Anchorage in the Fall of 2016.

Outside of the office, Natalie is a co-founder of Beefpuff Barbell – an apparel and coaching company focused on promoting self-acceptance through the pursuit of physical strength. Natalie also currently holds an American Record in Women's Powerlifting. She accomplished this incredible feat in late January of 2017. Congratulations!

NUVISTA'S NEW ADMINISTRATIVE ASSISTANT

Lisa Fox was hired in January of 2017 to work as a part-time administrative support staffer for Nuvista. Lisa has had many years in administration including her work as a communications specialist for two world-class museums.

Lisa has had varied career from running a non-profit whale research organization in Massachusetts to currently owning her own organic garden and floral design business, The FlowerSmith, here in Anchorage. She also is a freelance journalist with the Anchorage Press.

With degrees in Zoology, French and Biology and a long history of writing, public speaking and communications work, Lisa brings a lot of experience to her position at Nuvista. A long-time activist on environmentally related issues, she looks forward to helping advance the mission of Nuvista.

