

Aniak Energy Efficiency Project

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DOE PROGRAM REVIEW

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Native Village of Aniak

- Yup'ik Eskimo and Athabascan Alaska Native Village of 532 people
- People live a subsistence lifestyle, year round relying on fish, moose, bear, birds, berries, and gardens for food.
- The village is governed by a Traditional Council and a City Council.
- The community is a hub for surrounding villages with three schools, a sub-regional clinic, and a runway that can land a jet.



Background

- Aniak has a long-term goal to reduce and stabilize energy costs in the community.
- Aniak works to build knowledge and skills of the community to implement energy solutions.
- The Tribal Government in Aniak is strong and involved. The Traditional Council has ten staff positions in addition to the Council members that work to administer community programs, including energy assistance and environmental planning.

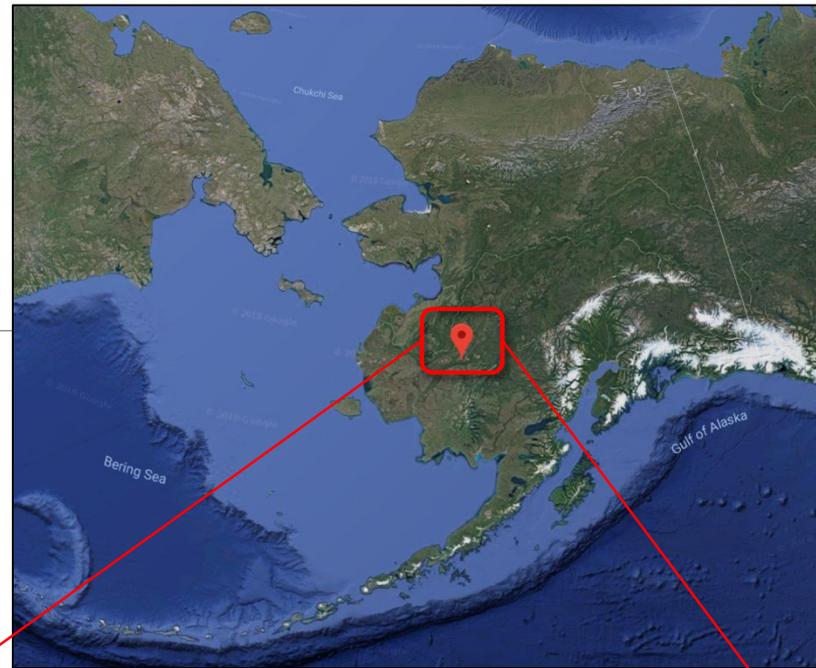


Project overview

- This project will address the high energy costs in Aniak.
 - Gallon of gasoline is \$6.94
 - Gallon of heating fuel is \$6.99
 - Electricity is \$0.60 / kWh
- The goal of the project is to reduce the fuel oil and electrical energy use of tribal buildings.
- Strategy:
 - Identify tribal buildings with high energy use.
 - Conduct ASHRAE Level II energy audits.
 - Develop an Energy Action Plan for each building.

Project location

- Aniak is not connected to the road system. Travel is by small plane or by boat when river is free of ice.
- Aniak is located in Southwest Alaska, where the Kuskokwim River meets the Aniak slough.
- Aniak is a service and transportation hub for the surrounding region.



Participants

- Daisy Philips – Finance director
- Laura Simeon – Tribal administrator
- Leonard Morgan – Maintenance director
- The Aniak Traditional Council – Project direction and oversight
- Cold Climate Housing Research Center (CCHRC) – Alaska nonprofit organization that conducted the energy audits and helped develop the Energy Action Plan.

Project objectives

- To reduce and stabilize energy costs in tribal buildings by setting energy efficiency improvement goals.
- These efficiency goals will provide direction for future retrofit projects.
- Demonstrate sustainable practices and behaviors to the entire community.



Project buildings

- The Aniak Traditional Council chose 7 buildings to participate in the project:

- Tribal office
- Community center
- VPSO office
- AVCP office
- Duplex
- Large farm building
- Small farm building

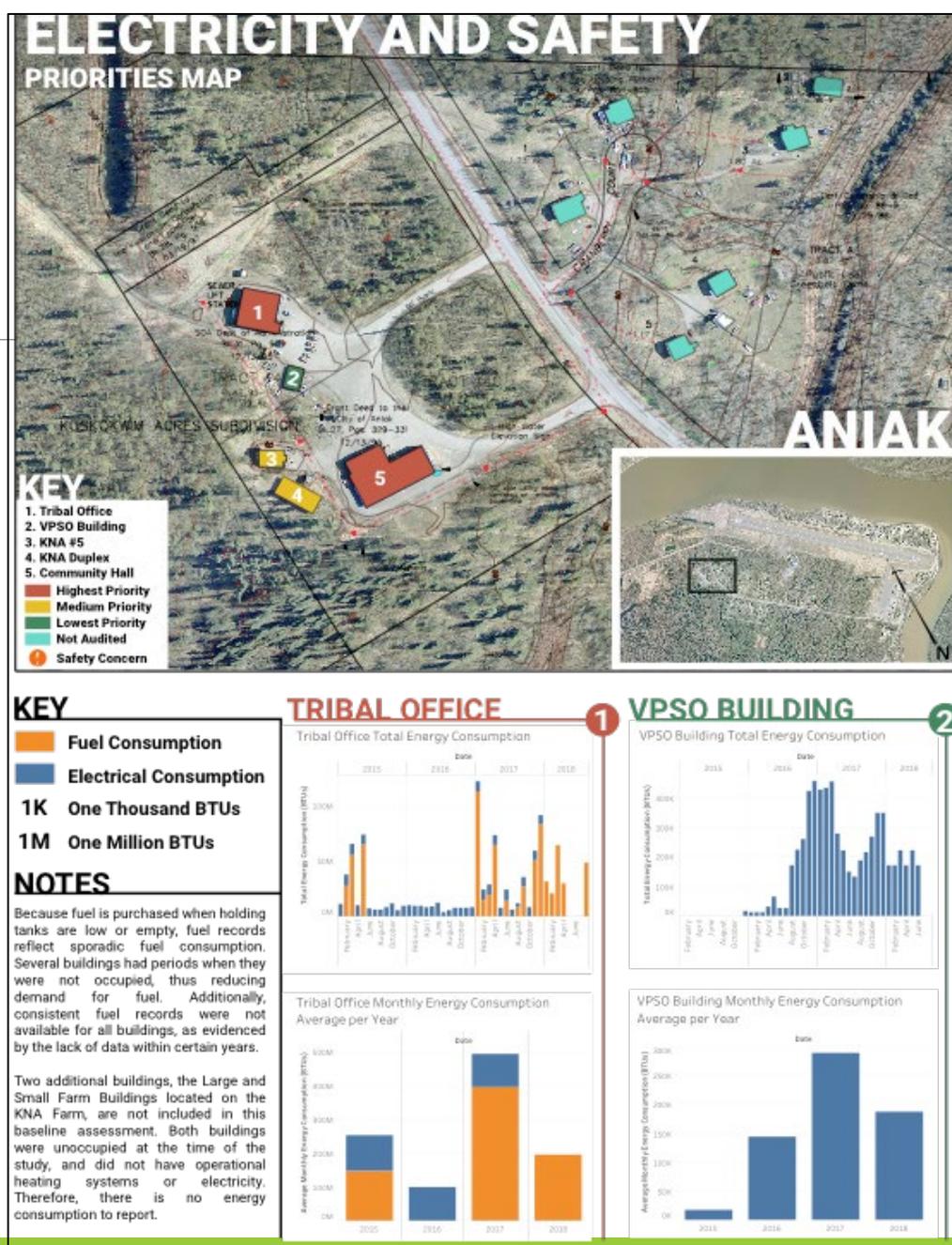


Accomplishments

- The Traditional Council decided on goals for each building in the project.
 - Reduce energy use
 - Renovate the Duplex and AVCP office for future lease
 - Renovate the farm buildings into warm storage facilities
- The project team collected baseline data for each building.
 - Data monitoring plan
 - Energy use and building condition
- The project team completed energy audits for each building.
 - Recommendations to reduce energy use
- The project team presented final audit results and draft report to the Council and went on a building walk-through with the maintenance director to show him and the office staff each recommendation.

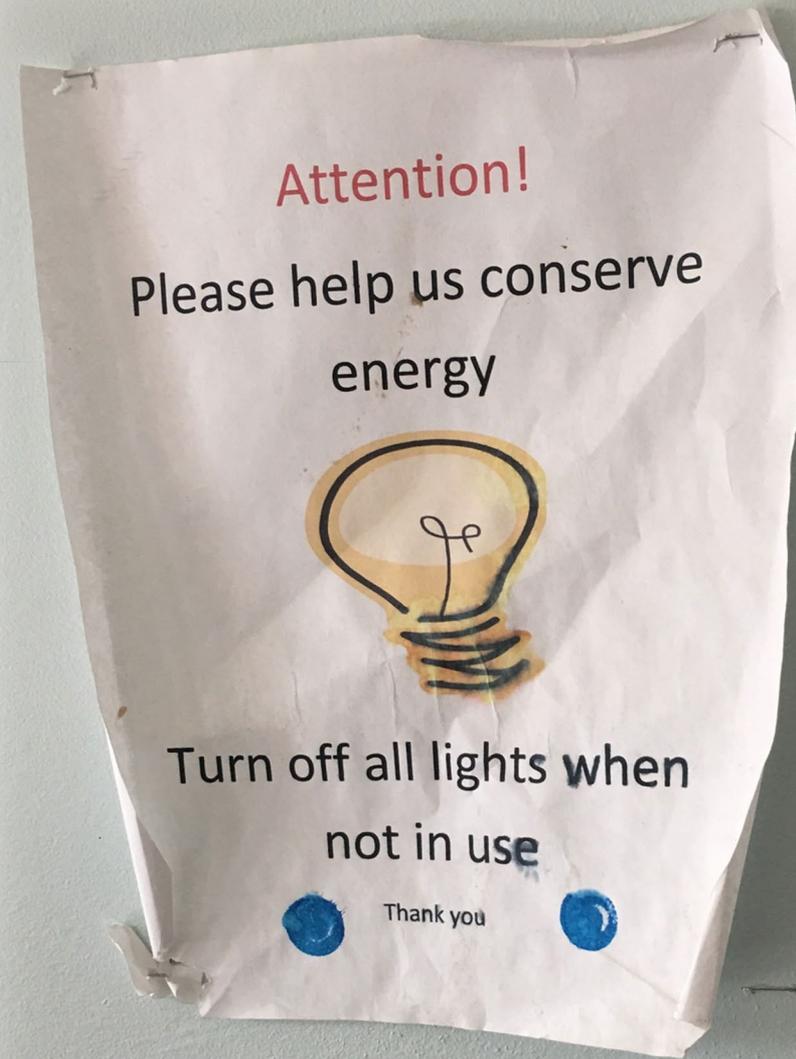
Final activities

- The project team will complete an Energy Action Plan for the tribal buildings.
 - Project information
 - Building descriptions and baseline data
 - Data monitoring plan
 - Energy audit summaries
 - Maintenance plan
 - Funding opportunities
 - Scope of work for contractors
- The project team will showcase the project to the community via a flyer and video, as they look toward next steps.



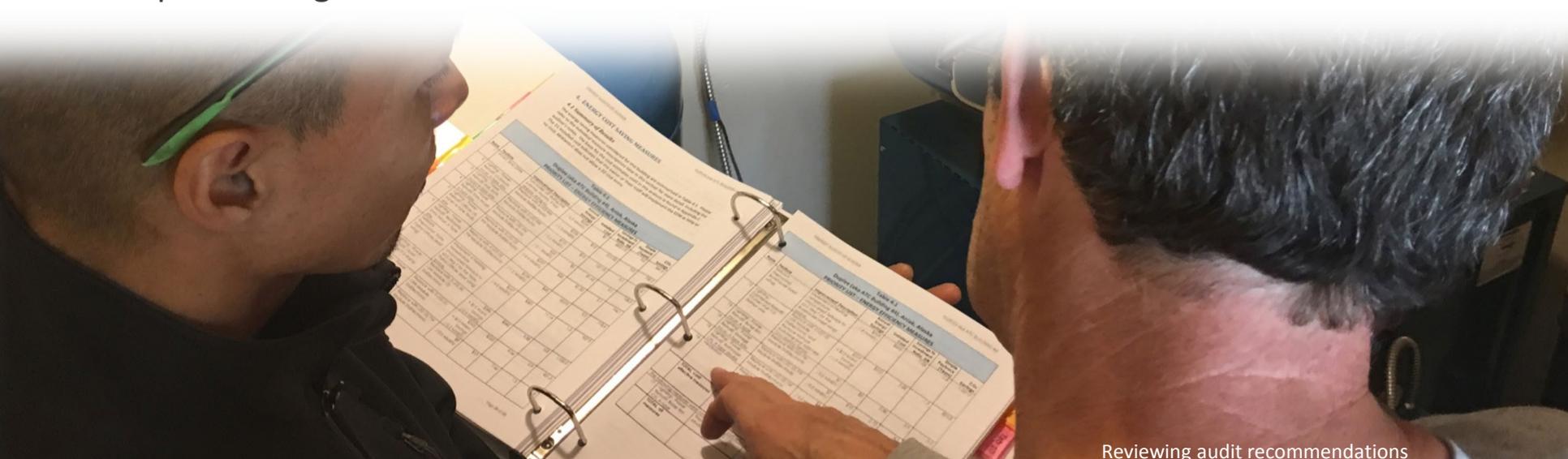
Lessons learned

- Energy use and costs can be greatly reduced!
- It is important to improve local workforce capacity to take care of building maintenance and oversee energy efficiency improvements.
- Stay organized and be careful so the project succeeds!



Future plans

- The Traditional Council will use the Energy Action Plan as a resource to search and apply for funding for a comprehensive retrofit project.
- The maintenance director will immediately begin to address recommendations in the energy audits, such as deferred maintenance, lighting upgrades, and programmable thermostats.
- The building occupants will immediately begin to address energy conservation recommendations in the energy audits, such as using programmable thermostats and performing maintenance checks.



Questions

For additional information, please contact:

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