

Establishing a Technical Assistance Network to Build Capacity in Southwest Alaska

DOE Office of Indian Energy Annual Program Review

November 13-17, 2017

Denver, CO



Laura Vaught, Energy Coordinator
Southwest Alaska Municipal Conference

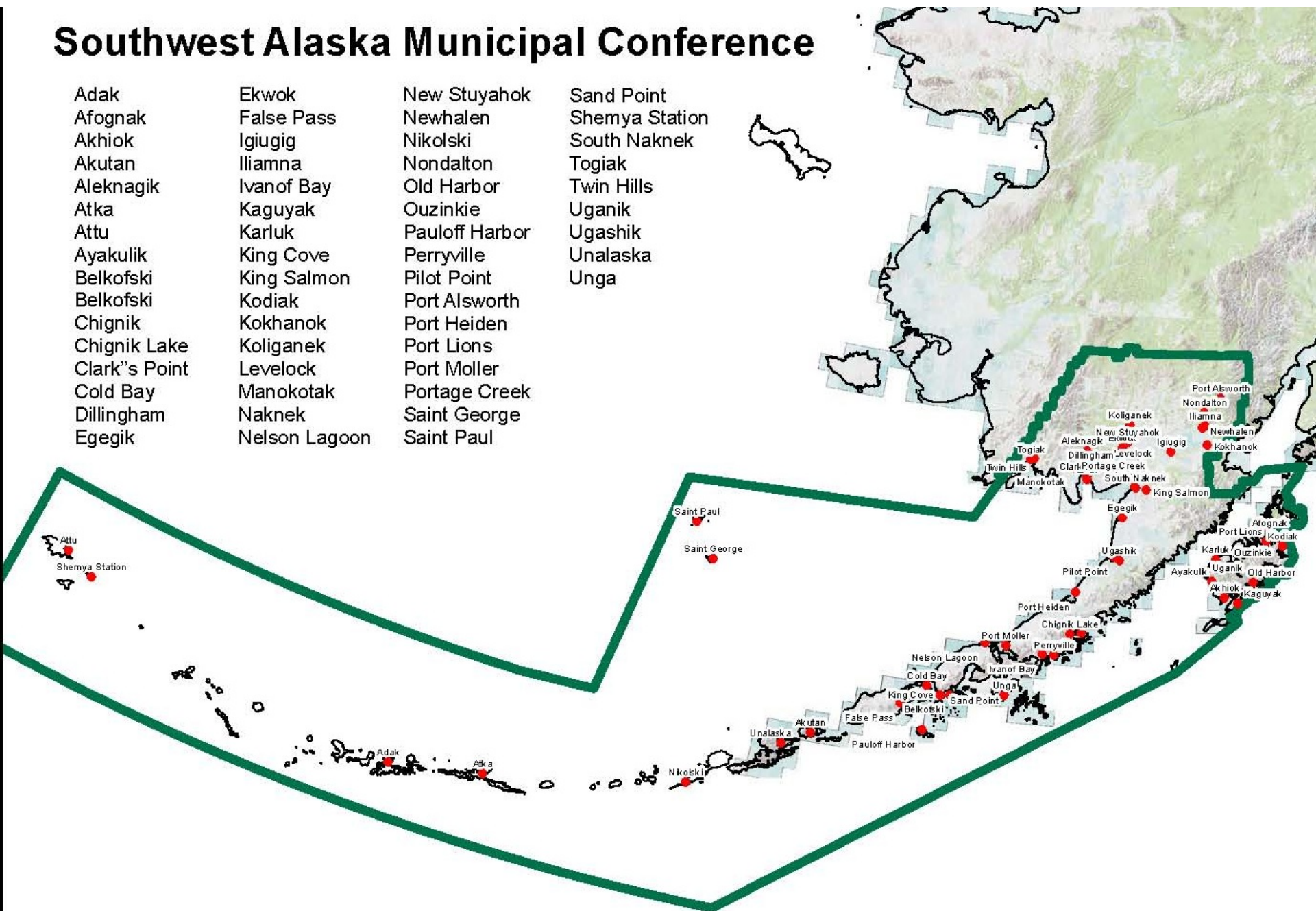


We are a regional membership organization that advances collective interests of the people, businesses, and communities of Southwest Alaska.

SWAMC helps promote economic opportunities to improve quality of life and influence long-term responsible development.

Southwest Alaska Municipal Conference

- | | | | |
|---------------|---------------|----------------|----------------|
| Adak | Ekwok | New Stuyahok | Sand Point |
| Afognak | False Pass | Newhalen | Shemya Station |
| Akhiok | Igiugig | Nikolski | South Naknek |
| Akutan | Iliamna | Nondalton | Togiak |
| Aleknagik | Ivanof Bay | Old Harbor | Twin Hills |
| Atka | Kaguyak | Ouzinkie | Uganik |
| Attu | Karluk | Pauloff Harbor | Ugashik |
| Ayakulik | King Cove | Perryville | Unalaska |
| Belkofski | King Salmon | Pilot Point | Unga |
| Belkofski | Kodiak | Port Alsworth | |
| Chignik | Kokhanok | Port Heiden | |
| Chignik Lake | Koliganek | Port Lions | |
| Clark's Point | Levelock | Port Moller | |
| Cold Bay | Manokotak | Portage Creek | |
| Dillingham | Naknek | Saint George | |
| Egegik | Nelson Lagoon | Saint Paul | |



Life in the SWAMC Region



Aleutian & Pribilof Islands Region



Bristol Bay Region



Kodiak Region



KONIAG
INCORPORATED



KODIAK AREA NATIVE ASSOCIATION

Past Related Activities



- 3 years of outreach through AEA Regional Energy Planning
- Development of Regional Energy Committees: Tribal and city representatives for Aleutian, Bristol Bay and Kodiak regions
 - ✓ Aleutian and Pribilof Islands Phase I Report (Resource Inventory) & Phase II Report (Stakeholder Engagement)
 - ✓ Bristol Bay Phase I Report (Resource Inventory) & Phase II Report (Stakeholder Engagement)
 - ✓ Kodiak Phase I & II Reports – Vol I (Resource Inventory and Outreach) & Vol II (Community Profiles)

Project Goal

A wide-angle photograph of a large body of water, likely a bay or coastal area. In the foreground, a line of white buoys is strung across the water, receding into the distance. The water is a deep blue-green color with some whitecaps. In the far distance, a low, green shoreline is visible under a clear blue sky with a few wispy clouds. A few small boats are scattered across the horizon.

Establishing a Technical Assistance Network to Build Capacity in Southwest Alaska

Regional tribal partners and communities will develop efficient and financially sustainable structures for identifying and developing energy projects that enhance community resiliency and energy sustainability

Project Participants

Project Management Team

- **Laura Vaught**, Multi-Region Energy Coordinator and Project Manager, *SWAMC*
- **Jamie Hansen**, Senior Consultant, *Information Insights*

Regional Energy Coordinators

- **Bruce Wright**, Senior Scientist,
Aleutian Pribilof Islands Association (APIA)
- **To Be Announced**, Regional Energy Coordinator,
Bristol Bay Native Association (BBNA)
- **Tyler Kornelis**, Project Manager,
Kodiak Area Native Association (KANA)

Project Participants

Technical Assistance Panel

- **Dr. Brian Hirsch**, President and Owner, *Deerstone Consulting, LLC*
- **Connie Fredenberg**, President and Owner, *Utility Management Assistance*
- **Jim Fowler, PE, CEM**, Founder and Principal, *Energy Audits of Alaska*
- **Travis Hammond**, Electrical Engineering Lead, *TDX Power*
- **Peter Crimp**, Owner, *Crimp Energy Consulting*
- **Douglas Vaught, PE**, Consulting Engineer, *V3 Energy, LLC*

Project Objectives



1. Build in-region technical and management capacity
2. Demonstrate improved capacity by identifying and developing energy efficiency, heating, and power supply projects that reduce community costs, improve energy systems, and utilize alternative sources of energy
3. Develop regional energy management structures that are financially sustainable

Objective 1 – Communication & Data Management Systems

- Regional Energy Coordinators and Multi-Region Energy Coordinator
- Technical Assistance Panel
- Communication and Data Management Systems:
 - Energy Committee Meetings & Annual Workshop
 - Southwest Alaska Energy Network Website
 - Quarterly Energy newsletter and survey
 - Facebook group
 - Project Tracking Database

Energy Workshop



www.southwestAKenergy.org

Southwest Alaska Energy Network

An Energy Support Network serving the Aleutian-Pribilof, Bristol Bay & Kodiak regions



[Home](#) [About](#) [Projects](#) [Funding](#) [Toolbox](#) [Meetings](#) [Reports](#) [Contact](#)

High Cost Energy Grant – Application due Dec. 11, 2017

Posted on **October 24, 2017** by [Information Insights](#)

The High Cost Energy Grant is again available to rural communities with energy costs exceeding:

- Electricity \$3,904 (\$0.345 per kilowatt hour)
- Fuel oil \$2,903 (\$6.25 per gallon)
- Total household energy \$5,546 (\$61.87 per million Btu)

The purpose of the grant is to provide assistance for communities most challenged by extremely high energy costs. To apply, visit <https://www.rd.usda.gov/programs-services/high-energy-cost-grants>.

Who may apply?

Sign Up to Stay Informed

Region

Subscribe

powered by [MailMunch](#)

Our Partners

www.southwestAKenergy.org

Projects

This is a full list of the energy projects that are being pursued or are needed in Southwest Alaska communities. If the page isn't wide enough to show all fields, click the green "+" dot to the left of each row to show the hidden data. This list has been compiled through the AEA Regional Energy Planning effort and through contact with regional stakeholders and it is continually being updated. For more detail on these projects, contact [Laura Vaught](#).

Use the search box below to filter the table to show only specific projects, resources, communities, or regions.

Column visibility	Copy	CSV	Excel	PDF	Print	Show 10 entries	Search:
REGION	COMMUNITY	RESOURCE	PROJECT NAME	DESCRIPTION	PROJECT STATUS	PROJECT STAGE	
+	Aleutians	Akutan	Energy Infrastructure	Address high line loss.	Issue/Need	Need Identified	
+	Aleutians	Akutan	Energy Infrastructure	Add additional community facilities to PCE program	Issue/Need	Need Identified	
-	Aleutians	Akutan	Geothermal Development	Akutan Geothermal Development Final Design	Active Project	Reconnaissance & Feasibility	
Project Lead Org City of Akutan							
+	Aleutians	Akutan	Heat Recovery	Install heat recovery system	Potential heat recovery to buildings near powerplant.	Issue/Need	Need Identified
+	Aleutians	Akutan	Hydroelectric	Town Creek Hydro, 105 kW		Work Complete	Operational
+	Aleutians	Akutan	Management	O&M training to			



Resources

Our energy team will post current funding and technical assistance opportunities below. If you know of one that is not listed, please [contact us!](#) Note: If the page isn't wide enough to show all columns, click the green "+" dot to the left of each row to show the hidden data. You can also use the "Column Visibility" button below to select columns to hide. Finally, you can filter the table using the search box below to show only specific projects, resources, communities or regions.

Column visibility	Copy	CSV	Excel	PDF	Print	Show 10 entries	Search:
APPLY BY	RESOURCE	TYPE	PROGRAM	SOURCE	ELIGIBILITY		
+	12/1/2017	Energy Efficiency, Energy Infrastructure, Management, Renewable Energy, Water/sewer	Grant	Community Development Block Grant FY18	Alaska Dept. Commerce, Community and Economic Dev.	Alaska Municipality	
-	12/11/2017	Energy Efficiency, Renewable Energy, Energy Infrastructure	Grant	High Cost Energy Grant	U.S. Department of Agriculture	Retail or power providers including State and local governmental entities; Federally recognized Tribes and Tribal entities; Non-profits, including cooperatives and limited dividend or mutual associations; and For-profit businesses.	
URL https://www.rd.usda.gov/programs-services/high-energy-cost-grants							
+	12/31/2017	Energy Efficiency, Renewable Energy, Energy Infrastructure, Management	Grant	BBEDC Community Block Grants	Bristol Bay Economic Development Corporation	BBEDC 17 CDQ Communities, Tribal Government, and/or City Government	



Quarterly Newsletters & Surveys

➤ Sent to Regional Energy Network

Energy Newsletters

- Updates on our Energy Network
- Energy projects making progress around the region
- Open funding opportunities

Energy Surveys

1. Feedback on February Energy Workshop
2. Energy efficiency upgrades: Experience with & barriers to
3. Feedback on Energy Network Facebook group



Kokhanok Moving Forward on Wind-Diesel Integration

The Kokhanok Village Council received funding from the Alaska Energy Authority's Renewable Energy Fund and the EPA's Clean Diesel Program to upgrade the existing diesel power system and integrate the diesel system with Kokhanok's wind turbines. The community reached out to the Southwest AK Energy Network and Peter Crimp, an advisor on the network's Technical Panel, for assistance on using these funds. At the Village Council's request, Peter wrote an RFP (Request for Proposals) to procure the engineering design and equipment installation needed to refurbish the community's wind-diesel system. Making sure the RFP meets AEA and EPA requirements is critical in obtaining project funding.

The objectives of the project in Kokhanok are to 1) replace an older 60 kW diesel generator with a larger generator that meets EPA Tier 3 emission standards, including the controls and switchgear necessary for power plant automation, and 2) integrate the wind system with the diesel powerhouse and controls. The project will result in a fully functional wind-diesel system that is capable of operating in unattended, automated mode. The wind system has not functioned since 2014, and solving the integration issues to get the turbines back up and running has been Kokhanok's number one energy priority.

See our [Energy Network website](#) for the list of consultants on SWAMC's Technical Panel. Reach out to Laura or your Regional Energy Coordinator to ask about technical assistance for your community!

Southwest Alaska Energy Network Facebook Group



Swamc Energy Coordinator

October 11

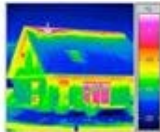


SAVE ENERGY – SAVE MONEY!

WOULD YOU LIKE A HOME ENERGY BASICS CLASS IN *YOUR* COMMUNITY?

Class covers:

- Basic building science
- Healthy indoor air quality
- Home retrofits
- Lighting & appliances
- Home renewable energy, and more



And... **tuition assistance** may be available. Ask me how!



AEA is an AEC's employer and educational institution and prohibits illegal discrimination against any individual. Also please do not discriminate.

For more information contact:
Mark Mastaler
Asst. Professor, Sustainable Energy
mmastaler@alaska.edu
907-414-0198
sustainableenergy@alaska.edu

ENERGY EFFICIENCY & RENEWABLE ENERGY

INTRODUCTORY COURSES WE CAN BRING TO *YOUR* COMMUNITY

- Home Energy Basics
- Solar Electric Systems
- Solar Hot Water Systems
- Small Wind Systems
- Heat Pump Systems



In-person and Online classes available



AEA is an AEC's employer and educational institution and prohibits illegal discrimination against any individual. Also please do not discriminate.

And... **tuition assistance** may be available. Ask me how!

For more information contact:
Mark Mastaler
Asst. Professor, Sustainable Energy
mmastaler@alaska.edu
907-414-0198
sustainableenergy@alaska.edu



Like



Comment



Swamc Energy Coordinator shared a link.



October 9

AEA is Offering Subsidized Energy Audits for Commercial Buildings!

AEA is now accepting applications for the USDA-funded Commercial Building Energy Audit (CBEA) program. Eligible applicants are private commercial building owners. The program will cover 75% of the cost of a Level I audit of a commercial building. The building owner is responsible for the remaining 25% of the audit cost. AEA will cover the auditor's travel costs since the SWAMC region is off the road system. There must be at least 2 eligible buildings applying per community to be considered, so talk to your neighbors!

City and Tribal-owned buildings are not eligible; however, communities are encouraged to work together to take advantage of the services of the energy auditor if they are already in a village doing commercial building audits. Hub communities may be especially interested in this program because an energy auditor can cover many buildings in one trip.

Learn more and apply for the program at <http://www.akenergyauthority.org/Efficiency/CommercialAudit>. The application deadline is November 15th!

Alaska Energy Authority > Efficiency & Conservation > Commercial Energy Audit

AEA is currently accepting applications for a USDA funded Commercial Building Energy Audit program. Please refer to the Request for Applications and submit the application form by November 15, 2017.

AKENERGYAUTHORITY.ORG



Like



Comment

Objective 1 – Energy Education & Training



- Identifying training/education programs across Alaska to collaborate with, share with region, and bring to SWAMC communities
 - Workforce development
 - Rural utility operator successor
 - Energy curriculum for youth
- 2018 Energy Workshop: Technical Panel to conduct trainings for attendees on challenging or commonly misunderstood energy topics

Objective 2 – EE & Heating/Power Supply Projects

- Energy Efficiency projects:
 - Baseline data collection: Benchmarking/Building Inventory
 - Regional and Community EE&C Guidebook
 - Energy audits and retrofits
- Heating and Power Supply projects:
 - Identify projects that are good fit for SWAMC TA. Technical Panel & REC contact community, ID barriers to progress
 - Help communities move high potential energy projects towards funding-ready point

Objective 2 – Accomplishments so far

- Strategic Energy Planning for Ouzinkie & Ugashik
- Quickbooks training for Port Alsworth
- RFP writing assistance for Kokhanok
- Crucial heat recovery system upgrades in Naknek
- Wind feasibility study in Unalaska
- Air Source Heat Pump demonstration project in Atka

Objective 3 – Financial Sustainability



- Secure long-term funding for energy positions and management structures
- Energy planning incorporated into project development region-wide
- Tools for continued progress on energy and efficiency projects developed and in use

Lessons Learned

A photograph of a large body of water, likely a bay or estuary, with a line of white buoys stretching across the foreground. Several fish are visible in the water, some near the buoys. The background shows a distant shoreline under a blue sky with some clouds.

- BBNA Regional Energy Coordinator position vacancy
- Communication methods: Accuracy of contact lists; in person meetings crucial. Lines of communication between REC and communities; between Technical Panel and communities
- Regional politics

Upcoming Activities

A wide-angle photograph of a large body of water, likely a bay or estuary, under a clear blue sky. In the foreground, a line of white buoys is strung across the water, with several fish visible near the surface. The water is dark blue-green with some whitecaps. In the distance, a low, green shoreline is visible under a bright sky with a few small boats.

- 2nd Project Team meeting: December/January
- 2nd Energy Workshop: February 28, 2018
- Focused Technical Panel & REC outreach to communities
- Outreach on Regional & Community EE&C Guidebooks



Quyana - Thank you!

Laura Vaught, Energy Coordinator

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