Tlingit-Haida Regional Housing Authority

Delivery of Tribal Energy Programs

Craig Moore, Vice President Planning & Development, THRHA

Sitka SEIRP Workshop
4-22-2011
OUR TRIBAL PARTNERS & COMMUNITIES

Yakutat Tlingit Tribe
Skagway Traditional Council
Central Council of Tlingit & Haida
Indian Tribes of Alaska
Douglas Indian Association
Angoon Community Association
Organized Village of Kake
Petersburg Indian Association
Wrangell Cooperative Association
Organized Village of Kasaan
Craig Community Association
Klawock Cooperative Association
Organized Village of Saxman
1057 housing units since 1973
Early HUD homes were not very durable or energy efficient.
But HUD homes offered safe and sanitary housing.
Nearly all THRHA HUD homes are heated with oil-fired boilers.
THRHA currently manages 637 Units (mostly low income rentals)

$1,556,423 was THRHA’s utility expense for all units in 2010
Many HUD homes received upgrades (CGP)

Angoon heating oil price March 2010 $4.80/gallon
NAHASDA Tribal Repair Programs helped residents in non-HUD homes.
Klawock Senior Center
Prince of Wales Island

Successful Model for
Independent Living and Aging in Place
Klawock Senior Center
Prince of Wales Island
Klawock Senior Center
Prince of Wales Island

24,980 SF

2010 heating oil expense: $52,671
Klawock Senior Center
Prince of Wales Island

2010 expense: $28,458 electric
SAXMAN Senior Center

R-30 Walls
R-60 Ceiling
Outside Insulation

27,679 SF

17 units independent living - ALL ELECTRIC
SAXMAN Senior Center

Evacuated Tube Solar Hot Water Collectors
2008 Legislature authorizes $360 million to AHFC for Building Energy Efficiency Programs in Alaska

$200 Million Lyman Weatherization Program

$160 Million Home Energy Rebate Program
AHFC Lyman Weatherization Assistance Program

THRHA Grants

$1.05 M grant for 2008-2009

$2.7 M grant for 2010

$3.0 M grant for 2011

Additional DOE Training Grants

$1.2 M

Jobs, training, and energy efficiency benefits for our communities
THRHA has trained and employed over 50 local workers in our communities for weatherization jobs.
Through 2011 grant year, THRHA will have weatherized over 500 homes in SE Alaska communities. Jobs, training, and energy efficiency benefits for our communities.
THRHA Weatherization

AS-IS Energy Ratings are performed with AkWarm software on each home at initial assessment.
Blown in cellulose to minimum R-40 in attics
In 2010, THRHA crews teamed with CCTHITA, SEACC, IPEC and others on an innovative demonstration project in Angoon.
Weatherization and outside insulation retrofit

Energy efficient lighting and appliances

Solar energy and wind turbine

"It'll be nice to live in a warm house, reduce my energy consumption, and be able to get some of my power from the sun."

Kelly and Peggy Williams, Angoon
CCTHITA, THRHA, and UAS have joined forces to train a local weatherization workforce to DOE standards.
GOALS OF ALASKA NATIVE WEATHERIZATION AND JOBS PROJECT

Training local workforce in DOE Core Competencies for the Weatherization Assistance Program

Installers
Crew Chiefs
Auditors (assessors)
The test house is a modular home with oil-fired forced air heating.

In this photo is a wall where students can practice installation of rain-screen siding, a technique widely used in our maritime climate.
Students get classroom training at the Test House, as well as hands-on training on various mock-ups.
Marquam demonstrates to students proper flashing techniques for windows and doors, essential for durable construction in the wet SE climate.
Weatherization Test House
Juneau

On this mock-up of a ceiling assembly, students get to practice air-sealing techniques for various ceiling penetrations.
Weatherization Test House
Juneau

Marquam shows students proper air-sealing and rim joist insulation techniques in this mock-up of a floor joist assembly.
Weatherization Test House
Juneau

Students get training in combustion safety
THRHA now has 8 BPI certified Building Analyst Professionals on team.
Weatherization Training Center - Juneau

Some of THRHA’s advanced training (BPI) crew
Marquam George

Building Energy Retrofit Technician (BERT)

- DOL approved Apprenticeship Program
- BPI Building Analyst approved certification curriculum
- College Credits
Weatherization Test House
Juneau

A student shows off his flashing technique for windows and doors. Each student gets practice on these mock-ups.
Weatherization Test House
Juneau

A duct-blaster is assembled to the ceiling mock-up, to demonstration pressure boundaries and air-leakage paths with smoke sticks
Weatherization Test House
Juneau

Students get practice on many techniques, from insulating pipes to performing blower door tests.
Sheetrock was removed from portions of this wall and Plexiglass was installed airtight, to show connection between crawlspace and attic.

Air movement inside the wall is visible with use of theatrical fog generator in crawlspace.
Tracey A. LeBeau

Tracey A. LeBeau is Director for the U.S. Department of Energy's Office of Indian Energy Policy and Programs. She was appointed in January 2011 to establish this new Office which is authorized by statute to manage, coordinate, create and facilitate programs and initiatives to encourage tribal energy and energy infrastructure development. Administratively, the Office was established to also coordinate, across the Department, those policies, programs and initiatives involving Indian energy and energy infrastructure development.
Energy Efficiency and Conservation Block Grants

Over $2.6 billion in formula grants are now available to Indian tribes, U.S. states, territories, and local governments under the Energy Efficiency and Conservation Block Grant (EECBG) Program. To obtain a copy of the Funding Opportunity Announcement (FOA), which contains complete information for grantees on the Program and application process, go to:
Weatherization Test House
Juneau

Students get training in zonal diagnostics and pressure imbalances
Weatherization Test House
Juneau

CURRICULUM RESOURCES

Alaska Residential Building Manual
Building Performance Institute - Building Analyst Cert.
Saturn Resources - Building Shell Guide
Saturn Resources - Energy Auditor Field Guide
Weatherization Assistance Program Core Competencies – US DOE
Energy Out West Field Guide - Best Practices for the Weatherization Assistance Program
Students who complete training may find employment on THRHA’s Weatherization Program
Thanks to sponsor Senator Lyman Hoffman from Bethel, the Alaska State Legislature authorized $200 million in 2008 to weatherize homes in Alaska.

THRHA received $2.7 million from AHFC in Grant Year 2010 to weatherize 220 homes in SE Alaska.
LYMAN WEATHERIZATION PROGRAM

THRHA is currently working on Priority Level 1 homes.

- Seniors over 55
- Families with children under 6
- Persons with disabilities
LYMAN WEATHERIZATION PROGRAM

Jobs, training, and energy efficiency benefits for our communities
THRHA Weatherization Crews are currently working in Saxman, Craig, Klawock, Hydaburg, Petersburg, Angoon, Hoonah, Yakutat and Juneau.

Jobs, training, and energy efficiency benefits for our communities.
2010 THRHA Board of Commissioners

Dr. Blake Y. Kazama
President and CEO