

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

STATE WEATHERIZATION



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



LYMAN WEATHERIZATION PROGRAM



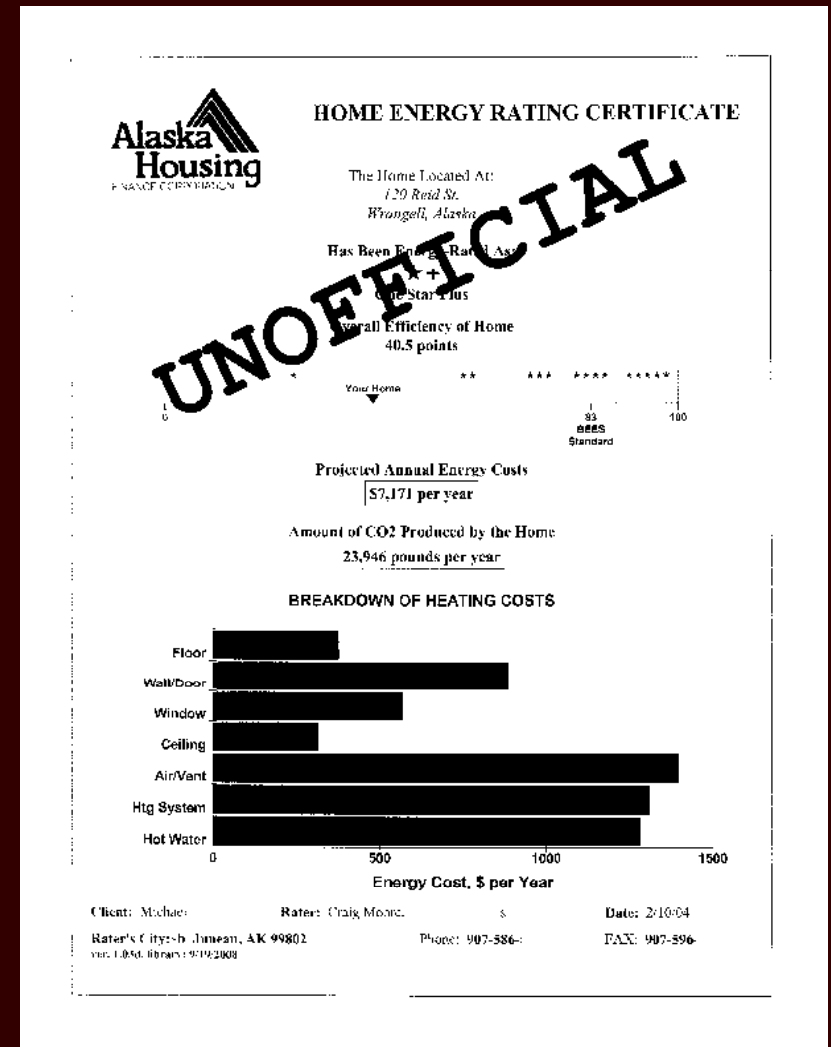
Through 2011 grant year, THRHA will have weatherized over 500 homes in SE Alaska communities

Jobs, training, and energy efficiency benefits for our communities

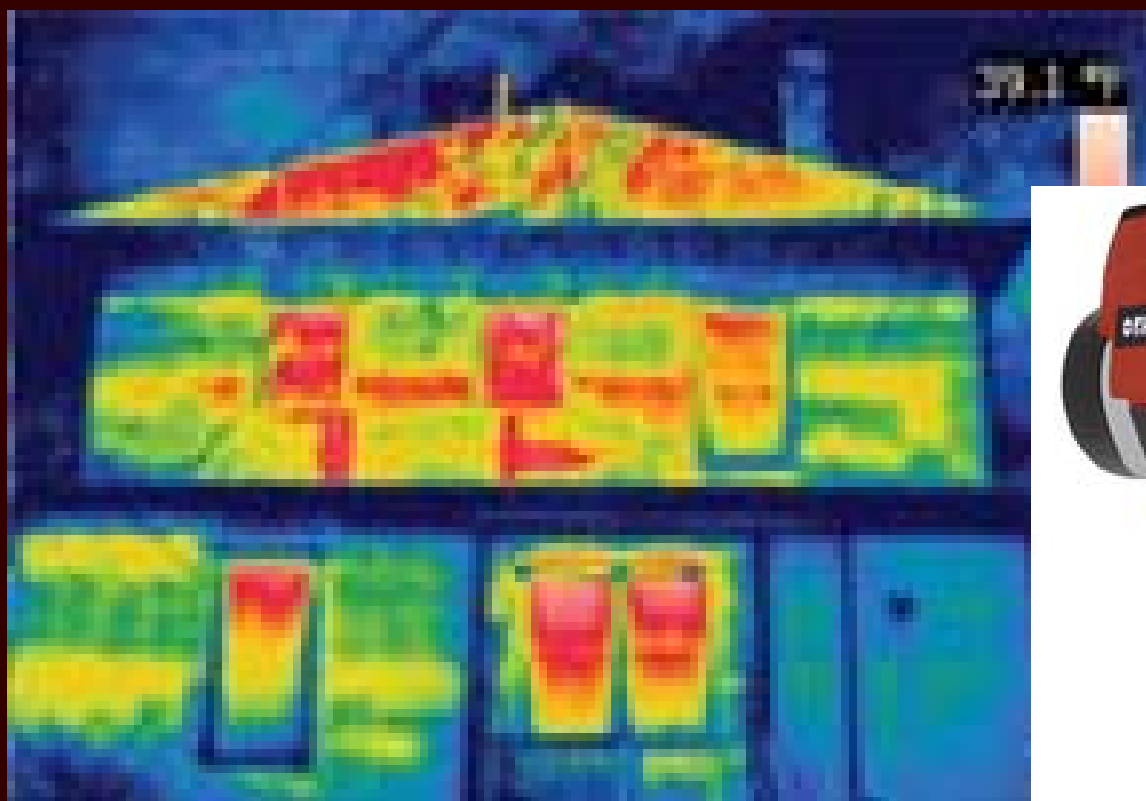
THRHA Weatherization



AS-IS Energy Ratings are performed with AkWarm software on each home at initial assessment



Infrared Thermal Imaging Cameras



Blown in cellulose to minimum
R-40 in attics



ANGOON DEMONSTRATION PROJECT



www.sustainangoon.org



In 2010, THRHA crews teamed with CCTHITA , SEACC, IPEC and others on an innovative demonstration project in Angoon

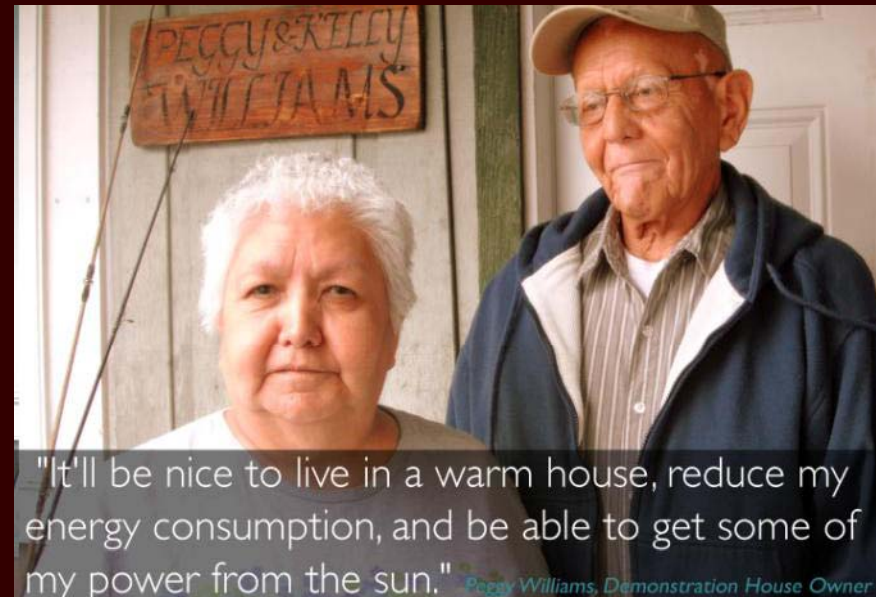
ANGOON DEMONSTRATION PROJECT



Weatherization and outside insulation retrofit

Energy efficient lighting and appliances

Solar energy and wind turbine



Kelly and Peggy Williams, Angoon

DOE WEATHERIZATION ASSISTANCE PROGRAM



CCTHITA, THRHA, and UAS have joined forces to train a local weatherization workforce to DOE standards

WAPTAC

WEATHERIZATION ASSISTANCE PROGRAM
TECHNICAL ASSISTANCE CENTER

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)

Weatherization Test House Juneau



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.

Weatherization Test House Juneau



Students get classroom training at the Test House, as well as hands –on training on various mock-ups .

Weatherization Test House Juneau



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



Building Performance Institute, Inc.



THRHA now has 8 BPI certified Building Analyst Professionals on team

Weatherization Training Center - Juneau



Some of THRHA's advanced training (BPI) crew

University of Alaska Southeast 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.

Weatherization Test House Juneau



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.



ENERGY.GOV



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.



New Tribal Energy Efficiency & Conservation Block Grants



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

LYMAN 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

LYMAN WEATHERIZATION PROGRAM



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

Tlingit-Haida Regional Housing Authority



WWW.THRHA.ORG

