

Scotts Valley Band of Pomo Indians

First Steps Toward Tribal Weatherization -Human Capacity

Development

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Final Report

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- Jody Larson, Housing Director
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- Shelton Enochs, Executive Director Energy Efficiency Training Academy, Oroville, CA
- Andy Sorter, Energy Consultant Arcata, CA

We would also like to acknowledge the Lake and Mendocino Tribes participation in the weatherization and BPI training this project funded, which opened the doors to pursue careers in green jobs. Other acknowledgement goes out to Pacific Gas & Electric for endless resource materials and energy efficiency training opportunities available for our use.

Most importantly we would like to acknowledge the Scotts Valley Tribal Council for supporting this important project and their commitment to continue the long range goals of the Tribes energy program.

Finally, we would like to thank the Scotts Valley Tribal Members and other local Tribes in the community who allowed us to enter their homes to perform energy assessments.

Executive Summary

From October 2009 to March 2012, the Scotts Valley EPA and Natural Resources Department assisted the implementation of this project to establish a Tribal Multi-County Weatherization Energy Program to provide training, outreach and education on energy assistance and conservation to low-income families. The Tribe's mission, under its Strategic Energy Plan of 2008, is to promote tribal efficiency, reduce energy costs, create jobs, economic opportunities, and incorporate energy planning in construction and economic development. The goal of the proposed project is to train and certify tribal members to provide tribal homes and buildings with weatherization services for energy efficiency. Funding for this effort was provided by the U.S. Department of Energy's Tribal Program under First Steps grant award #DE-EE0002531.

The Scotts Valley Tribal Environmental Director supervised the Project Energy Coordinator (PEC) hired under this grant to implement the work plan task activities. The PEC performed a variety of tasks as outlined in the project work plan activities, the following completed activities are:

- Coordinated and scheduled the weatherization training for all Lake and Mendocino Tribes, approximately 15 tribal trainees completed the training with an 81%-90% passing ratio.
- Partnered with Community Action Agency of Butte County, Inc. with the Scotts Valley Tribe to have certified weatherization tribal trainees to be trained and hired in their weatherization apprenticeship using grant funds to pay wages.
- Sought and provided resources for trainees interested in seeking green job careers and/or economic entrepreneurships in the green business economy.
- Promoted energy conservation and energy savings through outreach and education by developing: Scotts Valley Energy Efficiency brochures (Attachment #1); Scotts Valley Minzine (Attachment #2); Four powerpoint presentations (Attachment #3); Energy 101 class (Attachment #4-Class

Notice & #5-Powerpoint), energy booth events, large poster displays, energy agenda topics at tribal council and at local environmental meetings.

 Due to various discounts provided by energy partners, this allowed more funding available for further weatherization training, and advance energy training such as solar installation and Building Professional Institute (BPI) -Building Analyst and Building Performance Training certification (Attachment # 6-Copies of Certificates).



Figure 1-Tribal BPI graduates

Project Overview

The program is designed to provide human capacity building and economic sustainability. The Program implemented a Weatherization Training Program and developed a tribally certified workforce to provide weatherization services to tribal homeowners who live on and off the Rancheria's. The certified workforce had accessed through a job referral system for purposes of servicing the tribes. The Program also encouraged economic development and self-reliance for tribal members who have an interest in pursuing a weatherization business of their own.

The program provided numerous educational and outreach events to the tribal communities through workshops and presentations utilizing energy efficiency information and resources from various energy providers, state and federal agencies, organizations and developed material by the Tribe. The outreach was a viable component of the program that provided education to tribal homeowners on energy efficiency and assisted in recruiting tribal members for the tribally certified workforce program. The program sponsored a "Weatherization 2009 Activities Day" for the community at large at various tribal community events, filled with activities for children, speakers, and demonstrations.

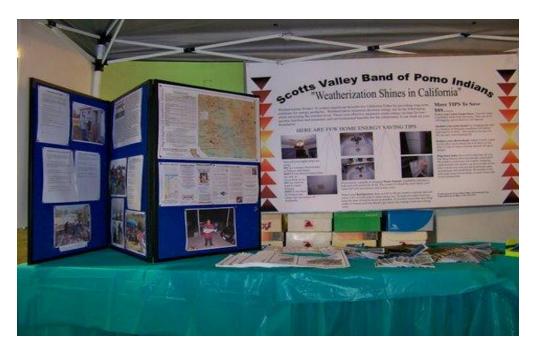


Figure 2-Scotts Valley Energy Booth Display at the Lake County Fair



Figure 3-Scotts Valley Energy Booth at Big Valley Tule Boat Event

At the Annual Big valley Tule Boat Event the Scotts Valley Energy Booth held raffles for all age groups 8-17 years old, in which each youth had to take an energy quiz (Attachment #7-Energy Quiz) to qualify to enter the raffle. Approximately 70-80 tribal youth completed the quiz. Each tribal youth were also given an Energy Resource and Activity Book (Attachment #8-Energy Resource and Activity Book) developed by the Scotts Valley Energy Program.

As part of continuing the energy efficiency program, an "Energy 101" class was held for all interested tribal community members and other tribal energy programs. The class presentation topics included, Introduction to Energy Audits, Energy Efficiency and Conservation Measures, Language of Energy, Renewable Energy, How Energy applies in today's funding for jobs in the energy sector, energy efficiency employment opportunities and promoting advance energy training. The training was well-received and most participates became more knowledgeable about energy efficiency.



Figure 4-OuRevolution consultant presenting "Energy 101" class.

In late Fall 2009, the recruitment process began in seeking tribal members interested in pursuing careers in green jobs by participating in the weatherization training. A notice was sent out to Lake and Mendocino Tribes who provided support letters for this project specifying the timeframes this training will begin and to seek out 1-2 tribal members interested in participating. The following Tribes responded to this request to participant:

Big Valley Rancheria	Scotts Valley	Middletown Rancheria
Elem Colony	Cahto Rancheria	Upper Lake
Hopland Rancheria	Guidiville Rancheria	Pinoleville Nation
Sherwood Valley Rancheria	Potter Valley Rancheria	Redwood Valley Rancheria
Robinson Rancheria		

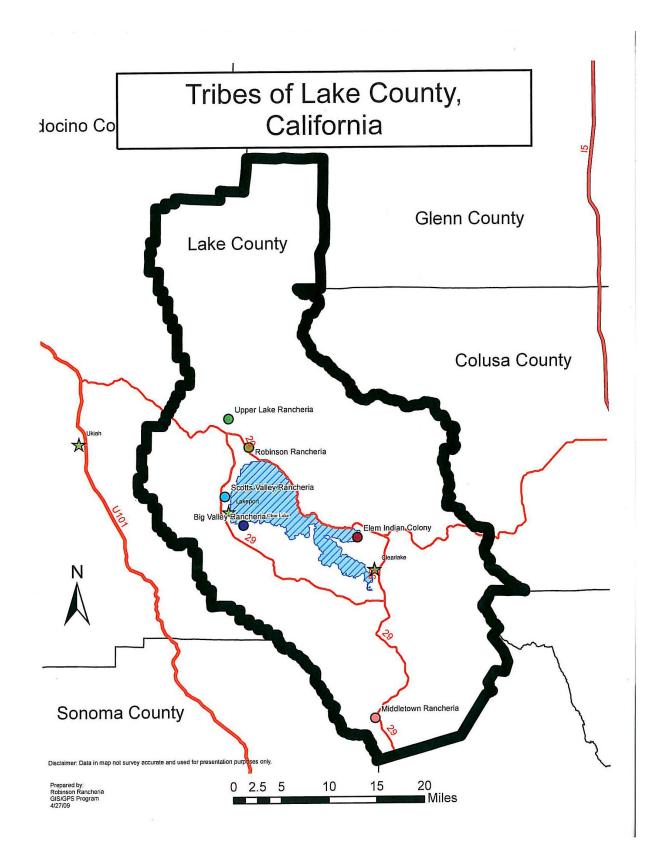


Figure 5 – Map of Lake and Mendocino Tribes

Approximately 25 tribal members completed all three courses (Attachments # 9-Weatherization Class Descriptions) to receive certification in weatherization.

After the training was completed from June 2010-October 2010, the top four students were selected for the upcoming 12-week apprenticeship program. The selection was based on the weatherization instructor and the Tribal Energy Project Coordinator recommendations. The four selected all agreed to participant based on the MOU (Attachment #10-MOU Agreement) developed between the Community Action Agency of Butte County and the Scotts Valley Band of Pomo Indians. Each of the four apprentices received a Certificate of Completion (Attachment #11- Copies of Weatherization Certificates). Once the apprenticeship ended, each one of these participates were given an opportunity to apply for a job within the Community Agency, however only one decided to apply and was hired, another was hired at a different energy assistance provided and the other two decided to go back to their tribes to work for their housing or newly established energy departments.

The goals and objectives of this project were not only met but exceeded our expectation on the amount of weatherization training provided to the tribal participates in preparation for new green job development trend in today's newest green economy.

Descriptions of Activities Completed.

According to the project task activities the following goals and objectives have been implemented:

- A weatherization training program was developed and a tribally certified workforce and job referral was initiated utilizing the Project Energy Coordinator to assist the trained members.
- A mutual agreement was set up to provide on-going weatherization training for Tribal members at the Energy Efficiency Training Academy, Oroville, California.
- Provided human capacity building by hiring a Project Energy Coordinator based at the Scotts Valley Lakeport administration offices to coordinate the weatherization training program, distribute energy information and resources for energy assistance for low-income families and resources on green business economic opportunities.
- Provided outreach to tribes to access energy bill payment and weatherization assistance to low-income families form NCES.
- Developed a contract with the Community Action Agency of Butte County, Inc. to provide on-the-job apprenticeships.
- Provided energy-related educational presentations and workshops to Tribes at community events.
- Promoted job creation by completing certified weatherization training in preparation for entering today's energy job market economy.
- Promoted economic development prospects to trainees interested in pursuing weatherization entrepreneurships.
- Aiding tribal members to access PG&E Energy Incentive Rebate Program.

The Project Energy Coordinator hired performed the following scope of work:

- Task 1: Initiate Energy Program
- Task 2: Program Administration
- Task 3: Implement certified weatherization training program application process
- Task 4: Implement Energy Efficiency Training Academy Application Program Outreach and Energy Education

Conclusions and Recommendations

In 2008, the Scotts Valley Band of Pomo Indians with the recommendations of their Housing Department wanted to gain more knowledge, experience and education on weatherization and sent several of their staff and interested Tribal members to their first weatherization training at Montana University. After completing this training all participants were excited and saw this as an opportunity to try and get more training in this field for job creation for their own members. In 2009, President Obama initiated ARRA which opened endless opportunities for Tribes to seek economic development in energy, thus the Scotts Valley Tribe applied for the Department of Energy (DOE-Human Capacity) Tribal Weatherization grant for weatherization training, energy assistance resources and economic development opportunities. This followed with the Department of Energy-Energy Efficiency Conservation Block Grant, which provided more assistance on training on weatherization and energy auditing. The following year, the Tribe applied again for the DOE Human Capacity grant to assist in developing a Tribal Energy Program Department, more training in weatherization and energy audits, economic development opportunities, energy resources and much more. With all combined grants, the Tribe was able to utilize all three to their benefit with DOE's assistance. In addition, energy audit training was available through the savings on weatherization training, this resulted in working in concert with all the energy grants to accomplish completing 14 energy audits. In conclusion, the ability to have DOE accept the Tribe to work all three grants consecutively within a 2-1/2 year time period was a successful collaborative process, which at times got a little complex and challenging, but with much patience and assistance from DOE the Tribe feels it accomplished their goals and objectives they set out to do.

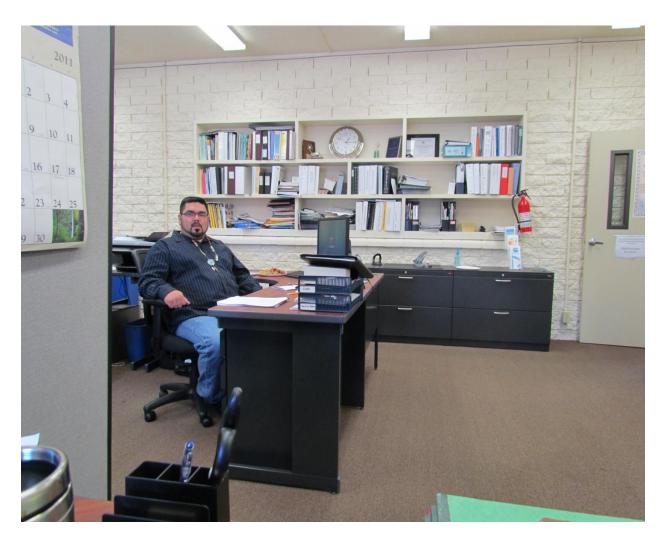


Figure 6 - The Scotts Valley Environmental and Natural Resources Department would like to congratulate Mr. Gabriel Ray for his outstanding work he performed while working under the Department of Energy Tribal Multi-County Weatherization grant. In April 2010, Gabe was hired as the Project Energy Coordinator and on June 8, 2011 his position ended. Under this Project, Gabe implemented the following activities: coordination and scheduling (3) Basic Weatherization Training for (11) Tribes located in Lake and Mendocino Counties; the setup of the weatherization apprenticeship program; provide energy conservation outreach and education; and seek career/job opportunities resources for weatherization trainees. These were huge accomplishments that will assist the Tribe's advancement of future energy programs and businesses. All of us wish Gabe good luck in his future endeavors and thank him for his great ideas and work (Tribal Newsletter Article, June 2011).

Lessons Learned

The Scotts Valley Tribe recognizes growth and sustainability of the program is vital to its success. When the Tribe set out to provide weatherization training the thought was to get them trained so they can find work in the new upcoming green job economy by taking small steps. Upon realizing that the tribe's interest in this type of training coincided with President Obama's ARRA it was an opportunity not to be missed. In keeping with the Tribes mission from their Tribal Strategic Energy Plan, this kept the Tribe focused to maintain their goals and objectives for green jobs and business development and at the same time offer these benefits not only to our own Tribe but the neighboring tribes as well. By sharing energy resources with other Tribes and other entities, these efforts supported and strengthen ongoing collaborative energy projects within our communities.

With this type of encouragement from the tribal and non-tribal communities the Tribe realized that once the training got implemented and many tribal members received their weatherization and BPI certificates it was time to move into another phase, creating and establishing a Tribal Energy Business. This business would provide weatherization services and energy audits, putting our tribally trained workforce to work performing these services. It is also important to keep up with all the latest green trends, green legislation, green products, etc, this is an important component in keeping track of job creation and economic development opportunities during the very fast-paced social change.

Bibliography

Cowperthwaite, Rick. Retrofitting Crawlspaces. Pacific Gas and Electric Company. 2010.

Design & Installation of Photovoltaics Manual. Solar Energy International (SEI). 1998.

Easley, Steve. Retrofitting Attics. Pacific Gas and Electric Company. 2010.

Healy, Gavin. *Integrating Energy Efficiency and Renewables in Home Retrofits.* Pacific Gas and Electric Company (2010).

Hoover, Bill. *Greening the Plumbing in Your Home and Business*. Pacific Gas and Electric Company. 2010.

Jerome, Mark & Bob Davis. *Ductless Heat Pumps: Recent Research & Applications for Low Energy Homes, Part 1.* Pacific Gas and Electric. May 24, 2011.

MacCourt, C. Douglas. *Renewable Energy Development in Indian Country: A Handbook for Tribes.(June 2010 Edition).*

Merry Liz. *Energy Careers and Business Opportunities*. Pacific Gas and Electric Company. 2011.

Miller, Rick. Lighting Controls Workshop. Pacific Gas and Electric Company. March 30, 2012.

Scotts Valley Band of Pomo Indians: Native Solar – A Preliminary Business Plan for a Tribal business to install solar energy systems and manufacture PV system accessories. Facilitated by McGinnis and Associates LLC. March 2008.

Scotts Valley Band of Pomo Indians Strategic Energy Plan. Facilitated by Meyo Marrufo, Project Coordinator. December 2008.

Scotts Valley Band of Pomo Indians Tribal Environmental Plan. Completed by Scotts Valley EPA Director. September 2009.

Shoemaker, Peter. Basics of Photovoltaic (PV) Systems for Grid-Tied Applications. Pacific Gas and Electric Company. 2010.

Stroupe, Ryan. *An Overview of the Commissioning Process for New and Existing Buildings.* Pacific Gas and Electric Company. Fall 2011.

Stroupe, Ryan. *Energy Auditing Techniques for Small and Medium Commercial Facilities Part 11.* Pacific Gas and Electric Company. 2011.

Wigington, Linda. *Deep Energy Reductions – The Thousand Home Challenge Pacific Gas and Electric Company.* May 6, 2011.

Appendices

- 1. Scotts Valley Energy Efficiency Programs Brochure
- 2. Outreach Minzine Fold-out Brochure
- 3. Powerpoint presentations
 - DOE Energy Review 2009 Scotts Valley Band of Pomo Indians Powerpoint Presentation
 - DOE Energy Review 2010 Scotts Valley Band of Pomo Indians Powerpoint Presentation
 - DOE Energy Review 2011 Scotts Valley Band of Pomo Indians Powerpoint Presentation
 - Energy Efficiency and Conservation Powerpoint Presentation
- 4. Energy 101 Class Notice
- 5. Energy 101 Class Powerpoint Presentation
- 6. BPI Graduate Certificate Copies
 - Temashio Anderson
 - Calvin Ray
 - Gabriel Ray
 - Shannon Ford
 - Shawn Ford
- 7. Energy Quiz
- 8. Energy Resource & Activity Book
- 9. Energy Efficiency Training Academy (ETTA) Courses
- 10. MOU Agreement
- 11. Weatherization Course Certificate Copies