



Confederated Tribes of Siletz Indians: Siletz Tribal Energy Program

The Confederated Tribes of Siletz Indians is made up of over 27 bands of people from western Oregon. Today's reservation is located in Siletz, OR, about 10 miles east of the town of Newport. The reservation was originally established through treaty in 1856. The establishment of tribal allotments and other policies led to a loss of a great deal of the reservation. The Siletz tribe lost their tribal status through the Termination Act of 1954, and with it, the rest of the reservation. Tribal status was restored after much effort in 1977. However, only 3,000 acres of reservation were returned to the Siletz people. Today, the Confederated Tribes of Siletz Indians own a checkboard of land surrounding the reservation which totals about 15,000 acres.



The Confederated Tribes of Siletz Indians Planning Department created the Siletz Tribal Energy Program (STEP) through a grant from the Administration for Native Americans in 2009. Since then, STEP has secured funding through sources as diverse as the U.S. Department of Energy through a partnership with the state of Oregon, Bonneville Power Administration, U.S. Environmental Protection Agency (EPA) and the U.S. Department of Health and Human Services. STEP's goals are to promote and increase energy efficiency and conservation of natural resources in the tribal community, as well as to reduce the tribe's energy consumption and greenhouse gas (GHG) emissions. The tribe has focused their efforts in increasing the livability of tribal members' homes and in improving tribal buildings. Many of their programs focus on training tribal members as a way to increase tribal independence in meeting their goals. Additionally, STEP holds many public events to educate the community about energy efficiency and conservation, renewable power, and the importance of reducing, reusing and recycling waste. In 2011, the EPA awarded the Siletz a Climate Showcase Communities Grant, which is being used to fund a variety of programs.

This profile highlights the major programs undertaken by STEP. These programs focus on involving the tribal community in increasing energy efficiency and reducing the tribe's carbon footprint. Most recently, STEP has increased the scope of its actions to include a plan to develop solar energy projects. Community involvement in the solar program provides an excellent example of the ongoing mission of STEP to involve the tribal community in reducing their environmental impacts.



Solar fountain in demonstration garden

Monitoring Tribal Energy Use and Greenhouse Gas Emissions

STEP is using data collection to establish a baseline of energy use and to monitor the effectiveness of the energy efficiency programs. A data entry coordinator was hired in 2011, funded by a Department of Energy First Steps grant, to provide structure to long-term data collection efforts. STEP is also gathering data from weather stations to measure the potential for renewable sources of energy. Furthermore, energy consumption data is being gathered which will be used to predict future consumption and better understand the tribe's progress in reducing their carbon footprint and promoting energy efficiency. Reducing greenhouse gas emissions is a significant priority for STEP, and the Siletz Tribe has set a target of reducing GHG emissions by 12% by the end of 2012.

Community Energy Efficiency and Weatherization

A key component of STEP's work toward promoting energy efficiency is public outreach. STEP is increasing community awareness of energy consumption and greenhouse gas emissions by actively distributing information, such as brochures, calendars and pamphlets. Additionally, STEP has extensively advertised to tribal members the availability of compact fluorescent light bulbs, low flow showerheads, faucet aerators and EPA Energy Star appliances for distribution to tribal members. Tribal events such as the annual Run to the Rogue, Elder Honor Day and others provide excellent opportunities for the organization to reach out to the tribal community. STEP is also making efforts to distribute information through a variety of media, and have created social media accounts (e.g. Facebook), in addition to the more traditional phone, mail and newsletter.

Educational events are a strong component of STEP's efforts to reach the community, and have included events during the Siletz Tribe's annual Culture Camp, a retreat for tribal members.

Demonstrations, advertisements for the program, and other outreach activities at Culture Camp



Weatherization Workshop Bags

serve to attract more tribal members to STEP's message. Additionally, STEP works with organizers at both Culture Camp and the Annual Nesika Illahee Pow-Wow in Siletz to reduce waste and promote low impact event planning. STEP has also hosted community health fairs, the Energy Month (October) Fair, and numerous small measure weatherization workshops. In these workshops, community members are shown easy steps, such as recaulking or installing weatherstripping, that they can take to increase the energy efficiency of their homes, and they receive free weatherization supplies.

STEP has created a demonstration garden that showcases a variety of sustainable practices, to help bring efforts to life for tribal members. This garden features a solar fountain and lighting and uses rainwater to minimize water use. It also serves as a model for how to compost and the benefits of composting, including vermicomposting (composting with worms).

Weatherizing buildings is a priority in their efforts to increase community energy efficiency. STEP is conducting energy audits of commercial and household buildings in the community to evaluate areas for improvement in energy efficiency. STEP and the Bonneville Power Administration (BPA) are holding workshops, which include training tribal members in using an infrared camera to perform household energy audits. Commercial energy audits of tribal buildings are also being conducted in collaboration with the BPA and other local power companies. Additionally, these tribal members are being trained in weatherization techniques. Training tribal members in infrared camera use and weatherization is an investment in the community which promotes sustainable levels of energy use and gives valuable job-skills to tribal members.



Demonstration garden

In addition to training community members, STEP has retrofitted commercial and residential buildings to increase energy efficiency. A construction and renovation crew of tribal members renovates households, for example by installation of insulation, repair of leaks, replacement of windows, installing new doors, adding weatherstripping. Commercial and tribal buildings are also being equipped with retrofit equipment, such as new heat pumps and LED lighting, to increase energy efficiency.



Can chimney solar collector

Solar Program

In an effort to increase energy efficiency and reduce conventional electricity use, STEP has developed a plan to install solar panels on the Tillicum Fitness Center. The type of panel, called a photovoltaic solar thermal (PVT) system, will showcase how solar can function in a rainy climate on the Oregon coast. STEP is investigating how to use solar heat from the panels to heat indoor spaces of the Fitness center. A key component of this project is training tribal members to install and maintain solar panels and solar heat systems. This will reduce dependence on outside companies and strengthen community involvement in sustainability initiatives.



Gwee Shut Tribal Housing

STEP is also conducting feasibility studies on increasing opportunities for tribal residences to include solar energy. This will build on efforts by the Siletz Tribal Housing Department to include solar hot water heaters in some of the new apartments built by the tribe.

The Siletz Tribal Energy Program seeks to facilitate long-term and sustainable efforts to move the tribal community toward the use of renewable energy and away from traditional power. Specifically, STEP aims to continue education of tribal members in hopes of generating further interest in sustainable building and energy practices in the community and to spark interest in potential career paths for tribal members. STEP has also identified health aspects of homes as a major concern for tribal members. The rainy climate in Siletz generates significant mold growth, and promoting the development of sustainable and safer housing for tribal members is another priority for STEP. Central to STEP's continued success is collaboration with outside partners, both local and national. Continuing to strengthen their relationship with local utility and power companies, while securing funding to bring back to the tribal community is another element of STEP's mission moving forward.

Resources

U.S. Dept. of Energy, Confederated Tribes of Siletz Indians Summary, 2011.
http://apps1.eere.energy.gov/tribalenergy/projects_detail.cfm/project_id=190

Claire Wood, Next Step for STEP, Tribal Energy Review Presentation, November 18, 2011.
http://apps1.eere.energy.gov/tribalenergy/pdfs/planning_siletz_wood.pdf

U.S. Environmental Protection Agency, Coastal Oregon On Line Climate Assessment Program (COOL CAP). <http://www.epa.gov/statelocalclimate/local/showcase/siletz.html>

U.S. Environmental Protection Agency, Climate Showcase Communities Program.
<http://www.epa.gov/statelocalclimate/local/showcase/index.html>

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Photos in this profile are courtesy of the Siletz Tribal Energy Program.

Tribal Climate Change Profile Project:

The University of Oregon and the USDA Forest Service Pacific Northwest Research Station are developing tribal climate change project profiles as a pathway to increasing knowledge among tribal and non-tribal organizations interested in learning about climate change mitigation and adaptation efforts. Each profile is intended to illustrate innovative approaches to addressing climate change challenges and will describe the successes and lessons learned associated with planning and implementation. For more information about the initiative, visit: <http://tribalclimate.uoregon.edu/>.

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