

Southwest

Bishop Paiute Tribe

Flourishing with a Small Footprint

With over 2000 members, the Bishop Paiute Tribe is the fifth largest federally recognized tribe in California. The sovereign nation is located on the Bishop Paiute Reservation, a 879 acre tract of land in the Owens Valley, situated at the base of the stunning Eastern Sierra Nevada mountains. The Reservation is surrounded by land owned by the Los Angeles Department of Water and Power and by federal land, making it remote and landlocked. However, its high ratio of tribal members compared to its relatively small acreage puts the Bishop Paiute reservation on par with the most densely populated states in the US.



A growing population on a small land mass makes the land an increasingly valuable asset for a tribe that has long lived in step with their natural resources. The Bishop Paiute Tribe has proven adept at responding to a changing landscape, whether those changes are motivated by the political sector or from a more recent player, climate change.

For thousands of years, Owens Valley and the adjacent Mono Basin have been home to bands of Paiute Tribes. The land was fertile and they fished, hunted, and foraged wild crops. They built deep canals channeling mountain snowmelt to 10-20 thousand acres of land below, where they grew crops such as the tuber taboose (*Cyperus esculentus*). That changed in 1932 when the federal government traded 67,000 acres of land to Los Angeles and four years later designated 879 acres to the Bishop Paiute Tribe. The Tribe has flourished, and as Harry Williams, Chair of the Tribal Environmental Protection Agency (TEPA) says, ‘We have outgrown our land.’

A Love of Land Sparks an Environmental Vision

With acreage at a premium, it is not surprising that the Tribe remains a committed steward of the land. The Tribe’s response to environmental challenges and climate change has been multifaceted. In 1996, the Tribe established the Environmental Management Office (EMO) to monitor and assess its natural resources. This spurred the creation of a Tribal Environmental Protection Ordinance which codified the responsibilities for the EMO and TEPA.

The creation of the Water Quality Control Program (WQCP) followed soon thereafter in 1998. WQCP monitors surface and groundwater quality to protect a number of designated uses from pollutants and implements nonpoint source best management practices to reduce nonpoint source pollution. The WQCP also operates an EPA-approved pathogen lab.

An Air Quality Program was launched three years later in 2001. The Air Quality Program performs continuous EPA FEM monitoring for air particulates, ozone, and meteorology via a dedicated weather tower, complete with data, special studies and reports made available to the public.

A Natural Resources division was created in 2007 addressing several needs including solid waste management, fuels reduction, mosquito abatement, and noxious weed removal. Williams says, “We started TEPA to help protect the environment. I’m really glad we did it. We started looking at our resources. Everything grew out of TEPA. We have realized a lot about our environment because of the TEPA program.”

Rooftop Solar: Climate Mitigation and Savings for Tribal Families

While attending the Environmental Protection Agency Region 9 tribal conference in 2012, EMO's Environmental Director Brian Adkins learned about California's Single-family Affordable Solar Homes program (SASH). The SASH program provides incentives to offset the cost of installing rooftop solar electric systems for low income families. Adkins was immediately interested. Unlike solar arrays, rooftop solar does not require additional land to implement. Solar would also dramatically reduce the utility bills for families where 400 of the 480 households were estimated to qualify as low-income and in an area where utility rates were consistently higher than average.



Ashlyn Hess, Solar Futures participant and member of the Bishop Paiute tribe.

Through a strategic energy planning process centered around a visit from the National Renewable Energy Laboratory (NREL), the EMO Office set a goal to install solar electric systems on 200 of the 400 qualifying households by 2020. In 2013 the Tribe applied for and was awarded the first of a series of SASH grants. They paired these with matching grants from the US DOE Clean Energy program. The Tribe then entered into a memorandum of agreement with GRID Alternatives, the appointed provider for the SASH installation. GRID Alternatives' strategy was two-fold: install solar systems and offer solar installation job training to tribal members. Working in conjunction with the Tribal Employment Rights Ordinance (TERO) Commission, GRID Alternatives has since provided 57 Bishop Paiute Tribal members a total of 3,446 hours of training. In later phases of the project, GRID required that solar subcontractors employ a minimum of 1-2 of trained tribal members per install.

To date, 152 solar electric systems have been installed with 508.106 kW AC of solar energy. Funding for 11 additional homes has been secured, and the Tribe is seeking funding to complete the final 37 installations to meet their goal by 2020.

Embracing rooftop solar has provided a number of benefits to the Tribe: reduced dependence on fossil fuels, electricity bills reduced by up to 75%, and workplace training that allows tribal members to not only maintain the systems they installed, but to also seek out employment opportunities as the solar industry continues to grow. Collectively, these benefits further a sense of self-sufficiency, a trait long upheld by this sovereign nation.

Food Sovereignty: Climate Adaptation through Native Foods

The Bishop Paiute Tribe has long been attuned to seasonal variations related to planting and stewardship of

plants. Jen Schlaich, Food Sovereignty Program Specialist for the Tribe, comments that over the past few years, “Several Elders have noted changes in harvest times for traditional foods. Community members have also mentioned changes in seasons such as out of the ordinary weather patterns, warmer fall weather, colder spring weather, etc.”

Funded by grants as well as tribal contributory, the Food Sovereignty Program (FSP) was launched in 2015. The mission of the program is to, “increase access to and awareness of healthy, traditional and environmentally-responsible, community-grown food that sustains an independent and resilient program which acknowledges, preserves, and strengthens existing community food systems and tribal sovereignty.”



Seeds stored in the Bishop Paiute Earthen Seed House

FSP has a diversified approach to food sovereignty. The team tends to several educational gardens, offers community and classroom workshops, and coordinates a lively Community Market from June through October. But FSP’s work extends beyond just the next harvest. A Seed Library, housed in an Earthen Seed House, is a seed collection effort focusing on bioregional seed adaptation. Tribal members can check out seed packets during planting season and then contribute new seeds following harvest. Currently the majority of seeds distributed by the library are collected from the FSP gardens with the program working to engage other local gardeners in order to maintain a higher level of genetic diversity and offer more plant varieties.

The FSP plans to broaden its efforts to prepare for climate change. In conversations with the Tribal Historic Preservation Office (THPO) and Natural Resources Program, they are in the process of applying for a BIA Tribal Resiliency Grant. If received, funds would allow the Tribe to identify and monitor existing traditional food regions. Drawing on traditional ecological knowledge, the FSP would advocate for increased tribal stewardship of the land as well as added protections that would preserve traditional food areas both for now and for future generations.



The Conservation Open Space Area (COSA) at Bishop Paiute

Open Space: Creating Networks to Combat Climate Change

Climate change emphasizes how interconnected ecological systems are. As the atmosphere warms there are local repercussions for the Bishop Paiute Tribe. A warming climate affects the length of growing seasons, alters precipitation patterns, encourages invasive species, and prompts conditions for increasingly destructive forest fires.

However, in a similar manner it is apparent that one of the strengths of the Bishop Paiute Tribe is the ability for individual programs to work together. Adkins comments, “We find that we go from one program to another within the same sentence. There are so many things that are so related here. It’s hard to compartmentalize anything.”

For example, the Tribe has set aside 25 acres of sensitive wetlands as part of the Conservation Open Space Area (COSA) program. The COSA wetlands were designated for conservation, research, education, and outdoor recreation. The tract includes 1.2 miles of trails, a self-guided tour of native plant species, and two native fish ponds. Visitors can visit the COSA resource center located within the Owens Valley Paiute-Shoshone Cultural Center before heading out to the trail and seeing it first-hand.



The Bishop Paiute Community Market held annually June through October.

COSA is adjacent to the Food Sovereignty Program farms, the Cultural Center, the elementary school, and the offices for the Forest Service and Bureau of Land Management. Proximity facilitates collaboration. Collaboration fosters cross-pollination of ideas and resources. While the Tribe houses many self-contained programs, programs often work together towards a larger vision. The Environmental Management Office works with the Employment Rights Office to garner training for tribal members in the solar industry. The Food Sovereignty Program hosts the Community Market on the grounds of the Cultural Center. The Bishop Paiute's Youth Forestry Project receives support from both the Forest Service and the Bureau of Land Management.

The Bishop Paiute Tribe has created a web of interconnected efforts aimed at responding to the complexities of climate change. They are protecting their natural resources with a combination of mitigation efforts and adaptation strategies. This is a challenging balance for any organization to achieve. When asked what the Tribe's secret was for advancing their network of environmental efforts, Williams answered, "Great staff," and then he quickly followed that up with, "and care for each place like it's your homeland."

Resources and References

- Bishop Paiute Tribe website:
<http://www.bishoppaiutetribe.com/index.html>
- Population density in the U.S. by federal states including the District of Columbia in 2018
<https://www.statista.com/statistics/183588/population-density-in-the-federal-states-of-the-us/>
- Bishop Paiute Tribe Environmental Management Office
<http://www.bishoptribeemo.com/>

- Grid Alternatives
<https://gridalternatives.org/>
- Single-family Affordable Solar Homes
<https://www.gosolarcalifornia.ca.gov/affordable/sash.php>

Project Contact:

Brian Adkins
Environmental Director
Environmental Management Office
Bishop Paiute Tribe
760/873-3584, ext 2100
Brian.Adkins@bishoppaiute.org

This profile was developed in September, 2019 by Amanda Kapp, Institute for Tribal Environmental Professionals, Northern Arizona University, with financial support from the Bureau of Indian Affairs Tribal Resilience Program. The profile is available on the Tribes & Climate Change website: www7.nau.edu/itep/main/tcc/Tribes/. The tribal climate change profiles featured on the website are intended to be a pathway to increasing knowledge among tribal and non-tribal organizations interested in learning about climate change mitigation and adaptation efforts.

Special thanks to Brian Adkins and Jen Schlaich for their assistance in developing this profile.

For more information please contact:

Nikki Cooley, Co-Manager
928/523-7046
Nikki.Cooley@nau.edu

Karen Cozzetto, Co-Manager
928/523-6758
Karen.Cozzetto@nau.edu

Citation: Kapp, A. (2019) The Bishop Paiute Tribe, September, 2019. Climate Change Program, Institute for Tribal Environmental Professionals, Northern Arizona University. Available at: www7.nau.edu/itep/main/tcc/Tribes/sw_Bishop