



IMPACTS OF CLIMATE CHANGE ON THE BISHOP PAIUTE TRIBE

Rising temperatures and drought compounded by over pumping of groundwater are impacting the physical, cultural, and spiritual health of the Tribe, its habitats, and ecosystems.

The Bishop Paiute Tribe is a federally recognized tribe living in Inyo County at the foot of the Eastern Sierra Nevada mountains, in the Owens Valley, just west of the city of Bishop. The people of the Bishop Paiute Tribe are descendants of the “Nüü-Mü,” the original people of the Owens Valley who have lived in the area since time immemorial and whose ancestral lands encompassed over 2 million acres of the greater Owens Valley. Payahuunadü or land of flowing water, is the Paiute word for the Owens Valley and Eastern Sierra region of California.

Historically, the Paiute dug irrigation ditches that routed runoff from melting Sierra Nevada snow into the Payahuunadü and helped the growth of grass nuts and tubers that made up a significant part of the native diet. The ditches also funneled native fish into areas and made them easy to catch.

We looked at everything as a garden. The natives made this place bloom like a rose.

~Harry Williams, Bishop Paiute Elder and Water Keeper

In 1913 the Los Angeles Department of Water and Power (LADWP) began pumping Owens Lake to provide water to Los Angeles. By 1926 the lake was dry. In 1970, a second aqueduct that mainly pumps groundwater from the Owens Valley was added. This ongoing water export has intensified the effects of climate change in the Eastern Sierra.

Bishop Creek



Photo: Owens Valley Indian Water Commission

Climate change has impacted wildlife, native vegetation, and culturally important foods such as pine nuts, acorns, fish, and wild game. Drought in the area, along with beetle infestations, have caused an increase in tree mortality. The Tribe has documented a build-up of dead trees in the National Forest area at Indiana Summit and an increase of perennial weeds, shrubs, and other fuels which has increased the fire danger for the Bishop Paiute Tribe.

As the climate changes the cultural and spiritual health of the Bishop Paiute Tribe are impacted. You cannot separate the health of the earth from the health of the Bishop Paiute. The Tribe has experienced a loss of gathering areas and

ceremonial locations, a reduction in traditional medicines and foods, reductions of culturally important fish species, and a loss of the Bishop Paiute's traditional waters. The Tribe has seen local streams and springs die which has a cascading impact on the surrounding insects, fish, mammals, birds, and vegetation.

The day and night-time temperatures have been rising in Bishop. Elevated temperatures affect human health, mental health, cultural and spiritual health, socio-economic health, as well as the health of the plants and animals that are part of the Bishop Paiute's ecosystem. As temperatures have increased, and water decreased, the Bishop Paiute Environmental Department has observed loss of important habitats including native grasslands, wetlands, riparian, and upland habitats and increasing levels of non-native grasses and shrubs.

The Bishop Paiute have cared for and been nourished by fish including the Owens pupfish since time immemorial. Historically, the pupfish was a staple food item for the Tribe, who caught the fish by the hundreds. The Tribe continues to try to protect and care for these threatened fish but as their habitat shrinks due to climate change, land use practices, and extensive water exports, they are now limited to a few areas.

Owens pupfish



Photo by Joe Ferreira

The Paiute still hunt both large and small game and have noticed a decline in culturally important species, such as rabbits, especially black-tailed jackrabbits and cottontail rabbits that used to be plentiful in the area. As the area has suffered from drought and desertification, the food on which the rabbits depend has become less available.

As the vegetation in the Owens Valley changes, the Valley is less resistant to fire. The native grasses of the Valley are being replaced by non-native species and shrubs. After the Inyo Complex fire in 2017, areas with native grasses recovered quickly, while other areas retained burn scars over a year later.

A year after the Inyo Complex the area at left with minimal native grass still appears burned. The area at right, mainly populated with native grasses, had largely recovered.



Years of drought, declining snowpack, over pumping of groundwater, and increasing temperatures, combined with more than a century of fire suppression and attendant changes in forest composition, have significantly increased fire severity, frequency, and size throughout the Eastern Sierra.

Climate change is impacting the culture, lives, environment, and health of the Bishop Paiute Tribe. These changes are compounded by LADWP's diversion of water from the Payahuunadü.

The Bishop Paiute people continue to work to protect and enhance the natural resources and habitat of the Owens Valley lands in order to manage and protect their traditional lands and limit the impact climate change is having on the Bishop Paiute people's right to hunt, fish, and gather from their land—something that is integral to their culture, well-being and livelihood.