Impacts of Climate Change on the Bishop Paiute Tribe

Rising temperatures, flooding, drought and wildfire 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

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 The Glass Mountain Range and an increase of perennial weeds, shrubs, and other fuels which has increased the fire danger for the Bishop Paiute Tribe.

Figure 1. Owens River



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.

Daytime and nighttime 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 availability has 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.

Figure 2. The Owens pupfish



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.

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 suffers from drought and desertification, the food on which the rabbits depend has become less available.

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. The Tribe is being impacted by wildfire smoke, which caused 39 days of air quality exceedances from August through October 2020. Warmer conditions and nighttime inversions are increasing surface smoke persistence.

Climate change is impacting the culture, lives, environment, and health of the Bishop Paiute Tribe. 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.

For more information contact:

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