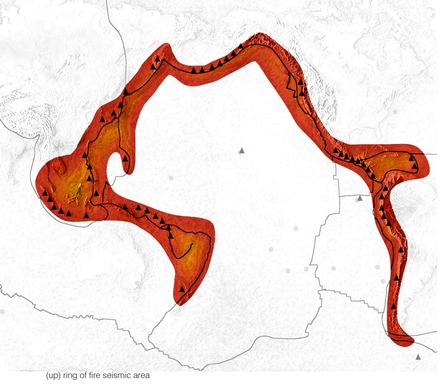
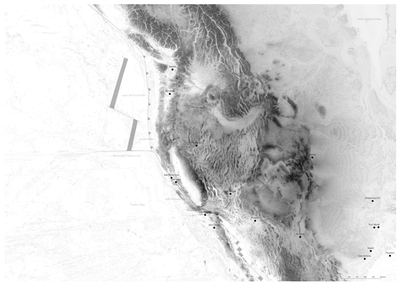
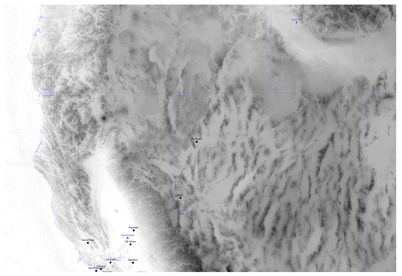
01/03

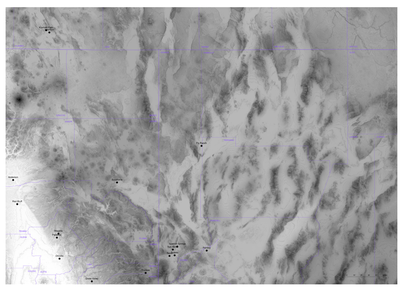
kiba paa'a - mountains of water

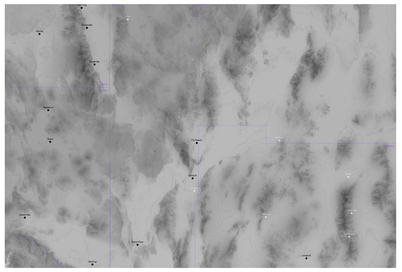


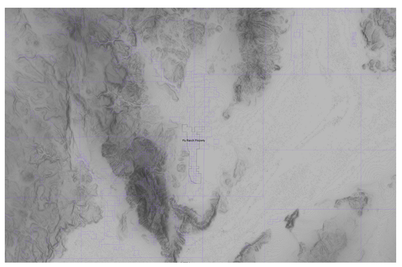
(up) ring of fire seismic area









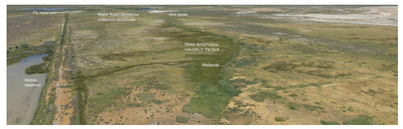


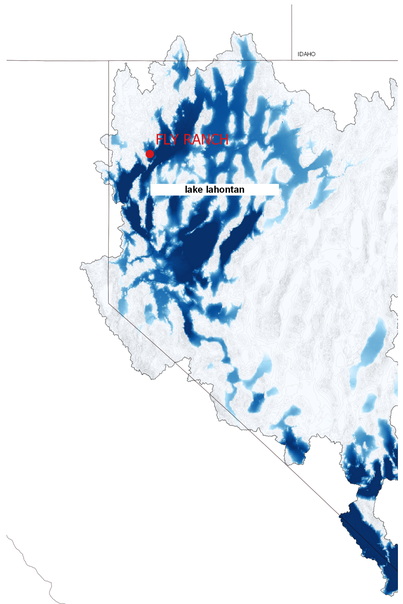
This earth was covered with water. These mountains showed very little. Sahegen covered the fire on top of the mountain; he lay on it; that's how they saved the fire. Sahegen burned his breast. That's why he has a black mark there.

The preservation of fire. Paiute tale

Water and fire sculpted the Great Bassin.The subduction of the Pacific Plate under North America gave rise to a series of mountain ridges and valleys that form the largest endhoreic watershed in North America. Here, the geological activity interplays with water and soil to sculpt a unique landscape of faults, hot springs, salty lakes and vegetation. Snow accumulates at the peaks during winter and meltwater flows down bringing life to the sage-covered valleys during the hot, dry summers. Inherent heterogeneity of arid lands causes areas of runon and runoff which lead to development of islands of hydrologically enhanced biotic productivity. In Hualapai flat this heterogeneity is motivated by its geotectonic setting and its climatic variability.

In 2005, the Jornada Experimental Range initiative presented a systematic, scientific approach to this practices of water and vegetation management in the Basing and Range geological province (of which the Fly Ranch is part). After a thorough study of the precipitation, soil, physiography, and vegetation, a catchment plan to remediate soil erosion and promote vegetation growth in key areas was developed. The installation of ditches and water spreaders to slow down surface runoff in specific sites enhances water infiltration into soil and vegetation productivity, promoting remediation of degraded rangelands and changes of natural vegetation patterns at a landscape scale.





(left) topographical and administrative structure of the us southwest - zoom in
(right) hydrological map of Hualapay flat. Fault lines and intervention in black.