03/03

kiba paa'a - mountains of water

Thousands of years ago, the Paiute dug irrigation ditches that routed runoff from melting snows into the valley. But unlike modern irrigation practices, the Paiute didn't channel the water onto farms or specific plots of land. «We looked at everything as a garden. The natives had made this place bloom like a rose

Harry Williams, Bishop Paiute tribe, Owens Valley, CA.
Paya, documentary, 2017

Middle Fly Ranch intervention

At the Middle Fly Ranch we find the stream with the most abundant flow in the Hualapai Flat. This water flow is affected by seasonality and during episodes how heavy rain, it has sufficient power to erode the soil forming gullies. A series of gully plugs (see Techniques below) will slow down these fast water flows, mitigating erosion and promoting sedimentation and soil enrichment.

This intervention will take place in the shape of a yearly **social episode around water** based on Paiute traditions:

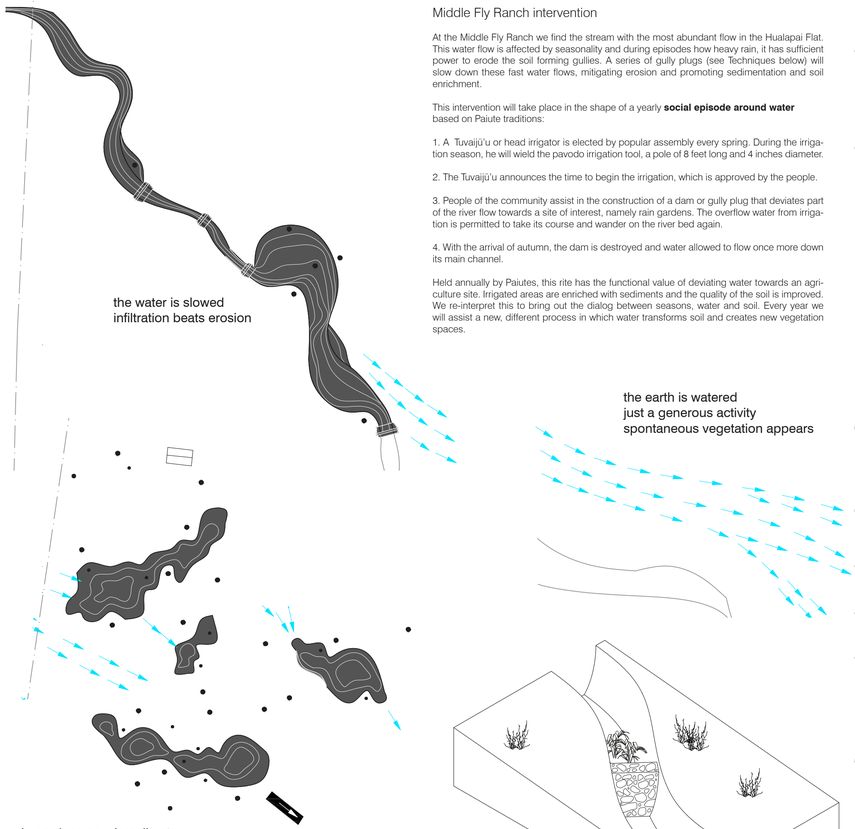
1. A Tuvaijü'u or head irrigator is elected by popular assembly every spring. During the irrigation season, he will wield the pavodo irrigation tool, a pole of 8 feet long and 4 inches diameter.

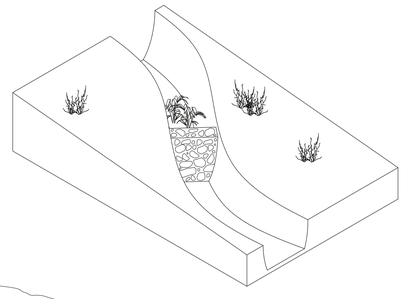
2. The Tuvaijü'u announces the time to begin the irrigation, which is approved by the people.

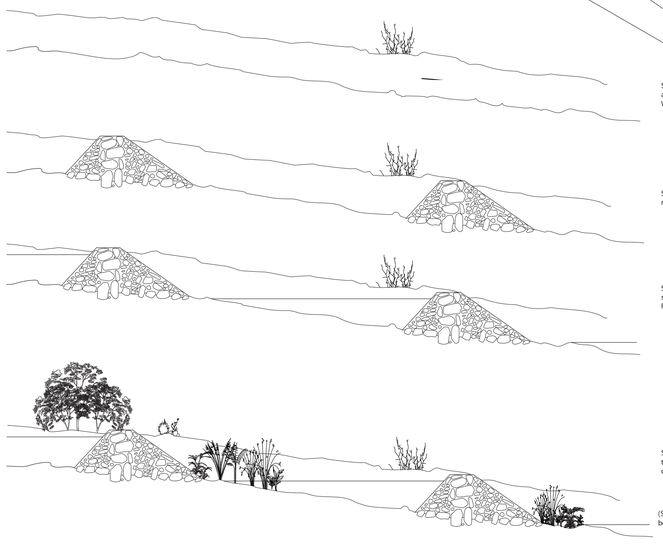
3. People of the community assist in the construction of a dam or gully plug that deviates part of the river flow towards a site of interest, namely rain gardens. The overflow water from irrigation is permitted to take its course and wander on the river bed again.

4. With the arrival of autumn, the dam is destroyed and water allowed to flow once more down its main channel.

Held annually by Paiutes, this rite has the functional value of deviating water towards an agriculture site. Irrigated areas are enriched with sediments and the quality of the soil is improved. We re-interpret this to bring out the dialog between seasons, water and soil. Every year we will assist a new, different process in which water transforms soil and creates new vegetation spaces.







Stage 1. Seasonal rainfall flows downhill at high speed, erodes the soil and forms gullies. Water does not percolate in the soil.

Stage 2. Gullies are plugged using locally available rocks and soil.

Stage 3. gully plugs slow down runnoff during short, intense storms, mitigating erosion. Rainfall accumulates temporarily in the gully

Stage 4. water and sediments accumulated in the in the gully plugs promote the colonisation by autochthonous species

(Stage 5. Reversibility: gully plugs can always be removed to return to initial state)