02/03

kiba paa'a - mountains of water

Coyote walked far without water. He was very thirsty. He dug a hole under the sagebrush and lay down with his mouth wide open. Horned Toad saw him. He climbed on the sagebrush above Coyote and dropped a little water in his mouth. Coyote didn't see him above. He took his bow and shot in the air, but he didn't see Horned Toad at all. Pretty soon Coyote had enough of this water, so he got up and went on.

Northern Paiute Tales, Isabel T. Kelly. J Am Folk 1938

Access to water is a pillar of human communities. From the 19th century, water management in the Great Basin technfied to meet the needs of human activity and intensive agriculture. The water management strategy put into practice at the Hualapai Flat changed the natural west-to-east water flow from the Granite Range to the Playa. A rectilinear, north-to-south structure that collects the runoff water and brings it to the middle Fly Ranch facilities. This construction disturbed the natural water movement and changed the landscape and soil, as is visible on the old aerial photographs. Vegetation disappeared from large areas in the north of the valley, that were exposed to erosion and degradation of the soil.

Intrusive water management strategies contrast with the ones used traditionally by local communities. Myths and stories testify to the importance water had for them since early times and even give clues about the methods used to obtain it. Water was closely associated with ground morphology; instead of using external elements like pipes, the conduction of water was done by modifying land by digging ditches and raising small promontories. They used materials available on site and dispensed with the use of heavy machinery. This results in structures with low environmental impact that integrate organically the landscape.

Northern Fly Ranch intervention

t the Northern Fly Ranch we encounter a water collection infrastructure that intercepts runoff water flowing towards the Playa. This affects wetlands creating dry areas exposed to erosion and vegetation impoverishment. We propose an intervention to reconstruct natural water flows using the faults made by the tectonics. Three structures are envisaged:
Embankment at the Little Cottonwood Creek to redirect water flows to arid areas
Two swells following a fault to create wetlands and conduct water towards the Fly Ranch facilities.

Southern Fly Ranch Intervention

Water flows in the south of the Fly Ranch are highly subjected to seasonality. We find intermittent flows of purely runoff water. A series of crescents, small ditch-lie structures, will serve to create islands of hydrologically enhanced biotic productivity. This action will promote sedimentation, improve the quality of the soil and colonisation by local species in a long term (>15 years).

scale 1:8000