AQUA PLANTERRA

Earthen pillars emerge from the reservoir, shrouded in an array of plants that mark the seasonal shift in the valley. Lichen and moss cover these pillars, purifying the water within the reservoir, while shrimp swim amongst the plants growing below, clinging to the pillars as new habitats are formed over time. As people come by throughout the day, sprouts are collected from some vessels, while others are watered from the reservoir and have new seeds placed on them. Once a day, someone collects water from the bottom vessels for use at the Ranch - made potable through the traditional passive clay filtration methods employed by these otherworldly pillars. When a vessel gets too old or damaged it is replaced, and the defunct unit is broken up and recycled, used to form habitats to support the array of flora and fauna that call Fly Ranch home. These pillars are part of Aqua Planterra, a proposed installation that would facilitate the on-site generation of drinking water and small-scale food production at Fly Ranch. In keeping with the Ranch's ethos of sustainability and low-impact self-reliance, Aqua Planterra is an interactive installation that utilizes passive vernacular technologies to tackle these issues. While the primary goal of the installation is to support the day to day functionality at Fly Ranch, the concept as a whole (from fabrication to afterlife) is meant to involve the local community, helping enrich and educate everyone on the craft, science, and sustainable attributes employed at each stage of this project. Located in the North Reservoir on Fly Ranch, the installation is easily accessed from the path running along the east of the water. The pillars can be seen from all sides, and beckon visitors to access them via a series of boardwalk paths.

CONCEPT

Systems Solutions

WATER FILTRATION

The bottom vessel of each pillar is a filter and cistern for potable reservoir water that gets filtered through the silver nitrate coated wall of the clay vessel by means of osmosis. Upper vessels can be used in the same way for rainwater collection.

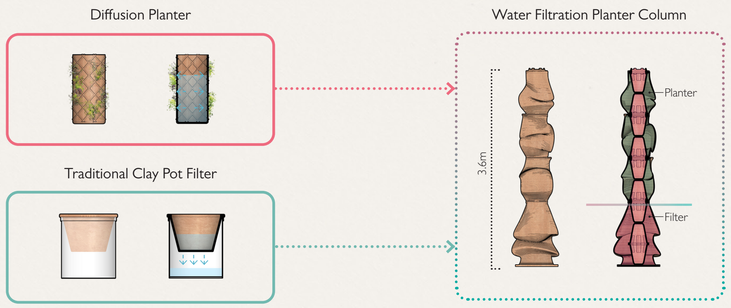
FOOD & AGRICULTURE

Small-scale food production/recycling: several edible plants can be grown in vessels, to be harvested periodically. Certain vegetables like alfalfa sprouts and scraps from cooking, such as Romaine lettuce, scallions, and leeks, can be sprouted in the upper vessels of columns.

Functional Precedents

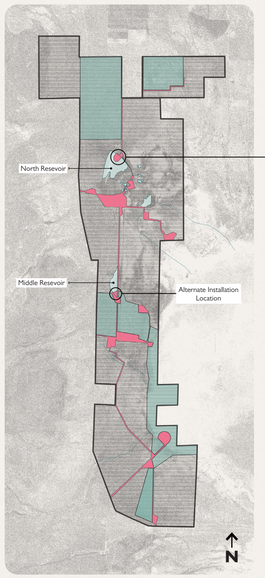
Aesthetic Precedents

Concept Diagram

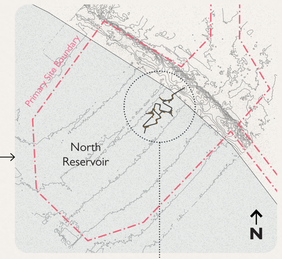


SITE PLAN

Fly Ranch Overall Site



Installation Location



Plan Configuration