A Deluge of Sand…

 *…*is a project that reacts and benefits from the harsh environment of Black Rock Desert in order to provide three primary services for the visitors of Fly Ranch and Burning Man; Food, Water. and Shelter. *A Deluge of Sand* is a product of the idea that, in order to prepare for the future, humankind must recognize that the built environment needs to respond to environmental conditions of every kind, no matter how extreme. *A Deluge of Sand* does so by not only allowing the environment to remain as is, but by becoming more useful as it spends more time in its environment.

Through the use of the fabric technology introduced and utilized by *Warka Water*, moisture is wicked from the air onto fins composed entirely of the fabric and a small hidden skeleton that can be assembled on-site as an activity for *Burning Man* as well as on *Fly Ranch*. The moisture is combined on the fins with the fertile dust that is kicked up from the *Burning Man* event to create a highly fertile soil that can be used to cultivate drought-resistant and heat-resistant crops such as figs, Sun King watermelons, Dark Star zucchini, etc. As the fins collect more dust and more water, they begin to sag downwards with the weight. All that needs to be done is the soil be harvested and brought into the dome to be used in the growth.

The project is intended to be modularized and introduced in as many places as desired, as it is designed to be minimally intrusive and maximally adaptable so that it can even be used on the playa flats *Black Rock Desert* is famous for. Each pod can be used interchangeably between a tent-like shelter for any who desire it and an agricultural element meant to provide provisions for the participants of *Burning Man* and any potential visitors to *Fly Ranch.*

*A Deluge of Sand* primarily will serve as an agricultural agent intended to interact with the festivals and events that occur around the area but are also designed to continue functioning well even without the intervention of humans. Capable of housing drought-resistant and heat-resistant crops year-round, everything from melons to broccoli can be grown here, with the assistance of the moisture-gathering sand fins.

The project is meant to be extremely low effort to bring to fruition, relying on minimal off-site labor to turn the construction of such a thing into a fun community activity. The cage of aluminum members should be easy enough to construct provided there is direction. The fins, made out of Warka Water fabric, are intended to be able to be assembled on-site by anybody. It is difficult to estimate the overall cost of such a thing without having the ability to get ahold of the Warka Water company but judging by the nature of that product it seems to be an affordable and effective option. Roughly speaking, the project would most likely be on the lower effort end of the spectrum regarding the cost of assembly (around $5000 to put together each module and around 40-80 hours to complete with a duration of 1 to 4 weeks) so to foster the ability to construct multiple modules. The primary materials are the aluminum members to construct the cage and the Warka fabric that the fins are composed of (excluding the seeds needed for planting).

Environmental Impact

Humankind needs to reevaluate the current state of operations regarding the intrusive interventions of architecture and design. *A Deluge of Sand* reconciles this issue by requiring no intrusive interventions beyond the natural to be constructed, only requiring the fabrication of the cage parts and the Warka fabric off-site. All elements are meant to be able to be assembled on-site by anybody, whether it’s sliding the fabric onto the skeleton of the fins, putting together the primary structure and the secondary structure, or even putting the fins onto the frame.

The project requires only the seeds to begin growth and encourages people to pitch in to cultivate what grows there. This is meant to cultivate not only new life, but also a new interest in creating a harmonious relationship between humans and nature for those that choose to participate. People will be encouraged to use water they’ve brought in to feed the growth of the plants in response to taking produce, allowing the project to only rely upon the inputs of the environment and the inputs of those who seek to be charitable while producing no waste in the process. *A Deluge of Sand* would produce according to the production schedules of each individual crop and is meant to be used year-round for planting as well as shelter.