**KINETIC MANIFESTO**

Main Concept:

The project harnesses energy from waves through a kinetic structure which floats in the sea. The structure creates a floating environment, which combines renewable energy, recreational uses, and awareness towards water consumption, while producing freshwater.

LA’s thirst has led to the importation of water from rivers across the Western United States. These sources have helped feed the urban metropolis for the past century, in turn taking a toll on the reciprocal landscapes which provide livelihood to the city. As the impacts of climate change increase, how can LA become less dependent on imported water, and sustain itself with its local hydrological system?

**The kinetic manifesto is a provocation, in the sense that it does not aim to create a new fresh water source for Los Angeles. At first site it gives the impression that the valuable resource of fresh water is spilling into the sea. It is through this expression of waste that the user can feel and experience the absurd waste of freshwater in LA.**

The kinetic structure is not only a floating sculpture in the sea, but is a public space which invites, educates, and serves as a social platform to question, discuss, and experience water consumption. Therefor becoming a physical and metaphorical platform or manifesto. It is a tool to stimulate public awareness through the production of freshwater.

The structure is wave powered. It is articulated in order to react to waves - a succession of waves will initiate the movement of the structure. It then uses metronome as kinetic energy. The movements of the structure initiate by the waves engender a pendulum rotation of the masts. The pendular motion trains a seawater piston - the high pressure result of this process is used to inject salt water at the base of the mast. The bottom part of the mast acts as a reverse osmosis cylinder -the pressurized salt water gets filtered and only fresh water reaches the top part of the mast. Using reverse osmosis the mast spills the water through a multitude of fossetts, producing showers, rain, fog, etc. By night the platform creates a light sculpture which is powered by solar cells. During the day this becomes a destination, and a playful sculpture for visitors to roam and experience the wet atmosphere.

**Harvesting fresh water**

The water spilled by the masts is harvested by the structure and collected in different recreative pools. Undersea hoses allow excess water to be directed toward the beach. The water is then redirected to the source, connecting citizens through small scale interventions along the coast to create awareness. A series of showers, and drinking fountains emerge from the sand, as the captured water continues its’ travel upstream. Beach goers will view a series of hoses which are marked and display information on where the newly generated water is destined to.

**Technical Specifications**

Main characteristics: floating fixed on the seabed partly articulated to react to wave movements

Main outcome: freshwater, public space, awareness

Dimensions: 20m x 5m to ∞

Materials: Recycled materials, plastic foam, bio-plastic moulded, 3d printed elements

Energy produced per year: potential of 20000 KWh harvested as fresh water