



Water

One of the most probable solutions to the California's severe drought is desalination of seawater, which is expected to drop in cost and to increase in efficiency. Because the seawater is the most abundant source of water in the earth, comprising more than 95 percent, if used efficiently with appropriate technology, it is possible to be the key to the drought and water shortage. The Infinite Water demonstrates the sustainable method of desalination to the community. Not only the system would produce portable water for the community, it would not harm the ecosystem as typical desalination plants usually do. Since the source of drinking water is from the nature, the Pacific Ocean, the outcome of the system should also be of nature.

Energy

One of the biggest downside of desalination is the consumption of energy to pump water for Revers Osmosis process, in which salt is separated from seawater. However, the Santa Monica Pier project site encompasses various and abundant sources of renewable energy given to be used, including wind, solar, and tidal energy. Considering the degree of advancement of technology at the current point and the feasibility of construction, solar power is chosen to be the most efficient and abundant sources to produce energy for the desalination plant and also for the community of Santa Monica.

Community & Culture

The most important feature of the Infinite Water is to provide community with the public space where people can experience, learn, and feel the meaning of the project –the sustainability of water-energy connection. The project will be mainly composed of three sections: the desalination section, MPHI theatre, and the water garden. When entering the site through the deck, people would first face the water garden, irrigated with rain-harvested water and filled with water from desalination plant. As they cross the section and step toward the Infinite Water, they would face MPHI theatre and the water tanks from desalination plant. While enjoying the water-surrounded garden and ocean-facing theatre, everything surrounded by solar-panel, visitors can experience and learn that energy is embedded by this ocean which can be made drinkable and livable.