



SCENARIO VISUALIZATION | USER PARTICIPATION & INTERIOR FEATURES

SOLAR RADIATION LOS ANGELES		
upper Limit	7,5 kwh/sqm/day	
lower Limit	2,6 kwh/sqm/day	
average	5,05 kwh/sqm/day	
DESALINATION CAPACITY		
Mediterranean Climate (1750 kwh/sqm/year)	6 l/sqm/day	
Los Angeles Climate (1843 kwh/swm/year)	6,3 l/sqm/day	
application of conduit system as solar collector to pre-heat water results in rais of efficiency by 15%		
Desalination Capacity with pre-heating	7,245 l/sqm/day	
Week	2644,425 l/sqm/year	
OVERALL DESALINATION SURFACE AREA		
Surface Area per Raft (3 Tanks)	80 sqm	
overall count of Rafts	25	
overall Surface Area	2000 sqm	
daily desalination Capacity	14490 l	
annual desalination capacity	5288850 l	
AVERAGE WATER REQUIREMENTS FOR PLANTATIONS		
beans	30 l/week	2614,4
Potatoes	36 l/week	2608,4
cabbage	35 l/week	2609,4
pumpkin	28 l/week	2616,4
Salad	22 l/week	2622,4
Tomatoes	36 l/week	2608,4
Root Vegetable	31 l/week	2613,4
Mixed Crops	31 l/week	2613,4
Average	31,125 l/week	
plantation area/raft	30 sqm	
SUMMARY		
Area per Raft	80 sqm	
Plantation Area per raft	30 sqm	
Desalination Capacity per day	14490 l	
Water consumption for plantations per day	3214 l	
Desalinated Water Surplus per day	11276 l	
Desalinated Water Surplus per year	4115740 l	

FUNCTIONALITY | DESALINATION CAPACITY

HYDROPONICS



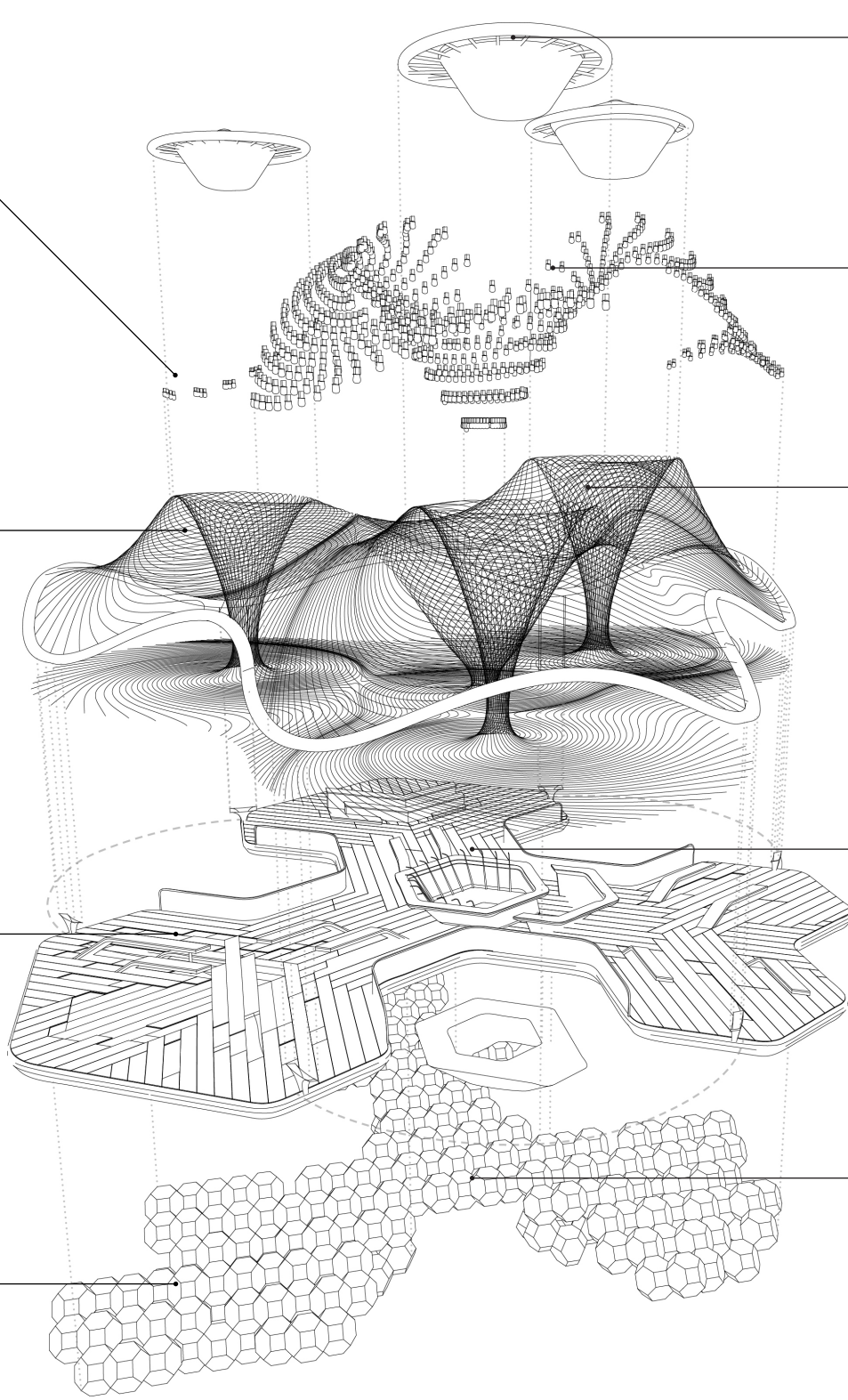
CLEAR PLASTIC TUBES



RECYCLED WOOD PLANKS



LOW DENSITY POLYETHYLENE BOX



Desalination Tanks

Water tanks for desalination process, 3 per Raft. Tanks combine desalination and solar pond to produce clean water and energy at the same time

Hydroponics

Hydroponics ambbed in conduit system

Conduit System

The conduit System is the transportation system for brakewater from the sea to the desalination tanks and for clean water from the desalination tanks to the storage tanks. The conduit system also serves as a solar collector and pre-heat the sea water before desalination

Raft

multi-functional Raft with a water-bar at its center and three dedicated zones:  
- learning & didactics  
- plantations  
- eatery

Floaters

Floaters from low density polyethylene boxes support the buoyancy of the raft

LAND

WATER



SCENARIO | OPEN SPACE POCKETS