ENVIRONMENTAL IMPACT Through the technological advancements, we wanted to utilize the best combination to increase the efforts in us humans being more resourceful and mindful of our consequential actions. With the idea of our central solar tower and the with the ability to also perform water refinements, the main goal is to supply electricity throughout the initial region and accompany many homes with the supply of energt given from the Sun. Energy production would be stored throughout the day and be used for the later replacing the energy used that is non-renewable. If this were to take effect for long periods of time, energy saving would AT AT AT AT AT AT A STATE OF THE AT A STATE OF T be beneficial and of course reduce the usage and cost of non-renewable energy sources. The water refinement process calls for both the technological and biological aspect. Through the use of our tower and an oyster field, we are able promote both water refinement processes and ultimately create a source of usable water for the public to enjoy. Many liters would be processed by the hour. And with the help of the oysters and the tower production would be twice as effective offering large amounts of water through a small period of time. In conclusion, these advancements will mold a better, thriving future for people to live in and better lives of others in every way possible instead of relying on non-renewable sources. rotating mass wave energy BOUY POWER TECHNOLOGY 10 July 1987 1987 25-50 meters water depth buoyant wave energy + desalination BREATHING BREAKWATER + KELP adjustable heliostat Heliostat for solar power tower able to reflect efficient sunlight to the receiver, enough to inclusion of the breakwater creates a filter feeder habitat through the produce solar electric energy. The heliostats are Modules (12) able to follow the sun's movements for high 1.1m x 3.12m means of large quantities of oysters that occupy there. the aspiration is to efficiency of energy intake. not only refine water through technological processes but also through the Rack Assembly help of animals and with that combined efforts of both land and sea. (Torque Tube) Azimuth and Elevation Acrylic Weatherizing Cover (Plexi) **Power Box** rotating mass As the rotating mass sways in the waves it causes the gyroscope to rotate freely which then produces energy transferred into a generator. The device is roofed with see-through plexiglass to showcase the beauty of the innovative energy technology. 100 Oysters at harvest remove nitrogen and WATER QUALITY The water refinement is attributed and processed in two ways: the central tower and through the habitat influence of the breakwater. The central tower, with its included symbolic meaning, takes it further by extending its reaches underwater and cleansing it through an established method of reverse osmosis. The refinement of the water by these means can create usable water for the city and even on a much larger scale. This would create an endless supply of usable water. In addition to that is, traveling with the further extent of SECTION LEGEND the site includes the original breakwater of Santa Monica Pier. Our inclusion of the breakwater hopefully creates a bio-filter habitat through the means of large quantities of oysters that occupy there. Our aspiration is (4) transparent platform (1) Central Tower to not only refine water through technological processes but also through the help of animals and with that combined efforts of both land and sea. 2 heliostats (5) kelp forest/wildlife habitat 7 rotating mass 6 buoy wave actuators (3) moving landscape(play area) 5 o 10 20 30m SECTION A