

## ❖ Introduction

### After Glow

- ◆ After Glow is an artistic interpretation of the relationship that Southern California has with automobile based infrastructure. Streets and freeways have defined the way people interact with the natural world. Current Infrastructure has been established based on trying to move cars from one starting point to another, accommodating for automobiles and driving have literally put nature in the backseat. Reimagining the future of human centered infrastructure that is in line with natural systems and patterns can be seen within our design concept. An alternative is presented that helps bridge together the natural world and people, while reducing automobile pollution from reaching the ocean. Design Inspiration comes from existing natural elements that are seen in and around Santa Monica bay. Creating an art piece that can generate green energy and encourage environmental stewardship is the underlying goal of the project.

## ❖ Design Features

- Concrete precast
  - ◆ Design concepts are based on elements mimicking characteristics that are related to positive environmental enhancement. For example, the below water precast concrete structures are designed to act as tide pools, places that will provide surface area that will house a variety of marine invertebrates. By allowing colonization of the structures will set the foundation for attracting other marine wildlife and increase the size of the littoral zone of Santa Monica.
- Seaweed
  - ◆ Western side of the site is comprised of a series of poles that are linked with ropes that are lined with sea weed spores. Space has the potential to be used for seaweed harvesting as well as a space for seaweed centered marine animals to exist. Placement of seaweed is located in areas of low wave turbulence, a series of wave generators are placed in front of the seaweed to act as a shield.
- Above Water
  - ◆ Above water structures are held up by concrete precast forms that are taken from overhead freeway development projects. They are comprised of proven technology that can withstand a cars weight coming from the top of the surface. They are used to resemble the poles of the Santa Monica pier, which will help to serve as a continuation of pier.
  - ◆ On the western side a series of poles is exposed to help encourage large marine animals to inhabit the space, as well as be platforms for birds to land.
- Elevated pier area
  - ◆ Area is elevated to provide access for people to visit the site and serves as an elevated walk way. Visitors will be able to observe various design elements and process above the sea level. Walking areas are comprised of a series cube like shapes that each serve a different purpose and function.
- Water Collection/Filtration
  - ◆ Our water filtration is done through the kelp forest environment, western side of our site. After Glow has twenty-eight Giant Kelp in which they can filtrate 13,800 kg of CO<sub>2</sub>/m<sup>2</sup>/day. This will alleviate the water pollution that occurs in Santa Monica, helping other species to thrive. Oysters are known to be a very efficient species to

filtrate water. There are many opportunities for oysters to thrive in After Glow. We have created spaces that are ideal for oysters to thrive like the posts for the walkway and the new breakwater that is full of ideal surfaces that oysters can attach to.

- Solar energy
  - ◆ Along the elevated walkway there are several solar panels, which not only generate clean energy but they also provide shade for visitors. There are 1,248 solar panels in the walkway that would generate around two-hundred and fifty kW per day.
- Public park/Wildlife sanctuary
  - ◆ After Glow counts with a public park and a wildlife sanctuary that visitors can see first-hand. The public park is on the elevated walkway near the lookout point in which you have direct views down into the ocean. This is where visitors can see wildlife in action and learn something about the species in Santa Monica.
- Electric car energy = Solar Power
  - ◆ Solar Power generates clean energy in which it can be distributed to homes, businesses and institutions. Energy provided can be used by people and the general public when they visit Afterglow, USB recharge stations are provided at no cost to the public. After Glow also wants to promote the use of clean energy to help clean the atmosphere based on offsetting a certain percentage of Solar Power generated, After Glow provides Electric car stations to meet these standards for clean energy. People who own electric cars can charge knowing it came from solar power.

#### ❖ Environmental Report

1. The average use per person in the US uses 9,000kW per year.
2. After Glow has twenty-eight Giant Kelp in which they can filtrate 13,800 kg of CO<sub>2</sub>/m<sup>2</sup>/day.
3. There are 1,248 solar panels in the walkway that would generate around two-hundred and fifty kW per day.

#### ❖ Conclusion

After Glow is an artistic response to the relationship that Southern California has with automobile based infrastructure. By reimagining the future of human centered infrastructure that is in line with natural systems and patterns can be seen within afterglow. An alternative is presented that helps bridge together the natural world and people, while reducing automobile pollution from reaching the ocean. Design comes from existing natural elements that are seen in and around Santa Monica bay. Creating an art piece that can generate green energy and encourage environmental stewardship is the underlying goal of the project. By providing a space where art and technology come together can help add a layer of importance to Santa Monica's environmentally sustainable future goals.