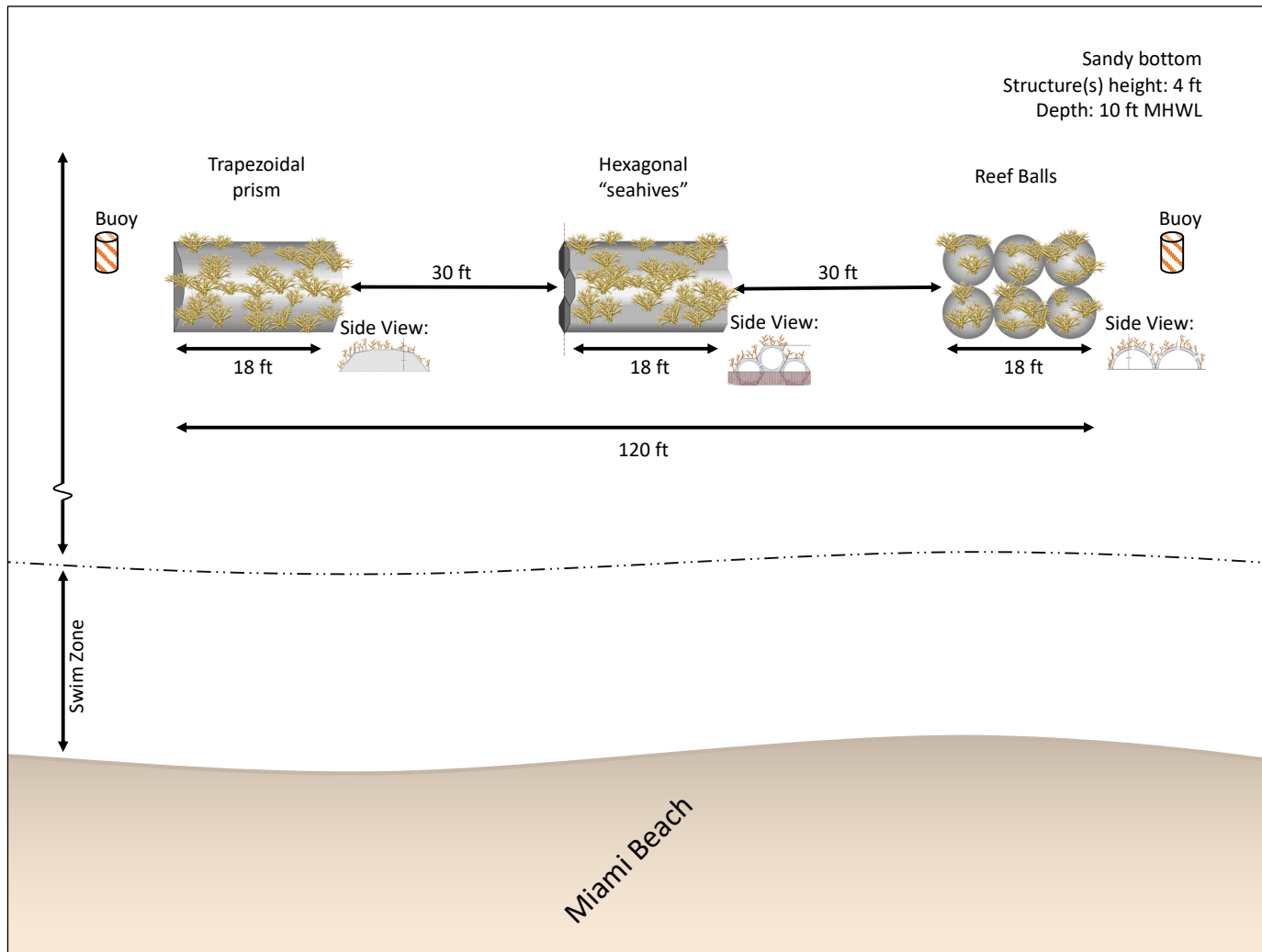


Field Deployment of Coral-Breakwater Hybrid Reef

We have made excellent progress in all areas of our project, with the ultimate goal of deploying real-world experimental structures offshore of Miami Beach. By deploying these structures, we will be able to collect critical data that will inform not only our own design framework, but coastal science on a larger scale. Recently, our team has worked to understand permitting requirements and to develop designs for such a structure. The figure below illustrates our field deployment plan:



Our design combines three types of concrete sub-structures:

1. Trapezoidal prism
2. Hexagonal "seahives"
3. Reef Balls

These structures will be:

1. Populated with restoration corals
2. Parallel to shore
3. Approx. 18 ft in length
4. Modular units of 500 lbs min
5. 4 feet high from substrate
6. In 10 feet of depth (MHWL), minimum 6 ft clearance
7. Deployed in sandy-bottom,
8. Deployed away from critical wildlife habitat, hardbottom, and swim zones
9. Perforated to create shelter for marine life
10. Parallel to shore
11. Spaced at least 30 feet