



**ENGAGING STUDENTS AND TEACHERS IN  
BUILDING ECOLOGICAL SOLUTIONS TO COASTAL COMMUNITY HAZARDS (BESCCH)**

**Project Site and Scenario: Atlantic City**  
Gardner's Basin Living Shoreline Project

**Location:** North of the intersection of North Rhode Island Avenue and Parkside Avenue  
Gardner's Basin, Atlantic City, New Jersey  
Atlantic County

**Habitat Type:** Tidal wetlands

**Physical Description of Site:** Gardner's Basin is located off of Absecon Inlet. Most of the properties around the basin contain bulkheads which are retaining walls that keep high tides and storm waters from coming up on shore. This site is at the end of the road and about 100 feet wide. There are no bulkheads and the property angles down to the water. The site currently has gravel and debris at the shoreline and along the upper sections.

**GPS Coordinates:** Latitude 39°22'48.0000"  
Longitude -074°25'12.0000"

**Goals for Site:** The goals for this site include:

- Stabilizing the shoreline;
- Creating or restoring habitat (priority species: horseshoe crab, red knots and pollinators);
- Reducing the severity of flood damage;
- Educating the community and/or local residents; and
- Strengthening or increasing resiliency for the upland area beyond the site which contains public park facilities and an active commercial center.

**Your Design Challenge:** To create a plan with ecological engineering design elements that addresses the goals for the site.

**Your Plan Should Include:**

1. What are your solution(s) for stabilizing the shoreline and reducing flooding (against future superstorms, high tides and high winds?) Why did you select these?
2. What are your solution(s) for creating and maintaining shoreline habitat? What plants, animals and ecological conditions will you create and/or consider? Why?
3. What structural features, if any, will you put into place to protect the upland area where human activities are being conducted? Where will these structural features be placed, and why?
4. What types of ecological monitoring practices will you use to study the site (over time) and determine if your resiliency solutions were successful and effective? Why would you use each of these practices?

**Photographs:** **Atlantic City**  
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**Existing conditions at the site**



**Aerial photograph of the site**