



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

**Project Site and Scenario: Brigantine**

**Location:** Atlantic Brigantine Boulevard (Atlantic County Route No. 638)  
Brigantine City, New Jersey  
Atlantic County

**Habitat Type:** Tidal wetlands

**Physical Description of Site:** This project involves four locations that are street right-of-ways (ROW) in Brigantine. The four sites are semi-improved dead ends with existing vegetated shorelines between properties that have retaining walls or bulkheads. This project reflects the common occurrence of gaps in bulk-headed shorelines. Sites are used for parking and some limited access to residential units. **For this Design Challenge you will focus ONLY on the ROW at South Cherokee Drive.**

**GPS Coordinates:** South Cherokee Boulevard ROW: 80 linear feet wide by 110 linear feet long  
Latitude 39°24'34.8000"  
Longitude -074°24'32.4000"

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

- Stabilizing the shoreline;
- Creating or restoring habitat (for pollinators);
- Reducing tidal flood damage;
- Practicing storm water management; and
- Strengthening or increasing resiliency for the upland area beyond the site.

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

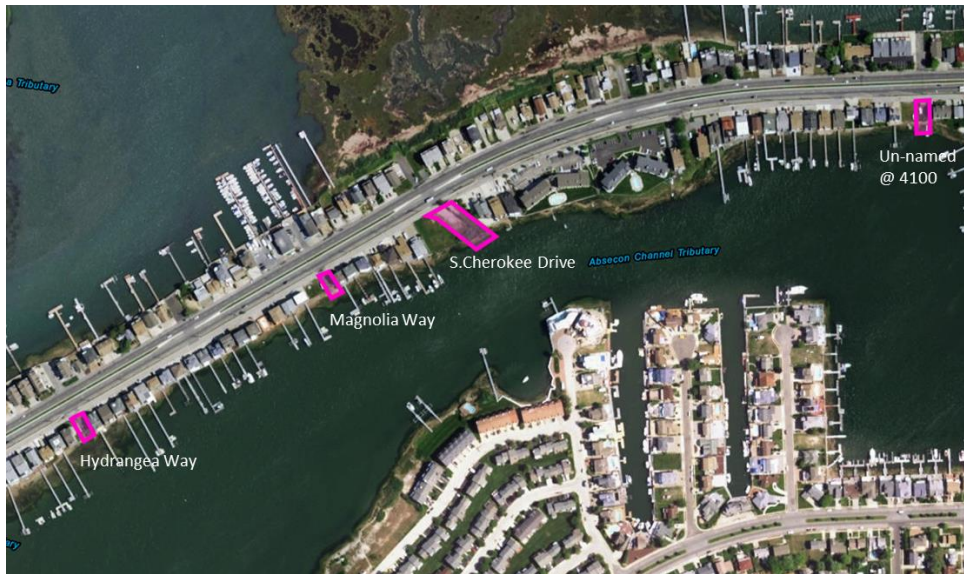
**Your Plan Should Include:**

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?

**Photograph: Brigantine**



**Existing conditions S. Cherokee Drive**



**Aerial photograph/map showing South Cherokee Drive**