# Summary of: Building Block Island's Coastal Resilience: Vulnerabilities and Solutions: A Community Learning and Engagement Event, held on 4 Aug. 2025

The Town of New Shoreham's Coastal Resilience Committee, working with The Nature Conservancy's Block Island Resilience Coordinator, organized a two-hour event on 4 August 2025, from 4-6PM in the Town Hall. The event, entitled "Building Block Island's Coastal Resilience: Vulnerabilities and Solutions: A Community Learning and Engagement Event" was meant to provide a space for the community to learn of the solutions that GZA proposes to address issues on Corn Neck Rd., to inform and engage the public on what the Coastal Resilience Committee has been working on, and to help people feel heard and share their ideas. The entire event was well attended with over 50 participants.

The first half (Part 1) of the event was dedicated to a presentation by GZA GeoEnvironmental Inc on the solutions they have identified as part of their contract with the Town of New Shoreham to provide engineering services for the Corn Neck Road Resilience Strategy and Dune Restoration. The second half (Part 2) of the event consisted of the 'BI Coastal Resilience Expo" where participants were able to circulate around the room to visit the five tables (described below) which provided participants an opportunity to learn, exchange, and share their feedback on a variety of tools, initiatives, and studies that are driving various coastal resilience initiatives on the island. This document summarizes each part of the event and includes an overview of the comments and feedback provided by participants. There is also web page <a href="here">here</a> that provides a link to the GZA presentation as well as the resources shared at the tables.

Part I: Solutions Presentation for Corn Neck Dune Resilience Project: GZA was selected by the Town to identify, design, and implement nature-based solutions, focusing on dune restoration along the eastern side of Corn Neck Road, to reduce flooding and damage occurrences during and following storm events, as well as enhance the function of natural ecosystems and protect critical habitat. Following initial surveys, data collection, and presentation of their vulnerability analysis, this event marked GZA's first presentation of potential solutions for Corn Neck Road resilience to the Block Island public. The presentation (found <a href="here">here</a> summarized the vulnerability analysis, discussed mitigation strategies, and reviewed three conceptual designs: 1) Scotch Beach Road (two conceptual designs); 2) Town Beach Parking Areas (two conceptual designs); and 3) dune pathways (two conceptual designs). During the Question & Answer segment, public participants asked questions specific to the conceptual designs presented and also about other solutions for areas that were not explored by GZA – including the southern end of Corn Neck Road, the Town Beach Pavilion, and marshes on the West side of the road. Additional comments from participants were collected during the second half of the event and those comments are recorded under the Table 5 section below.

**Part II: BI Coastal Resilience Expo:** The second half of the event was an opportunity for participants to learn, exchange, and share their feedback on a variety of tools, initiatives, and studies that are driving various coastal resilience initiatives on the island. Coastal Resilience Committee (CRC) members were assigned to organize tables with information on five topics:

Table 1: Corn Neck Road Resilience; Table 2: Mapping Climate Impacts on BI; Table 3: Protecting the Great Salt Pond and Salt Marshes; Table 4: Homeowner Concerns: Well Intrusion and Failing Septic Systems; and Table 5: Resilience Solutions and Partnerships. Each table organizer prepared questions to serve as prompts for exchanges with participants so that they might share their thoughts and ideas, and these questions are listed below. Each table also shared relevant informational resources with interested participants. The majority of participants did stay for Part II and visited tables on topics of interest to them. We also found that having different prepared snacks and treats available at each table served to entice participants to visit!

### Table 1. Corn Neck Road Resilience

Table Hosts: Socha Cohen, CRC Member and Michael Gardner, GZA.

The information shared, and feedback exchanged, at this table largely related to the following three questions:

- Where is Corn Neck Road the most vulnerable to sea level rise and storm surge?
- 2. How long does it take for the dunes to recover after a strong storm event?
- 3. What new zoning ordinances might help protect homeowners?

This table exhibited two posters — one with aerial and beach side photos of dune paths to show the current state of the paths, and one with a marked photo with the near-term vulnerable areas along Corn Neck Road identified. Michael Gardner from GZA took questions from participants about his presentation. Participants also provided feedback on the questions above, including on the question of new or revised ordinances that may be needed. Several participants expressed a desire to amend our ordinances to allow for set-back relief so marshes can migrate as well as to enable retreat from eroding shoreline, while others supported the idea of allowing pre-existing homes to be raised in flood-prone areas. One participant introduced the concept of risk-evaluations for homeowners in case they want to buy or sell or request relief from Zoning to either raise or move their home.

### Table 2. Mapping Climate Impacts on BI

**Table Hosts:** Nora Clark, Climate Resilience Coordinator for The Nature Conservancy- Block Island; Jean Louis Farges, CRC Member; Annette Grilli, Department of Ocean Engineering, University of Rhode Island.

The information shared, and feedback exchanged, at this table largely related to the following three questions:

- How can I see how sea level rise will affect my property in the coming years?
- 2. What is STORMTOOLS?
- 3. What areas of Block Island are most susceptible to sea level rise?

Laptops with monitors were set up to allow participants to see and use various applications (listed with links below) with information on where and how different parts of the island are vulnerable to flooding, sea level rise, and marsh migration. In addition to these five, CRC

member Jean Louis Farges also shared a Cumulative Block Island Climate Map which is still a work in progress, and not yet published. Visitors expressed interest and excitement about the maps — and especially the cumulative GIS map in progress. Some participants who are already interested in the mapping/data on BI expressed eagerness for the cumulative GIS map to go live so that it could be used for various purpose, including as a resource or as a tool for other projects and for looking at projected impacts on their own property. Some participants also expressed interest in Dr. Grilli's modeling of different solutions for mitigating wave energy and erosion along southern Crescent Beach, especially the potential for artificial reefs.

The following resources were available at this table:

- STORMTOOLS
- NOAA Sea Level Rise Viewer
- National Wetlands Inventory
- Sea Level Affecting Marshes Modeling (SLAMM)
- Town of New Shoreham GIS Site (FEMA flood zones, plat, zoning, contour and soil maps)

### Table 3. Protecting the Great Salt Pond and Salt Marshes

**Table Hosts:** Anne Salinas and George Davis, CRC Members

The information shared, and feedback exchanged, at this table largely related to the following three questions:

- 1. What are the climate and coastal resilience benefits of protecting Block Island's salt marshes?
- 2. What is "marsh migration" and why is it important to protect the ability of marshes to migrate?
- 3. What do we know about the health of the Great Salt Pond and its marshes, and how it will likely be affected by sea level rise and increased storms?

Summary responses to these questions, including references to relevant resources, were shared with participants who visited the table. Handouts were available on "Why Protect Salt Marshes?", "Marsh Migration", and "The Health of the Great Salt Pond." Those who visited the table were mostly interested in learning more about these topics; other than one who expressed the need to enforce coastal buffer zones in the Great Salt Pond, no other specific comments were provided by participants.

The following resources were available at this table:

- Wastewater Management | New Shoreham, RI Official Website
- Block Island Map-Treatment-Zones-PDF
- URI's Onsite Wastewater Resource Center: <u>Community Onsite Wastewater Resource</u>
  Center;
- <u>Septic & Onsite Wastewater Treatment Systems | Rhode Island Department of Environmental Management</u>
- EPA's Homebuyer's Brochure and Guide to Septic Systems

• EPA's Climate Adaptation and Saltwater Intrusion

# Table 4. Homeowner Concerns: Well Intrusion and Failing Septic Systems

**Table Hosts:** Valerie Blansfield, CRC Member: Wayne Pinkham, New Shoreham Minimum Housing Inspector; and Tom Boving, Hydrologist, University of Rhode Island.

The information shared, and feedback exchanged, at this table largely related to the following three questions:

- 1. Is my well at risk because of sea level rise or storm surge events?
- 2. Would I be able to dig a new well on my property if the other well is affected by salt water?
- 3. What alternatives do I have to digging another well?
- 4. Should I be concerned about my well water quality if I live in a densely populated area?

The majority of participants who visited this table asked questions related to salt water intrusion of wells, including: How do you test for salt water?; What can you do if you have saltwater in your well?; and How do you know if you are in an area that is vulnerable?. At the table, there was a map showing the areas of the island that are vulnerable to saltwater intrusion of wells, but the map did not have details such as the name of roads. This map was part of a longer presentation by Tom Boving on saltwater intrusion which was available for viewing at the table.

The following resources were available at this table:

- Tom Boving's Saltwater Intrusion presentation, including map of BI vulnerable areas
- Wastewater Management | New Shoreham, RI Official Website
- Block Island Map-Treatment-Zones-PDF
- URI's Onsite Wastewater Resource Center: <u>Community Onsite Wastewater Resource</u> <u>Center</u>
- <u>Septic & Onsite Wastewater Treatment Systems | Rhode Island Department of Environmental Management</u>
- EPA's Homebuyer's Brochure and Guide to Septic Systems
- EPA's Climate Adaptation and Saltwater Intrusion

### Table 5. Resilience Solutions and Partnerships

Table Host: Mary Anderson, CRC Member

The information shared, and feedback exchanged, at this table largely related to the following three questions:

- 1. What are the most important steps we can take in the next year to make Corn Neck Road (& the dunes along the road) more resilient?
- 2. What types of solutions do you think would be most effective in protecting Corn Neck Road from sea level rise?

3. What are the potential costs & benefits of different adaptation strategies including both financial and social costs?

In response to the above questions, participants wrote and posted their comments on Post-Its and some also shared additional comments in the days following the event. Below, these comments are listed according to the topic – including: general; overall/big picture; additional concerns; dune paths; Town Beach parking; and Scotch Beach road.

### **General Comments:**

# General comments on solutions presented:

- Increasingly, homes are not being insured. Do these projects offer any relief in terms of insurability of homes in the area? Can we compare the costs in terms of insurance if nothing were done versus the cost if these projects are done?
- Which state officials have looked at this study and are they supportive of these plans?
- Can we answer the question about how much more protection we will get from these projects in light of a 100-year storm?
- What is the cost-benefit analysis of these projects?
- How long can we expect each of these projects to last, if maintained well?
- Can we price out how much maintenance costs will go up with these projects, including whether any additional equipment is needed to sweep the pavers?
- Island is facing an existential threat; why are we just talking about the parking lot? The projects feel like a "band-aid" approach.
- I felt managed here (at the Aug. 4<sup>th</sup> event) rather than included.
- Is this a finger in the dike? Neither parking area solution would improve current conditions by a whole lot. Why so many unaddressed sea level rise threats?

# **Overall concept/big picture comments:**

- Why did it take so long since Superstorm Sandy to hire experts?
- We would like to see the whole picture so that we can entertain all the solutions at once.
- We need a long-term assessment of threats to Block Island including the coastal areas, wildlife, and tourism.
- Make it clear what it is that we want to accomplish.
- Can we learn more about modeling and the bigger picture of the issues we are facing?
- As an Island, we need to redefine our notion of "convenience"
- Provide storm simulations to educate the public on the impacts.
- The Town Council needs to see the whole picture so that they can make decisions.
- Can we have a master plan with a phased approach protection, accommodation, and managed retreat strategies? Can we do more scenario-based planning (storms, high tides) and their impact on natural resources and infrastructure? We need a complete picture of the risks.

- What kind of tools do we have that will allow us to have a more informed adaptive approach to rising seas?
- Create a film to show on the ferry which highlights the importance of protecting the dunes.

# Additional concerns (in addition to areas covered by GZA solutions):

- For the beach access just north of Avonlea where the sand is in the road; it's better to block off that steep path. Also, the big opening to the beach beyond that has gotten wider and needs to be narrowed and replanted.
- Big opening by Beachhead how do we think about preserving access versus protecting dunes.
- Sea level walls versus causeways what makes more sense for a resilience Corn Neck Road?
- We need to address bigger threats such as bluff erosion, pavilion relocation, possible need for a causeway, salt water well intrusion in vulnerable areas such as Cormorant Cove.
- Need to look at whether vehicles on the beach cause damage; need a sign saying that vehicles need permits. Consider gates to keep vehicles off beach.
- What about road protection?

### Town Beach Pavilion Related Comments:

- We need a plan for the building
- The pavilion is the white elephant
- Consider moving pavilion back and restoring dune in front of it
- Can we do a flyover and take pictures and put in the pavilion so that people understand how vulnerable this area is?
- Lift up pavilion and use underneath to store bikes, etc.
- Build pavilion so that it can be flooded without damage.
- Consider gabions (caged rocks) as an efficient, non-permanent way to break wave action off the beach
- Need to socialize and educate people around how we use the Town Beach pavilion space.

# **Comments on Dune Paths:**

- Rotating paths may not go smoothly as people are creatures of habit. Hard to convince people not to use the closed paths. This would be too confusing (Multiple comments on this)
- Positive feedback on vegetation area at fork in path (multiple comments)
- Positive feedback in terms of path mats being able to increase accessibility for families while also serving to protect the dunes.
- Paths are good as the larger openings have made the dunes more vulnerable.

- Given the increasing numbers of people going to the beach, there is going to be more damage to dune vegetation, so the paths are a good idea for protecting vegetation.
- How many seasons do we get out of the mats?
- Are three paths too many?
- Ropes will help people stay on the paths.
- Request for more aerial pictures to help understand the sites.
- Informative signage is needed for use of dune paths/beach access.

# **Town Beach Parking:**

- It is better to have the swail even if it means losing some parking.
- Will the parking area be raised to a higher grade? Will it be flat or pitched toward the swail? How will the grade of the new parking area impact Corn Neck Road? We don't want any more water going into Corn Neck Road.
- Will there be a loss of parking spots?
- Request for a cross section of the construction so that you can see what the sub-strait consists of.
- What are the costs for installing and maintaining?
- What is the life of the gravel versus pavers (for both Scotch and State)?
- How would we maintain the pavers? Is it as simple as just brushing off the sand?
- How is this new parking area constructed? What will be the process? Are there other projects like this that we can see?
- Do we need to also look at our transit system and consider reducing the number of cars parked at the beach?
- Can we price out how much maintenance costs will go up with these projects, including whether any additional equipment is needed to sweep the pavers? There is already a lot of sand sweeping needed.

### Scotch Beach Road:

- Will the change in the parking lot design and construction alter insurance availability for abutting homeowners?
- Is gravel just a band-aid?
- What is the difference in terms of maintenance and labor for Scotch vs. Town Beach parking plans?
- Arc the road from Scotch parking area to the beach.
- Suggestion to tackle Scotch as "safety"