### Sea Level Rise Committee Tuesday, February 7<sup>th</sup>, 2023 New Shoreham Town Hall, Old Town Road 3:00 p.m. AGENDA

Mission: The Sea Level Rise Committee is established to understand the potential local impacts posed by sea level rise, assess the community's vulnerabilities, engage citizens and assist the town to assess, recommend and implement mitigation projects or other priority actions that will improve Block Island's coastal resiliency.

### Zoom Link:

https://us02web.zoom.us/j/86558090855?pwd=NFAxZzg2YWczY3N0THdGQzB5Q2ZsZz09

Passcode: 893331

### 1. Approval of Minutes from January 3<sup>rd</sup>

## 2. Reschedule July Meeting from the 4<sup>th</sup>

## 3. Committee Member Updates

- a. Town Council
- b. Town Planner including Grants and the Town Hazard Mitigation Plan
- 4. Dr. Annette Grilli (URI) Wave Attenuation Technologies and Beach Protection/Preservation

# 5. URI Capstone Update

### 6. Upcoming Immersion/Education Sessions – Updates

The group agreed that the following people will be invited to join our regular meeting or hold a separate "immersion session:"

Public Outreach How To (March? Before summer) – Mary Anderson and Socha Cohen BI Tide Gauge Group – Nigel Grindley CRMC – Sven Risom Bryan Oakley, erosion and SLR – Judy Gray

### 7. Smaller-Scale SLR Projects

a. New Harbor Boating Facility – does the proposal accommodate sea level rise – who to lead for the SLR Committee?

### 8. For the Good of the Group

# IF WE HAVE TIME:

 Larger-Scale SLR Projects – Discuss priorities and where to focus Nigel to update on Corn Neck Road north of Beach Ave.
Sven to update on Bridgegate Square and North end of Ocean Avenue

#### 10. SnapCoast

Where is/are the best location(s) on BI? This will stay on the agenda until we have had a good discussion of the program for which Malcolm Spaulding sent a link. This article describes the program: <u>Progressive Charlestown: URI, R.I. Sea Grant, DEM, municipal partners invite public to take part in shoreline monitoring program (progressive-charlestown.com)</u>

11. Next meeting: March 7th, 2023

#### OCE496 Block Island, Spring 2023: Task List

1. Complete preparation of SDE maps for Great Salt Pond, 100 yr 0 SLR case done, need other SLR cases. Forward SDE data (STWAVE maps) to Chris Damon to allow access via STORMTOOLS app.

2. Compare and contrast SDE maps 100 yr, no SLR case to FEMA FIRMS for southeast corner of Great Salt Pond (Harbor and Trim Pond). Look at both inundation and wave crest values.

3. Analyze December 2022 water level observations for four stations (BI Club, Harbor Pond, Trim Pond and Old Harbor Pond) just provided by the Block Island SLR committee. Compare datum information to prior data analyses. Explore Dec 22-24, 2022 storm event.

3. Apply STWAVE to eastern side of Block Island, 100 yr with SLR. When does Corn Neck Road get overtopped? Allow erosion of all and non rip-rapped shoreline using FEMA methodology (see Schambach et al, 2018) and rerun simulation for 100 yr no SLR case. Compare results of simulations, with and without shoreline erosion.

5. Apply XBeach to eastern side of Block Island, 100 yr, no SLR case, with and without shoreline erosion. Compare to STWAVE case with and without shoreline erosion.

6. Compare number of structures no longer viable with SLR to the STORMTOOLS E911 Assessment.

7. Estimate the damage and cost for residential and commercial structures from flooding using CERI app for 100 yr plus SLR cases. Identify structures that can not be replaced because of SLR (only). Repeat analysis for infrastructure (wastewater pump stations, power distribution hub).

8. Review options for protecting the area in the vicinity of Scotch Beach Road from sea level rise and flooding proposed in a white paper by BI SLR Committee.

#### Events:

Dr Annette Grilli presentation on shoreline erosion and nature based offshore structures, to Block Island SLR Committee, Feb 7, 3-4 PM, via Zoom.

#### **References:**

Lauren Schambach, Annette R. Grilli, Stephan T. Grilli, M. Reza Hashemi,

and John W. King, 2018. Assessing the impact of extreme storms on barrier beaches along the Atlantic coastline: Application to the southern Rhode Island coast, Coastal Engineering 133 (2018) 26–42.

Individuals requesting interpreter services for the deaf and hard of hearing must call (401) 466-3200 forty-eight hours in advance of the meeting date. TTY: 711. Posted 1/xx/2022