

Nantucket Coastal Resilience Advisory Committee (CRAC)

Tuesday, April 9, 2024

Via Zoom

*Meetings are audio- and video-recorded

Members present: Gary Beller, Dr. Sarah Bois, Peter Brace, Tim Braine, Matt Fee, Dr. Jen Karberg, Doug Rose

Members Absent: Abby De Molina, Rachael Freeman, Christy Kickham, Joanna Roche

Staff present: Leah Hill, Will Dell'Erba

Scheduled Speakers: Kirk Bosma, Senior Coastal Engineer and Innovation Director at Woods Hole Group; Peter Morrison, Co-President of the Nantucket Civic League

Members of the public: D.Anne Atherton, Nantucket Coastal Conservancy (NCC); RJ Turcotte, Nantucket Land & Water Council; Linda Williams, Mark Beale, Will Kinsella

Recording available here: https://youtu.be/6xq8S_foNYM?si=y6nY7RQxK81Xqlyw

Packet available here: <https://www.nantucket-ma.gov/AgendaCenter/ViewFile/Agenda/04092024-13696>

1. Call to Order – 10:00am

- the meeting was called to order by chair Peter Brace.

2. Meeting announcements

- Script for remotely conducting Open Meetings.
- Meeting is being audio/visually recorded.

3. Public comment on topics not on the agenda

- D.Anne Atherton (NCC) addressed three topics: 1) to request an opportunity at an upcoming CRAC meeting to introduce the committee to photogrammetry, a new measurement capability of relevance to coastal resilience; 2) to commend the Town for including a \$10M capital appropriation for relocating sewer service for #104-120 Baxter Road; 3) to urge the Town to negotiate public benefits prior to signing the NOI regarding installation of coir terraces at #59-83 Baxter Road.

4. Approval of minutes

- None.

5. Presentation and discussion on the Massachusetts Coastal Flood Risk Model (MC-FRM) by Kirk Bosma, Senior Coastal Engineer and Innovation Director at Woods Hole Group

- Model started after Hurricane Sandy – regarded as a near miss for Massachusetts.
 - *Heightened interest in calculating probability of, vulnerability to, and intervention options for coastal flooding.*
- MC-FRM is a high resolution, physics-based model.
 - *Inputs: global sea level rise (SLR), tropical storms, landscape, elevation, changing climate, calibrated and validated to historic and recent events.*
 - *Probabilistic/hydrodynamic model incorporating global SLR projections adjusted for*

- northeastern US, tides, surges, wind, wave setup, run-up, overtopping, and future climate scenarios.*
 - *Not included: effects of erosion, precipitation, changes to elevations, and man-made structures.*
 - *Outputs: forward-looking inundation probability, depth, duration, volumes, winds, waves, currents, expressed in Coastal Flood Exceedance Probability (CFEP) maps.*
 - *Released in 2021; next anticipated in 2024.*
- Enables municipalities to weigh current and future probability of flooding, and to cross-reference versus criticality of infrastructure so as to optimize resilience resources.
- Bois expressed a need for clarity and simplicity in the Town's regulatory guidance.
 - *Beller later underlined this point, and urged CRAC to recommend standards which are consistent with the state of Massachusetts.*
- Hill asked three questions:
 - *Can MC-FRM data be uploaded into Nantucket's GIS map viewer? Bosma confirmed that it is GIS compatible, and several municipalities have imported it directly into their GIS systems.*
 - *Hill asked if Nantucket should incorporate the climate resilience design standard tool into its updated wetland regulations; Bosma indicated that all state-funded projects must use the coastal resilience design standards tool.*
 - *The MC-FRM color schemes seem counterintuitive; Bosma indicated that color schemes can be customized.*
- Fee urged CRAC to focus on physical triggers rather than weighing in on modeling.
- Turcotte (NLWC) described the highly litigious history around Nantucket's wetland regulatory environment ("if something can be challenged legally, it will be challenged"), and expressed concern over a disclaimer that indicated that MC-FRM "should not be used for legal, engineering, surveying or other purposes..."
 - *Bosma responded that this disclaimer originated several years ago with the Boston Harbor Flood Risk Management (BH-FRM) model, and that the supporting documentation for the MC-FRM release is still being finalized.*

6. Presentation and discussion on area association survey results by Peter Morrison, Nantucket Civic League Co-President

- Morrison provided an overview of the neighborhood association surveys sent out to in winter of 2023
 - *The neighborhood groups regard themselves as stakeholders in the CRP.*
 - *As a self-selected sample, it is not representative, but it does represent contemporary coastal resilience concerns.*
 - *Disproportionate responses came from Surfside, Sconset, Brant Point, Town.*
 - *Universal interest in more information.*
- Beller reinforced the importance of maintaining balance between island-wide infrastructure and locally relevant projects.
- Public comment: Linda Williams spoke to the need to reach more residents beyond the paying members of the Civic League.

7. Discussion on next steps for coastal resilience survey
 - As discussed in #6 above.
8. Discussion on next site visit
 - Continued.
9. Public outreach ideas/strategies from committee members
 - Media scorecard summary by Doug Rose.
 - *Total impressions now exceed 230,000 to date.*
10. New business, Natural Resources Dept. & Committee reports from Planning Board, Conservation Commission, Harbor and Shellfish Advisory Board, Select Board, Advisory Committee of Non-Voting Taxpayers, and other committee members.
 - Continued.
11. Discussion of upcoming meeting dates and topics:
 - Next Meeting is April 23, 2024, on Zoom.
12. Motion to adjourn:
 - moved (Fee), seconded (Karberg), approved unanimously (7-0).