
Coastal Hazards Adaptation Team (CHAT) Work Session #65

Tuesday, September 17, 2024

1:00-3:00PM

VIRTUAL MEETING

MINUTES

Note: Due to poor recording quality, minutes may be incomplete.

1. Introductions

CHAT Members

Jay Diener – Hampton Conservation Commission
Bob Ladd – Hampton Beach Village District
Ward Galanis – Hampton Planning Board
Jason Bachand – Hampton Town Planner
Brianna O’Brien – Hampton Conservation Coordinator
Stephen LaBranche – Member at large
Eric Sunderlin – Hampton DPW
Rayanne Dionne – Seabrook Hampton Estuary Alliance
Lucy Perkins – DES Coastal Program
Jen Gilbert – DES Coastal Program
Kate Bashline – Resident Representative
Barbara Kravitz – Hampton Beach Area Commission

CHAT Support Staff

Liz Durfee – Planning Consultant and CHAT Coordinator

Guests

Lynn Vaccaro – Great Bay National Estuarine Research Reserve (GBNERR)
Becky MacKnight – Great Bay National Estuarine Research Reserve
Chris Miller – Natural Resources Director, Brewster, MA
Sara Gagnon – SHEA Coastal Coordinator

2. Approve meeting notes from August 2024 (5 mins)

Motion: Mr. LaBranche moved to approve the August meeting minutes as written.

Second: Ms. Bashline

Vote: All in favor

3. Relevant Flood Updates (20 mins)

Mr. Bachand

- The Planning Board is starting its zoning board reorganization project. The top priority from the Master Plan was to review the zoning ordinance and identify needed changes to make it consistent

with the Master Plan. The review process will occur in three phases. The first phase will review the structure of the zoning ordinance. Second, there will be a warrant article requesting an audit of the ordinance. Third, changes to the zoning ordinance will be made to make it align with the Master Plan.

- Zoning board amendments are being submitted. The flood plain ordinance from last year was tabled but is being brought back for review. The focus of this ordinance is to help get structures out of harm's way, and this was discussed during a September 4th meeting with the Planning Board.
 - Ms. O'Brien stated the purpose of this ordinance is to improve flood resiliency and reduce barriers in the form of variances and associated costs.

Ms. Dionne

- Provided an update for an event stating there will be a photo contest and a kid's coloring contest with cash prizes. There will be a Summer Sparrow talk with a UNH research graduate on September 26.

Ms. O'Brien

- The Board of Selectmen approved moving forward with coastal conservation in Hampton regarding the voluntary elevation and buy out programs. There are between 40 and 50 Hampton properties that are eligible for this funding and the application deadline is January 2025.

Mr. Bassett (via CHAT Coordinator)

- Flooding occurred on several days in the Meadow Pond neighborhood. From August 20-23, the observed high tide was over 10 ft MLLW and up to 11.16 ft on the 20th, resulting in flooded or partially flooded streets.
- The bid process for the DPW Drainage Project began. Excavators dug to determine the water table height on Gentian Road on August 23.
- The Meadow Pond neighborhood submitted a rights to resilience letter to the Zoning Board of Adjustments on August 30, 2024 expressing their opposition to a request for a parking variance for redevelopment of 931 Ocean Blvd. The applicant sought to use public parking lots for business patrons, which threatens the adaptive capacity of our flood prone neighborhood to use these lots as allowed by the Flood Placard Program. The application was withdrawn by the applicant. A request was made to include the opposition letter from Meadow Pond as part of the official record for any future application by 931 Ocean Blvd that seeks a similar parking variance, but the Building Department did not guarantee that this could be done.
- Mr. Bassett asked that the ZBA post applications for variances online to improve public access and participation in local government.

4. Breakwater Landing Parking Lot Removal and Dune Restoration (30 mins)

Mr. Miller

- Showed a presentation showing storm damage and dune restoration projects in Brewster, MA over a period of years. The projects including replacing sand to rebuild the dunes, planting beach grass, and building sand drift fences. These projects were helpful until some storms occurred a few years after these projects.
- Breakwater Resiliency Project: This project occurred in response to the dune restoration efforts' failure over time. The purpose was to implement more robust protections for the area, reduce

damage and maintenance costs from storm damage, maintain the current amount of parking at the parking lot, and improve stormwater management and treatment.

- Project details:
 - Added beach sand to increase dune elevation to match the surrounding area
 - Narrowed the parking lot and moved the parking lot back from the beach
 - Installed an articulating concrete mat under sand to allow access for emergency response vehicles and coastal nourishment projects and people with limited mobility
 - Installed seasonal boardwalks through the dunes to the beach
 - Added interpretive displays
- Funding: The Massachusetts Coastal Zone Management grant paid for the plan design. The Green Infrastructure Grant plus matching town funds paid for implementation of the plan.
- Neighborhood concerns and alternative plans were discussed at town meetings.
- The final plan was approved based on town staff, regulatory agency, and public meeting input and approval.
- Stormtides.org was used to predict tides and flooding along the coast for planning purposes.
- Lessons learned:
 - It is important to increase public awareness and understanding of coastal storms and climate change to building community support.

Mr. Diener

- Asked how the area has fared during storms after the project. Mr. Miller stated that there has been slight scour, but it was filled in as the tide brought the sand back in. The area has had minimal impacts during storms since the project was completed. DPW moves wind-blown sand off the path and back onto the beach annually.

Ms. Durfee

- Asked who was invited to evaluate different design alternatives. Mr. Miller stated there were several design plan review meetings. The first meetings were informal with town departments available to provide information to each other and residents. Subsequent meetings were held for permitting with the conservation commission. Other meetings were held with regulatory agencies.
- Asked if similar projects have been done. Mr. Miller described similar projects and a culvert project. The projects are prioritized through town meetings and consensus building with citizens. A Coastal Adaptation Strategy was created to guide coastal resiliency projects and priorities. The Coastal Adaptation Strategy turned into the Coastal Committee. The selectboard then created a Natural Resources Advisory Commission with a broader scope with citizens and interested parties such as the Land Trust as part of the committee.

Ms. Bashline

- Asked for tips for how to get the beach grass to grow so well. Mr. Miller stated it was planted early in the season and went dormant then grew well during the season. The sand elevated the dune, so the beach grass isn't hit by a lot of surge and seems to have established deep roots.

5. NH Salt Marsh Plan and resources (30 mins)

- Lynn Vaccaro, Rachel Stevens, and Becky MacKnight, Great Bay National Estuarine Research Reserve

Ms. Vaccaro

- GBNERR is part of NH Fish and Game and they are geographically focused on the Great Bay Estuary. Research and monitoring are a big part of the focus. Federal funds are received for these efforts annually.
- The importance of salt marshes:
 - They help protect water quality through filtration and microbial actions.
 - Nurseries and habitat for fish and wildlife
 - Carbon sequestration
 - Flood resilience: salt marshes absorb water and the grasses slow waves
 - Physical protection for the shoreline
- The Hampton Seabrook Estuary is rich in salt marsh area
- How to best manage salt marsh systems in the future:
 - Assess salt marsh resilience by assessing current condition, vulnerability, and the potential for the salt marsh to adapt.
 - Data is available showing marsh elevation, modeling of marsh migration, and agricultural ditches.
 - The available data is used to calculate individual resilience scores and overall resilience scores for each marsh area.
 - A management options table uses the resilience scores to make recommendations for potential courses of action for each marsh area.
 - These resources are available at greatbay.org/salt-marsh-plan
 - Resilience scores can help Hampton determine priority levels for salt marsh protection.
 - Identify places to invest in marsh migration pathways and determine how to assist marsh migration. Housing and other structures are at risk along migration pathways.
 - Marsh migration mapping is available on the website.
- Salt Marsh Stewardship Guide
 - The salt marsh boundaries are changing which impacts residents and landowners.
 - Goal is to educate and empower residents and landowners on how to be good stewards and neighbors for salt marshes
 - Guide is being developed by GBNERR and NH Coastal Program (DES)
 - The draft guiding principles include: anticipating change, minimizing activity in the salt marsh, creating a cushion between people and the marsh, adopting sustainable landscaping and property management practices, watching out for invasive species, asking for help when needed, and advancing strategies for sustaining a marsh.

Mr. Galanis

- Asked about options for mitigating ditching and dealing with ponding. Ms. Stevens stated there are options for ditch remediation, but they also take a lot of time and funding to implement. The idea is that some marsh land will be lost, and the marsh will migrate, so it makes the most sense to focus on places where the marsh won't be lost.
- Ms. Durfee stated that DES is currently working with Hampton on pilot projects to analyze the effects of ditch remediation. Ms. O'Brien showed a map of Hampton ditch remediation designs.

Ms. Bashline

- Asked about mussels and Ms. Stevens said there are plans for mussel restoration.

Additional notes provided via email: "Ribbed mussels are native to salt marshes — they live nearly buried in the peaty mud, almost invisible to the untrained eye."

"Some people actually call ribbed mussels 'habitat engineers,'" said Annalee Tweitmann, a coastal restoration ecologist with Mass Audubon . When mussels attach their byssal threads to plant roots, the threads basically glue chunks of peat together. That's the number one reason why we think they could be really great in a restoration project — is they can really stabilize a very unstable salt marsh.

Ribbed mussels have another advantage: they filter excess nutrients like nitrogen from the water. Nutrients are very necessary for plants to grow. But when you have too much, it can be a bad thing, said Tweitmann. When salt marsh plants are exposed to high levels of nutrients, they grow tall and lush without their roots digging deep for food. The shallow-rooted plants become unstable and vulnerable to erosion."

Full article here:

<https://www.wbur.org/news/2022/10/19/salt-marsh-erosion-ribbed-mussels>

Ms. Gagnon

- Stated that SHEA partnered with SALT and other conservation organizations recently and used the NH Salt Marsh plan to identify potential conservation parcels for the RCCP grant.

Ms. Durfee

- Asked how the salt marsh plan will be packaged for homeowners. Ms. Vaccaro stated that the stewardship guide is geared towards residents. The mapping tools can be drilled down to the parcel level.
- Ms. Stevens said that two-page marsh profile summaries are being developed to simplify the data and summarize actions to be taken for the marsh area.
- Ms. MacKnight stated that residents can request information online and speak with GBNERR representatives as needed.

Ms. Bashline

- Asked if the Hampton Seabrook marshes have different names. Ms. Vaccaro stated that the marshes were broken into different named units for the Salt Marsh plan. The names are historic names or geographic names.

Ms. Durfee

- Will send a link to the Hampton Seabrook Estuary Collaborative webpage. There are presentations on ditch remediation and other topics.

6. **Call for proposed legislation and funding requests for state budget** if there is anything that CHAT would like the state legislature to consider, the filing period for incumbents is in early September and there is another window that opens after the election (mid Nov) and is about 10 days, those are the only times that legislation can be introduced.

7. **Hampton Historical Society Fall Festival Table (Oct 13) (10 mins)**

- Date: 10/13/24, Time: 11am-3pm
- CHAT will share a portion of the Master Plan Implementation Committee's table
- Mr. Bachand, Mr. Galanis, Kate & Gary Bashline will be present. Others are encouraged to attend.
- Table materials:
 - A few copies of CHAT's 2023 year in review (attached)
 - Copies of a 1-page flyer with CHAT meeting info (attached)

- CHAT business cards (Mr. Diener has these)
- Art engagement project – create a drawing that incorporates a line graph of sea level from the last 10 years. See attached instruction page and blank sheet and feel free to send comments. We can keep or take a photo of the drawings.
- The Stone Living Lab website provides age-based approaches to climate resilience, a blank graph to chart sea level rise could be an art project
- Photos from past Rising Tide/King Tide events (Lucy to check to see if there are mounted photos from Hampton available)
- SHEA drawing contest material could be repurposed (tentative)
- Adaptation strategy image options poster (tentative – Ms. O’Brien to check in on this) OR
- Mapping activity – share observations of flooding or storm impacts (either draw on map or use sticky notes (tentative – Ms. Durfee and Ms. O’Brien to coordinate)
- Tuck Museum Hampton historic land use drawing – use as a prompt for participants to envision how Hampton will look in the future

Ms. Durfee will follow up with Mr. Bachand to coordinate printing/organizing these materials as we get closer to the festival.

8. Next meeting: October 15, 2024

9. Adjourn

Members of the public are welcome at CHAT meetings. Visit <https://shea4nh.org/coastal-hazards-adaptation-team-chat/> to learn about CHAT. Please contact CHAT coordinator Liz Durfee at efd.planning@gmail.com if you have questions about how to join on Zoom.

During the meeting, please:

- *Keep your microphone on mute to minimize background noise*
- *Use the hand raise function or type in the chat box if you have a question or comment*
- *Stay on topic*
- *Be respectful of all meeting participants*