
Coastal Hazards Adaptation Team (CHAT) Work Session #11

Tuesday, November 19, 2019

3 PM – 5 PM

Hampton Town Hall, Downstairs Meeting Room

NOTES

Participants: Jay, Rayann, Jason, Jennifer, Stephen, Tom

Absent: Mark, Bryan, Deb, Jim, Nancy

Staff: Kirsten, DES, Steve Couture, DES, Liz

Liz began the meeting at 3 PM and introduced the members and visitor, Steven Couture, Program Administrator - NHDES Coastal Program

1. Approve meeting notes from September 17, 2019 and October 21, 2019

Stephen motioned to approve the September 17, 2019 minutes, as amended. Rayann seconded the motion, with all in favor, the motion passed unanimously.

Jason motioned to approve the October 21, 2019 minutes, as amended. Rayann seconded the motion, with with Stephen and Jen abstaining due to absence from that meeting, approved 4-0-

2. Brief Relevant Flood Updates

Rayann – noted Conservation Commission was working on housekeeping with Warrant Articles for revisions.

Jay – noted SHEA was working with the Town Manager and RPC to develop a process to apply for FEMA grants on behalf of property owners.

Stephen – noted the first meeting of the Municipal Budget Committee is tonight at 7 PM and they will begin looking at the budget books and Police and Fire.

Jason – noted Planning staff will meet with the Steering Committee tomorrow evening concerning the Master Plan. Planning will be working to draft Warrant Articles and get cost information through January. Jason noted the preliminary survey on the Master Plan had a good response rate.

Jen – noted the tides were high yesterday with the Nor'easter off shore. WMUR notified DPW that the Town received the flood resiliency grant and interviewed Jen, which was good publicity for the

naysayers and is a positive step in finding solutions. DPW is engaging a consultant to look at Ashworth. The consultant could share information as a subconsultant with DOT. The Town of Hampton needs to work with DOT. An RFP with DOT would cover all coastal NH to look at sea level rise and risk management solutions. Monitoring data may not be as useful as we thought it would be and there is difficulty with theft of the sensors which will be taken out for the winter and put back in spring. UNH plans to do for a couple of years. Data will be retrieved in January and may be beneficial to release. Recommends finding partners for extra funding for preliminary design. There could be a Warrant Article for King's Highway to consider the cost and feasibility. Jen congratulated everyone on the grant and thanked Kirsten noting we couldn't have done this without her writing skills. A \$200,000 Warrant Article will be written asking for the next round which will give DPW \$500,000 for design.

Tom – noted as a resident of a flood prone area he is delighted to hear the good news about the Fish & Wildlife grant falling into place. Working with NHDES to apply for grants is a great idea.

Kirsten – noted she was thrilled the grant was funded and is here to help with applications. The King Tide Photo Contest winners were chosen and ten photos have been put into gallery format which she would like to post at the Hampton Library or a local event, perhaps launch an art space in Portsmouth with a cash bar. A slide show could be put on Channel 22 and at the school's Channel 13. The middle school students should see and get informed at an early stage. The school has a newsletter, SharkNews and Kirsten will look into both of those. Kirsten discussed the formation of a Seacoast Corridor with 10 coastal towns. CHAT has a unique model. Dover has a coastal plan already. Flooding on Route 1/Ashworth appear to be separate problems. Kirsten will reach out to Chris Pappas and try to get the whole delegation interested.

Steve – noted he has been with the Coastal Program since 1999 and congratulated CHAT on its grant round. Mr. Couture is working with other coastal states and recommended as you go through the process could be working with FEMA.

Liz – noted she will give an update the Hazard Mitigation Plan and Evacuation Routes when Bob is here since he was the most interested in the topic. Jay sent out a couple of resources from the Charitable Trust and a link of a NY Times article about Virginia which she will add that link to the minutes. (links of interest: <https://www.nytimes.com/2019/11/19/climate/climate-real-estate->

[developers.html](#) and <https://www.pewtrusts.org/en/research-and-analysis/articles/2019/11/19/mitigation-matters-policy-solutions-to-reduce-local-flood-risk>).

3. Wrap up NH Coastal Flood Risk Guidance Activity (Link to guidance: <https://scholars.unh.edu/cgi/viewcontent.cgi?article=1210&context=ersc>, link to mapper: <http://nhdes.maps.arcgis.com/apps/webappviewer/index.html?id=c231e2f3b1f94d05bc0c8faf0265f569>)

Liz reviewed what the Team went over at its last meeting concerning the 7 Steps, the first being to select a sample site which was a residential condominium on Ashworth of 1.5 stories at the end of Keefe Avenue and then to identify the type, location and timeframe which was a 100 year lifespan. The next step was determining “Tolerance to Risk” which is the community decision maker’s willingness to accept impact. The Team chose Medium however Liz explained typically a residential condominium or SF home would be lower as that is based on the cost, number of people affected and whether the asset is of an individual/s or to the community. Four categories include very low, low, medium, and high. Examples would be a shed – very low, and a hospital - high.

Kirsten discussed edits made to incorporate flood impacts into the 2015 changes to the Building Code. Everyone must now have 1’ of freeboard on new or substantially redeveloped buildings.

Jen noted some pushbacks on redevelopments. Elevation in a flood zone is not grandfathered.

Jay recommended suggesting where redevelopment should not occur and Jen added by taking it out of the inventory.

Liz reviewed the NH Sea Level Rise, Stormwater and Groundwater mapper exercise.

The recent King Tide flooding was roughly the equivalent of the extent a 1.7’ increase in sea level. Under 1.7’ of slr that flooding would occur with every high tide, twice per day normal. Jen noted Keefe doesn’t flood now.

Tom noted the value of working with stabilizing emissions guidelines.

Tom asked what the high water marks would be and how deep the water would be on Ocean Boulevard in these scenarios. Ocean Boulevard would likely see a depth of 2’ and at 4’ not be driveable.

Liz reviewed Step 5 Sea Level induced Groundwater Rise

SLR impacts on groundwater can affect drinking water and septic systems three miles inland.

Steve noted that Miami has seen salt contaminating their drilled wells.

Water being drawn by well will draw salt water into aquifers.

Liz reviewed Step 6 Extreme Precipitation

Liz noted manuals don't include the best available data from the NE Regional Climate Center data. She compared their data to NH Stormwater Manual Tables at year 50 and there was quite a difference.

Liz reviewed Step 7 which included relative SLR, Coastal Storms, Groundwater Rise and Extreme Precipitation. The cumulative impacts are worth considering.

Adaptation Strategies:

Rayann noted permeable pavers are not working at this point and are often used by developers to increase density. Liz noted in sites where these won't function they should not be traded for density, only where it will be effective. Kirsten wondered how developers will try to finagle that.

Jay noted to look at the life expectancy of the design and use a reasonable figure for today, such as 50 years.

Tom noted elevating structures is good but you can't get emergency vehicles in. Emissions and greenhouse controls should be on the table always. Jay recommended a waiver that purchasers sign. Rayann agreed, as this would increase awareness. Kirsten questioned whether the risk could be assigned in the deed.

Liz questioned whether there could be a better use for a parcel like this such as a park or parking lot.

Kirsten noted on December 15 new wetlands rules will require a vulnerability assessment.

4. Initial Discussion of CHAT Progress and Recommendations to BOS and Master Plan Subcommittee

Liz handed out copies of the 2019 Coastal Hazards & Adaptation Team Review dated November 18, 2019 with Appendix and urged members to look it over for any missing content. Liz will send it out electronically to the Team.

Section 1 summarizes the purpose.

Section 2 Introduction shows A-C: Overview, Primary Objectives and Approach.

Liz directed the Team to the bubble graph on Page 2: Identify, Share, Learn and Become familiar with the science and recommendations.

Section 3 is Flood Updates which members give at each meeting.

Section 4 is Sea Level Rise Estimates regarding climate science in NH and SLR in coastal NH.

Section 5 is Adaptation Frameworks with (A) talking about the New Zealand model and (B) drafting framework for Coastal Flood & Erosion Management Action for Hampton developed for CHAT with four steps summarized: Identify, Understand the Risk, Determine Flood Risk Tolerance and Define clear goals and objectives. The three situations were identified as Keeping the Water Out, Living with Water and Getting out of Water's Way.

Section 6 is Characterization of Adaptation Strategies, the questions to ask about any action under consideration.

Section 7 is Case Study Review. CHAT reviewed three examples of planning efforts: Louisiana, Norfolk and Climate Ready Boston.

Section 8 is Mapping flood vulnerability. CHAT developed a map with existing data and new information identified during meetings to identify areas, attributes, assets and critical facilities, SLR scenarios, water infrastructure, resources, conservation and vulnerable locations.

Section 9 Topics of Interest to CHAT was pulled from the meeting minutes.

Section 10 is Concerns that need more information.

Section 11 is Barriers to Adaptation such as costs, involvement, responsibility, advocacy, messaging, political hurdles, lack of awareness and others.

Section 12 is Outreach, Communication and Education which identifies several venues to communicate with residents, engagement approaches, residents interests and communication.

Section 13 are Tools, Guidance and Resources with the Seven Steps and Resources which can be found in the Appendix.

Section 14 are the Next Steps in developing recommendations and recommendations for CHAT's role, recommendations and addressing barriers.

Guest speakers could be engaged such as Kevin Lucey, NHDES Alison Eberhardt, Cooperative Extension, an insurance agent or mortgage lender.

Stephen noted the new auditorium at the Academy could be a resource for educational outreach if the presentation could be boiled down to an hour. Rayann agreed and suggested having the photo contest gallery in the entryway. Tom suggested a skype session or video conerence with Norfolk, VA.

Kristen added transparency and putting the minutes online and suggested after 11 meetings to make the minutes public going forward. Stephen asked about putting them on the Town's website and noted perhaps having the BOS formally recognize this Committee. Liz noted minutes are currently available publically if requested. The group agreed to formally vote on posting minutes online at the December meeting.

Tom asked if the relationship with DES will continue and Kirsten noted it depends on funding from NOAA but would renew at the end of June.

The CRHC report can be accessed here: <https://www.nhcrhc.org/wp-content/uploads/2016-CRHC-final-report.pdf>.

D) The draft NHDES Guidance for using Scientific Projections and mapper we used in the last two meetings can be found here:

<https://scholars.unh.edu/ersc/211/> Look for the blue Download button on the right.

Here is a link to the mapper: <http://nhdes.maps.arcgis.com/apps/webappviewer/index.html?id=c231e2f3b1f94d05bc0c8faf0265f569> .

5. Next Meeting

Liz indicated the next meeting will be December 17, 2019 from 3 PM – 5:10 PM. Liz will send out a poll to see who is available. Liz noted some topics to discuss at the next meeting include:

- a. CHAT outreach
- b. Speaker Series and Topics

6. Adjourn

The meeting ended at 5:10 PM.

Respectfully submitted,

Nancy J. Hoijer
Recording Secretary