

Coastal Hazards Adaptation Team (CHAT) Work Session #10

Monday, October 21, 2019

9 AM-11 AM

Hampton Town Hall, Downstairs Meeting Room

**NOTES**

**Participants:** Jay, Bob, Rayann (@9:59), Jason, Mark

**Absent:** Mark, Bryan, Deb, Tom, Jim, Nancy, Stephen, Jennifer

**Staff:** Nathalie, DES, Liz

1. Approve meeting notes from September 17, 2019

September 17, 2019 minutes were tabled for approval at the next meeting.

2. Brief Relevant Flood Updates

Jay – The environmental group Storm Surge will host a live video presentation on Nov. 6 by A.R. Siders, a managed retreat specialist at the University of Delaware who will speak and answer questions from the audience at the Parker River National Wildlife Refuge auditorium in Newburyport, beginning at 7 p.m., Siders will talk about how storms, floods, erosion and sea level rise are making coastal towns more dangerous places to live. She will address the question of at what point does it make sense to move away from the ocean.

One obstacle to the Town moving forward and expanding FEMA Hazardous Mitigation Grants is that there is not staff for this in Town. The Rockingham Planning Commission could be hired to handle the administrative end to apply for grants and oversee the process. The deadline to submit an application letter to the State for RPC's participation and funding would be by December. Jay will send a copy of the Letter of Intent and information he has to Liz. The application is online so there is not a lot of detail.

Bob – recommended expanding the scope to include the emergency management piece. There were three major issues in Hampton, the Legionnaires outbreak, a hurricane and a water ban. Communication in 2019 is not with people from here. A group could be formed. Some information is mailed to residents as part of the Seabrook Calendar but it is not certain who is reading that. Some more direct source of communication is needed to relate information, especially to non-residents who are visiting. Liz noted they will have to look at the Hazard Mitigation Plan and to see if that is something that the plan identifies to implement by the Town. She will ask CHAT if it wants to expand its scope if this is not included in the Hazard Mitigation Plan.

Jason – noted that Planning is working on the Master Plan and thanks to Nathalie has an RFP for the Vision and Coastal Management chapters. There is a live survey for residents (with a link provided on the town's website) at <https://publicinput.com/HMPS1>.

The first draft Warrant Article for other sections of the master plan has a revised version with cost information for November and something should be approved by December. Jason gave information to the Recreation Department for tonight's Board of Selectmen's meeting and will talk with the BOS about the Master Plan and Survey. The Friends of Hampton Beach website is also a good community outreach source. Jason will send information to Bob for John to put on the Village Facebook page, link at HamptonBeach.org. Jason thanked Nathalie for her enthusiasm and support.

Nathalie – noted a revised draft guidance from the technical advisory panel approved at their November 1 meeting will be released in March of next year.

### 3. Flood Adaptation Brainstorm

#### a. Characterize a policy/regulatory strategy

Liz noted the goal is to build information on types of strategies to compare and deliver in a user-friendly format for residents. The two-sided document has results from the exercise two meetings ago.

Liz noted there was a lot of feedback provided during the first two characterization sessions of adaptation strategies. A zoning overlay was one of the potential flood adaptations that came up during discussions of potential strategies. This would serve to add additional restrictions or requirements for development in certain areas of Town.

Jay noted Durham has an advisory Flood Hazard Overlay District and Portsmouth is considering regulatory changes to include an extended flood hazard area beyond the Special Flood Hazard Area that the existing Flood Plain District encompasses.

Liz noted she looked at the Norfolk, VA ordinance and there were zoning amendments to codify elements of the Norfolk Vision 2100 plan that encourage responsible development. The City has an Upland Resilience Zone where development is targeted and a Coastal Resilience Overlay with additional requirements that developers have to meet to get site plan approval.

Liz asked for input on what CHAT thought the best, feasible, way to identify the area of a possible zoning overlay was in Hampton?

Bob – noted this fits as a piece of the emergency management plan and having an individual advisory committee put together. Bob opined this is totally necessary. Encourage the public to get together, zoning is always a flashpoint, look at zoning as what they want to do.

Mark – noted in Hoboken, NJ, which is urban, 5-8 years ago there was a consultant from the Netherlands who designed an underground parking lot which was a two-fold project so that when the garage is empty (during a storm event) it serves to direct the flood water to whatever locks and channels that takes it away and thus would keep Ocean

Boulevard from being underwater. It also offsets insurance costs. Europeans plan for much bigger windows of time than we do. We tend to look at four years ahead where they typically look 100 years ahead. Spending \$100 million to be proactive versus spending \$100 billion if we do nothing and have to rebuild. Are we at that point?

Jay noted the Team should compare the cost of protecting versus rebuilding. Is it a 7:1 ratio? Do we construct so we can sustain some sort of impact? Regulations we should build into the ordinance today should cover the next 20-30 years but developers only want to do what the ordinance requires now. Need to get them to build to the conditions that will be present in 2030 .

Mark added there needs to be a public partnership with private developers. It's only when we experience a disaster that we say "oh now we have to do something." We haven't had that awful huge storm yet, but we have had creeping tides. Mark questioned when we will act, when first floors are underwater? or when it reaches Ashworth?

Liz – agreed ~~there should~~ ideally we would have a list of ten different strategies but it will take time to develop that. This would be a menu of strategies appropriate for different areas. Think of the zoning overlay as a specific adaptation strategy like the underground parking structure, for example.

Nathalie spoke about the benefits of consistently acknowledging risks and how Boards and Commissions evaluate risks. When there are multiple boards reviewing projects, such as Planning Board and Site Plan Review Board, they do not always approach risk evaluation the same. Using the SLR guidance can help these boards first evaluate the situation and then encourage adaptation of designs.

Jay noted that was what having people go through the guidance accomplishes.

Liz noted that another aspect is incorporating the best available data into your ordinances, such as accurate precipitation data rather than something that could be outdated and doesn't show the magnitude of current precipitation. The NH Stormwater Manual which most municipalities use, has some outdated precipitation data but also says you can use other data.

Bob noted that voluntary compliance won't get us there. If you require a business to notice the person you sold to that may entice more sustainability. Liz noted that a disclaimer for the developer would not be popular but could be effective in informing buyers. Jay noted the real estate industry is strong in NH and not going to do that voluntarily if it makes it difficult to sell. Nathalie agreed a flood risk disclosure would be good, but agreed NH has a strong real estate lobby.

Liz advised that the group walk through the evaluation of a conceptual zoning overlay that requires that standards be met to increase resiliency, to be forward thinking.

The group began the characterization of this adaptation strategies and determined that the goal would be *living with water*. The group considered the location and area in different areas of Town. This could be coastal, or within the buffer? Or, perhaps a broader area encompassing the flood plain and sea level rise scenario extent.

Jay noted 1.7' for 10' high tide over 15/yr could be a good extent. That projection could be used to start mapping out areas that would experience flooding most frequently. Bob recommended adding other areas who experience flooding. Mark agreed, if one area experiences flooding and attempts to mitigate that, the ripple effect is other areas. Jay added there are people prone to flooding near streams and ponds also.

Nathalie noted the 500-year floodplain captures more upland freshwater flooding sources. Jay agreed the plan should not just focus on coastal. The group determined that the 500 year floodplain would be a good area to use for the overlay.

Liz demonstrated some "check-box" locations, such as:

Beach;  
Marshland;  
Inland  
Town-wide and vulnerable areas

Liz noted the second portion is: What Scale? Individual, Coast, Town-wide Ordinance region?

Liz noted the third portion is type or cause? The Team noted all of the above with:

High Tide;  
Precipitation and  
Stormwater  
(groundwater was later added)

Liz noted the fourth focus is the no regrets benefits. Bob noted survival is the most obvious.

Preventing v. Rebuilding  
Lowering Flood Insurance Rates

Nathalie added encouraging building above the floodplain standards could qualify. Jay cited as an example, requiring 2-3' freeboard versus 1.'

The negative would be where would the water go? Would it impact other areas?  
Example: a retaining wall could have impact on neighboring properties. Jay noted one piece of stormwater management already requires not allowing water from your property to

impact other properties. Mark agreed, noting that whatever is on your property, you keep.

Nathalie noted the Portsmouth model considered the impact of new properties in vulnerable zones. Liz added rebuilding and new development in these areas is controversial. Do you want your zoning overlay district to have a lot of development or redevelopment occurring?

What about maintenance needs for this type of strategy?

The ordinance could be updated as needed. Jen, who is absent could probably provide a lot of information on this topic.

Liz noted another negative is if the ordinance becomes unpopular the legislative body could vote to amend it. It has more teeth than a regulation but it may not be as permanent as a structural adaptation strategy.

Bob asked about grandfathering? Jay noted it depends on whether the redevelopment is substantial or not. Nathalie noted there could be an event worse than what the zoning overlay or ordinance plans for. Mark noted we know more than we did 40 years ago. In vulnerable areas, you can't develop to the density that we did previously.

Jay noted the best interest of the Town versus individual property rights can become troublesome. It can be hard to tell a developer there was something there previously but it can't be there now.

Bob agreed, real estate is usually someone's biggest financial asset. And emotional Jay added . Property will need to be reassessed going forward if owners are allowed to do less than they are currently taxed for. Bob said he was amazed there are not already a lot of abatement requests, but that is because the market is selling high. It goes back to that disclosure. You could require periodic review.

Jay noted the best available science needs to be evaluated every five years and built into this to be used. Rayann recommended you can reference things "as updated." Liz noted everyone doesn't know what the best available science is.

Liz discussed the keyplayers involved. Planning Board, BOS, ZBA, Code Enforcement, Hampton Beach Commission, Property Owners. Rayann noted it would be good to get their support going forward.

Liz discussed funding sources. Unless staff is going to take it on, some outside support is needed, such as DES grants. DES offers aquifer or ground water protection grants to fund overlay district ordinances. Nathalie added that the Coastal Program would be a source of funding.

Liz asked if there were questions?

Rayann asked what the boundaries of the overlay could be?

Liz recommended the 500-year flood plain, as discussed by the group, which includes coastal and inland flood prone areas. It could also encompass the extent 1.7' sea level rise scenario.

Mark asked the best way to roll it out so it gets adopted?

Bob indicated that it is important to answer the question : “Why?” “Why do this at all?”

Rayann noted substantial redevelopment with bigger projects evolve over time as people make greater investments.

Jay added the consequences, legal and otherwise, of doing nothing.

Bob added the complexity of the permitting process and making something simpler.

Rayann included modifications that can be made to make more resilient development and waiving some permit fees. Being careful how to classify, make the burden feel less significant.

Bob added create assistance to people with projects.

A Floodplain Administrator with oversights, inspections and a full-time position.

Alternative strategy instead of zoning overlay?

Jason noted that an alternative would be to not allow development to continue in certain areas. Some areas are not feasible. Liz noted it could be like Madbury who doesn't allow any new development within the flood plain. Rayann said that the revision to the flood plain ordinance doesn't cover up to 500-year. Nathalie added that's how Durham did it, by expanding the flood overlay.

Rayann asked about funding? Encouraging to do on their own without ordinances and how to get developer's attention. FEMA hazardous mitigation grant application process can be daunting. Jay added reimbursement grants up to 75% are not paid up front and takes several years to see those dollars. Developers don't dial into that.

Liz discussed a potential rating system for flood adaptation. When people ask why didn't that house get rated that way? Bob clarified like an energy star rating on appliances. Jay added an incentive, like a tax abatement. Set up some criteria for flood resilience. Bob

recommended a bonding mechanism. Have the developer put up a bond like they do with roads and unfinished winter projects. Nathalie asked how to apply that to private developments. Bob suggested considering if they are on a public way.

Rayann asked how many structures do we already have in those vulnerable areas with frequent issues? Its not well-defined. It is an important piece of property tax revenue.

\_\_\_\_\_ agreed if the house has issues in a flood zone it now becomes worth half as much and is not as saleable in regular market situations. If upland, the value is not as great as the coast. Jay noted there are costs to the Town for services. Some of those are tracked when it is a FEMA event. Bob added the ability of the Town to respond. Whether a resident can stay or needs to be rescued and if the condition of the roads make rescue possible by direct methods

#### 4. Development Review Workshop

Liz indicated for purposes of the NH Flood Risk Guidance exercise, a site was selected to use as a model of different sea level rise scenarios. She noted that the point of the exercise was not to review why or how the site plan was approved. Nathalie handed out the draft guidance 2019 Science & Technical Advisory Panel and step by step evaluation or risks and details and accompanying worksheet. Liz provided copies of maps.

- a. Review site plan example – Keefe Avenue, 2013 condominiums, 1.5 story. The location was identified by CHAT as vulnerable during the mapping exercise. Rayann noted it was a parking lot before. It's a small residential development.
- b. Use the NH Coastal Flood Risk Summary Draft Guidance – using 10-11' high tide and 1.7' sea level rise scenario of year 2100.
- c. Make recommendations for the specific project – determine the design life or useful life, plan for 30-40 years? Bob noted the useful life if flooded out it has no use and would influence a buyer's decision. The guidance can help us determine how long the structure will be around. Identify nearby assets and the important functions of roads and utilities. Determine which risk level, from high like a walking trail to low like a hospital. Some are seasonal, some year round. The Team decided on medium risk although noted they would like to see a comparison with low. Low would typically be infrastructure of the Town, for example rather than individual homes.

In this scenario, future high tide would be 3.8' sea level rise scenario. Nathalie noted the increments are 2.' Results are inundation of zero to 2' by 2100 at high tide, twice a day without any other variables. Other impacts would be sediment and erosion effects on the structure, on drainage, and associated financial impacts.

Step five is to assess and consider the sea level rise induced groundwater rise. In this area of Hampton groundwater is unknown but estimated to be at 3-4' below surface. Wetlands are a good indicator of where to expect groundwater levels rising to the surface. Now a 4'

sea level rise scenario results in 3.2-4.2' of groundwater rise, in addition to sea level rise on the surface.

Step six is to consider the impact of extreme precipitation according to the NH Stormwater tables.

d. Identify potential policies and recommendations for development projects in Hampton

Rayann recommended considering the ability to leave during a flood event or be rescued and condition of access roads.

Rayann included requiring projects to provide and identify water table information.

Liz noted that the meeting had run out of time and the discussion could continue at the next meeting.

5. Next Meeting:

Liz indicated the next meeting will return to the regular schedule, the 3<sup>rd</sup> Tuesday from 3 PM – 5 PM. Liz will send out an email.

6. Adjourn

The meeting ended at 11 AM.

Respectfully submitted,

Nancy J. Hoijer  
Recording Secretary