
Coastal Hazards Adaptation Team (CHAT) Work Session #14

Tuesday, March 17, 2020

2 PM – 4 PM

Virtual Meeting

MEETING SUMMARY

Participants: Jay Diener, Rayann Dionne, Jason Bachand, Stephen LaBranche, James Waddell, Debra Bourbeau, Mark Olson, Tom Bassett

Absent: Bryan Provencal, June Black, Barbara Kravitz, Steve Belgiorino, Bob Ladd, Jennifer Hale

Staff: Kirsten Howard and Nathalie Morison; NHDES, Liz Durfee, EF Design & Planning, LLC

Guests: James Burdin, Senior Regional Planner, Strafford Regional Planning Commission (SRPC); Peter Britz, Environmental Planner/Sustainability Coordinator, City of Portsmouth

The meeting began at 2:05 PM via GoToMeeting. The meeting was held virtually due to COVID-19 concerns.

1. Remote Meeting Logistics

Ms. Durfee and Ms. Howard reviewed logistics for the virtual meeting. Ms. Howard assisted members with accessing the slides and with calling in. Participants should feel free to interject and ask questions during the meeting. CHAT members can also use the chat box to comment or ask questions. Meeting attendees were confirmed.

Ms. Durfee briefly discussed why the agenda changed. Due to COVID-19, it is not feasible to host public meetings at this time. Since the timeframe for when CHAT may be able to return to the proposed schedule for outreach is not known, Ms. Durfee worked with Mr. Diener, Ms. Dionne, Ms. Howard, and Ms. Morison to develop a revised agenda for the meeting today. That includes two guest speakers. We will continue to have guest speakers join CHAT meetings to discuss specific adaptation strategies. CHAT will still make recommendations to boards, but the timeframe for when public outreach may occur has changed.

Ms. Durfee proposed to switch the order of item (3) Brief flood updates and item (4) Adaptation strategy: flood hazard overlay district to accommodate the guest speakers' schedules. The group agreed.

2. Approve meeting notes from February 2020

Ms. Durfee pulled up the meeting minutes and asked for edits and a motion. Mr. Bassett suggested editing the minutes to include a link to the Woods Hole data that Jen Hale mentioned.

A motion was made by Jay Diener to accept the minutes with the edits. Seconded by Deb Bourbeau. All in favor.

4. Adaptation strategy: Flood hazard overlay district

Ms. Durfee briefly introduced the two guest speakers, James Burdin, Senior Regional Planning with Strafford Regional Planning Commission and Peter Britz, Environmental Planner with the City of Portsmouth. CHAT members introduced themselves.

Ms. Durfee provided an overview about what an overlay district is and noted that Hampton has several existing overlay districts.

a. Two Local Examples

i. Durham's Flood Hazard Overlay District

Mr. Burdin began his presentation on working with the Town of Durham to amend the Town's Flood Hazard Overlay District in 2018. The two key amendments were requiring two feet of freeboard and identifying and creating an Advisory Climate Change Risk Area. An objective of the project was to codify sea level rise (SRL) projections for future protection. The project was funded by the NHDES Coastal Program through the Setting Sail program.

Mr. Burdin worked with the Town to determine how far the town was willing to take regulations that protect from SLR. The project aligns with several recommendations from the Town's Hazard Mitigation Plan, Climate Risk in the Seacoast Vulnerability Assessment, and the Coastal Risk and Hazards Commission Report.

Mr. Burdin worked with Durham's leadership team, a trusted group comprised of staff and department heads on the update. He explained that Durham has a Town Council form of government, which means that the Town Council has the ability to vote and approve zoning amendments.

Mr. Burdin explained a series of maps that depicted three SLR scenarios with storm surge along with the FEMA Floodplain: 1) Low Sea-Level Rise with Storm Surge, 2) Moderate Sea-Level Rise with Storm Surge, and 3) High Sea-Level Rise with Storm Surge. He described the process of working with the Leadership Team to select the most appropriate scenario for the town at this time. One thing they did was look at the parcels that were located within the overlay district.

He noted that SRPC was doing some other work with Durham on developing a building footprint dataset and that this information was also used when looking at the potential impacts of the overlay. Most of the properties that fall within the Advisory Area are residential.

The Town determined that the extent of the Advisory Area would be equivalent to a moderate level of projected SLR (3.9 ft) and storm surge.

In addition to choosing the SLR and storm surge scenario, another key decision that the Leadership Team made was to determine whether the new guidelines for the Advisory Climate Change Risk Area would be advisory in nature or required. Mr. Burdin mentioned that this was one of the questions that the public inquired about too. Some residents were concerned that the recommended standards would become required.

Other issues that the Leadership Team reviewed were impacts to flood insurance rates. Mr. Burdin explained that rates would not increase and may even be lower given the extra freeboard requirement. The new provisions of the ordinance apply to new and substantial redevelopment. If a property owner is located within the Advisory Area and they come in for a building permit, the Town recommends that they elevate to base flood level plus two feet of freeboard.

Mr. Burdin briefly described the purpose of the ordinance, noting that it was important to have this purpose statement for the Advisory Area.

Mr. Burdin explained that with the adoption of this Advisory Area, the Town is being proactive and anticipating that the 100-year flood elevation may change. In the future, the ordinance will be amended as FIRMs are updated.

Ms. Durfee asked about whether the Leadership Team looked at assessing data for impacted properties. Mr. Burdin indicated that they did not take this extra step but that it would be feasible.

Ms. Durfee asked about the timeframe for developing the new ordinance. Mr. Burdin indicated that it took about a year but that the timeframe was influenced by other projects he was working on with Durham.

Mr. Burdin noted that if he were to do this again, one thing he would do differently would be to do more to figure out elevation when base flood elevation is not available as he is not sure exactly how the building inspector determines that in practice. He also noted that the Advisory Area could have been a separate overlay from the Flood Hazard Overlay District.

Ms. Durfee will follow up with the Town of Durham to find out whether residents have complied with the recommended standards and if and how the building inspector have established elevation in the Advisory Area.

Mr. Burdin left the meeting.

ii. Portsmouth's Extended Floodplain

Mr. Britz introduced the City of Portsmouth's recent amendments to their zoning ordinance and shared a presentation that he gave to the City Council in December 2019. Portsmouth needed to update its flood maps. Following recommendations from several studies and guidance from Jennifer Gilbert with NH Office of Strategic Initiatives, the City determined that it would add an extra layer of protection beyond what FEMA requires to in order to incorporate measures to address impacts of climate change, in addition to updating the ordinance to comply with National Flood Insurance Program (NFIP) regulations.

A key change the City made was creating an Extended Flood Hazard Area (EFHA) that extends further upland than the extent of the Area of Special Flood Hazard (ASFH), which is equivalent to the 100-year floodplain. The approximate extent of the EFHA was mapped using contour data. Two feet was selected based on the City's two-foot SLR projection for 2050.

Mr. Britz explained some of the other changes that were made to the ordinance, including clarifying definitions. He explained that there were questions about what "storage of equipment or materials" meant, and whether things such as outdoor storage of kayaks were considered equipment and materials. Mr. Britz said that things like kayaks and boats were not considered land uses that impact storage capacity of the floodplain.

He also briefly discussed a question posed by a resident on floodproofing residential structures as can be done with commercial structures. Mr. Britz explained that the NFIP does not allow residential buildings to be floodproofed as an alternative to being elevated.

One of the changes that Portsmouth made to their ordinance was lowering the threshold of what constitutes "substantial improvement" from 50% to 40% of the value of the structure. The revision is intended to reduce costs for property owners in the long run by requiring them to use flood zone construction standards that will help to prevent potential loss and damage from flooding. The assessed value of the structure is used as the basis for determining the value of the structure and it is based off the most recent municipal assessed value of the home at the time a building permit application is submitted for a project.

Mr. Britz also explained how the proposed changes are consistent with the recently adopted 2015 International Building Code, which requires that structures within the special flood hazard area be elevated a minimum of one foot above the base flood elevation (BFE).

Mr. Britz walked through examples of development that is subject to the floodplain construction standards. In both the ASFH and the EFHA, new construction after January 1, 2020 must be elevated to two feet above BFE. In both the ASFH and the EFHA, improvements less than 40% of assessed value are not subject to the floodplain construction standards. For improvements that are equivalent to 40% or more of the assessed value, the floodplain construction standards do not apply in the EFHA but do apply in the ASFH (i.e. in the ASFH the building would need to be elevated to one foot above BFE).

Ms. Durfee asked Mr. Britz to clarify how the City determines when a property is in the EFHA. Mr. Britz said that if development is proposed within the mapped EFHA, and elevation certificate must be submitted to confirm whether the property is subject to the EFHA construction standards.

Mr. Britz left the meeting.

Following the presentations and Q&A, Ms. Durfee shared a [link](#) to examples of other approaches to adapt to flooding using land use regulations. In Houston, for example, the extent of the regulated floodplain is the 500-year floodplain as opposed to the 100-year floodplain.

Ms. Durfee opened the [coastal viewer](#) to show the extent of the 500-year floodplain and SLR scenarios compared to the 100-year floodplain in Hampton. She encouraged CHAT members to go to the viewer and look at these areas in Hampton. She also encouraged CHAT members to think about whether this type of adaptation strategy (a flood overlay district) is something that CHAT would recommend the Town look into.

3. Flood Updates

Mr. Bachand shared that the Warrant Article for the full Master Plan was approved by voters. The vision and the coastal management elements of the plan were approved by Governor and Council.

Mr. Diener shared that Warrant Article 33 to participate in the FEMA Advanced Assistance Grant Program also passed.

5. Review of Adaptation Framework

Ms. Durfee briefly reviewed CHAT's previous characterization of flood overlays and asked CHAT members to revisit this and add to their previous responses to the questions in the characterization matrix after learning more from the guest speakers about how two communities adopted this strategy. She also revisited the adaptation framework that CHAT has previously discussed. There are three goals (keep water out/off, live with water, get out of water's way) and three main categories (structural, planning and zoning, and financing) in the framework CHAT has used. She encouraged CHAT members to keep this framework in mind when thinking about the types of recommendations that CHAT may put forward.

6. Next Meeting

The next meeting is scheduled for April 21, 2020 from 2-4pm and will likely be held virtually again. The group discussed the option of using the video feature.

Future meetings will include guest speakers as we continue to prepare for developing recommendations. We are working to have Alyson Eberhart and Tom Ballestero join a meeting to discuss dunes, marshes, and sea walls. Ms. Durfee said that if anyone has an additional topic that they should share their ideas. Mr. Bassett suggested having someone who could speak to issues of social equity and provide an example of how towns and cities have assisted residents through mitigation, property tax abatement, etc.

7. Adjourn

The meeting ended at 4pm.

Meeting summary drafted by Liz Durfee, Planning Consultant