
Coastal Hazards Adaptation Team (CHAT) Work Session #4

Tuesday, April 16, 2019
3-5PM
Masonic Lodge, 77 Tide Mill Road

DRAFT NOTES

Meeting PPT slides: <https://drive.google.com/file/d/1ekR6l49uawc9VvNDXGPHWK3xhpOula5/view?usp=sharing>

Members Present: Jennifer Hale, Rayann Dionne, Jason Bachand, Mark Olsen, Steven LaBranche, Bob Ladd, Nancy Stiles, Jay Diener,

Staff present: Nathalie Morison, Liz Durfee, Kirsten Howard

Members Absent: Deb Bourbeau, Bryan Provencal, Tom Bassett, Jim Waddell, Board of Selectman rep

1. Approve meeting notes from 2/19/2019 and 3/19/19
 - a. February 2019 minutes were approved. Steve abstained.
 - b. March 2019 minutes were approved. Jen, Mark, and Steve abstained.
2. Finalize Rules and Procedures
 - a. Group finalized the Rules and Procedures document with a few minor edits to the resident representative section as well as the vacancy section.
 - b. Rules and Procedures document was approved by the membership. Final version attached to these notes and available here:
https://drive.google.com/file/d/1SQXJ28LnAqaN4_t1mfZmh2AlrN5ZFAS/view?usp=sharing
3. Introductions and Relevant Flood Updates

Relevant Flood Updates

Rayann: Conservation Commission is drafting a coastal flood hazards policy statement. Over the last few years we've noticed synergy and overlap between town wetlands ordinance and floodplain ordinance. Cons Comm has been trying to emphasize information about flood risk in applications. Refocusing attention on that topic. Looking to educate applicants and help with designs. Rayann read draft policy statement to the group. As a second piece, Rayann is pulling together resources into an Excel file so that the group can use that information to help us think about ordinance changes and to help support why they're proposing changes.

Jason: Non-compliant properties were reviewed with FEMA community assistance visit. Staff and Town Manager are working on bringing them into compliance in order to enable Community Rating System participation. Properties have been measured for flood venting. Town Manager gave FEMA an update on progress.

Rayann: Two property owners have had their sites visited and they have agreed to do that over the spring and summer.

Bob: Why does FEMA punish the whole town for six properties?

Rayann: Punishment would be to kick us out of the NFIP. Or they could add a fee to all policies. They've been patient with us.

Bob: If one property was so non-compliant that they wouldn't fix the issue, would they kick us out of the NFIP?

Rayann: Once you've demonstrated that you've done everything you could to make sure they would comply, they can just penalize that one property by raising their insurance premium.

Mark: I see things are changing. I visited some of the places in town—there are some serious problems. West side of Ashworth Ave and Little Jacks and Ashworth Hotel. I wasn't willing to drive a vehicle down there during an extra high high tide. I'm getting beyond my skepticism. Went to Raymond a week ago for the Southeast Watershed Alliance. Great presentation focused on MS4.

Jennifer: Drainage studies came in at \$260,000 which is too high to do the scope that we really wanted to complete. We are working hard to get this done, but there are a lot of pieces to it. We had to reduce some scope. It won't produce less sincere or validated results. We're evaluating Meadow Pond and how it operates from the top to the bottom, and the West side of Ashworth Ave. Sitting on our Plan Review Committee (PRC), I'm privy to a lot of projects that come through the Planning Board. For the last two PRCs that have said that things don't flood (after receiving Zoning Board variance). Rayann has showed them photos of flooding at the sites. It is unfortunate because we want smart development in Hampton; it's not at all that we don't want development; we just want development in safe places. We need to understand that we need to be diligent and hold our ground under our ordinances to not let development make this problem worse.

Steve asked Jennifer: Last night you described some budget cuts to DPW; would that include the manhole covers that cost \$600 each with the self-locking lids?

Jennifer: I put \$230K in budget to do sewers, but I got \$170K. Can't pay for it. The locking lids prevent additional infiltration. We will be able to pay for those and that will help us avoid treating salt water.

Bob: HBVD budget was approved. We are confronted with realities that we need to improve PR, so we are adding a circus event Labor Day Weekend. With respect to flooding, there were days when the school buses could not take the kids home from school. We now have a high water emergency vehicle at the Police Department, so that is an improvement. We will offer people the use of our dry parking lots on an as needed basis. If anyone here wants to present to Channel 22, we offer services of our monthly meeting. We'll put you on the agenda if you like.

Nancy: HBAC has no set agenda for April yet. The presentations we've had so far about flooding and insurance are on the website. It's a long process to try to figure out where we're going. Still looking to redo the natural resources master plan in that area.

Steve: Budget Committee has a meeting tonight, and I will summarize what we talked about today.

Jay: Kirsten and I went to Washington DC for a meeting at the Georgetown Climate Center. They were interested in hearing about what we're doing in Hampton. The focus of the meeting was planned relocation. There were people there from Louisiana up to Maine. Many of them are further along with programs. I was at a meeting last Friday that Nathalie hosted and made a contact with Dr. Jayne Knott at UNH who is working with groundwater rise issues related to sea level rise. I asked her if there was a way that we could understand what the projections are for groundwater rise in Hampton to better understand what groundwater rise impacts will be. The maps will be available on the Coastal Viewer at the end of this month.

(Note: they are available now).

Nathalie: Some of Jayne's research is very applied. She looks at groundwater rise impacts to pavement longevity. The projections will be included in the 2019 update to the Coastal Risk and Hazards Commission Coastal Flood Risk report. If anyone wants to take a look at that draft, I will pass that along.

Kirsten: I've been in touch with the US Army Corps of Engineers about the Hampton Harbor Dredge project and its potential to influence flooding in Hampton. The key reasons that the dredging is not expected to influence the flooding in Hampton are:

- 1) The dredge project is too small to either increase or reduce flooding,
- 2) Hampton's estuary is not a closed system and water level is not regulated by bottom depth, and
- 3) In general, deeper channels and embayments result in higher flood risks. More shallow channels and embayments result in lower flood risks. This is because surface water gathers more energy the further it is from the sediment bottom (causing bigger waves/surges which cause more overland flooding). The sediment bottom causes friction that removes energy from surface water, and it removes more energy from surface water the closer the bottom is to the water surface (in more shallow areas, waves/surge is smaller causing less overland flooding).

The Army Corps responded with the following statement:

Good afternoon Kirsten

The maintenance dredging of Hampton Harbor is not expected to change the height of tide or reduce any flooding impacts. The purpose of the dredging is for navigation.

Please let me know if you need anything else.

Wendy

Wendy Gendron

Programs & Project Management Division

Chief, Civil Works & IIS Branch

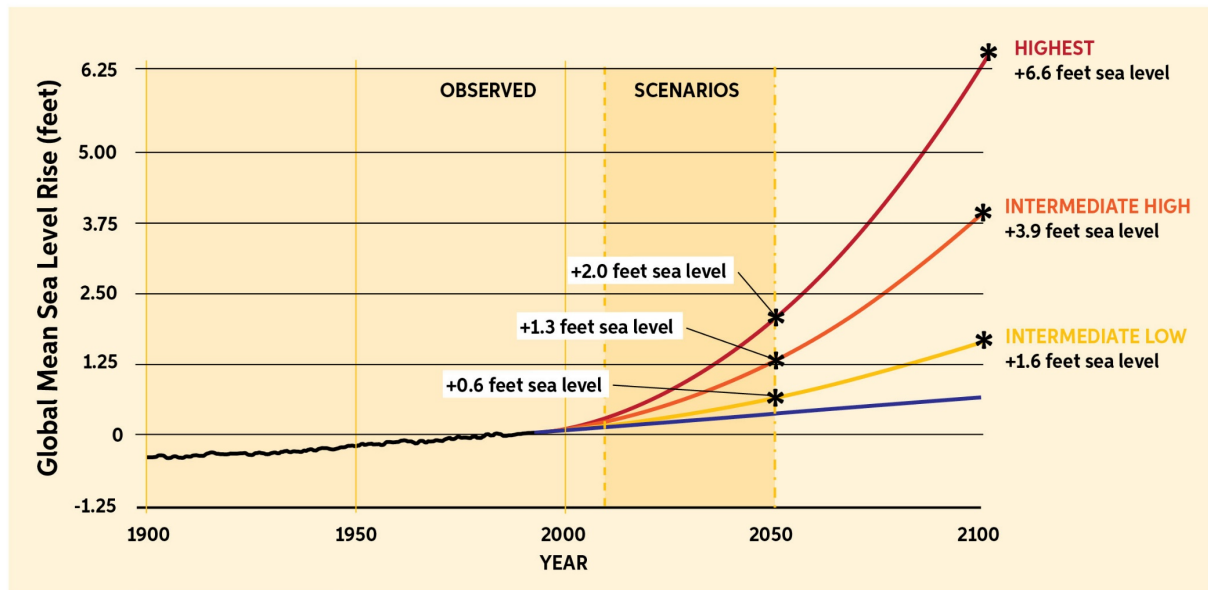
Liz shared photos of flooding that occurred during a high tide and small wind event in March.

4. CHAT Map Set

Two groups engaged in a mapping exercise that involved the following steps:

- a. Review Existing Flood Conditions Draft Maps ([see PPT slides](#))
- b. Map additional vulnerable areas
 - i. Group agreed that another meeting was needed to continue this exercise.
- c. Discuss use of map
- d. Preview: Sea Level Rise and Future Flood Conditions Map
 - i. Steve asked what the sea-level rise projections are.
 1. Kirsten responded that it is likely Hampton will see at least 2 feet of sea level rise by 2100. Projection curves are pasted below:

Sea-level rise scenarios under different emission levels in 2050 and 2100. Source: Adapted from NHCRHC STAP (2014).



- Group discussed the words minor and major to describe flooding within the exercise. Decided we need definitions.
- Group agreed that the maps could be useful for evacuation planning and for prioritizing areas for specific flood management approaches. Liz suggested that the maps could be useful for helping figure out when certain assets and resources will need attention over time.
- Liz's group identified areas that flood that weren't identified in 100-year floodplain
- Steve: I learned that with SLR, that's enlightening and scary. We have a lot of taxable property that might be underwater, that will affect Hampton a lot.
- Rayann: I'd like to see the balance of the value vs. the services and the wear and tear it takes on our infrastructure and equipment. Does that balance? Is the lack of tax revenue equal to what we're spending? I wouldn't be surprised if it cost us more to services those areas.
 - Bob: The beach contributes 1/3 of tax revenue and 8-10% of school student body. If you lost 1/3 of the tax base that would put a strain on schools.
 - Rayann: Jen do you ever sum up the damages and report those numbers out? Do we ever hear what a storm event cost?
 - Jen: Only calculate that for FEMA Public Assistance funding after a disaster declaration. We don't track it all the time. We track special events. Storms, snow plowing, other events, but not regular flooding work.
- Jennifer: If you took Glade Path, their biggest cost isn't necessarily damage to their homes. In order to make that neighborhood continue to generate taxes as sea levels

rise, in addition to the costs associated with the homes that are being raised, how much does it cost to make those homes usable and accessible? \$750K to rebuild that road? How long does it take for those homes to cover that cost? That brings up a question of which area do you build up first with the limited resources we have?

- Bob: Many of the private driveways don't get services. A more immediate concern would be that you are going to see these people file for tax abatements.
- Jay: How does the town adjust to the fact that we have neighborhoods that will flood dramatically to the point that they become unlivable?
- Bob: It may not be doable. How are you going to avoid those property owners asking for buyouts?
- Jay: On May 20, the two state experts on the HMGP will speak to the BOS. You've heard from residents asking why the town isn't applying for those grants. They will learn more about the program there.

Next meeting and map edits

- Liz: For next meeting, let's continue marking up these maps and talk about how to tackle prioritizing areas. Feedback for Liz about colors or legibility? Will change the blue and turquoise.
- Rayann: Put an edge on the 10ft tide line.
- Nathalie: Make the roads identified as flooded a wider line.
- Rayann: Add tide flaps and gates
- Nathalie: Make water infrastructure a tiny bit bigger. Mark: Maybe different shapes?

Liz handed out talking points—a short summary of work so far for group members to share with their boards/groups/departments/etc. Asked members to bring back requests or info from groups they represent to better understand what CHAT can help them with.

5. Next meeting

Next meeting is May 21, 3-5pm. Location TBD.

6. Adjourn

Group adjourned at 5PM.