

PREPARING FOR CLIMATE CHANGE IN THE SEABROOK-HAMPTON ESTUARY

GAINING INSIGHTS & CHARTING A COURSE

September 10, 2014, 6:00-7:30pm
Hampton Falls Fire Department
Public Meeting Notes – Comments and Questions

Workshop #3 – Sea Level Affecting Marshes

*This workshop built on two previous workshops where residents of Hampton, Hampton Falls, and Seabrook were asked to think about the potential climate change impacts in their communities. Residents were then asked to prioritize issues that the three communities can work on together (regulatory tools and strategies, and protecting salt marshes and dunes), and brainstorm challenges, desired outcomes, and actions that can be taken related to these issues. This workshop focused on protecting marshes and the many ecological services they offer to these three communities. This workshop, led by employees from NH Fish and Game Department, featured a presentation of the Sea Level Affecting Marshes Model (SLAMM) and an interactive discussion on how it can be used to assist in community decision-making. Examples of how it can be used include decisions about zoning, wetland buffers, infrastructure, and land conservation. **The notes below capture the discussion from the workshop, with community member questions and comments next to the solid bullet and NH Fish and Game staff responses next to the hollow bullet.** The project team will use this input as they continue to work with these communities to assist them with using SLAMM in community decision-making.*

Discussion Notes

- Does phragmites grow in salt marshes?
 - Yes they grow in brackish water. They are an example of a natural barrier to migration.
- What would be the impact of removing the dam at 95? How far upstream would the marsh go if it was out?
 - We want to try and model that to support your decision making.
- So at the 2100 scenario there is no marsh to protect us from storm surge?
 - Correct. There will be a lot of erosion. However, in the model, barriers like parking lots make the model shut off that migration. There may be opportunities for restoration to make room for the marsh to grow.
- So eventually the model will be able to predict a storm surge?
 - No, storm surges are not accounted for in this model. Salt marshes are usually not heavily impacted by storm surge.

This project is led by a local steering committee including members of the Seabrook-Hampton Estuary Alliance. There is no cost to the communities participating. This project is funded by a federal grant from the National Oceanic and Atmospheric Administration awarded to the NH Coastal Program. This program is managed by UNH Cooperative Extension and NH Sea Grant.

- Did you input soil types, bedrock, drainage...
 - Yes the NWI mapping was done for all the coastal towns and that includes soil types.
- Is there a way to predict a tipping point for a salt marsh?
 - That's kind of what the model shows. At what point is the sea level rise so high that the marsh cannot keep up.
 - We could make finer time scale maps for you that could provide more detailed information.
- Ponds that are not maintained that are silting up, what is the impact of that?
 - We're not sure about that but we could help you dig into that.
- How much of this is impacted by the relatively small opening to the system?
 - Modeling that is outside of the bounds of this project. If it was a natural system there would probably be many more openings.
- In Hampton four of the emergency facilities roads are flooded.
- Does the model incorporate precipitation changes.
 - Not currently but we're hoping some work with UNH can be merged eventually.
- These data seem to be constantly updated, how can we be sure it's accurate?
 - We would say if you're going to use the model in 5 years. Re-run it with updated local information. We hope that NHF&G can help maintain it.
- I'm concerned that existing property owners are concerned that we're going to come down with these harsh regulations. Really its about making the best decision, I think zoning is really important.
- Using that medium scenario...up in the area by the ball field, its been talked about to put a big parking garage up there. Can you use a model like this to show what might happen in terms of damage to wetlands if that happened?
 - We will have to look at each scenario individually to see what we can do with it. We want to make sure that your question is a good match for what this model can do.
- I think these more narrowly focused pictures are really powerful. I think one of the useful applications would be, in Hampton they are developing a Capital Improvement Plan – those plans look up to 20 years out, should use this data
- Or the police station in Hampton.
- I agree that its nice to look at it as a small scale but since we're looking at the three towns collectively, it would be really interesting to look at things like, where are all the state roads and which ones are going to flood. This would allow towns to approach state about road flooding concerns
- Is the model going to be available online?
 - It's going to be part of the Coastal Viewer, which is part of GRANIT. This is part of the Resilient NH Coasts Project.
 - The data is available through Rachel Stevens at NH Fish & Game.
- You're preaching to the choir. I'm a selectmen. NH hates taxes. These things might cost a lot of money. How do we deal with that?
 - Personal opinion – there are opportunities to not make the problem worse. Land acquisition, zoning, buffers, easements.
- Do you have a model that shows vulnerable infrastructure?
 - You can do it on GRANIT with those data layers.
 - It will also be available through the Tides to Storms project, which is a vulnerability assessment for coastal NH.
- Do you currently have maps that show phragmites extent?

Other things this model can be applied to

This project is led by a local steering committee including members of the Seabrook-Hampton Estuary Alliance. There is no cost to the communities participating. This project is funded by a federal grant from the National Oceanic and Atmospheric Administration awarded to the NH Coastal Program. This program is managed by UNH Cooperative Extension and NH Sea Grant.

- Master plan updates
- Mother nature doesn't care about boundary lines – we need to look as a region. Get out emergency management together so we're not duplicating efforts.
- Buying lands that can benefit the three towns.
- Gas, water, electric utilities.
- Fishing cooperatives, marshes key area for fish nurseries.
 - The fishing grounds have moved so far offshore. The areas around here are in bad shape. Have we not done enough to protect our marshes?
 - Working with fishing industry to protect marshes for fisheries, locally and across New England

Decisions that your town(s) is going to make

- RPC's intermodal transport center
- Where the Taylor river comes down, if that dam was removed

This project is led by a local steering committee including members of the Seabrook-Hamptons Estuary Alliance. There is no cost to the communities participating. This project is funded by a federal grant from the National Oceanic and Atmospheric Administration awarded to the NH Coastal Program. This program is managed by UNH Cooperative Extension and NH Sea Grant.