Hancock County Planning Commission
Adapting Working Waterfront: Implementation Strategy for Resiliency

"We all have put in a good amount of time on this, but I do feel it is worth it in the end as all towns need to talk about this issue going forward. I just think it is tricky to get it out there in such a way townspeople can start making some grassroots planning decisions themselves from this document. Having the decisions already in the document on storm water, sea level rise overlay districts, etc., is just going to scare business owners, realtors, residents and others in town by overwhelming them and by having that happen not take the adaptation plan seriously and reject it. I think having the document reflecting the realization flooding and climate change are real and having this document reflect the infrastructure affected, costs to protect it, or strengthen them, will go a long way to getting people to think themselves what ARE our next steps and how do we potentially get there. Not all towns are the same, all have different problems from this potential scenario and the costs associated with it. So no documents coming from this problem will be the official answer to all towns/cities how to cope with this".

High Tide October 9, 2014

PROJECT DESCRIPTION (completed March 2016)

Stonington is Maine's top value port in terms of commercial fishing landings. This project assessed the current vulnerability of waterfront infrastructure in Stonington to storm damage and flooding and identified needed adjustments based on projected storm surges. The project recommends a Capital Improvement Plan including a schedule of improvements, cost estimates and identifies funding sources.

PARTNERS

Project partners included the Town of Stonington, Maine Geological Survey, McCullough Engineering, Penobscot East Resource Center (PERC), and Maine SeaGrant Program. The town's role included data collection on public facility and service needs and ongoing review of the various drafts. The town also organized the publicity for the outreach meetings. McCullough Engineering supplied cost estimates for Hagen Dock. The Maine Geological Survey provided its current estimate of projected sea level rise. PERC contributed information on recent changes in fishery resources.

THE CHALLENGE & APPROACH TAKEN

One challenge was choosing the sea level rise scenario to use in assessing future needs. HCPC chose a two-foot increase by 2070. This was based on information supplied by the Maine Geological Survey. It will be important to review this scenario periodically to see if new data indicate that a different scenario should be used.

Another challenge was setting priorities for improving the infrastructure. HCPC worked with Department Heads and staff responsible for a given service to complete facility evaluation forms in order to establish a schedule of improvements. Due to numerous deficiencies and its importance to the fishing community, the Hagen Dock ranked as a top priority. The plan recommends replacement of the fire station, presently located on the dock, with a new facility elsewhere in town. The plan also recommends elevating the dock by two feet, after the fire station has been relocated.

A related challenge was developing a realistic schedule for improvements. The town faces fiscal limitations and can't afford to undertake major improvements in a short period of time. After extensive discussion with the town manager and department heads, the recommended capital improvement schedule was set through 2038.

To avoid alarming the tax payers, the report narrative stressed that these expenditures were subject to review. The report also stated that the sanitary district faced some inflow problems that would not be resolved unless the level of Main Street was increased by two feet. Because the cost to do so could be prohibitive, the town may not be able to address all of its infrastructure needs by 2038.

THE RESULTS

Stonington now has a detailed assessment of the improvements needed to increase the resiliency of its waterfront facilities. The department heads actively participated in this process. The issues were presented to the public during two outreach workshops.

HCPC

NEXT STEPS AND OPPORTUNITIES

The town can use this information in writing grant applications and in the annual review of its Capital Improvement Plan. The town leadership was wary of introducing more restrictive land use ordinances. If the town does proceed with a comprehensive plan, it could discuss any changes to land use ordinances in a more deliberative manner.

NEEDS

As with most planning documents in small towns with limited staff, it will be a challenge to keep the document in active use. It will need periodic updating. The long term frame (2038) means that it is likely that few of the current participants in this project will have an active role throughout implementation. The town needs to preserve its Institutional memory. It also needs to add a new year to the CIP time frame each year so it retains its 22-year time frame. For example, in 2017, the CIP would be extended to 2039.

Perhaps the greatest need is how to pay for all the recommended improvements. Assuming that most coastal towns will face similar capital expenses in addressing their resiliency needs, there will be stiff competition for grant funds.

LESSONS LEARNED

One lesson is that adjusting infrastructure to accommodate storm surges and sea level rise is very costly. Even if the town of Stonington were able to afford to make the improvements recommended in this report, other problems could affect the town's viability as a fishing port. These problems include changes in fishery resources. The warming and increased acidification of the Gulf of Maine has already altered habitats and resulted in the introduction of species normally found in warmer waters.

Another lesson is that the proposed improvements address only a small portion of the threats to the waterfront and the town as a whole. Major storms could cause substantial damage to private property. Similarly, if the Deer Isle causeway (the only road connection to the mainland) were damaged, the fishing industry would be disrupted.

APPLICABILITY TO OTHER MUNICIPALITIES

The data collection process could be applied to other coastal towns. The key is to have local leadership supporting the project. A dedicated climate adaptation committee would relieve overworked municipal officials of some of the work

QUOTE FROM TOWN MANAGER:

"I am glad you picked Stonington for this because you are right on target, it is a huge town with a lot of affected infrastructure both on a public and private sector level. Both of those sectors will have to work together to overcome and cope with the seriousness of the situation in the future. This document should reflect these thoughts to bring it alive for people to think on and realize that all towns & cities on the eastern seaboard are now starting to access their vulnerabilities and plan ahead. Maybe some anecdotal information on what other coastal towns are doing in addition to us would be helpful in this document. I look at it now and say, *do we raise Main St? What happens to the houses and businesses on the shore side, the opposite side, is it even feasible? Do we somehow "break" wave action in the harbor, Hagen Dock if we eventually add to the top of it, how do you get the others to "raise" their levels? "*

Town Manager Kathleen Billings

RECOMMENDATIONS

As mentioned in the quote from the Stonington town manager, we need to involve the private sector as well. Given the limited funds that are available for infrastructure, there needs to be a ranking system to determine the top priorities for investment. Given the high value of the fishing catch, the deficiencies in Stonington's waterfront infrastructure affect a broader portion of Maine's economy. The problems identified in this report should be viewed in a regional context. The extent of regional impact should be considered in ranking priorities.

FOR MORE INFORMATION

For the complete report and other supporting documentation:

http://www.hcpcme.org/stonington/coastal/index.htm

CONTACT

Thomas E. Martin, AICP
Executive Director HCPC
tmartin@hcpcme.org
207-667-7131

Kathleen Billings, Town Manager
stoningtonstownmanager@gmail.com
207-367-2351

FY15 CCG - 33
2.1.2017.

Financial assistance provided by the National Oceanic and Atmospheric Administration, U.S. Department of Commerce Grant CZM NA14NOS4190066 to the Maine Coastal Program.