Approved 10/28/26

Coastal Resilience Zone Working Group 9/30/26

Present: Noah Froh, Sue Hruby, Angela Luckey, Robert Myhill, Kate Guiney (admin)

Also present: Shannon Hulst, floodplain specialist, Cape Cod Cooperative Extension (Barnstable County)/Woods Hole Oceanographic Institute

Shannon Hulst presented on regulatory tools for the floodplain that the Cape Cod Cooperative Extension (CCCE), along with the Cape Cod Commission, have drafted in the face of sea rise elevation and intensifying storms.

Currently, most floodplain regulations are driven by the Congressionally created National Flood Insurance Program (NFIP); any changes to these regulations must occur through an act of Congress. These regulations are the same nationwide for all towns participating in the NFIP and are managed by FEMA based on maps that use historical—i.e., backward-looking—data. FEMA maps don't consider sea level rise or the potential for more intense storms; additionally, the most recent maps are 10 years out of date.

In MA, the NFIP regs are primarily manifest in the building code and zoning. While MA State regulations are more stringent than federal, they only regulate building methods and materials, not land use or environmental protection. Conservation commissions, which the MA Wetlands Protection Act give jurisdiction over the FEMA floodplain (known as Land Subject to Coastal Flowage, or LSCF) have an opportunity to impose regulations where none exist. Shannon noted that the MA DEP has released *draft* floodplain regulations for LSCF, but a finalized version has been long coming. In the meantime, the CCCE released its own set of model bylaws and regulations for adoption by towns. The **Model Coastal Resilience Bylaw**, an update to the Wetlands Protection Act, allows concoms to expand jurisdiction from existing LSCF (floodplains) to incorporate land that will be affected by projected sea rise (a horizontal expansion of jurisdiction) and/or a 1% chance storm. The **Model Coastal Resilience Zone (CRZ) Regulations** can be applied either to a town's LSCF as it stands now or, if the Coastal Resilience Bylaw is adopted, to an expanded jurisdiction. The Regulations are designed to be flexible and responsive to new flood modeling in the future.

Shannon said most Cape towns are adopting the Regulations before the Bylaw, which could be considered out of order, but since the Bylaw must pass at town meetings but the Regs can be adopted by a conservation commission, towns are taking action where possible rather than waiting to expand jurisdiction and then apply the Regulations.

A companion floodplain zoning bylaw—the **Model Floodplain Overlay District Zoning Bylaw** — can be put to Town meeting by the Planning Board; this would strengthen zoning regulations in the floodplain. Shannon did not present on this Bylaw.

For sea-level rise projection, the CCCE worked using the Massachusetts Coast Flood Risk Model (MC-FRM), an official State model. This mapping tool indicates structures that, while currently outside the FEMA floodplain, can be expected to be affected by sea level rise and would fall under the model Regulations. Proposed protections for these new areas are lower than for areas in the high-risk existing floodplain.

The Regulations are laid out in terms of General Performance Standards that apply to the entire Coastal Resilience Zone, then are broken up by flood zones using FEMA terminology. The **V Zone** is the highest risk zone; next is the high-risk **Coastal A Zone** (the State Wetlands Act calls this the Moderate Wave Action, or MoWA, Zone); then the **A Zone** (in State terms, the Minimum Wave Action, or MiWA, Zone). The model Regulations add additional special transition zones where wetlands are expected to migrate with sea level rise. It also designates redevelopment sites, areas already heavily developed where it makes less sense to prohibit future development.

Shannon shared a graphic displaying these differing zones, a cross-section laid out horizontally. Waves in the V Zone are anticipated to reach 3 feet or higher and will cause significant damage. Waves in the Coastal A zone are expected to reach between 1.5 and 3 feet. (She noted that FEMA has found that these waves, though smaller, can cause real damage and the building code therefore regulates these areas, as do the Regulations.) In the "regular" A zone, little wave action is expected. In FEMA maps, the X zone, beyond these other areas, is unregulated. The Bylaw would expand jurisdiction so that parts of this land where the floodplain is expected to expand with sea level rise would be subject to the Regulations.

The Regulations won't apply to existing structures unless major work is done (in accordance with building codes). Under the proposed Regulations, new developments, major renovations, and raze-and-replace projects will be subject to the best flood/sea-level elevation data available at the time. The Regulations also introduce limitations and prohibitions on highest-risk flood zones: no new development in V or Coastal A Zones; no new impervious surfaces in V or Coastal A Zones; prohibition of hazardous materials in V or Coastal A zones (this doesn't apply to propane tanks if they are anchored, which Shannon notes is often not the case). If major damage is caused by two independent storms, rebuilding is not allowed.

Currently, Chatham passed the Regulations almost in their entirety on June 25 and is now working to pass the Bylaw. Eastham, Orleans, Dennis, and Harwich are in various stages of

reviewing/adopting the Regulations. Nantucket is discussing them. Yarmouth adopted portions of the Regulations, and Provincetown adopted a portion of the Bylaw.

In terms of towns' experiences adopting the Regulations, Shannon said Chatham had an easy time. The town conducted three different public meetings and accepted feedback, some of which they incorporated. Different towns have wanted different levels of participation from CCCE. Overall, public engagement has been supportive. Janet Williams on the Chatham ConCom could be a resource for the Working Group.

Shannon recommended that the Working Group meet monthly and reach out to her as needed. To be ratified, the Regulations must be put on the ConCom agenda and discussed. A 30-day period must then pass to allow for public comment, after which the Regulations can be voted upon. Adoption of the Bylaw expanding jurisdiction for these Regulations must go through Town meeting. The ConCom must put forward the Bylaw article to the Town Warrant.

Angela asked whether, in adopting the Bylaw, ConCom should retain its additional 100-foot buffer to the floodplain. Shannon felt that as it pertains to the floodplain in particular, if WT expands ConCom's jurisdiction, it should scrap this additional area since a horizontal buffer doesn't consider facts on the ground (for example, a house on a bluff). Maps based on sea-rise elevation projections are fairer. Other aspects of the buffer—plantings and anything else in accordance with the Conservation Bylaw—should be retained.

Angela asked whether the proposed Regulations, if adopted without the Bylaw, should apply to this additional jurisdictional area given the WT ConCom has purview anyway? Shannon suggested that Chris Seidel at MVC might be able to map the expanded jurisdiction and determine where it overlaps with the existing buffer.

With respect to use of the MC-FRM versus mapping that Chris Seidel might do, Shannon cautioned that the MC-FRM modeling was undertaken for the MA Department of Transportation to protect crucial infrastructure in extreme storms and is therefore less conservative in its projections than it would be for residential. The State contracted with WHOI to tweak this model to better apply to residential areas. WHOI's determination was that MC-FRM mapping for 2050 was more likely applicable to 2070. In other words, it's more likely an indicated area could have as much as 2.5 feet of sea level rise in 2070 rather than in 2050.

Chris Seidel should be able to produce maps with more accurate projections for the island for 2050. Shannon noted, however, that any adjustments only apply vertically, to elevations; horizonal extents remain accurate. As to public/professional outreach, other towns are working on one-pagers that can be tailored for broader use. Shannon said that any Regulations the ConCom decide upon should be vetted by legal counsel before final adoption. Shannon can look at them after counsel has made any changes and before ConCom votes on them.

She said realistically it would take the Working Group six months to draft something tailored to the Town's needs. An outstanding question is whether West Tisbury's current regulations can be extracted from its existing Conservation Bylaw and worked and voted on separate from the Bylaw itself—or would this constitute changing the Bylaw, and therefore need a Town vote? Going forward, it might serve the Town's interest to have a free-standing set of Regulations distinct from the Bylaw that can be updated without recourse to Town Meeting.

Angela will confirm with Jen Rand how ConCom was recently able to update some regs in the Conservation Bylaw without passage through Town Meeting. An added question is whether the act of extraction itself also needs a vote at the Annual Town Meeting, since this could be seen as altering the Bylaw. Sue said if this were the case, it might make sense to pursue passage of the new Bylaw and Regulations simultaneously, given that everything would be brought to vote anyhow.

It was decided Angela would send both Chris and Shannon an email asking Chris to undertake mapping similar to what has been done for other Cape towns. Shannon will connect Chris with the GIS person who undertook mapping for the Cape.

Kate will ask Claude to look at both the Conservation Bylaw and the proposed CRZ Regulations side-by-side to see how they might be integrated.

The Working Group will next meet October 28 at 2:30 pm.