

**Community Rating System
Activity 510 (Floodplain Management Planning)
Progress Report on Implementation of Credited Plan**

Date this Report was Prepared: 4/20/2021

Name of Community: Town of Sandwich

Name of Plan: Sandwich Hazard Mitigation Plan

Date of Adoption of Plan: May 11, 2017

5 Year CRS Expiration Date: 2022

1. How can a copy of the original plan or area analysis report be obtained:
The plan can be obtained on the Town of Sandwich website. See link below.

<https://www.sandwichmass.org/DocumentCenter/View/3831/Hazard-Mitigation-Plan-2016>

2. Describe how this progress report was prepared and how it was submitted to the governing body, released to the media, and made available to the public:

Preparation: Each Mitigation Action (1-26) was reviewed by the responsible Department, relevant information drafted and submitted to the Planning Department for the completion of the progress report.

Submission: This progress report will be placed before the Selectmen for review on the evening Thursday April 29, 2021 and placed on the Town webpage and made available to the public via a press release the week of May 3, 2021.

3. Provide a description of the implementation of each recommendation or action item in the action plan or area analysis report, including a statement on how the project was implemented or not implemented during the previous year:

Mitigation Action 1 [Complete]: Purchase lighting trailers and sign boards to use during emergencies

Responsible Department: Police and Fire Departments, Emergency Management

Implementation: Sandwich Police Department has acquired lighting trailers and sign boards and employs to alert the public to hazardous conditions.

Mitigation Action 2 [Complete]: Upgrade the generator at Sandwich High School/Shelter

Responsible Department: Police and Fire Departments, Emergency Management

Implementation: New generator was installed at Sandwich High School to accommodate regional shelter requirements

Mitigation Action 3 [In Progress]: Upgrade communications systems for Town Staff/Departments to ensure open communication during a disaster situation

Responsible Department: Police Department, Emergency Management

Implementation: In process, awaiting final plans and funding for the installation of an upgraded microwave communications system

April 2020 – April 2021: Installation almost complete. Police are awaiting battery backup at a remote site.

Mitigation Action 4 [In Progress]: Secure funding for the purchase of evacuation signs in town

Responsible Department: Police and Fire Departments, Emergency Management

Implementation: Not implemented. Fire Department is in the process of seeking funding.

Mitigation Action 5 [Complete]: Inventory, perform needs assessment and if applicable, purchase new generators for critical facilities. The goal is to have a generator for every town building

Responsible department Police and Fire Departments, Emergency Management

Implementation: An assessment of the Town's needs was conducted by the Facilities Department resulting in the following: the Police and Fire stations have generators that are rated for the full building loads; the IT Department with the servers at 34 Quaker Meetinghouse has a generator for the network equipment; the DPW has a generator for heat, lighting and IT equipment for the Town; COA has a generator for the building. The future Town Hall, located at 100 Route 6A, has a full building generator. The Marina has a generator. Additionally, the Town has two small 6500 watt units, one to connect to the Town Hall for the sprinkler system compressor and the second generator can be used needed. There are no generators associated with the Town Hall Annex or 16 Jan Sebastian. These building will be no longer be in use by the end of 2021.

Mitigation Action 6 [In Progress]: Seek funding opportunities to reduce Sandwich's vulnerability to natural hazards

Responsible Department: Town Staff

Implementation: The Town of Sandwich has received the following: Municipal Vulnerability Preparedness grant program (MVP) Certification Grant Nov 2017. (Completed June 2018); MVP Action Grant- Vulnerable Municipal Infrastructure Assessment June 2018 (Completed Oct 2019); MVP Action Grant #2-Education /Outreach-June 2019-(Due to be completed June 2020); The Town of Sandwich has in the application process for: 1.) MVP Action Grant #3-Downtown Sandwich Resiliency- June 2020; 2.) NRCS Grant Storm water/Shell fish beds enhancement-Jones Lane Culvert- June 2020.

April 2020 – April 2021: Looking at MA Division of Ecological Restoration and MA Municipal Vulnerability Preparedness grants that would look to improve a number of tidal culverts. These culverts would include: under Town Neck Road near RR crossing, under Dewey Ave., under Foster Road, under Ploughed Neck Road and under Cranberry Trail & Sandy Neck Road. In other words most of the major flood pathways in town. Sandwich received funding through MVP Action Grant to conduct a vulnerability and adaptation study for downtown Sandwich. Work on this study will be starting late spring 2021.

Mitigation Action 7 [In Progress]: Obtain a town specific Code Red system and conduct public outreach to increase the number of subscribers. This action will enhance communication to residents and vulnerable populations before, during and after hazard events

Responsible Department: Police and Fire Departments, Emergency Management

Implementation: The Town of Sandwich Fire Department as has purchased and uploaded a CODE RED alert system. The system is functional, outreach has not been conducted at this time.

April 2020 – April 2021: The Code Red system is in place. An announcement was completed to get more subscribers. Another possible outreach opportunity will be at the Sandwich Town Meeting (May 2021) with a flyer.

Mitigation Action 8 [In Progress]: Create a grant program for STEM students in Sandwich that would fund local projects

Responsible Department: Town Staff

Implementation: Not implemented

April 2020-April 2021: Grant program and other contact with Sandwich High School STEM on hold due to COVID 19.

Mitigation Action 9 [In Progress]: Continue to acquire the best available mapping data for the town (i.e. LIDAR, photogrammetry) to accurately assess hazard risk

Responsible Department: Engineering, Department of Natural Resources

Implementation: The Cape Cod Commission is on track to conduct a 2020 flyover which will include planimetrics.

April 2020 – April 2021: 2020 aerial imagery has been distributed and planimetrics are currently being reviewed for errors.

Mitigation Action 10 [In Progress]: Continue to gather accurate data on the location, history, extent and impact of natural hazards in Sandwich

Responsible Department: Police and Fire Departments, DPW, Natural Resources, Emergency Management

Implementation: As a result of the MVP Grant through the Wood's Hole Consulting Group, data has been collected and analyzed to develop plans to renourish barrier beach systems for Town Neck Beach & Springhill Beach. To date we have full permits to 1.) Renourish dunes at Town Neck Beach. 2.) Transport Sand from an off shore borrow site on Scusset Beach. Working on permits: Section 111 Study with USACE and dredging sand from Old Harbor to place on Town Neck Beach and Springhill Beaches.

April 2020 – April 2021: The Section 111 Study is now in its final stage- the public comment period on the final report is just ending. After the public comment has ended the report is sent to the USACE Washington DC Office for final approval. We are hoping that this will translate into implementing the plan in late fall 2022 or early 2023.

Mitigation Action 11 [Complete]: Designate better and larger storage areas for emergency equipment (i.e. sand bag filler, storage sheds, barricades, message boards)

Responsible Department: Department of Public Works

Implementation: New storage areas created with opening of the new public safety complex, Fall 2019.

Mitigation Action 12 [Complete]: Manage data in town departments to ensure that records are backed up on remote servers.

Responsible Department: Information Technology

Implementation: Paper records in all Town offices are currently being scanned and will be available electronically. All electronic records are backed up locally each day, and the backups are automatically uploaded to secure data centers around the country that are prepared for any disasters. This Mitigate Action was implemented in 2017.

Mitigation Action 13 [Complete]: Develop a debris management plan for the town of Sandwich or coordinate with the Barnstable County Regional Emergency Planning Committee about a regional debris management plan. A debris management plan would include information on the amount, type and disposal of demolition debris, storm debris, and hazardous waste, identify sites for sorting, chipping, and transporting the debris after the hazard event

Responsible Department: DPW, Police and Fire Departments, Emergency Management

Implementation: The DPW has used MassDEP's Disaster Debris Management Planning guidelines to dispose of debris during major storm events. The Oak Crest Cove field has been designated as the temporary debris management site. The DPW will develop a complete Debris Management Plan using this site and other local resources (eg, Transfer Station and Waste Management facility) to properly dispose of all debris during major storm events.

Mitigation Action 14 [Complete]: Continue to coordinate with the Barnstable County Regional Emergency Planning Committee and other County and State agencies about disaster preparedness, emergent planning and disaster recovery

Responsible Department: Emergency Management

Implementation: The Sandwich Office of Emergency Management is an active participant in the Barnstable County Regional Planning Committee and manages one of the 6 regional shelters when activated. OEM regularly participates in available training opportunities for regional sheltering and other operations, and consistently shares and receives valuable lessons learned with regional partners. OEM hosted a training in the use of WebEOC, the commonwealth's crisis information management system for local, county, and state partners. This system was utilized to manage situational awareness and reporting during the COVID 19 crisis, and has helped Sandwich stay current in emergent and recovery planning during events such as the pandemic.

Mitigation Action 15 [In Progress]: Distribute educational materials about storm surge, sea level rise, flooding, the Community Rating System and the National Flood Insurance Program at Town Hall, the Harbor Masters Office, and the Library. Most of the materials available through County, State and Federal agencies are available online. Therefore, these materials will also be posted on the Town website, Police and Fire Facebook pages.

Responsible Department: CRS Coordinator (Engineering Department)

Implementation: Educational materials are available at the Sandwich Town Offices, Town Annex and the Library. Many of these materials are available online the Town of Sandwich Floodplain Information and Maps webpage. This Mitigation Action was implemented in November of 2018.

<https://www.sandwichmass.org/427/Floodplain-Information-Maps>

Mitigation Action 16 [In Progress]: Continue monitoring and beach management efforts for town-owned beaches in Sandwich

Responsible Department: Natural Resources

Implementation: Through the MVP Grant and the Wood's Hole Consulting Group the Town is monitoring ongoing beach management efforts.

Mitigation Action 17 [In Progress]: Secure funding for the purchase of open space in or near floodplain

Responsible Department: Planning and Development, Natural Resources

Implementation: Identify parcels and submit to Community Preservation Committee for consideration of Community Preservation funds. A draft Open Space and Recreation Plan was completed winter 2019 and submitted to the Executive Office of Energy and Environmental Affairs for certification. Once the plan is certified, the Town will be available to apply for land purchase grants.

April 2020-April 2021: FEMA program for this slated to be launched fall 2021. Town staff is attending webinars and other training for implementation of this program. More specifically Barnstable County and Woods Hole Sea Grant is holding a forum on federal buyout programs Wednesday April 21, 2021.

Mitigation Action 18 [Complete]: Perform an alternatives analysis for mitigation actions to reduce erosion on town-owned beaches (i.e. jetty removal, backpassing, beach nourishment)

Responsible Department: Natural Resources

Implementation: Through the MVP Grant and the Wood's Hole Consulting Group the Town has performed an alternatives analysis for mitigation actions to reduce erosion on town owned beaches.

Mitigation Action 19 [Complete]: Improve Sandwich's Class in the Community Rating System (CRS) to at least a Class 9

Responsible Department: CRS Coordinator (Engineering Department)

Implementation: The Town of Sandwich entered the CRS program as a Class 7. The verification report was prepared on November 13, 2018.

Mitigation Action 20 [Complete]: Mitigate or move the Police and Fire Station on Route 6A out of the floodplain

Responsible Department: Police and Fire Departments

Implementation: Police and Fire headquarters were moved to the Sandwich Public Safety Complex located at the corner of Cotuit Road and Quaker Meeting House Road fall 2019

Mitigation Action 21 [In Progress]: Develop, prioritize and seek funding to reduce the vulnerability of local infrastructure from costal hazards

Responsible Department: Department of Natural Resources

Implementation: As an MVP Certified Community, the Town of Sandwich must seek at least one MVP Action Grant per year and complete an annual MVP report to retain "Good Standing" status.

Mitigation Action 22 [Complete]: Annually contact owners of repetitive loss properties to inform them of their risk and that financial assistance is available for structural mitigation (i.e. acquisition and elevation)

Responsible Department: CRS Coordinator (Engineering Department)

Implementation: As part of CRS Activity 501, residents with properties located near repetitive loss areas receive an annual notice identifying ways you protect your property from flood damage, actions you can take to reduce damage and ways to find information about Federal grants that may reduce mitigation costs. These notices were first implemented on October 2, 2018.

Mitigation Action 23 [Complete]: Increase the base flood elevations, also known as freeboard, in AE zones by 1 foot. Bring to Town Meeting. This action was carried over from 2002.

Responsible Department: Building Department

Implementation: The 9th edition of the Massachusetts State Building code requires that all new or sustainably improved structures in the AE Zone be built so that the lowest floor is at or above design flood elevation (R322.2.1 Elevation Requirements). The 9th Edition was implemented on January 1, 2018.

Mitigation Action 24 [Complete]: Require all new or substantial improvement to dwellings within 100 feet of the beach/ dune boundary be located as far landward as feasible. This will require amendment of the Floodplain Bylaw (section 4300). Bring to Town Meeting.

Responsible Department: Town Staff

Implementation: Proposed zoning changes to section 4300 scheduled for the 2020 Annual Town Meeting do not include the 100 foot setback. Chapter 7 (entitled Conservation) of the Town of Sandwich Bylaws provides such provisions that no person shall remove, fill, dredge, build upon, or alter land in or within one hundred (100) feet of the following resource areas: freshwater wetland, coastal wetland, vegetated wetland, unvegetated wetland, surface water body, ocean, bay, estuary, stream/creek (intermittent or continuous, natural or manmade), and land under said water, any bank, beach, dune, flat, marsh, wet meadow, bog, swamp, or any land subject to coastal action, or inundation by groundwater, surface water, tidal action, coastal storm flowage or land subject to flooding within the one-hundred (100) year and five-hundred (500) year flood zone as identified on the most recent FIRM (Flood Insurance Rate Maps) for the Town of Sandwich as established by FEMA (Federal Emergency Management Agency).

Mitigation Action 25 [Complete]: Evaluate and recommend appropriate measures to mitigate any downstream impacts of flooding from the failure of Shawme Dam. Develop an Emergency Action Plan to mitigate the downstream impacts from flooding. This action was carried over from 2002.

Responsible Department: Town Staff

Implementation: The Town staff has conducted the following: a) DNR coordination with the Waste Water Committee to conduct a study for this purpose in 2020. b.) DNR coordination with the Engineering Department to complete the Emergency Action Plan for the two (2) Shawme Dams in 2020-2021.

April 2020- April 2021: The Emergency Action Plan for both Upper & Lower Shawme Dams is complete and has been approved by MA Dam Safety as of March 1, 2021. The Sandwich Fire Department has completed a Response Matrix for the Shawme Dams.

Mitigation Action 26 [Complete]: Improve radio communication for public safety. The current system is obsolete and failing, which makes it challenging for town departments to communicate during a storm event

Responsible Department: Police Department

Implementation: Communications were upgraded and a cell tower was installed at the new Public Safety Complex, fall 2019

4. Discuss why any objectives were not reached or why implementation is behind schedule:

Mitigation Action 4: Currently seeking funding for evacuation signage. Plan to implement Action within the next two years.

Mitigation Action 8: Seeking avenues for grant program.

Mitigation Action 15: The actions listed below were not completed due to COVID-19. We plan to highlight the Floodplain Information and Maps webpage and distribute additional education materials to Police and Fire Departments late 2021.

5. What are the recommendations for new projects or revised recommendations?

- a. Seek funding to help reduce costs of mitigating homes in vulnerable areas or seek opportunities for buyout programs to relocate homes to areas not impacted by coastal flooding or purchase vulnerable properties where homes were destroyed by natural hazards.