

APPENDIX II

OLD SAYBROOK GOALS AND IMPLEMENTATION

There are various options available to the Town of Old Saybrook for hazard mitigation. Town government officials, boards, commission, and agencies will be the overall responsible parties for educating the public on the need for mitigation and options for reducing damage from natural hazards. The following sections are divided into objectives to meet the goals listed. Listed are the supporting tasks with the board/commission or individual responsible for implementation and timeline for consideration and the priority of the task. The priority are listed as very high, high, medium, and low based on priorities established by the town during draft review. Modifications may be made after public review and adoption. The primary responsibility will be the application for grant funding and budgeting where appropriate to implement these supporting tasks.

Planning Process: Old Saybrook municipal personnel were interviewed and consulted in the development of each town section for risk, vulnerabilities, municipal challenges, and mitigation objectives as described in the Natural Hazards Mitigation Regional Overview. (Pages 34-36). The following documents were referenced to identify existing mitigation strategies and proposed mitigation strategies:

- Town of Old Saybrook Subdivision Regulations, amended to 10/1/01
- Town of Old Saybrook Zoning Regulations, revised to 9/15/03
- Town of Old Saybrook Plan of Conservation and Development
- Old Saybrook Inland Wetlands and Watercourses Regulations, rev to 1/05
- FEMA Flood Study, Old Saybrook, CT – Jan, 1978
- FEMA Flood Insurance Study Supplement – Wave Height Analysis, Jan, 1984

The individual town review was important for the development of goals and objectives within Old Saybrook. After the supporting tasks were compiled, town personnel evaluated each task using the STAPLEE criteria described in FEMA's "How-to Guide #3: Developing the Mitigation Plan" (FEMA 386-3. The evaluation yielded priority ratings based on the following: (Very High – if the task met 6-7 of the STAPLEE criteria), (High – if the task met 4-5 of the STAPLEE criteria), (Medium – if the task met 2-3 of the STAPLEE criteria), and (Low – if the task met 1 of the STAPLEE criteria)

Areas in yellow denote tasks which qualify for Community Rating System reward points. The National Flood Insurance Program's (NFIP) Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and (3) promote the awareness of flood insurance.

GOAL 1. Ensure that public funds are used in the most efficient manner.

Objectives: Prioritize mitigation projects based on available funding starting with sites facing the greatest threat to life, health, and property.

#	<u>Supporting Tasks</u>	<u>Who</u>	<u>Timeline</u>	<u>Priority</u>	<u>Completion Goal</u>	<u>CR</u>
1	Develop a strategy for use of public funding to protect public services and critical facilities through municipal capitol improvement program and regional transportation program	BOS OEM Public Works BOF BOEd EDC	2006 to 2011	High		
2	Evaluate opportunities for public funding for projects on private property where the benefits exceed the costs	BOS BOF, BOEd EDC	2011 to 2016	Medium		
3	Identify and apply for outside sources of funding	BOS BOF BOEd EDC	2006 to 2011	Very High		
4	Promote owner participation in mitigation efforts to protect their own properties.	BOS BOF BOEd EDC	2011 to 2016	Medium		

GOAL 2: Reduce the loss of life and property and associated economic impacts from floods, high winds, severe winter storms, earthquakes and dam failure.

Objective 1 - Ensure that critical facilities continue to function during a hazard event.

#	<u>Supporting Tasks</u>	<u>Who</u>	<u>Timeline</u>	<u>Priority</u>	<u>Completion Goal</u>	<u>CR</u>
1	Update the flood zone study for the town to incorporate changed conditions upland and within the floodplain, and an expected sea level rise over the next twenty years.	BOS Zoning Commission	2006 to 2011	High		

2	Strengthen existing subdivision and zoning regulations to either optimally prevent road or house construction within the floodplain or increased elevation and flood-proofing	Planning Zoning ZBA Flood Engineer	2016 2021	Low		
3	Ensure that flood proof construction standards for roads and structures within the flood plain are strictly enforced, flood-proof roads	Building Official/ Planning/ Zoning/ZBA/ BOS	On- going	Medium		
4	Review and revise storage of critical files and electronics at the Town Municipal Center to ensure that flooding will not destroy valuable records. Provide a back up GIS mapping system at the EOC out of the flood zones and surge areas. Provide training to emergency management volunteers and officials on the use of GIS compatible mapping systems	BOS OEM Flood Engineer	2006 to 2011	Very High		
5	Implement strategic enforcement actions to include engineering reports for structural expansion or alterations on properties within the 100 year flood zone.	Building Official Zoning ZEO	2011 to 2016	Medium		
6	Access and incorporate regional Geographic Information System (GIS) mapping to coordinate for accuracy with HAZUS data maintained by the CRERPA GIS system. Updated town GIS layers yearly to reflect future property damage, access issues, and evacuation for residents from flooding events.	BOS Planning Zoning, Assessor OEM	2011 to 2016	Medium		
7	Encourage property owners listed in repetitive loss report to obtain assistance for hazard mitigation funding from DEP/FEMA for elevation of structures and repairs where applicable	BOS Public Works	2016 to 2021	Low		
8	Implement mapping and monitoring of storm-water outlets and infrastructure. Provide for yearly maintenance programs for storm-water facilities and encourage the update of regulations to provide for no-net runoff from development	BOS Public Works	2006 to 2011	Very High		

9	Conduct a full evaluation of dams in conjunction with state review which includes a timeline and allocation of funding for repairs.	BOS, Flood Engineer	2011 to 2016	Medium		
10	Evaluation of Obed Reservoir Heights Dam – work with property owners and State for repairs as needed	BOS, Flood Engineer	2006 to 2011	High		
11	Evaluation of remaining four dams – work with property owners and State to repair as needed	BOS, Flood Engineer	2011 to 2016	Medium		
12	Elm Street Underpass – Resolve drainage/flooding problems to improve evacuation options	BOS, Flood Engineer, Public Work	2016 to 2021	Low		
13	Elevation of College Street near North Cove Road to improve evacuation options	BOS, Flood Engineer, CTDOT	2006 to 2011	High		
14	Program for elevation of structures at Plum Bank, Great Hammock, Cornfield Point, and Lynde Point to avoid property loss during coastal flood events	BOS, Flood Engineer ZC, ZBA	2016 to 2021	Low		
15	Improvements to Banbury Crossing to improve evacuation options	BOS, Flood Engineer	2016-2021	Low		
16	Improvements to South Cove Causeway to improve evacuation options for coastal residents	BOS, Flood Engineer	2011 to 2016	Medium		
17	Elevation of Plum Bank Road near Cornfield Point to improve evacuation and access options	BOS, Flood Engineer, CTDOT	2006 to 2011	High		
18	Elevation of Sandy Point Road to improve evacuation and access options	BOS, Flood Engineer	2011 to 2016	Medium		
19	Elevation of Shetucket Road to improve evacuation and access options	BOS, Flood Engineer	2011 to 2016	Medium		

Objective 2 – Educate the town residents about natural disasters, mitigation activities and preparedness

#	<u>Supporting Tasks</u>	<u>Who</u>	<u>Timeline</u>	<u>Priority</u>	<u>Completed</u>	
1	Visit schools and educate children about the risks of floods, hurricanes, and other natural hazards and how to prepare for them	OEM, Police, Fire, CRERPA OEM board	Yearly	Medium		

2	Access existing literature prepare by regional groups and the chamber of commerce and FEMA and display for public distribution in Town Hall and Library	Planning Zoning Commissions Library	2011 to 2016	Medium		
3	Update town webpage with section on Hazard Preparedness for the public. Include maps of evacuation route, storm surge areas, and shelters. Include options for mitigation for residential structures and business recovery and provide link to FEMA, NOAA, State OEM and CRERPA websites for additional information.	BOS OEM CRERPA State OEM	Yearly	High		
3a	Swimming Pool – Life Safety Training Facilities	BOS Public Works	2011- 2016	Medium		
4	Provide pamphlets and refer to web-based information for property owners for hazards listed in this document to show options for obtaining additional insurance, structural alterations to protect against various hazard damage, and emergency procedures for families during a hazard even Include information for contractors and homeowners on the risks of building in hazard prone areas	Building Dept. Planning Zoning BOEd OEM Tax Collector Library	2011 to 2016	Medium		
5	Identify refuges of last resort for those unable to reach designated shelters and review annually program for evacuation of persons without means of transport.	BOS OEM SART	Annual	Very High		
6	Distribute hurricane preparedness information including pet sheltering plans	BOS OEM	Annual	Very High		
7	Participate in regional program for sheltering pets during hazard events	State BOHealth CRERPA	2011 to 2016	Medium		

8	During vulnerable periods, a system of warnings about campfires and open fires should be posted in public locations.	OEM Fire Police	Annual	Low		
9	Training and education of new firefighters include brush and forest fires	OEM Fire	Annual	Low		
10	Create a published hotline for public information and volunteer support: family to family assistance, medical assistance, transportation for evacuees, etc.	OEM/ BOS/ RPO Estuary Senior Center	2006 to 2011	Very High		
10a	Upgrade High School generator	BOS BOF BOEd	2006 – 2011	Very High		
11	Review established chain of command for hazard mitigation and relief efforts and publish and promote for public knowledge.	BOS OEM	2006 to 2011	Very High		

Objective 3 - Institute long term goals to enhance short term – high priority mitigation

#	<u>Supporting Tasks</u>	<u>Who</u>	<u>Timeline</u>	<u>Priority</u>	<u>Completed</u>	
1	Advance an assertive open space acquisition plan for unprotected areas that are subject to flooding. Acquire shorefront land for open space	BOS Conservation Commission	2006- 2011	Medium		
2	Implement a Tree Hazard Management Program to encourage responsible planting practices and minimized future storm damage to buildings, utilities, and streets	BOS Tree Warden Utilities	2016 to 2021	Low		
3	Land-use planning that encourages groundwater retention within existing new, and redeveloping areas (rain gardens, curb-less roads)	Planning, Zoning, Conservation Commissions	2011 to 2016	Medium		
4	Implement dune restoration and marshland protection techniques, flood storage	HMC, BOS Conservation Commission Inland Wetlands	2016 to 2021	Low		

5	Advance planning for drought to minimize impacts includes frequent updates to town-wide groundwater studies	BOS	2016 to 2021	Low		
6	Recommendations for future land use patterns including recharge into existing aquifers, including site design to encourage water conservation through such techniques as: strict regulation of vegetative buffers for stream and river corridors, rain gardens for site drainage, and prohibition of wetlands alteration.	BOS Planning Zoning Conservation Commissions	2011 to 2016	Medium		
7	Where water supplies are insufficient, new development should include dry hydrants.	BOS Planning Zoning Commissions Fire Marshal	2016 to 2021	Low		
8	During periods of drought, establish forestry practices that increase the ability of firefighters to access forest fires.	BOS Fire Planning Zoning Commissions	2016 to 2021	Low		
9	Encourage neighborhood preservation/revitalization for wind damage retrofitting	BOS Planning Zoning Commissions	2016 to 2021	Low		
10	Require the installation of underground/buried utilities for all new residential and commercial developments	Planning Zoning Commissions	2016 to 2021	Low		

Objective 4 – Create opportunities for public involvement and investment in hazard mitigation

#	<u>Supporting Tasks</u>	<u>Who</u>	<u>Timeline</u>	<u>Priority</u>	<u>Completed</u>	
1	Develop a list of techniques for homeowner self-inspection especially for those located in coastal areas as listed below	BOS OEM Building Department	2011 to 2016	Medium		

2	Adopt regulations and promote low impact development (LID) methods that include storm water on individual lots. Include storm water absorption techniques such as rain gardens, creative use of wetlands, gallery systems to retain water on site for discharge into aquifers	Planning Zoning Conservation Commissions	2011 to 2016	Medium		
3	Review mitigation goals and objectives with beach associations at the beginning of each season. Encourage the association's help to educate homeowners	BOS OEM	2011 to 2016	Medium		
4	Publish materials on additional hazards, earthquake, wildfire, and tornado. Encourage additional insurance	BOS OEM	2016 to 2021	Low		
5	Enlist public participation through public workshops to develop methods for notification of emergencies	BOS OEM Police Fire	2011 to 2016	Medium		
6	Develop business recovery plan cooperatively with other region's towns and distribute to town businesses	BOS EDC	2011 to 2016	Medium		
7	Develop strategy and program for flood prone property owners who request a buyout	BOS, BOF	2016 to 2021	Low		

List of A-Z Strategies for Homeowners of Coastal Properties

- a. Wet flood-proofing (Allow water to enter uninhabited areas of the house)
- b. Venting on roofs
- c. Dry flood-proofing (Sealing the structure to prevent floodwaters from entering)
- d. Installation of in place shutters for glazed openings
- e. Bracings with struts on walls
- f. Elevation of structures by piers, posts or column
- g. Anchoring and connections in walls
- h. Reinforce entry doors
- i. Install hurricane straps and hurricane clips
- j. Garage doors with stiffer horizontal members
- k. Glider tracks and track supports should be strengthened
- l. Bracing struts pilaster columns in walls perpendicular to freestanding walls
- m. Renail sheathing
- n. Create a secondary water barrier
- o. Provide support for sliding glass doors and double doors opening to outside
- p. Improve anchorage of windows to openings
- q. Add ridge ventilators to reduce uplift of wood sheathing
- r. Strengthen garage doors
- s. Anchor adjacent structures, including fences, pool enclosures, and patio roofs
- t. Improve connections of porch roofs and overhangs
- u. Reinforce entry doors
- v. Buried utilities in new subdivision development and onsite within new commercial developments
- w. Landscaping practices that encourage the planting of species that are less susceptible to damage from ice storms to reduce to probability of damage structures
- x. Plan for inability or assistance needed to evacuate and strategies for pets.
- y. Evaluating dangers of being outside or traveling, the danger of carbon monoxide poisoning in motor vehicles and from portable heaters and power generators in homes, the danger of house fires.
- z. Evaluating danger of hypothermia from prolonged exposure to cold weather