

APPENDIX II

OLD LYME GOALS AND IMPLEMENTATION

There are various options available to the Town of Old Lyme 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 Lyme 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:

The town will make every effort to include or incorporate the mitigation goals , tasks, and plan into these plans, codes, regulations, and programs.

- Town of Old Lyme Subdivision Regulations
- Town of Old Lyme Plan of Conservation and Development
- Old Lyme Inland Wetlands and Watercourses Regulations
- FEMA Flood Study, Old Lyme, CT

Prioritization and timelines will be incorporated upon completion of the public hearing/ adoption process.

The individual town review was important for the development of goals and objectives within Old Lyme. 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	Board of Selectmen/OEM/ Public Works	2006 - 2011	High (example)	2006-2008 (example)	
2	Evaluate opportunities for public funding for projects on private property where the benefits exceed the costs	Board of Selectmen	2006- 2011			
3	Identify and apply for outside sources of funding	Board of Selectmen	2006-2011			
4	Promote owner participation in mitigation efforts to protect their own properties.	Board of Selectmen				

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	Board of Selectmen	2006-2010			

	floodplain, and an expected sea level rise over the next twenty years.					
2	Strengthen existing subdivision and zoning regulations to either optimally prevent road or house construction within the floodplain, or alternatively.	Planning/ Zoning	2006- 2010			
3	Ensure that flood proof construction standards for roads and structures within the flood plain are strictly enforced	Building Official/ Planning/ Zoning/ZBA/ Board of Selectmen	Ongoing			
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	Board of Selectmen/ OEM	2006- 2010			
5	Implement strategic enforcement actions to include engineering reports for structural expansion or alterations on properties within the 100 year flood zone.	Building Official	2006- 2010			
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.	Board of Selectmen, Planning and Zoning, Assessor	2006 – 2008			
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	Board of Selectmen, Public Works	2006- 2011			
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	Board of Selectmen, Public Works	2006 - 2011			

9	Conduct a full evaluation of dams in conjunction with state review which includes a timeline and allocation of funding for repairs.	Board of Selectmen, Beach Associations	2006-2011			
10	Review and revise storage of critical files and electronics at the Town Hall to ensure that flooding will not destroy valuable records in a Category 3-4 hurricane.					
11	Evaluate options and implement drainage improvements near beach communities as identified in plan.					
12	Develop long range business strategy planning for small businesses within the Old Lyme business district for continuity of service and operation following a hazard minimize revenue loss due to a flood or hazard event.					
13	Review and formalized where necessary inter-local town agreements for assistance protocols during hazard events					
14	Establish early warning system for tornadoes or other hazards					
15	Install reverse 911 systems to alert residents of hazards					
16	Create hierarchy of road and infrastructure improvements as identified in this plan with emphasis on roads used for evacuation from beach areas to be included in capitol improvement plan					

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, Regional OEM board	Yearly			
2	Access existing literature prepare by regional groups and the chamber of	Planning, Zoning, Library	2006-2011			

	commerce and FEMA and display for public distribution in Town Hall and Library					
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	Board of Selectmen, OEM, RPO, State OEM	Yearly			
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/ Planning/ Zoning	2006-2011			
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.	Board of Selectmen/OEM	Annual			
6	Distribute hurricane preparedness information including pet sheltering plans	Board of Selectmen/ OEM	Annual			
7	Participate in regional program for sheltering pets during hazard events					
8	During vulnerable periods, a system of warnings about campfires and open fires should be posted in public locations.	OEM/ Fire/ Police	Annual			
9	Training and education of new firefighters include brush and forest fires	OEM/Fire	Annual			

10	Create a published hotline for public information and volunteer support: family to family assistance, medical assistance, transportation for evacuees, etc.	OEM/ Selectmen/ RPO				
11	Review established chain of command for hazard mitigation and relief efforts and publish and promote for public knowledge.					

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	Board of Selectmen/ Conservation Commission	2006-2011			
2	Implement a Tree Hazard Management Program to encourage responsible planting practices and minimized future storm damage to buildings, utilities, and streets	Board of Selectmen/ Tree Warden/ Utilities	2006 - 2011			
3	Land-use planning that encourages groundwater retention within existing new, and redeveloping areas.	Planning/ Zoning/ Conservation Commissions	2006-2011			
4	Implement dune restoration and marshland protection techniques	Harbor Management/ Board of Selectmen/ Conservation Commission	2006-2011			
5	Advance planning for drought to minimize impacts includes frequent updates to town-wide groundwater studies	Board of Selectmen	2006-2011			
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	Board of Selectmen/ Planning/ Zoning/ Conservation	2006-2011			

	corridors, rain gardens for site drainage, and prohibition of wetlands alteration.					
7	Where water supplies are insufficient, new development should include dry hydrants.	Board of Selectmen/ Planning/ Zoning	2006-2011			
8	During periods of drought, establish forestry practices that increase the ability of firefighters to access forest fires.	Board of Selectmen/ Fire/ Planning/ Zoning	2006-2011			
9	Encourage neighborhood preservation/revitalization for wind damage retrofitting	Board of Selectmen/ Planning/ Zoning	2006-2011			
10	Require the installation of underground/buried utilities for all new residential and commercial developments	Planning/Zoning	2006-2011			

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	Board of Selectmen/ OEM/ Building	2006-2011			
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	2006-2011			
3	Review mitigation goals and objectives with beach associations at the beginning of each	Board of Selectmen/ OEM	2006-2011			

	season. Encourage the association's help to educate homeowners					
4	Publish materials on additional hazards, earthquake, wildfire, and tornado. Encourage additional insurance for non flood hazards	Board of Selectmen/OEM				
5	Enlist public participation through public workshops to develop methods for notification of emergencies	Board of Selectmen/OEM/Police/Fire				
6	Develop business recovery plan cooperatively with other region's towns and distribute to town businesses	Board of Selectmen/Chamber of Commerce				
7	Develop strategy and program for flood prone property owners who request a buyout	Board of Selectmen				

List of A-Z Strategies for Homeowners of Coastal Properties

- a. Wet floodproofing (Allow water to enter uninhabited areas of the house)
- b. Venting on roofs
- c. Dry floodproofing (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. Remail 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