

Community Resilience Building Risk Matrix				www.CommunityResilienceBuilding.org					
H-M-L priority for action over the Short or Long term (and Ongoing) V = Vulnerability S = Strength				Top Priority Hazards (tornado, floods, wildfire, hurricanes, earthquake, drought, sea level rise, heat wave, etc.)					
				Sea Level Rise	Hurricanes and Storms (flooding, wind)	Wildfire and Drought	Ecological Change, Vector Borne Disease	Priority	Time
								H - M - L	Short Long Ongoing
Features	Location	Ownership	V or S						
Infrastructurel									
Reliance on Ferry System	Tisbury, Oak Bluffs	State	V	Ferry piers and bridge rebuilt to accommodate sea level rise	Improve/modernize Ferry System, planning and coordination; "legislative redo"			H	L
Airport	Specific	Public	S		Reinforce Airport's role as emergency supply point, evacuation, medivac			L	O
Public Buildings	Specific	Public	V/S		Ensure public buildings have backup generators and a water source			L	O
Schools	Specific	Public/Private	V		Backup generator for Chilmark School			L	L
Menemsha	Chilmark	Public/Private	V	Professional and Technical Planning for Menemsha; floating docks?				M	L
Menemsha Water Supply	Chilmark	Public	V			HMP: "Install 8000 gallon holding tank for Menemsha public water supply"		M	S
Menemsha Parking Lot	Chilmark		V		HMP: "Rehabilitate Menemsha parking lot drainage"			L	S
Stormwater infrastructure	Townwide	Public	V/S		HMP: "Reduce damaging volume of direct stormwater discharges to beaches and surface waters by infiltration of those segments of the systems where infiltration is possible back in the watershed, particularly in the vicinity of Menemsha"			M	L
Electric Grid and Internet	Townwide	Eversource and Private	V		Selective undergrounding of most-vulnerable wires, grid modernization; More solar microgrids; Reduce reliance on grid, add redundancy			H	L
Water Supply In State Forest	Specific	Town	V			HMP: "In order to reduce the impacts of drought and wildfire, install new public water supplies and water supply lines within the State Forest"		M	L
Water supply	Townwide	Private	V		Electric backup for pumping water wells/ hand pumps	Designated public water source; HMP: "Consider potential need for and options to provide water supply to areas with a development pattern that may not be compatible with continued private well water supplies, which may not be adequate in the event of emergencies such as drought and wildfire; build the necessary infrastructure"		M	L
Water supply for general firefighting	Townwide	Public/Private	V			HMP: "Install dry hydrants to pump pond water for firefighting. Required for some new subdivisions. Encourage elsewhere. If there is no pond nearby, install a water source."		M	L
Food Supply	Townwide	Public/Private	V		Increase local food production and storage			H	O
Fuel Supply	Specific	Private	V		Increase fuel storage capacity			L	S
Mill Pond Dam	Specific	Town	V		HMP: "The brush on the upstream and downstream faces should be cut yearly and the condition of the spillway planks should be determined and replaced if necessary (annual cost \$2000). Areas of potential erosion from road runoff should be protected with asphalt aprons. A simple static and seismic stability analysis of the dam should be done (cost about \$5000). An operation and maintenance manual should be developed. An emergency action plan for an alternative travel route should be prepared by the West Tisbury Emergency Planning Group. New- consider options such as dredging."			M	S

Priester's Pond Dam	Specific	Town	V		HMP: "The pond level should be recorded continuously so that water flow and spillway capacity can be measured after every major storm event. An operation and maintenance manual should be developed. The brush on the entire dam should be cut yearly and the condition of the spillway and the masonry wall on the upstream face be determined and repairs made as necessary."			M	S
Looks Pond Dam	Specific	Town	V		HMP: "All saplings, vines and trees located on any part of the dam should be cut and removed from the site, especially near the primary and auxiliary spillways (the roots will rupture or crack the adjacent cement concrete). General or standard Dam Engineering practice calls for a tree-clear area extending 10 feet from the dam; Replace stoplogs within the anciliary spillway."			M	S/O
Coastal District overlay regulations	Coastal	Town	S	Review and possibly amend Coastal District and other overlay regulations for hazard mitigation				M	S
Residential Areas	Townwide	Private	V/S			Additional fire tanks, forestry management, enhance "Firewise"		H	S
Subdivision Regulations	Townwide	Public/Private	V/S		HMP: "Use town regulations to prevent subdivision covenants from restricting homeowners from using fire-wise roofing materials such as asphalt" "Update subdivision regulations to keep drainage from private roads from flowing onto South Rd" "Review and possibly revise local subdivision regulations for stormwater management to lessen the impacts of flooding" "Hold informational sessions with town boards to encourage the incorporation of Low Impact Development Techniques in local subdivision regulations"			M	S
Wastewater	Townwide	Public/Private	V		Upgrade septic technology				
Stormwater collection areas and discharges	Townwide	Public/Private	V/S		Map stormwater collection areas and discharges			M	S
Tiah's Cove Rd	Specific	Public/Provate	V		Raise parts of Tiah's Cove Rd			H	O
South Road	Specific	Town	V		HMP: "Establish South Rd as a critical facility from town line to town line and prioritize its storm protection and adaptation to rising sea level. Protect and possibly elevate the bridge adjacent to Stonewall." "Rehabilitate South Road stormwater drainage"			M	S
Roads	Townwide	Public/Private	V	Retreating/elevating/prote	HMP: "Reduce flood impacts by identifying and correcting discharges from Town and Commonwealth roadways where they cross streams, including: Mill Brook (West Tisbury and Chilmark portions), Tiasquam (Chilmark portion), Fulling Mill Brook, Paint Mill Brook, Roaring Brook, Turtle Brook, 2 unnamed stream crossings in the Great Rock Bight area, Black Brook (West Tisbury), Witch Brook (West Tisbury), andunnamed stream flowing along portion of North Road that extends from Menemsha Cross Road to Menemsha Village. The road surface at each crossing should be adjusted during repaving to divert as much runoff as possible into roadside vegetation before it reaches the road crossing." "Work with the Joint Transportation Committee to make long-range plans for public roads vulnerable to Sea Level Rise"	Widening and improvements to fire roads		M	S
Societal									
Elderly population	Townwide	Private	V		Communication and transportation for pre-identified isolated elders as part of hazard response (already exists?). Incorporate climate change into Healthy Aging MV; In-house elder services; community-based plan and education and outreach; long term recovery plan, neighborhood-based			H	S/O
Lyme and other vector borne diseases	Townwide	Public/Private	V				Obtain tick disease detecting equipment	H	S

Public Education				Hire resilience coordinator and educator; educate coastal landowners about shoreline management, and public about usage				H	S
Medical Care	Townwide	Private	V		Improve communication infrastructure resilience			H	L
Homeless Population	Townwide	Public (day) / Private (night)			Warming shelter			L	L
Development	Townwide	Private	V	Protect aquifer, limit development				H	O
Public Safety	Townwide	Public/Private	V/S	Reliance on volunteers; enhanced coordination and integration; trained professionals				H	O
Environmental									
Forests	Townwide	Public/private	V/S			Forest fuel reduction, dead wood removal, planning for wildfire, fire breaks. HMP: "In order to reduce the impacts of drought and wildfire, establish an overall management plan for the State Forest, including establishment of specific procedures or Memoranda of Agreement regarding the transfer of land for new public water supplies and for easements to install water supply lines"	Coordinate forest and wildlife management	H	S/O
Ponds, wetlands, harbors	Townwide	Public/private	V/S		Protection from erosion, water quality. Culvert replacement (as needed). Use environmental moorings. HMP: "Reduce flood impacts by identifying stormwater systems that have potential to discharge hazardous materials in the event of a storm or flood and installing an emergency shut-off system in each of those systems"		No chemical fertilizer or herbicides	M	O
Streams	Specific	Public/private	V		Culvert Replacements			L	S
Coastal lands (in general)	Coastal	Public/private	V/S	Benchmarks in visible locations showing high water marks, to build awareness about sea level rise and storm surges				M	S
Beaches	Townwide	Public/private	V/S	Allow retreat	HMP: "Beach Nourishment and dredging and structural reconfiguration of inlets and inlet protections to improve natural defenses and circulation, in order to minimize storm impacts (appropriateness to be determined by Board of Selectmen on a case-by-case basis); vegetation management for dune restoration"			M	O
Aquifers	Townwide	Private	V/S	Assistance for homeowners to relocate wells as needed				L	O
Salt marsh habitat	Coast	Public/private	V/S	Allow retreat				M	O
Food & Agriculture	Townwide	Private	S	Expand capacity, diversity, greenhouse, abatoir. Leverage conservation land for agriculture, ag commission; right to farm bylaws, etc; canning storage				M	O