

Town of Bristol - Risk Assessment Matrix - June 2009 as revised June 2010

Ranking	Vulnerable Areas	Location	Ownership	Natural Hazard	Primary Problems/Effects	Mitigation Benefits	Risk Historical = H Potential = P
1	Coastal Flooding of Property	Areas in A and V flood zones and along critical roads: <ul style="list-style-type: none"> • Hope Street at Silver Creek • Poppasquash Road 	Public and Private State Roads	<ul style="list-style-type: none"> • Hurricane • Nor'easter • Flooding with wave and wind action • Heavy Rain Storm 	<ul style="list-style-type: none"> • Property and lives are at risk • Evacuation hindered • Cuts off access for residents and rescue • Oldest house in Bristol is located on Hope Street at Silver Creek • Business interruption 	<ul style="list-style-type: none"> • Increase public safety • Decrease damage to structures • Decrease public and private costs of cleanup after disaster 	H and P
2	Bridges Subject to Coastal Flooding and Washout	<ul style="list-style-type: none"> • Mill Gut Pond • Mill Pond • Town Bridge at Silver Creek 	Public - State	<ul style="list-style-type: none"> • Hurricane • Nor'easter • Flooding with wave and wind action • Heavy Rain Storm 	<ul style="list-style-type: none"> • Evacuation hindered • Cuts off access for residents and rescue • Property and lives at risk • Business interruption 	<ul style="list-style-type: none"> • Public safety • Maintain evacuation routes 	H and P
3	Local Roads Subject to Flooding	<ul style="list-style-type: none"> • <u>Conduits under these roads for Silver Creek:</u> Chestnut, Gooding, Tupelo, Terrace and Elmwood, St Mary's Cemetery • <u>Conduits under these roads for Tanyard Brook:</u> Mt. Hope, Cole, Collins, Catherine, Richmond, Charles, Garfield, Woodlawn, lower Wood; and Hope at Wood 	Public - Town and State	<ul style="list-style-type: none"> • Hurricane • Flood • Nor'easter • Heavy Rain Storm 	<ul style="list-style-type: none"> • Loss/damage of lives and property • Disruption of evacuation • Business interruption 	<ul style="list-style-type: none"> • Public safety • Maintain evacuation routes • Decrease costs of cleanup 	H and P
4	Wastewater Treatment Facilities	Plant Avenue	Public -Town	<ul style="list-style-type: none"> • Flood • Hurricane • Nor'easter • Heavy Rain Storm 	<ul style="list-style-type: none"> • Facility inoperable or cannot handle flows; • Safety and health issues • Potential pollution to adjacent waterways 	<ul style="list-style-type: none"> • Limits health and pollution risks • No interruption of essential services 	H and P
5	Sewer Pump Stations	Silver Creek; Mount Hope; Ferry Road; Plant Avenue; Kickimuit	Public - Town	<ul style="list-style-type: none"> • Flood • Hurricane • Nor'easter • Heavy Rain Storm 	<ul style="list-style-type: none"> • Facility inoperable or cannot handle flows; • Safety and health issues • Potential pollution to adjacent waterways 	<ul style="list-style-type: none"> • Limits health and pollution risks • No interruption of essential services 	H and P
6	Sanitary Sewer Lines	Hope Street, Shore Road, Brookwood Drive, Everett Drive, Harrison Street, Viking Drive, King Philip Road, Wilcox Road and all roads along the Bike Path	Public - Town	<ul style="list-style-type: none"> • Flood • Hurricane • Nor'easter • Heavy Rain Storm 	<ul style="list-style-type: none"> • Safety and health issues from sewers backing up into dwellings • Potential pollution to adjacent waterways 	<ul style="list-style-type: none"> • Limits health and pollution risks • No interruption of essential services 	H and P

Town of Bristol - Risk Assessment Matrix Cont. – June 2009 as revised June 2010

Ranking	Vulnerable Areas	Location	Ownership	Natural Hazard	Primary Problems/Effects	Mitigation Benefits	Risk Historical = H Potential = P
7	Tree Damage	Town-wide	Public and private	<ul style="list-style-type: none"> Hurricane Windstorm Ice Storm Snow Storm Nor'easters Blizzard 	<ul style="list-style-type: none"> Tree damage causes downed power lines Lack of power and communication Loss of heat from loss of power Disposal of debris after storm Road Blockage Safety issue from downed lines 	<ul style="list-style-type: none"> Increase public safety Lower cost and time for recovery Maintain constant power during/after event Maintain communication systems Maintain heat during/after event Maintain access 	H and P
8	Inland Flood Areas	<ul style="list-style-type: none"> Areas along Silver Creek and west and east branches of the creek Areas along Tanyard Brook 	Public – Private	<ul style="list-style-type: none"> Hurricane Flood Nor'easter Heavy Rain Storm 	<ul style="list-style-type: none"> Upstream flooding resulting from restriction at mouth Silver Creek causing property damage Flooding resulting from Tanyard Brook causing property damage Town's DPW facility is located in flood plain of Tanyard Brook 	<ul style="list-style-type: none"> Decrease damage to structures 	H and P
9	Seawall at Bristol Harbor	Properties along Seawall	Public and Private	<ul style="list-style-type: none"> Hurricane Flood Nor'easter Flood with wave action 	<ul style="list-style-type: none"> Loss of property Threat to long-term ability of barriers to provide storm protection 	<ul style="list-style-type: none"> Reduce property loss Public Safety 	H and P
10	Emergency Shelter	Community Room at Franklin Court	Private and Public	<ul style="list-style-type: none"> Flood Hurricane Nor'easter Blizzard Ice Storm 	<ul style="list-style-type: none"> Shelter is not an "all hazards" shelter 	<ul style="list-style-type: none"> Increase public safety 	P
11	DPW Facilities	Public Works	Public - Town	<ul style="list-style-type: none"> Flood Hurricane 	<ul style="list-style-type: none"> If flooded, there is no other place to get diesel and gasoline to fuel police, fire, rescue and public works vehicles; and, No place to repair work vehicles needed for clean up 	<ul style="list-style-type: none"> No loss of service to police, fire, rescue and public works vehicles during storm event. 	H and P
12	Residential Homes	Town-wide	Private	<ul style="list-style-type: none"> Earthquake Hurricane Nor'easter Flood Blizzard 	<ul style="list-style-type: none"> Economic and social hardship Damage of Property Tree damage impacts dwellings 	<ul style="list-style-type: none"> Public safety Decrease damage to structures Prevent or minimize economic and social damage 	H and P
13	Dam	State Street Reservoir	Public	<ul style="list-style-type: none"> Hurricane Flood 	<ul style="list-style-type: none"> Damage of property downstream Economic hardship 	<ul style="list-style-type: none"> Prevent or minimize damage to property Decrease or eliminate economic hardship 	P
14	Nursing Homes and Elderly Housing And Medical Center	Silver Creek Nursing Home Elder Care 1 and 2 Franklin Court Asst.Living Bristol County Medical Center	Private	<ul style="list-style-type: none"> Hurricane Flood Nor'easter Blizzard Heavy Rain Storm 	<ul style="list-style-type: none"> Loss/damage of lives and property Need additional time for evacuation Elderly population dependent on electricity Loss of medical center services 	<ul style="list-style-type: none"> Public safety Expedite evacuation 	H and P
15	Historical Buildings	Historic District area along Thames Street	Public and Private	<ul style="list-style-type: none"> Hurricane Nor'easters Flood Eatthquake 	<ul style="list-style-type: none"> Economic and social hardship Loss of cultural resources 	<ul style="list-style-type: none"> Prevent or minimize economic and social damage Prevent or minimize loss of cultural resources 	H and P
16	Access points to large wooded areas	Mount Hope	Public and private	<ul style="list-style-type: none"> Fire 	<ul style="list-style-type: none"> Damage of property and lives Economic and social hardship 	<ul style="list-style-type: none"> Access to source of fires Prevent or minimize damage to property Decrease or eliminate economic hardship 	P

