Focus on South Quincy/Fore River—Mitigation Actions

Geographic Area	Hazard	Mitigation Action #	Lead Department	Additional Funding Sources	Approximate Cost	Timeframe	Consistency with Mitigation Goals	Consistency with other City Plans	Benefit Cost Review Rating	Priority Ranking
Citywide	Flood	Ongoing Salt Marsh Restoration & coordination with US Army Corps of Engineers	Parks & Forest- ry Dept/ DPW	CZM/ USAC- OE	\$	1-5 years	Increase resilience by protecting and enhancing natural resources	Open Space Plan	6	High
Citywide	Flood	Small MS4 Program - Drainage System O&M Plan includes invasive species removal	DPW	MassDEP	\$	2-4 years	Protect existing properties and structures	Stormwater Management Plan	5	Medium
Citywide	Flood	Evaluate use of Tree Filter Boxes in flood prone areas to improve stormwater infiltration	Parks and For- estry	MassDEP	\$	1-2 years	Increase resilience by protecting and enhancing natural resources	Stormwater Management Plan	5	Medium
Citywide	Flood	Ongoing Sea wall repairs	DPW	EOEA/ FEMA	\$\$\$	1-5 years	Protect existing properties and structures	Capital Improvement Plan	4	Medium
Citywide	Flood	Small MS4 Program - water quality retrofits	DPW	MassDEP	\$	3-5 years	Increase resilience by protecting and enhancing natural resources	Stormwater Management Plan	3	Medium
Citywide	Flood	Ongoing Retrofit and flood proof existing buildings subject to repetitive flooding	Planning	U.S. HUD/ FEMA	\$\$	1-5 years	Protect existing properties and structures	Community Rating System Plan	-1	Low
Citywide	Flood	Ongoing Property Acquisition	Mayor's Office	CPA/ Hotel- Motel Tax	\$	1-5 years	Protect the health and safety of the public	Open Space Plan	-1	Low
Citywide	Flood	Ongoing Elevate Repetitive Loss Structures	Planning	U.S. HUD/ FEMA	\$\$	1-5 years	Protect existing properties and structures	Community Rating System Plan	-3	Low
Citywide	Invasive Species	Develop and implement invasive species removal program	Parks and For- estry, DPW	CZ/ DCR	\$	1-5 years	Increase resilience by protecting and enhancing natural resources	Open Space Plan	11	High
Citywide	Winter Weath- er and Wind	Obtain additional equipment to improve ability to respond to tree removal from natural hazard events	Parks and For- estry	FEMA	\$\$	1-2 years	Ensure that essential services can function during and after a hazard event	Comprehensive Emergency Management Plan	13	High
South Quincy/ Fore River	Brush Fire	Ongoing Conduct outreach to residents about not dumping yard waste in or against the park wall for Faxon Park	Fire/ Emergen- cy Manage- ment		\$	1 year	Hazard Awareness	Open Space Plan	12	High
South Quincy/ Fore River	Brush Fire	Ongoing Installation of water pipes at Blue Hills Reservation and Faxon Park.	DPW		\$\$\$\$	1 year	Protect the health and safety of the public	Capital Improvement Plan	11	Medium
South Quincy/ Fore River	Flood	Water Street Drainage Improvements - Brook Road to Brewers Corner	DPW	CITY	\$\$\$\$	5 years	Protect existing properties and structures. Protect access to SW Middle school	Capital Improvement Plan	4	Medium
South Quincy/ Fore River	Flood	Ongoing Drainage improvements in the Penn's Hill Area	DPW	FEMA	\$\$\$\$	1-5 years	Protect existing properties and structures	Capital Improvement Plan	3	Medium

Squantum Point/Marina Bay –Flood Risk

Present and Future Flood Risk for Inland Community Assets

Community		Pre	sent aı	nd Hist	oric Flood Risk	Future Flood Risk		
Asset #	Community Asset		MA 10	0-year	Floodplain [1]	FEMA Base Flood		
		AO	AE	VE	Based Flood Elevation (NAVD 88)	Elevation plus 2 ft (NAVD88)	Other Flood Area-	
4	Child's View Day Care		Х		12	14		
15	Quincy Health Dept & Council on Aging		х		11	13		
59	Former Squantum Airfield Site		х		11	13		
107	Sewer Pump Station		х		12	14		
151	CVS		х		11	13		
242	QPS Bus Barn		Х		11	13		
243 252 262	Fallon Ambulance Boston Scientific Ayers Towing		X X X		10 11 11	12 13 13		
149	Squantum Yacht Club			х	16	18		
152	Marina Bay			Х	15	17		

Focus on Squantum Point/Marina Bay—Mitigation Actions

Geographic Area	Hazard	Mitigation Action #	Lead Department	Additional Funding Sources	Approximate Cost	Timeframe	Consistency with Mitigation Goals	Consistency with other City Plans	Benefit Cost Review Rating	Priority Ranking
Citywide	All Hazards	Revised Public Education-Provide additional op- portunities for City Staff Departments	Mayor's Office, DPW, Planning		\$	1 year	Hazard Awareness	Comprehensive Emergency Management Plan	13	High
Citywide	All Hazards	Revised- Emergency Power Generators will be added or improved as needed	DPW/ Emer- gency Manage- ment	FEMA	\$	1 year	Emergency Response to Hazards	Comprehensive Emergency Management Plan	13	High
Citywide	All Hazards	Evaluation of hurricane barrier to address Sea Lev- el Rise and increasing surge	DPW		\$	1-3 years	Protect existing properties and structures	Resilient Quincy	11	High
Citywide	All Hazards	Cloud Based Record Storage and Access System for Building Inspections	IT/ Inspectional Services		\$\$	1-2 years	Emergency Response to Hazards	Comprehensive Emergency Management Plan	11	High
Citywide	All Hazards	Discuss Climate Change Adaptation Plan with Stormwater Advisory Committee annually	DPW		\$	1 year	Planning for Future Development	Stormwater Management Plan	10	Medium
Citywide	All Hazards	Ongoing analysis to consolidate Emergency Com- munications System	IT/ Emergency Management		\$	1 year	Emergency Response to Hazards	Comprehensive Emergency Management Plan	10	Medium
Citywide	All Hazards	Maintain Comprehensive Emergency Manage- ment Plan	Emergency Management		\$	1-2 years	Emergency Response to Hazards	Comprehensive Emergency Management Plan	9	Medium
Citywide	All Hazards	Incorporate coastal management staff and re- sources into the proposed Natural Resource De- partment	Parks and For- estry		\$\$	1-2 years	Increase resilience by protecting and enhancing natural resources	Comprehensive Emergency Management Plan/ Open Space Plan	9	Medium
Citywide	Coastal Erosion	Maintain coastal buffers to stabilize shorelines	Parks and For- estry	DCR CZM MVP	\$\$	1-3 years	Increase resilience by protecting and enhancing natural resources	Open Space Plan	3	High
Citywide	Earthquakes	Revised Seismic impact evaluation and gas utility study.	Public Build- ings Depart- ment		\$	3-5 years	Protect the health and safety of the public	Comprehensive Emergency Management Plan	11	High
Citywide	Flood	Sewer Interceptor Relief for Downtown- Burgin Parkway	DPW	SRF	\$\$\$\$	3-5 years	Protect existing properties and structures	Capital Improvement Plan	9	High
Citywide	Flood	Ongoing Tide-gate management plan- annual cost	DPW/ Inspec- tional Services	EOEA/ FEMA	\$	1-2 years	Protect existing properties and structures	Stormwater Management Plan	9	High
Citywide	Flood	Incorporate Climate Change Adaptation Plan into HMP	Planning	FEMA	\$	1-2 years	Protect existing properties and structures	Quincy Resilient Plan	8	High
Citywide	Flood	Purchase high capacity mobile pumps	DPW	FEMA	\$\$\$\$	1-2 years	Protect existing properties and structures	Stormwater Management Plan	6	High

Focus on Squantum Point/Marina Bay—Mitigation Actions

Geographic Area	Hazard	Mitigation Action #	Lead Department	Additional Funding Sources	Approximate Cost	Timeframe	Consistency with Mitigation Goals	Consistency with other City Plans	Benefit Cost Review Rating	Priority Ranking
Citywide	Flood	Ongoing Salt Marsh Restoration & coordination with US Army Corps of Engineers	Parks & Forest- ry Dept/ DPW	CZM/ USAC- OE	\$	1-5 years	Increase resilience by protecting and enhancing natural resources	Open Space Plan	6	High
Citywide	Flood	Small MS4 Program - Drainage System O&M Plan includes invasive species removal	DPW	MassDEP	\$	2-4 years	Protect existing properties and structures	Stormwater Management Plan	5	Medium
Citywide	Flood	Evaluate use of Tree Filter Boxes in flood prone areas to improve stormwater infiltration	Parks and For- estry	MassDEP	\$	1-2 years	Increase resilience by protecting and enhancing natural resources	Stormwater Management Plan	5	Medium
Citywide	Flood	Ongoing Sea wall repairs	DPW	EOEA/ FEMA	\$\$\$	1-5 years	Protect existing properties and structures	Capital Improvement Plan	4	Medium
Citywide	Flood	Small MS4 Program - water quality retrofits	DPW	MassDEP	\$	3-5 years	Increase resilience by protecting and enhancing natural resources	Stormwater Management Plan	3	Medium
Citywide	Flood	Ongoing Retrofit and flood proof existing buildings subject to repetitive flooding	Planning	U.S. HUD/ FEMA	\$\$	1-5 years	Protect existing properties and structures	Community Rating System Plan	-1	Low
Citywide	Flood	Ongoing Property Acquisition	Mayor's Office	CPA/ Hotel- Motel Tax	\$	1-5 years	Protect the health and safety of the public	Open Space Plan	-1	Low
Citywide	Flood	Ongoing Elevate Repetitive Loss Structures	Planning	U.S. HUD/ FEMA	\$\$	1-5 years	Protect existing properties and structures	Community Rating System Plan	-3	Low
Citywide	Invasive Species	Develop and implement invasive species removal program	Parks and For- estry, DPW	CZ/ DCR	\$	1-5 years	Increase resilience by protecting and enhancing natural resources	Open Space Plan	11	High
Citywide	Winter Weath- er and Wind	Obtain additional equipment to improve ability to respond to tree removal from natural hazard events	Parks and For- estry	FEMA	\$\$	1-2 years	Ensure that essential services can function during and after a hazard event	Comprehensive Emergency Management Plan	13	High
Squantum Point	Coastal Erosion	Bayside Road slope protection and infrastructure hardening design, permitting & construction	DPW	EOEA/ FEMA	\$\$	3-5 years	Protect existing properties and structures	Capital Improvement Plan	4	High
Squantum Point	Coastal Erosion	Squantum Seawalls Design Permitting & Construc- tion	DPW	EOEA/ FEMA	\$\$\$\$	3-5 years	Protect existing properties and structures	Capital Improvement Plan	-1	Low
Squantum Point	Flood	East Squantum/ Dorchester Streets Drainage Hy- draulic Model	DPW	SRF	\$\$	1-2 years	Protect existing properties and structures	Capital Improvement Plan	9	High

Meeting Agenda

ATTENDEES:	Quincy Municipal Vulnerability Preparedness Community Resilience Building Workshop #2	
LOCATION:	Quincy City Hall	
DATE:	May 14, 2019	
START TIME:	5:30 PM	
5:30 PM	Sign in, Refreshments	
5:30 PM	Individual Map Excercise	
6:10 PM	Group Introductions	Table groups
6:15 PM	Session 1: Introduction, Natural Hazard Risks and Climate Change	Tighe & Bond
6:30 PM	Table Discussion #1 Identifying Risk Area and Community Strengths	Table groups
6:45 PM	Session 2: Mitigation Strategies for Vulnerable Assets	Tighe & Bond
7:00 PM	Table Discussion #2 Identify Actions to Address Vulnerabilities or Protect Strengths	Table groups
7:20 PM	Short Break	
7:30 PM	Large Group Discussion #3 Small group report out to full group on top 3-5 actions	Table groups
8:00 PM	Wrap up and closing remarks	
8:30 PM	Adjourn	



DEPARTMENT OF PLANNING & COMMUNITY DEVELOPMENT

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JAMES J. FATSEAS Director

THOMAS P. KOCH Mayor

Quincy MVP Workshop #2 May 14, 2019

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Jon Lanhan	Father Bills	Slanham@helptons.org
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PLANNING DATE OF THE STREET

DEPARTMENT OF PLANNING & COMMUNITY DEVELOPMENT

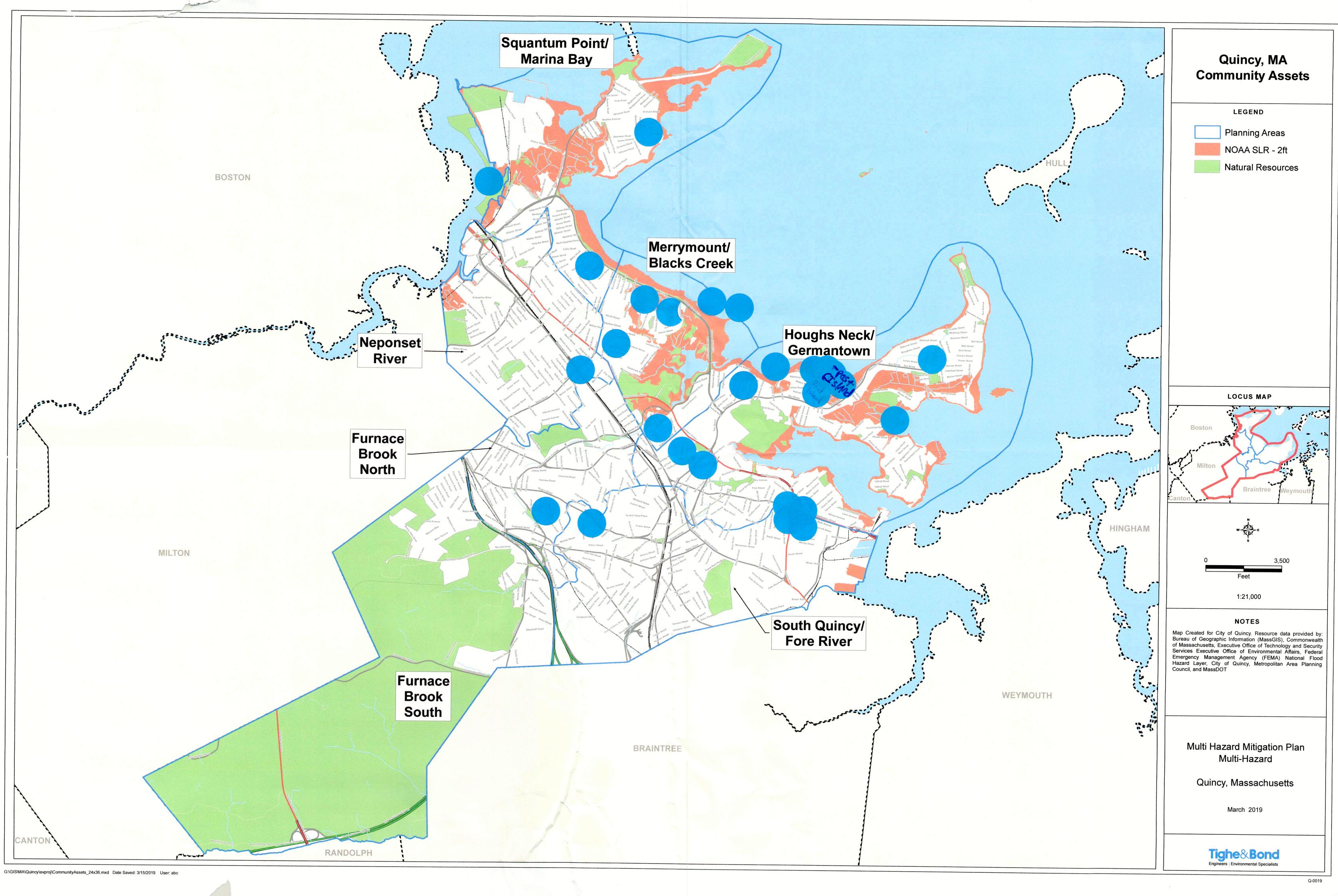
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JAMES J. FATSEAS Director THOMAS P. KOCH Mayor

Quincy MVP Workshop #2 May 14, 2019

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Kory Eng	QCAN	King Q QCAP. CKL
Rub Carley	NHS	r.colle ONWSANA.ors
Donna Ackein	NAS	Colle ONWSANA.03 d.ackermano
DAVID LOUGHUNG	NUS	D. LOVERING @ NWSOM A. OKC
Jonathan Boie	Post Island	jbe prplusa.com
Tim Dehert,	NHS	
Tim Cahill	Quy Chambersf Comme	e Tcahill@ The quiny chamber. com



Quincy Community Assets- Strengths and Vulnerabilities

Individual Mapping Exercise: The purpose of this mapping exercise is to allow workshop participants to take a fresh look at the 326 community assets that were identified in the Quincy 2019 Hazard Mitigation Plan and see which locations should be counted at the top for assets that providing a significant strength to the community in the face of natural hazards. The mapping exercise also asks participants to consider which assets or locations in Quincy are most vulnerable to natural hazards^{*}.

What is a Community Asset? Community asset as anything that is important to the character and function of Quincy. Community assets are split up into four different categories: People, Economy, Built Environment, and Natural Environment described below.

Community Asset Categories	Critical Sectors	Characteristics of Community Assets
People	Schools, Vulnerable Populations, Cultural Facilities, Cultural Resources	Areas of greater population density, or population with unique vulnerabilities or less able to respond and recover during a disaster.
Built Environment	Critical Municipal Facilities, Water, Wastewater, Energy, Stormwater, Transportation,	Critical facilities necessary for a community's response to and recovery from emergencies, infrastructure critical for public health and safety, economic viability, or needed for critical facilities to operate.
Economy	Marinas, Business District, Food and Drug Supplies,	Major employers, primary economic sectors and commercial centers where loss or inoperability would have severe impact on the community and ability to recover from a disaster.
Natural Environment	Natural Resources	Areas that provide protective function to reduce magnitude of hazard impact and increase resiliency. Areas of sensitive habitat that are vulnerable to hazard events, protection of areas that are important to community objectives, such as the protection of sensitive habitat, provide socio-economic benefits, etc.

PLEASE USE YOUR DOTS AND POST-ITS TO COMPLETE THE FOLLOWING:

Question #1: Which community assets are most important to you?

Directions: Put green dot on the asset, write asset name on post it and note why you made this choice on the back.

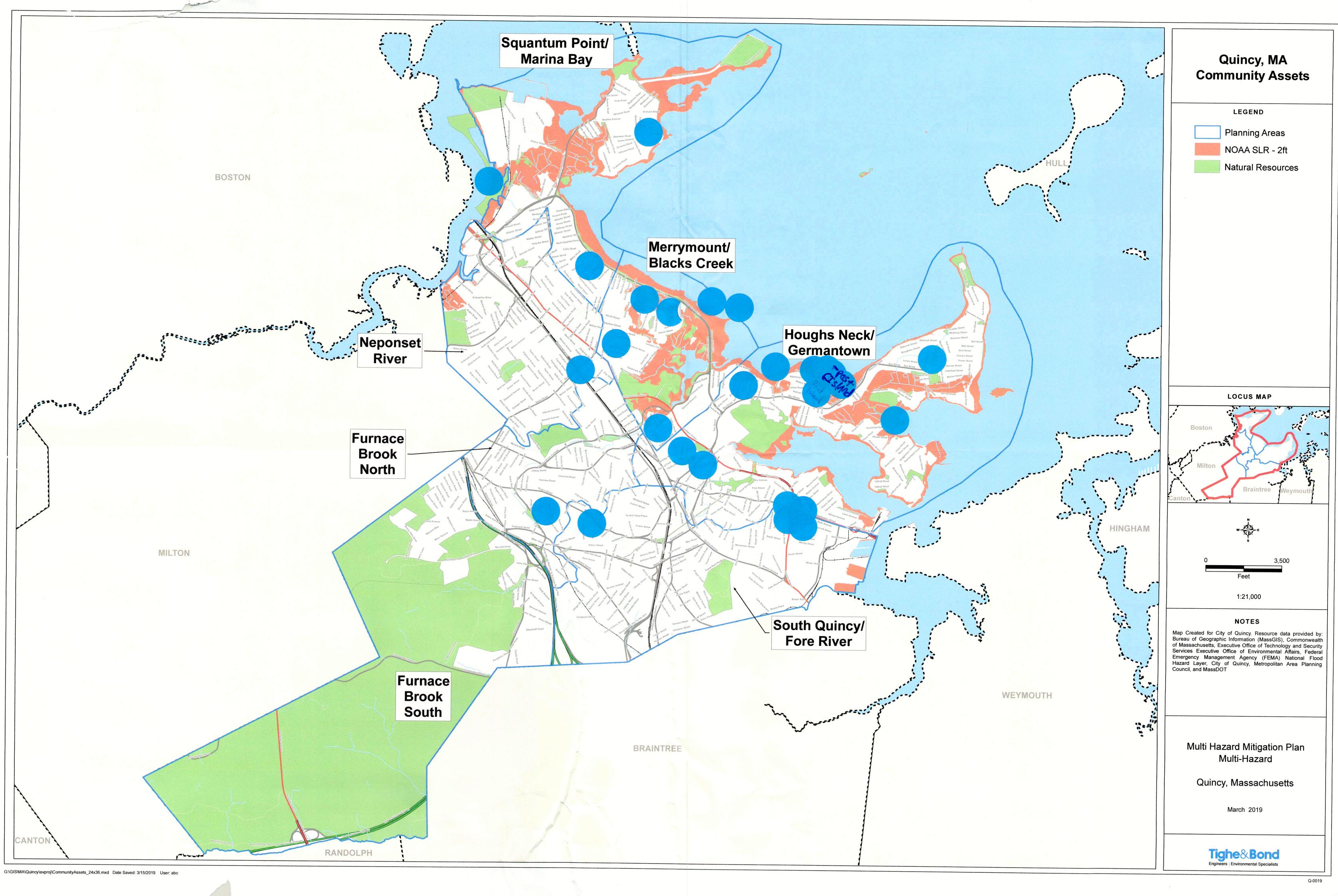
Question #2: In your experience, which community assets are most vulnerable to natural hazards*?

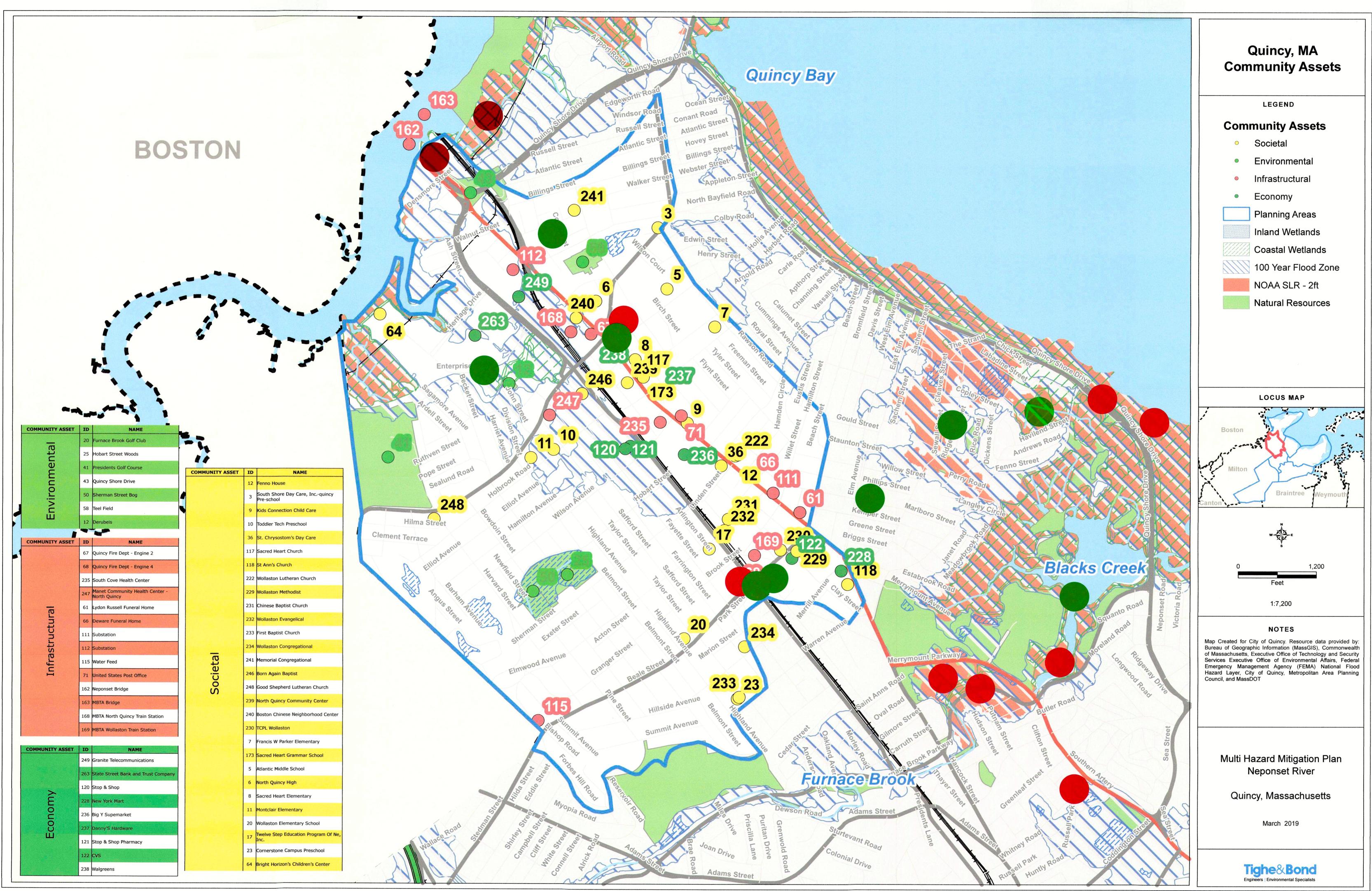
Directions: Put a red dot on the asset or area, write asset/area name on post it and note why you made this choice on the back.

*Natural Hazards: inland and coastal flooding, extreme winter weather & nor'easters, coastal erosion

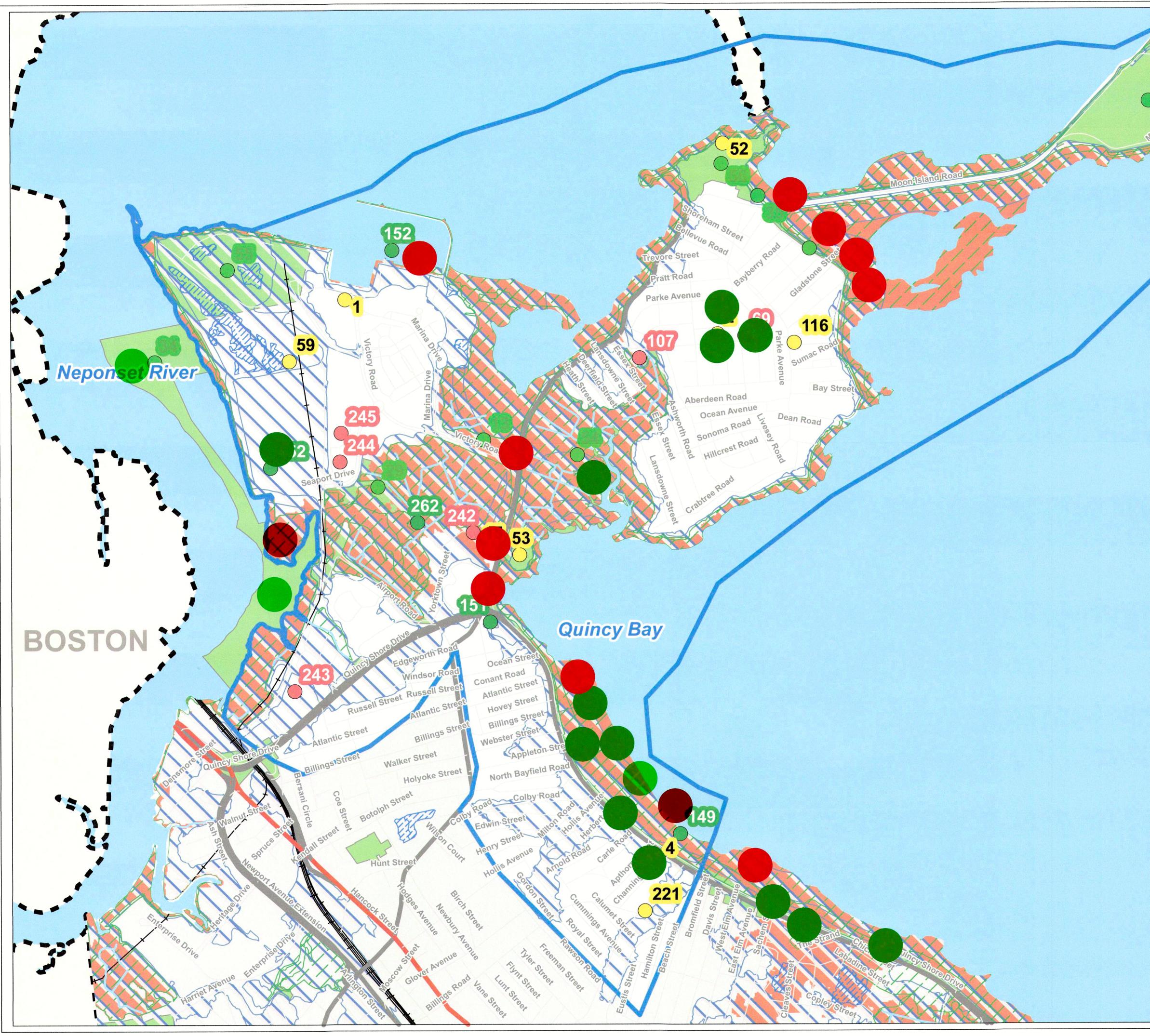


APPENDIX C



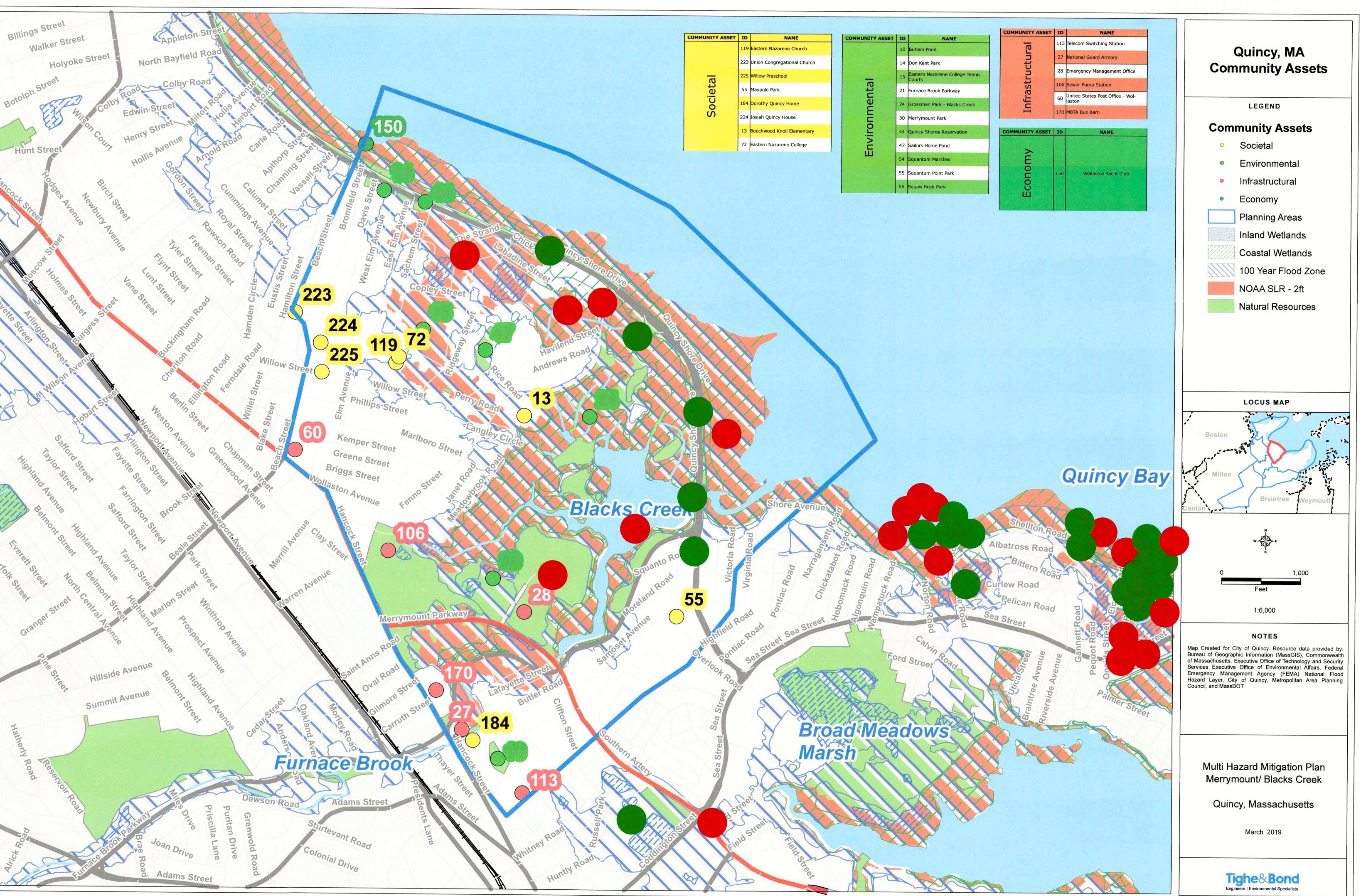


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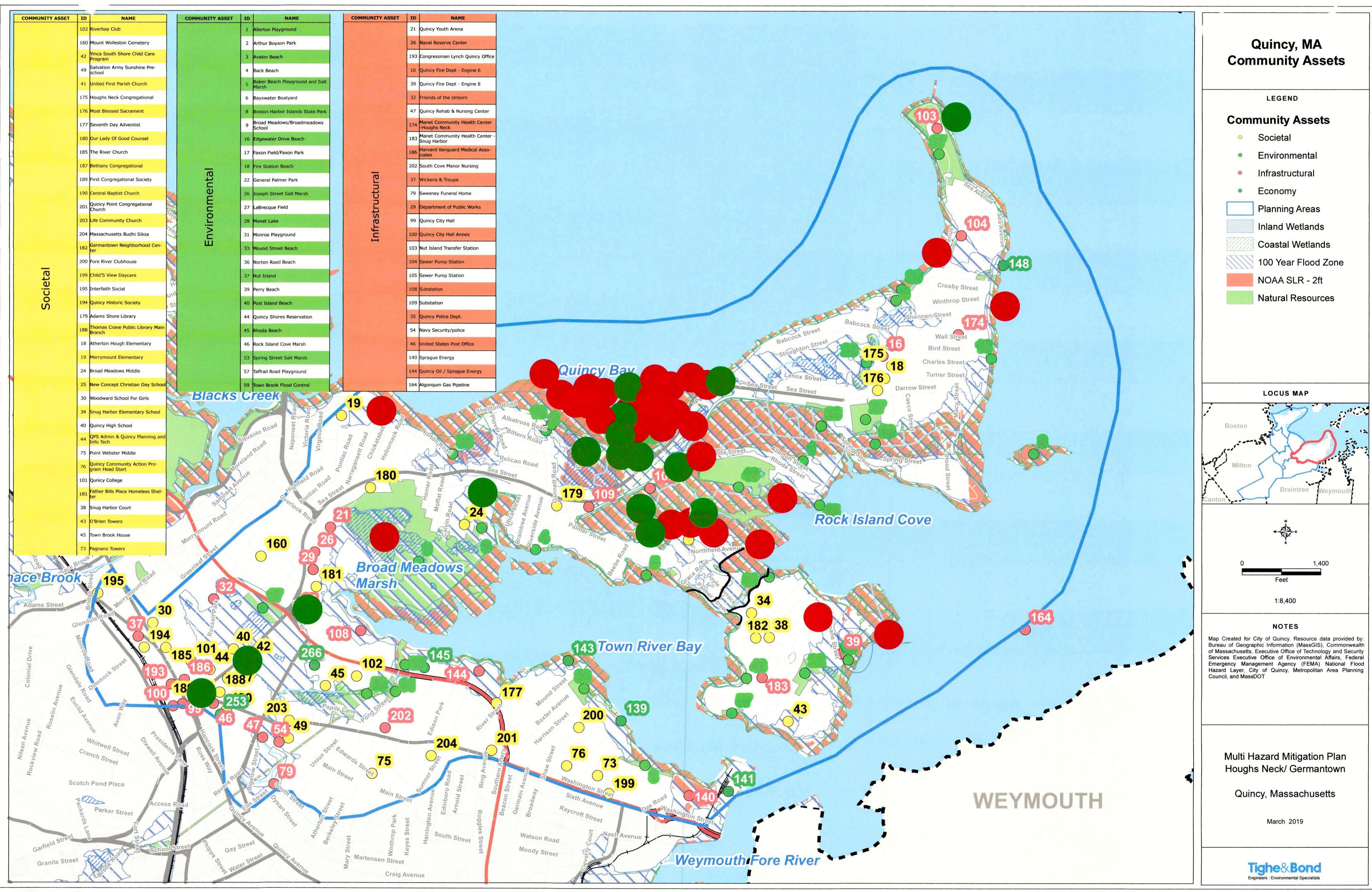


			Againcy, MA Community Assets LEGEND Descental Societal Societal Infrastructural Infrastructural Planning Areas Inland Wetlands Coastal Wetlands Ioo Year Flood Zone NOAA SLR - 2ft Natural Resources
	4 116 221 52 53 59 2	NAMEJack N' Jill Chid Care At Marina BayJack N' Jill Chid Care At Marina BayChild's View DaycareFirst Church SquantumQuincy Crisis Center IncMyles Standish CairnMoswetuset HummockFormer Squantum Airfield SiteSquantum ElementaryKennedy Center, Council on Aging	LOCUS MAP Boston Milton Braintree Weymouth
Environmental	14 29 32 34 35 38 43 54 55 55	NAMEDickinson WaterfrontDon Kent ParkMarina Bay Conservation AreaMoon IslandNeponset River ReservationNickerson BeachOrchard BeachQuincy Shore DriveSquantum MarshesSquantum Point ParkSquaw Rock Park	0 1,200 Feet 1:7,200 NOTES Map Created for City of Quincy. Resource data provided by: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services Executive Office of Technology and Security Services Executive Office of Environmental Affairs, Federal Emergency Management Agency (FEMA) National Flood Hazard Layer, City of Quincy, Metropolitan Area Planning Council and MassDOT
Infrastructural Infrastructural	243 244 245 107	NAME Quincy Fire Dept - Engine 7 Brewster Ambulance Alliance Health Marina Bay Atria Marina Bay Sewer Pump Station Quincy Public School Bus Barn	Council, and MassDOT Multi Hazard Mitigation Plan Squantum Point/ Marina Bay
Economy	149 152 151	Fallon Ambulance Squantum Yacht Club Marina Bay CVS Ayers Towing	Quincy, Massachusetts March 2019

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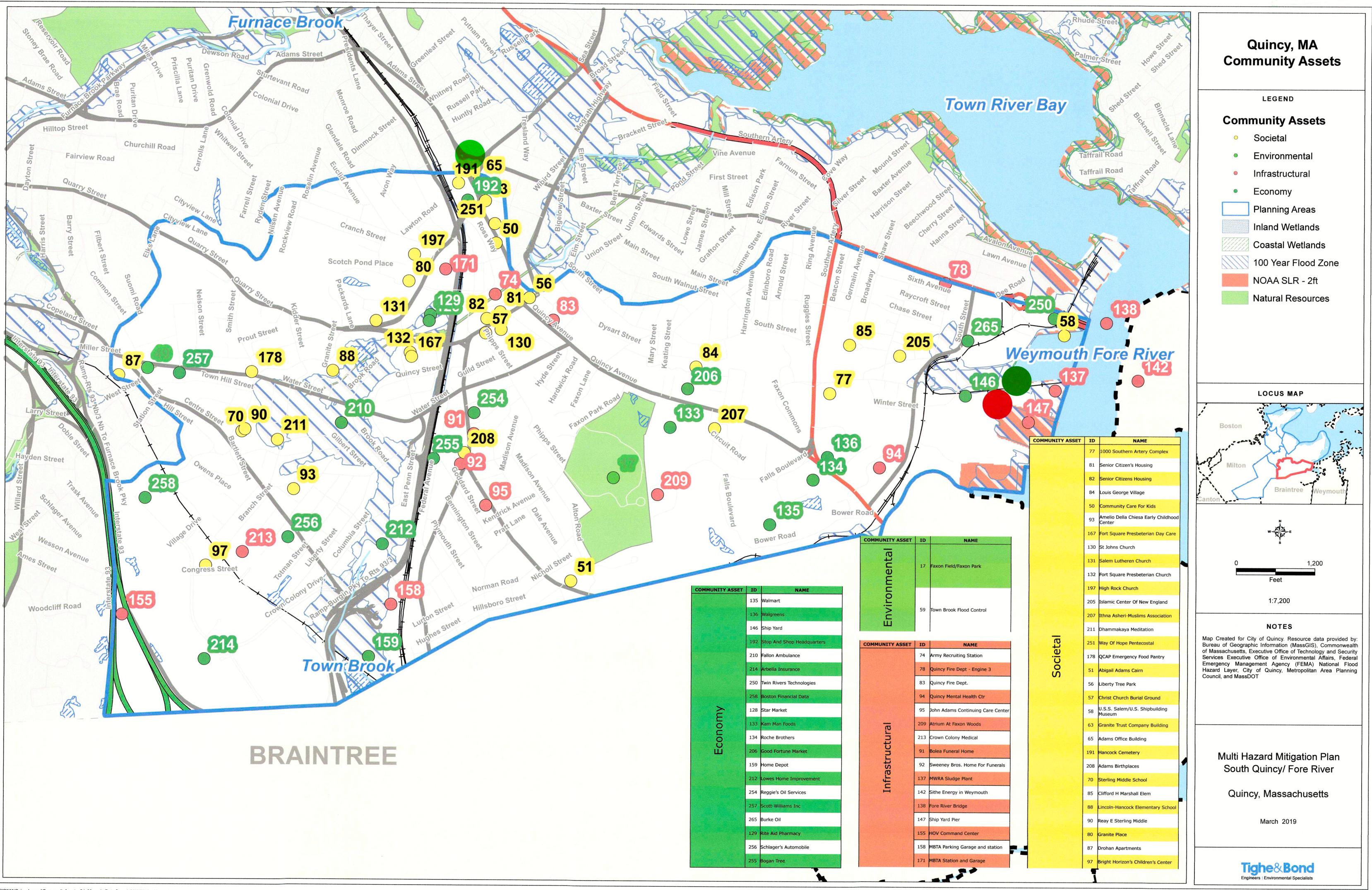
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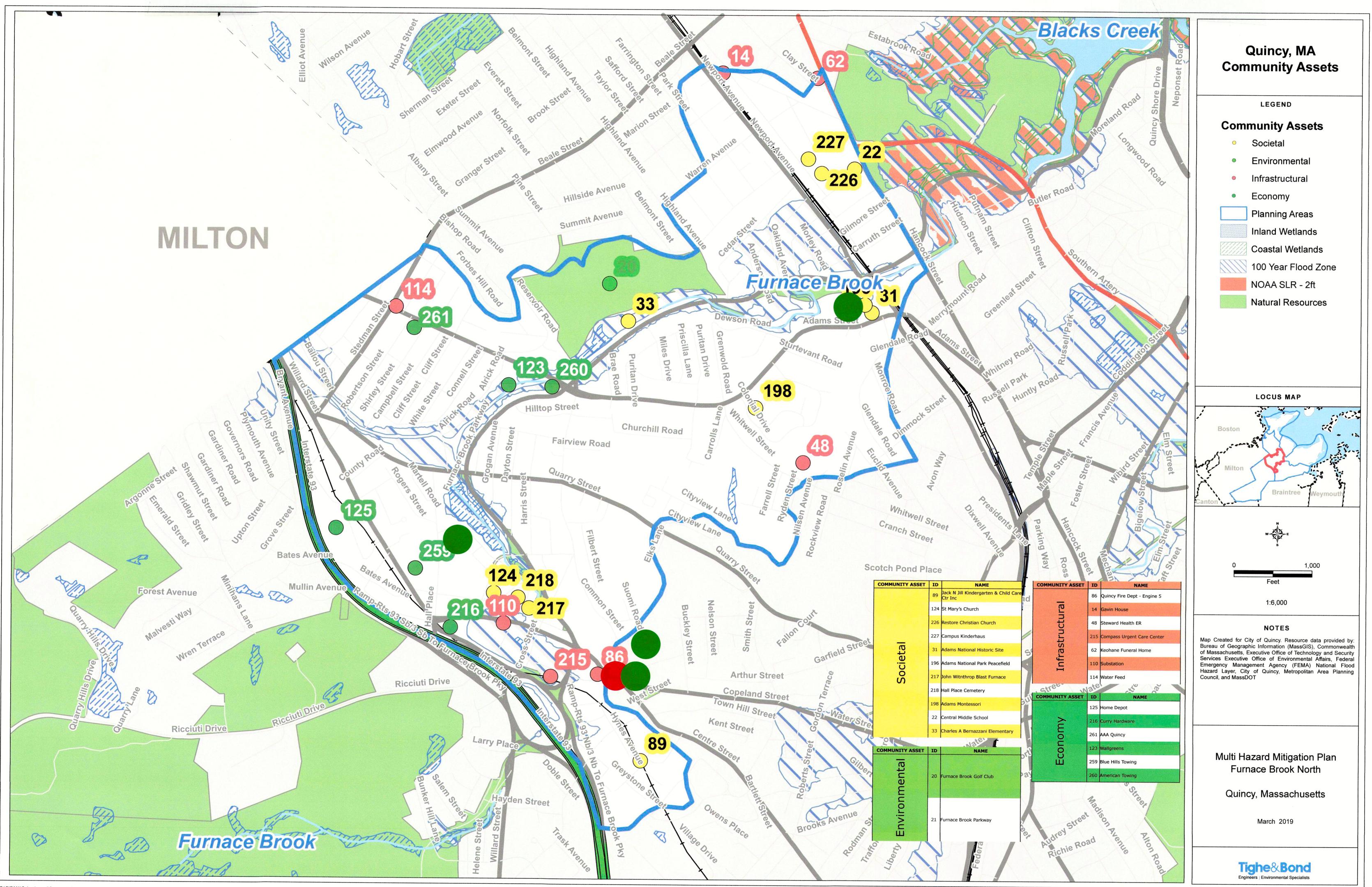
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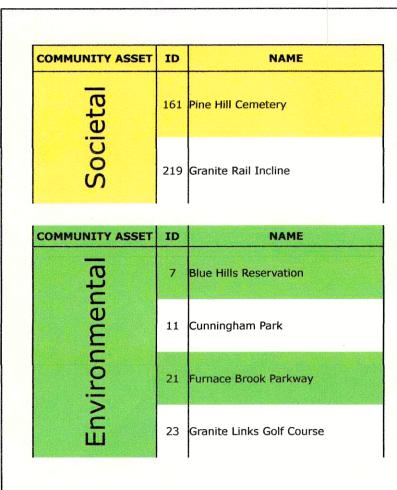
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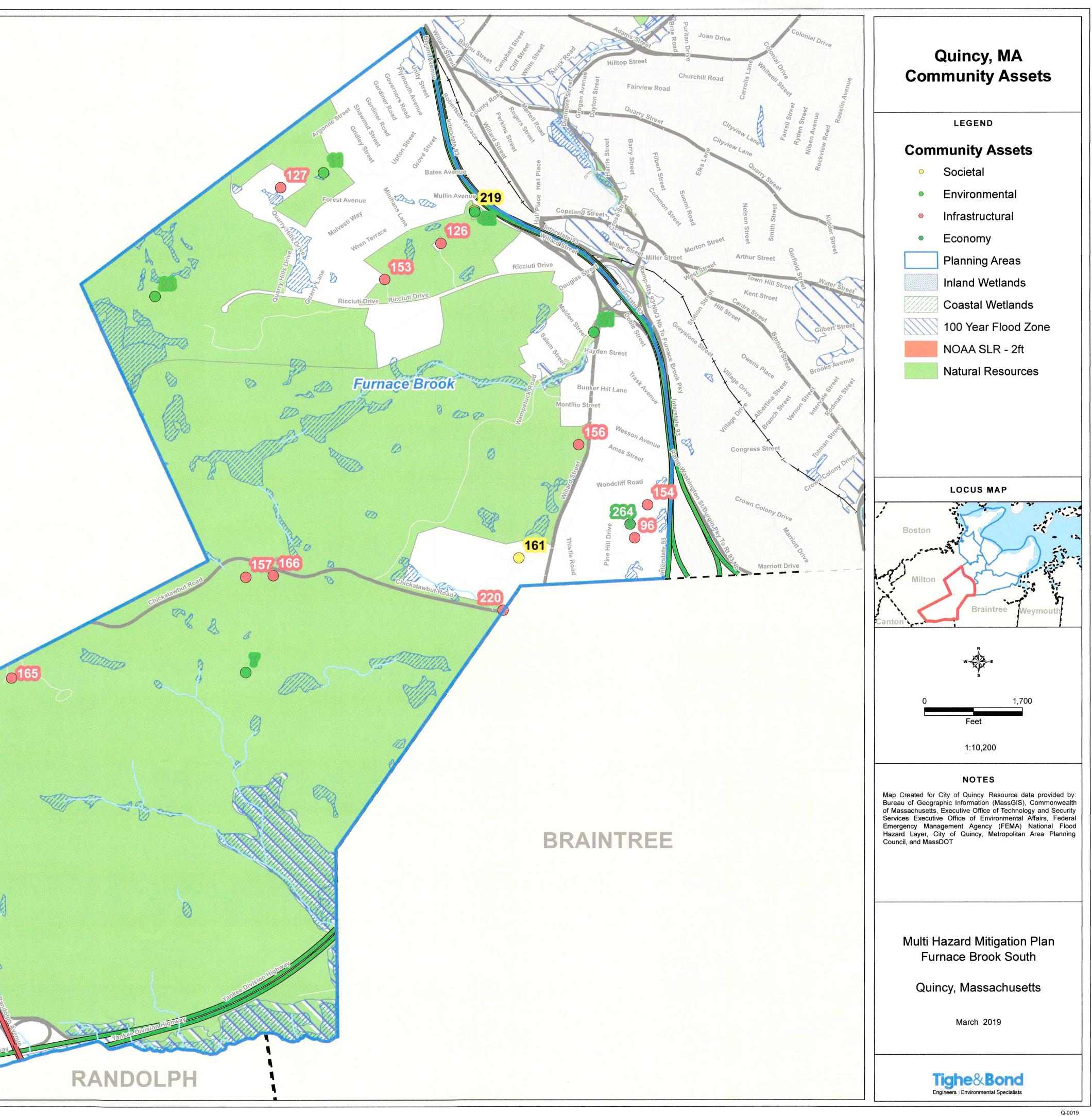
COMMUNITY ASSET	ID	NAME
		Shea Memorial Skate Rink
	126	Verizon Microwave Cell Tower
-	127	Dirico Cell Tower
nra	96	Federal Communications Commis-
nct	153	Stand Pipe Ricciuti Drive
str	154	Woodcliff Road Stand Pipe
Infrastructural	157	Mass Water Reservoir
	166	Mass Water Dam
	165	Algonquin Gas Pipeline
	220	HOV Lane
COMMUNITY ASSET	ID	NAME
Economy	264	National Fire Protection

MILTON

AD

12

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APPENDIX D

Community Resilience Bu	uilding Risk Matrix)		www.CommunityResilienc	eBuilding.org		
<u>H-M-L</u> priority for action over the <u>S</u> hoi	rt or <u>L</u> ong term (and <u>U</u> ngoing)			Quincy's Top Priority Hazards				Priority	Time
$\underline{\mathbf{V}}$ = Vulnerability $\underline{\mathbf{S}}$ = Strength			1		g Coastal Flooding & Erosion				
Assets	Location	Ownership (City, State, Federal, Private)	V or S	Inland Flooding		Nor'easter	Severe Winter Weather	<u>H</u> - <u>M</u> - <u>L</u>	<u>S</u> hort <u>L</u> ong <u>O</u> ngoing
	Complete for No	ew Assets Only							
Infrastructural		-							
Road Access/Transportation Corridors	Citywide	City/State	v	mprove access during emergencies and severe weather events; Establish alternative routes and emergency alternative means of transportation; Increase culvert size at main corridors hroughout City					0/S
, . 				Improve Stormwater Management	Install Pump Stations or purchase mobile pumps	3			,
East Squantum Street	East Squantum Street	City	v		Ongoing maintenance and repairs to seawall; On	going clearing of debris from road		М	L
Sea Street Access	Sea Street	City	V	Backup Generator; MWRA Sewer Easement Acco	ess, develop hydraulic model, Sea Street Seawall R	Rehab and Enhancement for greater protection	1	Н	S
Terne Road Access	Terne Road	City	V		Analysis for Construction of Pump Station or use	of mobile pumps; Assessment of Tide gates		Н	S
	Storm		Storm Drain Maintenance	Salt Marsh restoration; Ongoing tide gate repair Creek Tide Gate project; Sand Removal	and maintenance; ongoing seawall repair and	l maintenance; Increase seawall height; Blacks			
Quincy Shore Drive	Quincy Shore Drive	DCR	V/S	Alternative Route Planning; Ongoing maintenance and clearing of debris along road; Allocate funding to maintenance and improvements of Quincy Shore Drive; Conduct Analysis of Loca and Feasibility study for elevating residential homes on Quincy Shore Drive; Mosquito spraying; control of invasive species; Sand Removal;				H	0
Post Island Road Neighborhood	Post Island Road	City/Private	V/S	Emergency Backup Generators; Georges Island S Street; Perform dike assessment	Seawall Analysis; Pump Station/mobile Pump Ana	lysis; Construct new seawall; Evaluate living s	shoreline; Increase capacity of culverts on Sea	H/M	0/S
Neponset Bridge	Neponset Ave	City	v		Salt Marsh Restoration; Sagamore Creek Tide Ga	te; Division Street Pump Station Repairs		н	L
Squantum Point Ferry Pier	552 Victory Road	City	V/S		Breakwater			L	0
Squantum Isolation	Squantum Neighborhood	City/Private	v	Increase culvert size				Н	0
MBTA Stations & Access	Citywide	State	S	Improve Stormwater management and Construct	ction of Stormwater Pumping Stations/Purchase o	of mobile Pumping Stations		Н	L
MBTA Bus Barn	Hancock Street	State	V/S	Maintain up to date SPCC Plan; Maintain fleet fo	r use in case of emergencies			м	0
			.,.	Retrofit Bus Barn for flooding and elevate roads			Retrofit site to sustain severe winter weather		
Light & Power for Evacuation Routes	Citywide	N/A	v	Provide emergency power to light evacuation ro	outes			Н	S
Access to Emergency Services	Citywide	N/A	v	Maintain Comprehensive Emergency Manageme Stormwater Management	ent Plan; Provide additional Public Education; Esta	ablish an Emergency Notification and Warning	g System to Resident's Cell Phones; Improve	Н	0
Emergency Management Office	1 Merrymount Pkway	City	S	Maintain Equipment in case of emergency; Gene	erator upgrades; Maintenance of Vehicles/Fleet; Si	ite Floodproofing		Н	0/S
Quincy Fire Dept - Engine 5	182 Copeland Street	City	S	Maintenance of Equipment; Adequate Staffing; C	Ongoing Public Education and Emergency Alert Sys	stem		Н	0

Community Resilience Bu	ilding Risk Matrix)		www.CommunityResilienc	eBuilding.org		
<u>H</u> - <u>M</u> - <u>L</u> priority for action over the <u>S</u> hort	or <u>Long term</u> (and <u>Ungoing</u>)		-	Quincy's Top Priority Hazards				Priority	Time
$\underline{\mathbf{V}}$ = Vulnerability $\underline{\mathbf{S}}$ = Strength									
Assets	Location	Ownership (City, State, Federal, Private)	V or S	Inland Flooding	Coastal Flooding & Erosion	Nor'easter	Severe Winter Weather	<u>H - M - L</u>	<u>S</u> hort <u>L</u> ong <u>O</u> ngoing
	Complete for New	w Assets Only]					
Infrastructural (continued)									
Germantown Fire Station	126 Doane Street	City	v	Provide medical services in emergencies at fire s	stations; Relocate fire station to higher ground; En	hance seawall along Palmier Street		Н	L
Compass Urgent Care Center	54 Miller Street	Private	S	Miller/Cross/Furnace Stormwater Control Statio	/Cross/Furnace Stormwater Control Station				0
National Guard Armory	1000 Hancock Street	Federal	V/S	Maintain and protect Fleet for use during emerg	ain and protect Fleet for use during emergency; Move fleet to high ground before possible flooding				
Spring Street Tide gate	Spring Street	City	V		Ongoing tide gate management; Inspection Protocol; Automation of tide gate				0
Tide Gates	Citywide	City	V	Alert/Notification System when Tide gates are in need of maintenance or repair; Replace tide gates				Н	L
Greenburg Bridge Tide Gate	Phillip Greenberg Bridge	City	S		Replace Tide Gate			М	S
Upper Black Creek Culvert	Blacks Creek Neighborhood	City	S	Increase capacity of culverts; Replace tide gates	in Blacks Creek Area			Н	S
Seawalls	Citywide	City/Private	V	Increase height of seawalls and improve drainag	e on opposite side of seawall			Н	L
	P 0	<i>c</i>		Rehabilitate pump station; Conduct ongoing mai	ntenance; Equip with Emergency Backup Generat	or			
Sewer Pump Station	Fenno Street	City	V	Retrofit Pump station for flooding				— Н	0
Division Street Pump Station	Citywide	City	S	Repairs to Pump Station; Equip with Emergency	Backup Generator			М	L
Nut Island Treatment Plant	Nut Island	State	V	Coordinate with MWRA to ensure preparedness	and functionality;			Н	L
Storm Drain System	Citywide	City	V	Sewer/Storm Drain separation; Maintenance of	outfalls and catch basins; Regulations requiring st	ormwater retention for new developments		Н	L
				Back Up Generator					_
Copeland Street National Grid Substation	278 Copeland Street	Private	V	Miller/Cross/Furnace Stormwater Control Statio	n			— Н	0
Brewers Corner	Brewers Corner Neighborhood	City/State/Fed	v	Stormwater Drainage Improvements				Н	L

Community Resilience Building Risk Matrix www.CommunityResilienceBuilding.org									
H M L priority for action over the Short or Long form (and Ungoing)			Quincy's Top Priority Hazards						
<u>H-M</u> - <u>L</u> priority for action over the <u>S</u> hort or <u>L</u> ong term (and <u>U</u> ngoing) <u>V</u> = Vulnerability <u>S</u> = Strength							Priority	Time	
Assets	Location	Ownership (City, State, Federal, Private)	V or S	Inland Flooding	Coastal Flooding & Erosion	Nor'easter	Severe Winter Weather	<u>H</u> - M - L	<u>S</u> hort <u>L</u> ong <u>O</u> ngoing
	Complete for New	w Assets Only							
Societal									
Jack n Jill Daycare	39 Station Street	Private	V	Pre-closure and evacuation prior to severe storm	re-closure and evacuation prior to severe storms or emergencies				S
Schools - Citywide	City-wide	City	V/S	Emergency Response Planning; Maintain Compr	mergency Response Planning; Maintain Comprehensive Emergency Management Plan; Emergency Notification/Communication System				0
Bernazzi Elementary School	701 Furnace Brook Pkwy	City	V/S	Maintenance of stream bed and removing debris	Flood Barrier			Н	0
Beachwood Knoll School	225 Fenno Street	City	V/S	torm Drain Maintenance Blacks Creek Tide Gate Project; Marsh Preservation and Restoration; Invasive Species Management			н	0	
Broadmeadow Elementary School	120 Broad Meadow Road	City	V	Emergency Response Planning; Maintain Comprehensive Emergency Management Plan; Ensure fully functional as an emergency shelter; Equip with backup emergency generator; Emergency Notification/Communication System; Mosquito prevention; Elevate electrical system					S
North Quincy High School	316 Hancock Street	City	V	Emergency Response Planning; Maintain Comprehensive Emergency Management Plan; Ensure fully functional as an emergency shelter; Equip with backup emergency generator; Emergency Notification/Communication System				Н	0
Eastern Nazarene College	23 East Elm Ave	Private	V/S	ducate Public and Residents and provide with Emergency Warning or Notification System; Ongoing seawall maintenance				М	0
Quincy Libraries	Citywide	City	V	Improve Stormwater Management				Н	0
Historic Properties	Citywide	City/State	V/S	Protect historic properties; expand stream beds adjacent to historic properties				Н	L
Interfaith Social Services	105 Adams Street	Private	S	Maintain food supplies in case of emergencies; Backup Emergency Generator				М	0
Kennedy Center (Quincy Council on Aging)	440 E Squantum Street	City	V/S	Retrofit existing building to withstand flooding and Nor'easters				Н	0
Low Income Housing	Citywide	City	V	Help access services & federal support funds after emergency/severe weather event; Train City staff on how to respond and direct to services; improve stormwater drainage				Н	L/S
Homeless Shelters	Citywide	City/Private	V	Assist vulnerable populations during emergencies and severe weather events; Help access services & federal support funds after emergency/severe weather event; Train City staff on how to respond and direct to services				М	0
Vulnerable Populations	Citywide	N/A	V	Develop and maintain a list of vulnerable residents; Help access services & federal support funds after emergency/severe weather event; Train City staff on how to respond and direct to services				H/M	I/S
Quincy Yacht Club	1310 Sea Street	Private	V		Rebuild Sea Ave Seawall and floodproof Yacht Cl	ub		L	L

Community Resilience E	Building Risk Matrix			www.CommunityResilienceBuilding.org						
<u>H-M-L</u> priority for action over the <u>Short or Long term (and Ungoing)</u>				Quincy's Top Priority Hazards				Priority	Time	
$\underline{\underline{V}} = Vulnerability \underline{\underline{S}} = Strength$							Thorney			
Assets	Location	Ownership (City, State, Federal, Private)	V or S	Inland Flooding	Coastal Flooding & Erosion	Nor'easter	Severe Winter Weather	<u>H</u> - <u>M</u> - <u>L</u>	<u>S</u> hort <u>L</u> ong <u>O</u> ngoing	
	Complete for Ne	w Assets Only								
Environmental										
Terne Road Salt Marsh	Terne Road	City	V/S		Tide gate enhancement; Seawall Rehab on Sea St	treet; Marsh expansion/restoration		Н	S	
Squantum Marshes	Squantum Neighborhood	City	V/S		Salt Marsh Restoration; Use Restrictions; Maintain buffer zone around marshes; Tide gate enhancement			M/H	L	
Princess Eve Marsh	Princess Eve Drive	City	V/S	Increase capacity of culverts; Replace Tide Gates in Princess Eve Marsh; Marsh expansion/restoration				Н	S/L	
Post Island Marsh Post Island R			V/S	Install pump stations or purchase mobile pumps; Increase capacity of culverts						
	Post Island Road/Sea Street	City			Replace tide gates in Post Island Marsh; Marsh expansion/restoration			Н	0/L	
Public Waterfront & Parks	Citywide	City	V/S	Improve drainage	Enhance seawall height and depth; Prevent coas	tal erosion; Maintain coastal banks;		L	L	
Wollaston Beach	Quincy Shore Drive	City	S	Improve Stormwater Management				М	L	
Orchid Beach	Bayside Road	City	V/S		Salt Marsh Restoration; Use Restrictions			L	0	
Norton Road Beach	Norton Road	City	v		Seawall Rehab on Sea Street			Н	S	
Dickinson Waterfront	Victory Road	City/Private	V/S		Salt Marsh Restoration; Use Restrictions			L	0	
Butlers Pond	Butler Road	City	V/S	Tree Filter boxes at catch basins; Dredge pond; Control invasive species				Н	0	
Wetlands	Citywide	City	V/S	Cleanup of Oil from floating booms in wetlands				Н	S	
Furnace Brook Pkwy	Europeo Brook Digur	City	v	Mosquito Control; Establish Alternative Routes			Н	0		
	Furnace Brook Pkwy			Maintenance of Stream Bed	Blacks Creek Tide Gate Project			Н	0	
Furnace Brook Golf Course	20 Reservoir Road	Private	S	Back up Generator; Maintain food and supplies in case of emergency				L	S	

Community Resilience B	uilding Risk Matrix		-)		www.CommunityResilienc	eBuilding.org			
				Quincy's Top Priority Hazards						
<u>H-M-L</u> priority for action over the <u>S</u> hort or <u>L</u> ong term (and <u>U</u> ngoing) \underline{V} = Vulnerability <u>S</u> = Strength							Priority	Time		
Assets	Location	Ownership Location (City, State, Federal, Private)	V or S	Inland Flooding	Coastal Flooding & Erosion	Nor'easter	Severe Winter Weather	<u>H - M - L</u>	<u>S</u> hort <u>L</u> ong <u>O</u> ngoing	
	Complete for New	Complete for New Assets Only		1						
Economy										
Pharmacies	Citurida	Private	V/S	Provide assistance to Pharmacies to allow them to stay open during severe weather events; Provide traveling staff to deliver/administer medications				N	0./5	
	Citywide			Improve Stormwater Management;				M	0/S	
Grocery Stores	Citywide	Private	V	Improve Stormwater Management				М	0	
Gas Stations	Citywide	Private	V	Backup Emergency Generators				Н	S	
Curry Hardware	370 Copeland Street	Private	S	Establish relationship with City to supply materials and support in case of emergency				М	0	
Home Depot	465 Centre Street	Private	S	Establish relationship with City to supply materials and support in case of emergency					0	
American Towing	500 Adams Street	Private	S	Establish relationship with City for support in case of emergency					0	
Personal Property	Citywide	Private	V	Homeowner education; Support Contact List and FEMA Claim Assistance; FEMA Advocacy for Homeowners; Increase capacity of culverts, replace tide gates city wide					0/S/L	
State Street Corporation	State Street	Private	V/S	Establish emergency plan for businesses; Relocate businesses and development				H/M	0	
Boston Scientific	500 Commander Shead Blvd	Private	V		Ongoing maintenance and repairs to seawall			М	L	
Marina Bay	Marina Bay Development	Private	V/S		Elevate Seaport Drive			М	L	
The Strand Area	The Strand Area	Private	S	Increase capacity of Pump Stations, purchase mobile pumps, improve stormwater management				М	0	
Wollaston Yacht Club	692 Quincy Shore Drive	Private	v	Maintain sewer & water services to Wollaston Yacht Club to prevent break during severe weather				М	0	
Soft Shell Clamming	Citywide	N/A	S	Increase resiliency of natural resource area and allocate funding to protecting and preserving these areas and industries				L	0	



APPENDIX E

Workshop #1 April 23, 2019

CITY OF QUINCY



Wellness

COMMUNITY RESILIENCE BUILDING WORKSHOP

APRIL 23, 2019



TODAYS AGENDA

Community Resilience Building Workshop Overview

Massachusetts' Changing Climate and the Quincy Hazard Mitigation Plan

Workshop 9:30-12:30

Session #1 Session #2 Session #3 Session #4- Full Group Discussion



Hazard Mitigation and MVP Core Team

Mayor's Office

- Community and Planning Department
- Department of Public Works
- Emergency Management
- Parks and Forestry
- Marine Unit, Police Department
- Sustainability: Public Buildings
- Traffic, Parking, Alarm and Lighting





CRB WORKSHOP PROCESS AND OUTCOMES

- Build Resilience and Preparedness- for more frequent and intense weather events
- Improve pre-event planning, response & recovery and long-term actions
- A prepared and resilient Quincy will be able to maintain functions, protect its residents and be prepared for future storm events and a changing climate

- Review natural hazards identified in the Hazard Mitigation Plan
- Identify and map vulnerabilities and strengths
 - Infrastructural
 - Societal
 - Natural Resources
 - Economy
- Develop and prioritize actions and clearly define next steps



QUINCY WORKSHOP GOALS

- Complete the requirements as a certified Municipal Vulnerability Preparedness Community.
- Examine how to integrate climate change planning into other City plans and programs identified in the HMP Capabilities Assessment.
- Provide community outreach opportunity for Quincy Hazard Mitigation Planning.



MASSACHUSETTS' CHANGING CLIMATE

Changing Weather

- > Higher Temperatures
- Shorter Winters
- More frequent and intense storms
- Sea Level Rise
- Droughts

Amplifies existing risks

- Community and regional infrastructure
- Local and regional economies
- ➢Public Health
- Natural resources and our environment

Goal for Building Resilience to a Changing Climate:

Protect life, property, natural resource and the economy





QUINCY CHANGING CLIMATE AND MULTI-HAZARD MITIGATION PLAN- 5-YEAR UPDATE

MVP Workshop April 23, 2019





WHY PREPARE A HAZARD MITIGATION PLAN ?

- Required to qualify for Hazard Mitigation Grants per Disaster Mitigation Act of 2000, 44 CRF Part 201.6
- Documents historic impacts from natural hazard and community vulnerability
- Prioritizes mitigation projects to meet multiple community goals
- Educates the public on the risk of natural hazards to property damage, life and public health and the benefits of mitigating hazards so the community is better prepared and can recover more quickly
- May improve scoring for Community Rating System, results in lower flood insurance premiums
- Improves chances for obtaining other State and Federal Grants- MVP and Environmental Bond Bill



HAZARD MITIGATION PLANNING PROCESS

- Define potential risk due to natural hazards including impacts of climate change
- 2) Identify key community assets and vulnerability to risk
- 3) Define mitigation projects to improve resiliency
- 4) Prioritize projects for areas most at risk





2019 PLAN IMPROVMENTS

- Natural hazard risk consistent with 2018 Massachusetts State Plan
- Incorporates climate change
- Evaluates impacts on community assets
- Geographically based mapping and analysis

Environmental

Societal

Economic

□ Built infrastructure

Vulnerability considers recent record breaking storm events





GEOGRAPHIC PLANNING AREAS





NATURAL HAZARD RISK ASSESSMENT

