





Wildland  
Urban  
Interface  
Oak Bluffs, MA


Hazard Mitigation Plan

 Affected Critical Facilities


 Affected Critical Infrastructure


 Affected Structures


 Unaffected Structures


 Wildland Urban Interface

Roads

 Primary Road

 Secondary Road

 Neighborhood Road

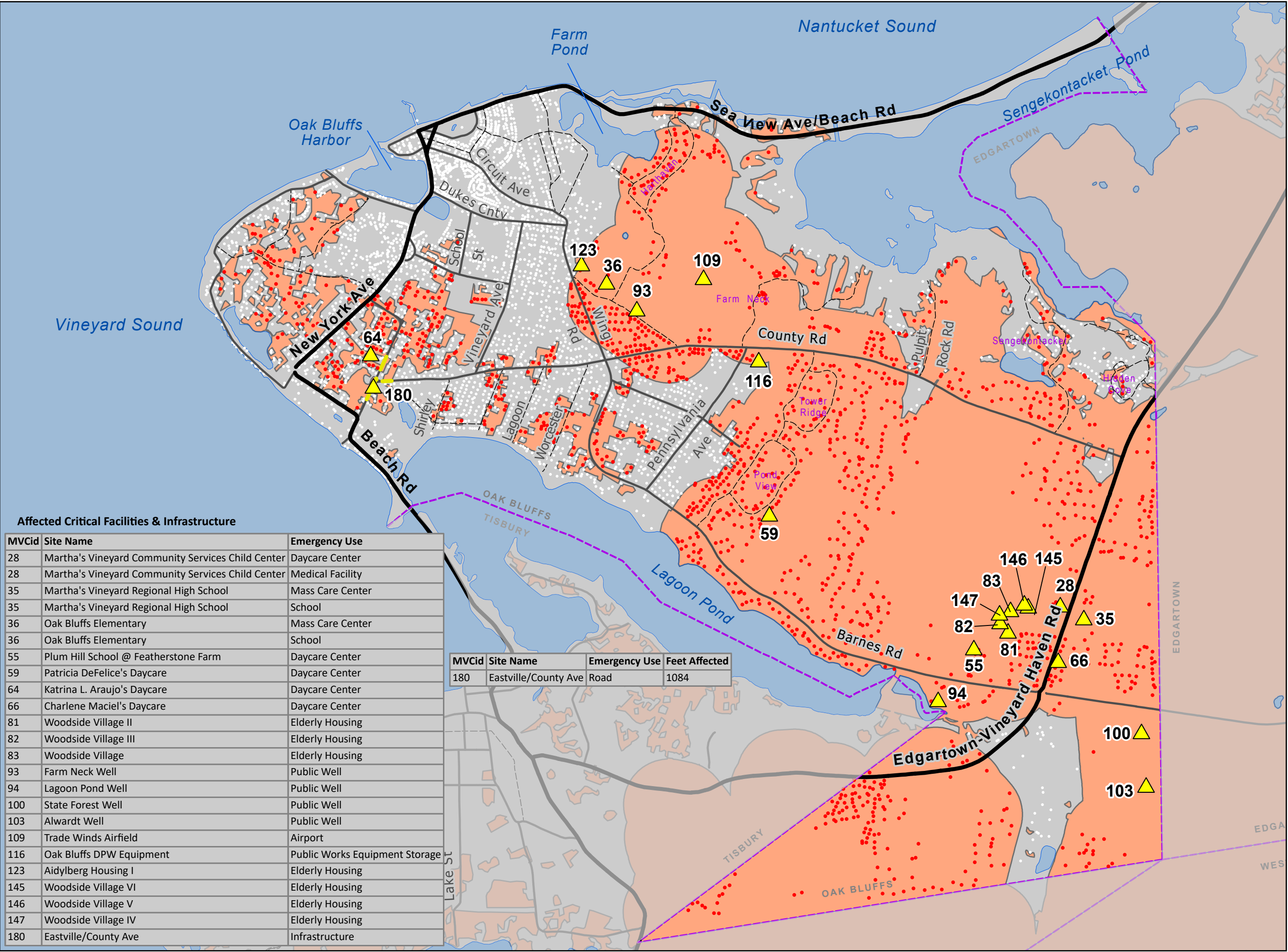
 Local Road

Notes: Wildland Urban Interface (WUI) was delineated by the MVC from The Nature Conservancy's vegetation data (2002) and MassGIS land cover data (2016). Pitch pine and scrub/shrub oak habitats (TNC) were extracted along with subsets of evergreen and deciduous land cover from MassGIS. Any structures within the a) pitch pine/scrub oak habitat; OR b) contiguous woodland (50acre or greater patch); OR c) within 1,000ft of contiguous woodland are considered within the WUI.

Disclaimer: Data provided are for planning purposes only. These data are not adequate for regulatory interpretation. The MVC is not responsible for the end-user's interpretation of the data.

Compiled by: MVC, CL Seidel,  
www.mvcommission.org; 508-693-3453  
Data: Structures - MassGIS 2019; Roads 2017;  
Town Line - MassGIS 2003/MVC 2020; Wildfire Urban Interface - MVC 2020  
Coordinate Reference: Stateplane  
MassMainland NAD83 meters

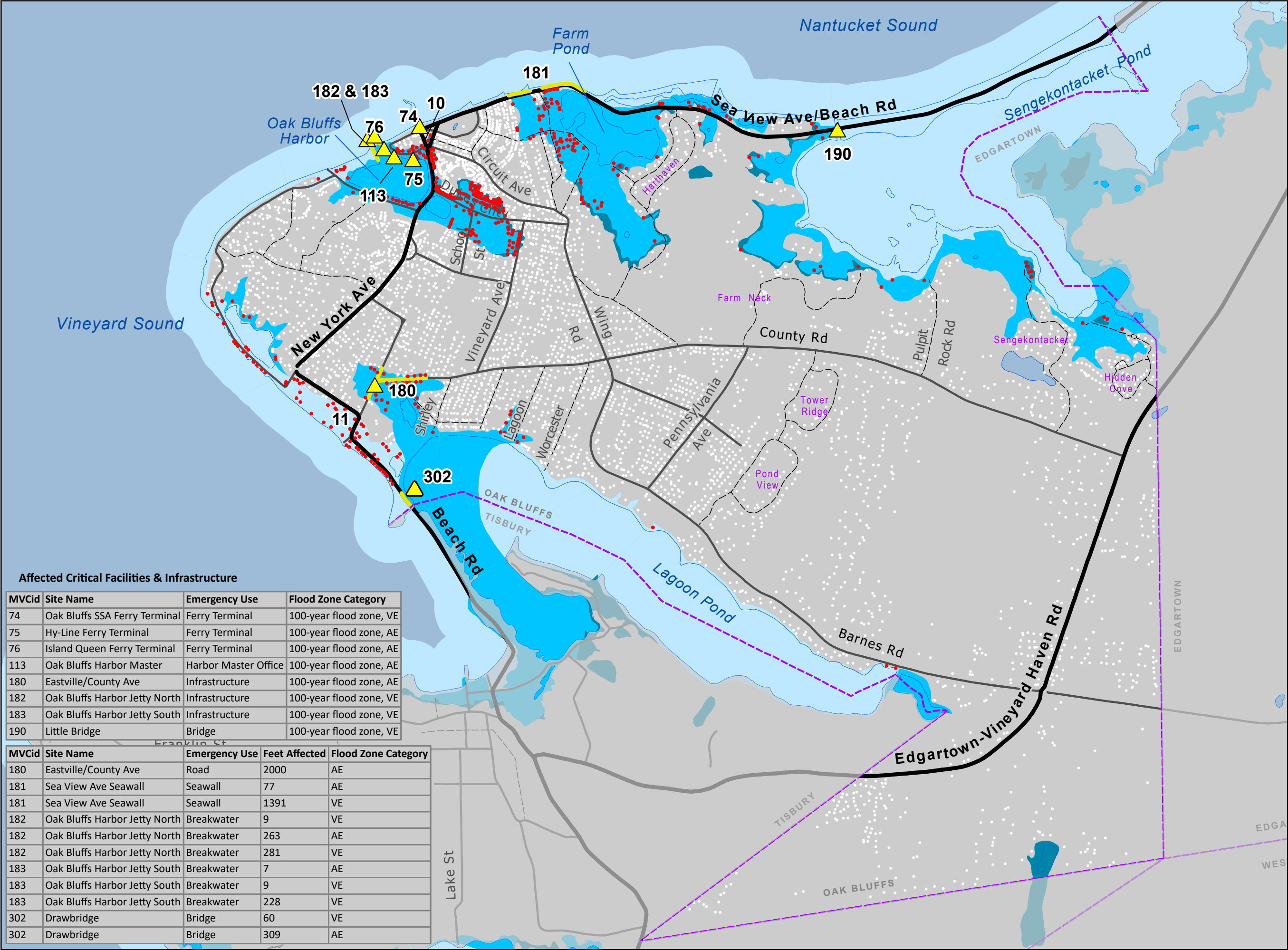
Folder: Hazard Mitigation Plan  
Project: HMPseries\_Fire.aprx;  
Export: 1/20/2021 HMPseries\_Fire\_\*.pdf



Affected Critical Facilities & Infrastructure

MVCid	Site Name	Emergency Use
28	Martha's Vineyard Community Services Child Center	Daycare Center
28	Martha's Vineyard Community Services Child Center	Medical Facility
35	Martha's Vineyard Regional High School	Mass Care Center
35	Martha's Vineyard Regional High School	School
36	Oak Bluffs Elementary	Mass Care Center
36	Oak Bluffs Elementary	School
55	Plum Hill School @ Featherstone Farm	Daycare Center
59	Patricia DeFelice's Daycare	Daycare Center
64	Katrina L. Araujo's Daycare	Daycare Center
66	Charlene Maciel's Daycare	Daycare Center
81	Woodside Village II	Elderly Housing
82	Woodside Village III	Elderly Housing
83	Woodside Village	Elderly Housing
93	Farm Neck Well	Public Well
94	Lagoon Pond Well	Public Well
100	State Forest Well	Public Well
103	Alwardt Well	Public Well
109	Trade Winds Airfield	Airport
116	Oak Bluffs DPW Equipment	Public Works Equipment Storage
123	Aidylberg Housing I	Elderly Housing
145	Woodside Village VI	Elderly Housing
146	Woodside Village V	Elderly Housing
147	Woodside Village IV	Elderly Housing
180	Eastville/County Ave	Infrastructure

MVCid	Site Name	Emergency Use	Feet Affected
180	Eastville/County Ave	Road	1084



Affected Critical Facilities & Infrastructure

MVCid	Site Name	Emergency Use	Flood Zone Category
74	Oak Bluffs SSA Ferry Terminal	Ferry Terminal	100-year flood zone, VE
75	Hy-Line Ferry Terminal	Ferry Terminal	100-year flood zone, AE
76	Island Queen Ferry Terminal	Ferry Terminal	100-year flood zone, AE
113	Oak Bluffs Harbor Master	Harbor Master Office	100-year flood zone, AE
180	Eastville/County Ave	Infrastructure	100-year flood zone, AE
182	Oak Bluffs Harbor Jetty North	Infrastructure	100-year flood zone, VE
183	Oak Bluffs Harbor Jetty South	Infrastructure	100-year flood zone, VE
190	Little Bridge	Bridge	100-year flood zone, VE

MVCid	Site Name	Emergency Use	Feet Affected	Flood Zone Category
180	Eastville/County Ave	Road	2000	AE
181	Sea View Ave Seawall	Seawall	77	AE
181	Sea View Ave Seawall	Seawall	1391	VE
182	Oak Bluffs Harbor Jetty North	Breakwater	9	VE
182	Oak Bluffs Harbor Jetty North	Breakwater	263	AE
182	Oak Bluffs Harbor Jetty North	Breakwater	281	VE
183	Oak Bluffs Harbor Jetty South	Breakwater	7	AE
183	Oak Bluffs Harbor Jetty South	Breakwater	9	VE
183	Oak Bluffs Harbor Jetty South	Breakwater	228	VE
302	Drawbridge	Bridge	60	VE
302	Drawbridge	Bridge	309	AE

# FEMA Flood Zones

## Oak Bluffs, MA

### Hazard Mitigation Plan

Affected Critical Facilities

Affected Critical Infrastructure

Affected Structures

Unaffected Structures

**FEMA Flood Zone**

100-year flood zone, VE

100-year flood zone, AE

500-year flood zone

Notes: Effective 2016, the 100 and 500-year flood zones represent a subset of the data presented on FEMA's Flood Insurance Rate Maps (FIRM). These data were developed by FEMA to support planning activities but do not replace the effective FIRM maps. These data are not suitable for engineering activities or site work nor can the data be used to determine the absolute delineation of flood boundaries. Instead the data should be used to portray zones of uncertainty and possible risks associated with flooding.

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Compiled by: MVC, CL Seidel,  
www.mvcommission.org; 508-693-3453  
Data: Structures - MassGIS 2019; Roads 2017;  
Town Line - MassGIS 2003/MVC 2020; FEMA Flood Zone - FEMA 2016  
Coordinate Reference: Stateplane  
MassMainland NAD83 meters

Folder: Hazard Mitigation Plan  
Project: HMPseries\_FEMA.aprx;  
Export: 1/23/2021 HMPseries\_FEMA\_\*.pdf

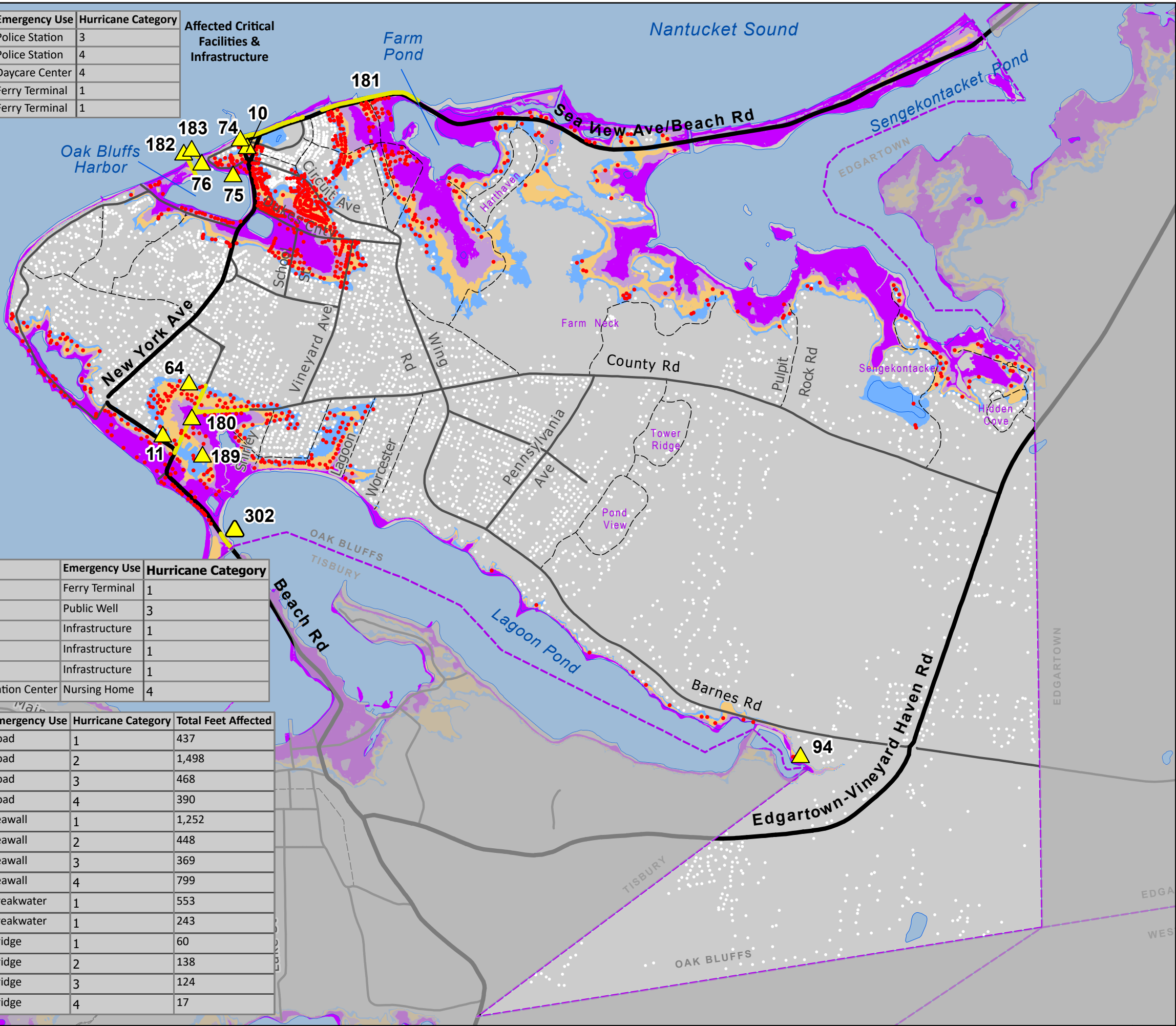
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MVCid	Site Name	Emergency Use	Hurricane Category
10	Oak Bluffs Police Station	Police Station	3
11	State Police Station, Oak Bluffs	Police Station	4
64	Katrina L. Araujo's Daycare	Daycare Center	4
74	Oak Bluffs SSA Ferry Terminal	Ferry Terminal	1
75	Hy-Line Ferry Terminal	Ferry Terminal	1

Affected Critical  
Facilities &  
Infrastructure



MVCid	Site Name	Emergency Use	Hurricane Category
76	Island Queen Ferry Terminal	Ferry Terminal	1
94	Lagoon Pond Well	Public Well	3
180	Eastville/County Ave	Infrastructure	1
182	Oak Bluffs Harbor Jetty North	Infrastructure	1
183	Oak Bluffs Harbor Jetty South	Infrastructure	1
189	Windemere Nursing & Rehabilitation Center	Nursing Home	4

MVCid	Site Name	Emergency Use	Hurricane Category	Total Feet Affected
180	Eastville/County Ave	Road	1	437
180	Eastville/County Ave	Road	2	1,498
180	Eastville/County Ave	Road	3	468
180	Eastville/County Ave	Road	4	390
181	Sea View Ave Seawall	Seawall	1	1,252
181	Sea View Ave Seawall	Seawall	2	448
181	Sea View Ave Seawall	Seawall	3	369
181	Sea View Ave Seawall	Seawall	4	799
182	Oak Bluffs Harbor Jetty North	Breakwater	1	553
183	Oak Bluffs Harbor Jetty South	Breakwater	1	243
302	Drawbridge	Bridge	1	60
302	Drawbridge	Bridge	2	138
302	Drawbridge	Bridge	3	124
302	Drawbridge	Bridge	4	17

# Hurricane Surge Inundation Oak Bluffs, MA

## Hazard Mitigation Plan

- Affected Critical Facilities
- Affected Critical Infrastructure
- Affected Structures
- Unaffected Structures

### Hurricane Surge Inundation

#### Worst Case Scenario

- Category 1
- Category 2
- Category 3
- Category 4

Notes: Per USACE: "Hurricane surge elevations were determined by the National Hurricane Center using the PV2 SLOSH model basin, and assumed peak hurricane surge arriving at mean high water. The hurricane surge inundation areas shown on this map depict the inundation that can be expected to result from a worst case combination of hurricane landfall location, forward speed, and direction for each hurricane category." ACCURACY: SLOSH Model Elevation Data: +/-20 percent LiDAR Elevation Data: +/- 0.5ft vertical; +/-1ft horizontal; Shoreline Data: Less accurate than LiDAR; Hence, discrepancies will be visibly noticeable when displayed together.

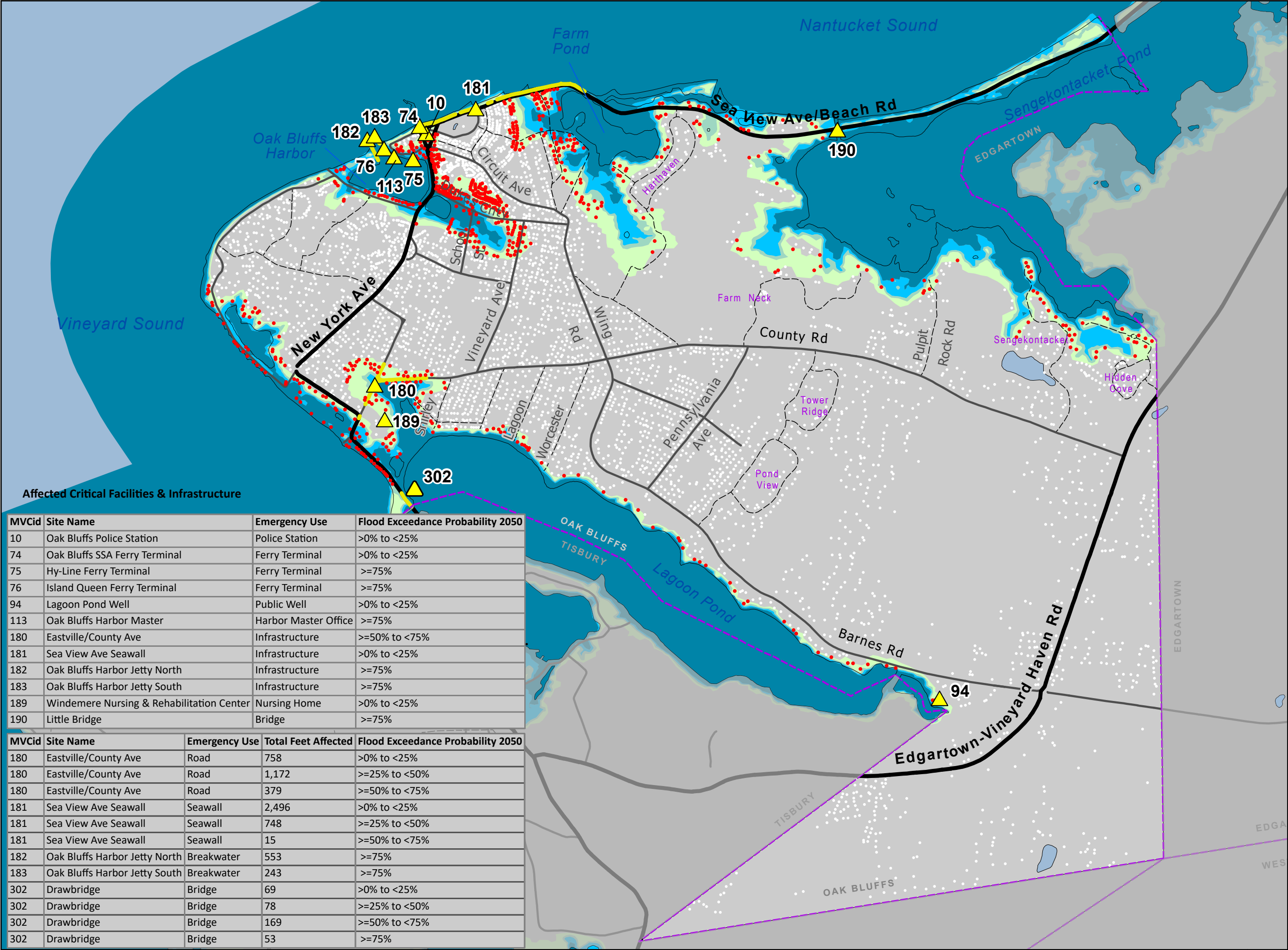
Disclaimer: Data provided are for planning purposes only. These data are not adequate for regulatory interpretation. The MVC is not responsible for the end-user's interpretation of the data.

Compiled by: MVC, CL Seidel,  
www.mvcommission.org; 508-693-3453  
Data: Structures - MassGIS 2019; Roads 2017;  
Town Line - MassGIS 2003/MVC 2020;  
Hurricane Inundation - USACE 2013  
Coordinate Reference: Stateplane  
MassMainland NAD83 meters

Folder: Hazard Mitigation Plan  
Project: HMPseries\_SLOSH.aprx;  
Export: 1/24/2021 HMPseries\_SLOSH\_\*.pdf

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Miles





Affected Critical Facilities & Infrastructure

MVCid	Site Name	Emergency Use	Flood Exceedance Probability 2050
10	Oak Bluffs Police Station	Police Station	>0% to <25%
74	Oak Bluffs SSA Ferry Terminal	Ferry Terminal	>0% to <25%
75	Hy-Line Ferry Terminal	Ferry Terminal	>=75%
76	Island Queen Ferry Terminal	Ferry Terminal	>=75%
94	Lagoon Pond Well	Public Well	>0% to <25%
113	Oak Bluffs Harbor Master	Harbor Master Office	>=75%
180	Eastville/County Ave	Infrastructure	>=50% to <75%
181	Sea View Ave Seawall	Infrastructure	>0% to <25%
182	Oak Bluffs Harbor Jetty North	Infrastructure	>=75%
183	Oak Bluffs Harbor Jetty South	Infrastructure	>=75%
189	Windemere Nursing & Rehabilitation Center	Nursing Home	>0% to <25%
190	Little Bridge	Bridge	>=75%

MVCid	Site Name	Emergency Use	Total Feet Affected	Flood Exceedance Probability 2050
180	Eastville/County Ave	Road	758	>0% to <25%
180	Eastville/County Ave	Road	1,172	>=25% to <50%
180	Eastville/County Ave	Road	379	>=50% to <75%
181	Sea View Ave Seawall	Seawall	2,496	>0% to <25%
181	Sea View Ave Seawall	Seawall	748	>=25% to <50%
181	Sea View Ave Seawall	Seawall	15	>=50% to <75%
182	Oak Bluffs Harbor Jetty North	Breakwater	553	>=75%
183	Oak Bluffs Harbor Jetty South	Breakwater	243	>=75%
302	Drawbridge	Bridge	69	>0% to <25%
302	Drawbridge	Bridge	78	>=25% to <50%
302	Drawbridge	Bridge	169	>=50% to <75%
302	Drawbridge	Bridge	53	>=75%

Annual Coastal  
Flood  
Exceedance  
Probability

2050 Scenario: 2.57ft Sea  
Level Rise relative to year  
2008

Oak Bluffs, MA  
Hazard Mitigation Plan

Affected Critical Facilities

Affected Critical Infrastructure

Affected Structures

Unaffected Structures

Coastal Flood Exceedance  
Probability

>=75%

>=50% to <75%

>=25% to <50%

>0% to <25%

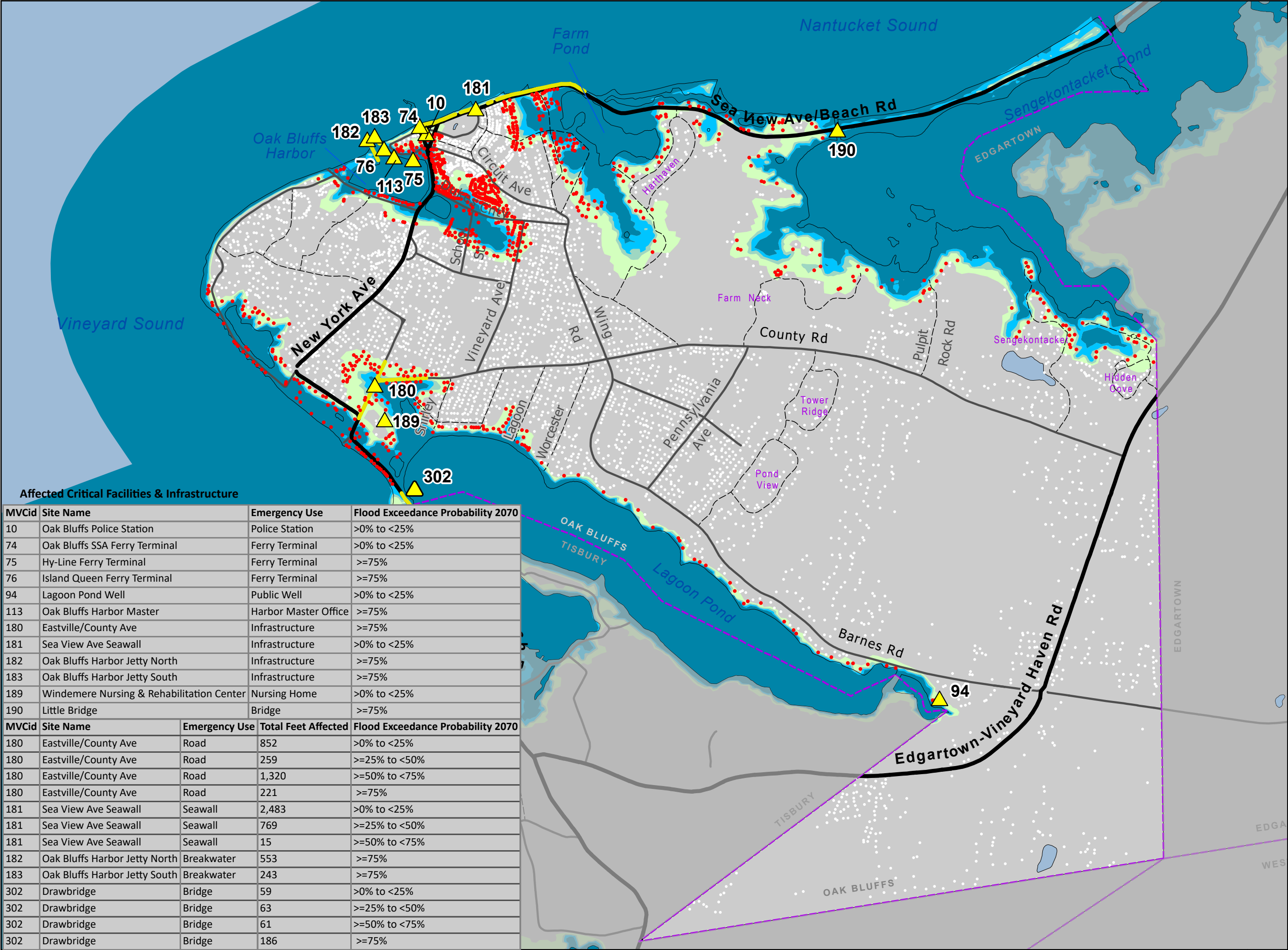
Notes: These data are derived from output of the MA Coast Flood Risk Model (MC-FRM) for several time horizons, sea level rise and coastal storm simulations as described in the report "Assessing the vulnerability of MassDOT's coastal transportation systems to future sea level rise and coastal storms, and developing conceptual adaptation strategies" (2020). Sea level rise values utilized in the model are those adopted by ResilientMA.org and MassCZM. The probabilities is the percent chance that a location would be inundated under a given climate condition. For example, an area of 2% Probability has a 2% chance of flooding in a given year.

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Compiled by: MVC, CL Seidel,  
www.mvcommission.org; 508-693-3453  
Data: Structures - MassGIS 2019; Roads 2017;  
Town Line - MassGIS 2003/MVC 2020; ACSEP -  
MassDOT Highway Div. 2020  
Coordinate Reference: Stateplane  
MassMainland NAD83 meters  
Folder: Hazard Mitigation Plan  
Project: HMPseries\_FRMprob2050.aprx;  
Export: 2/2/2021 HMPseries\_FRMprob2050\_\*.pdf







Affected Critical Facilities & Infrastructure

MVCid	Site Name	Emergency Use	Flood Exceedance Probability 2070	
10	Oak Bluffs Police Station	Police Station	>0% to <25%	
74	Oak Bluffs SSA Ferry Terminal	Ferry Terminal	>0% to <25%	
75	Hy-Line Ferry Terminal	Ferry Terminal	>=75%	
76	Island Queen Ferry Terminal	Ferry Terminal	>=75%	
94	Lagoon Pond Well	Public Well	>0% to <25%	
113	Oak Bluffs Harbor Master	Harbor Master Office	>=75%	
180	Eastville/County Ave	Infrastructure	>=75%	
181	Sea View Ave Seawall	Infrastructure	>0% to <25%	
182	Oak Bluffs Harbor Jetty North	Infrastructure	>=75%	
183	Oak Bluffs Harbor Jetty South	Infrastructure	>=75%	
189	Windemere Nursing & Rehabilitation Center	Nursing Home	>0% to <25%	
190	Little Bridge	Bridge	>=75%	
MVCid	Site Name	Emergency Use	Total Feet Affected	Flood Exceedance Probability 2070
180	Eastville/County Ave	Road	852	>0% to <25%
180	Eastville/County Ave	Road	259	>=25% to <50%
180	Eastville/County Ave	Road	1,320	>=50% to <75%
180	Eastville/County Ave	Road	221	>=75%
181	Sea View Ave Seawall	Seawall	2,483	>0% to <25%
181	Sea View Ave Seawall	Seawall	769	>=25% to <50%
181	Sea View Ave Seawall	Seawall	15	>=50% to <75%
182	Oak Bluffs Harbor Jetty North	Breakwater	553	>=75%
183	Oak Bluffs Harbor Jetty South	Breakwater	243	>=75%
302	Drawbridge	Bridge	59	>0% to <25%
302	Drawbridge	Bridge	63	>=25% to <50%
302	Drawbridge	Bridge	61	>=50% to <75%
302	Drawbridge	Bridge	186	>=75%

# Annual Coastal Flood Exceedance Probability

Year 2070 Scenario: 4.37ft Sea Level Rise relative to year 2008

## Oak Bluffs, MA Hazard Mitigation Plan

Affected Critical Facilities

Affected Critical Infrastructure

Affected Structures

Unaffected Structures

**Coastal Flood Exceedance Probability**

>=75%

>=50% to <75%

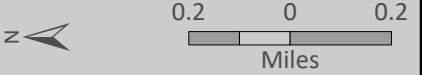
>=25% to <50%

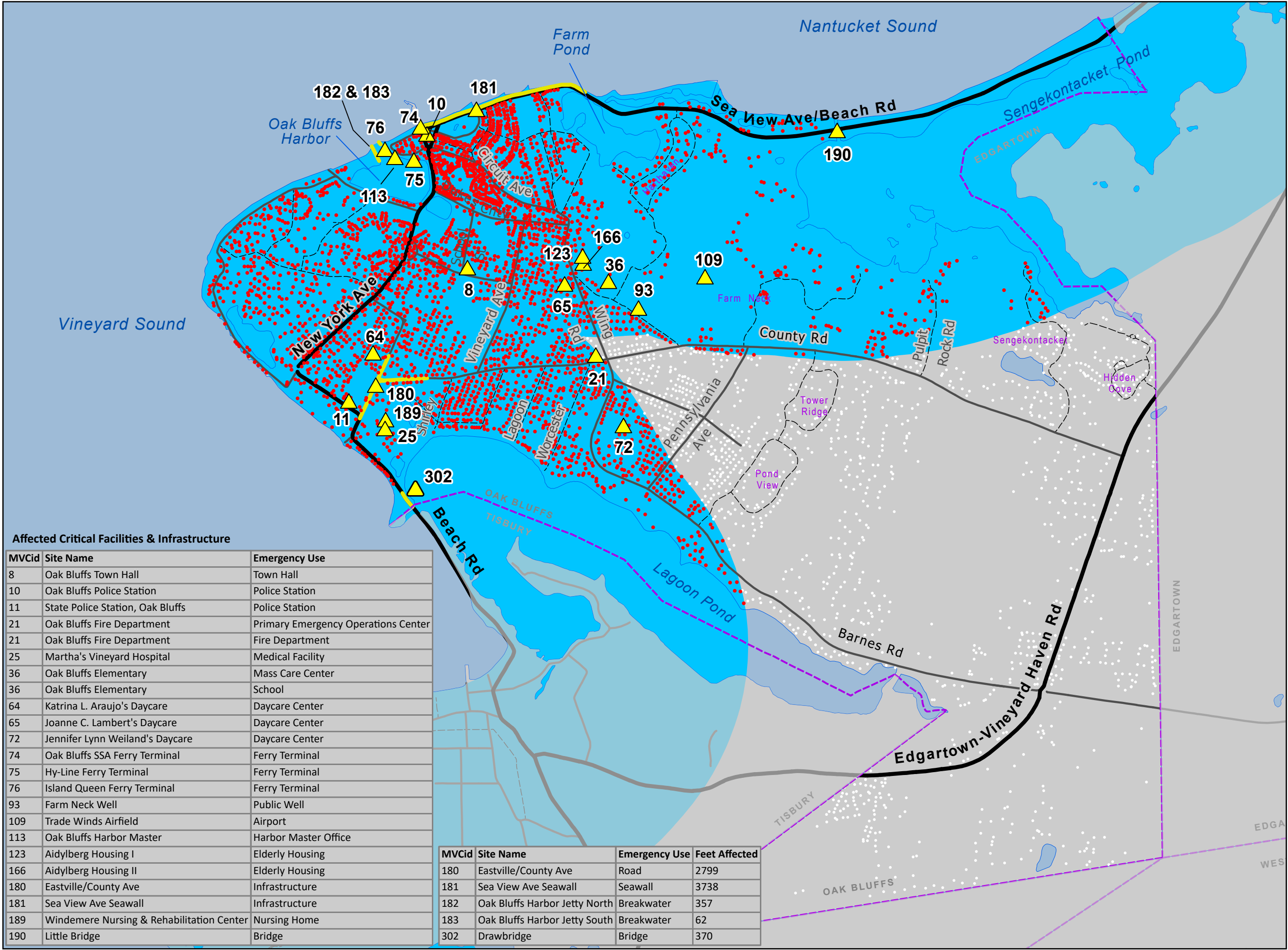
>0% to <25%

Notes: These data are derived from output of the MA Coast Flood Risk Model (MC-FRM) for several time horizons, sea level rise and coastal storm simulations as described in the report "Assessing the vulnerability of MassDOT's coastal transportation systems to future sea level rise and coastal storms, and developing conceptual adaptation strategies" (2020). Sea level rise values utilized in the model are those adopted by ResilientMA.org and MassCZM. The probabilities is the percent chance that a location would be inundated under a given climate condition. For example, an area of 2% Probability has a 2% chance of flooding in a given year.

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Compiled by: MVC, CL Seidel, [www.mvcommission.org](http://www.mvcommission.org); 508-693-3453  
Data: Structures - MassGIS 2019; Roads 2017; Town Line - MassGIS 2003/MVC 2020; ACPEP - MassDOT Highway Div. 2020  
Coordinate Reference: Stateplane MassMainland NAD83 meters  
Folder: Hazard Mitigation Plan  
Project: HMPseries\_FRMprob2070.aprx;  
Export: 2/10/2021 HMPseries\_FRMprob2070\_\*.pdf





# Tsunami Hazard Zone

## Oak Bluffs, MA

### Hazard Mitigation Plan

▲ Affected Critical Facilities

— Affected Critical Infrastructure

● Affected Structures

○ Unaffected Structures

■ Potential Tsunami Hazard Zone

**Roads**

- Primary Road
- Secondary Road
- Neighborhood Road
- - - Local Road

Notes: The potential tsunami hazard zone is any land or water area within 1 mile of the coastline. The 1 mile buffer was not applied to the shoreline of coastal ponds.

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Compiled by: MVC, CL Seidel,  
www.mvcommission.org; 508-693-3453  
Data: Structures - MassGIS 2019; Roads 2017;  
Town Line - MassGIS 2003/MVC 2020; Tsunami Hazard Zone - MVC 2020  
Coordinate Reference: Stateplane  
MassMainland NAD83 meters

Folder: Hazard Mitigation Plan  
Project: HMPseries\_Tsunami.aprx;  
Export: 1/23/2021 HMPseries\_Tsunami\_\*.pdf

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MASS GIS

FEMA

MARTHA'S VINYARD COMMISSION