

Affected Critical Facilities & Infrastructure		
MVCid	Site Name	Emergency Use
14	West Tisbury Police Station	Police Station
23	West Tisbury Fire Department - State Rd	Alternate Emergency Operations Center
23	West Tisbury Fire Department - State Rd	Fire Department
34	Martha's Vineyard Public Charter School	School
51	Martha's Vineyard Agricultural Hall	Mass Care Center
52	Island Children's School	Daycare Center
86	Animal Health Care Associates	Vet/Animal Shelter
91	Dukes County Wastewater Treatment Plant	Wastewater Treatment Plant
119	W.Tisbury DPW Equipment	Public Works Equipment Storage
195	Mill Brook Bridge	Bridge

MVCid	Site Name	Emergency Use	Feet Affected
300	State Road	Road	19
301	Tiahs Cove Road	Road	19
301	Tiahs Cove Road	Road	2435

# Wildland Urban Interface

## West Tisbury, MA

### Hazard Mitigation Plan

Affected Critical Facilities

Affected Critical Infrastructure

Affected Structures

Unaffected Structures

Wildland Urban Interface

**Roads**

Primary Road

Secondary Road

Neighborhood Road

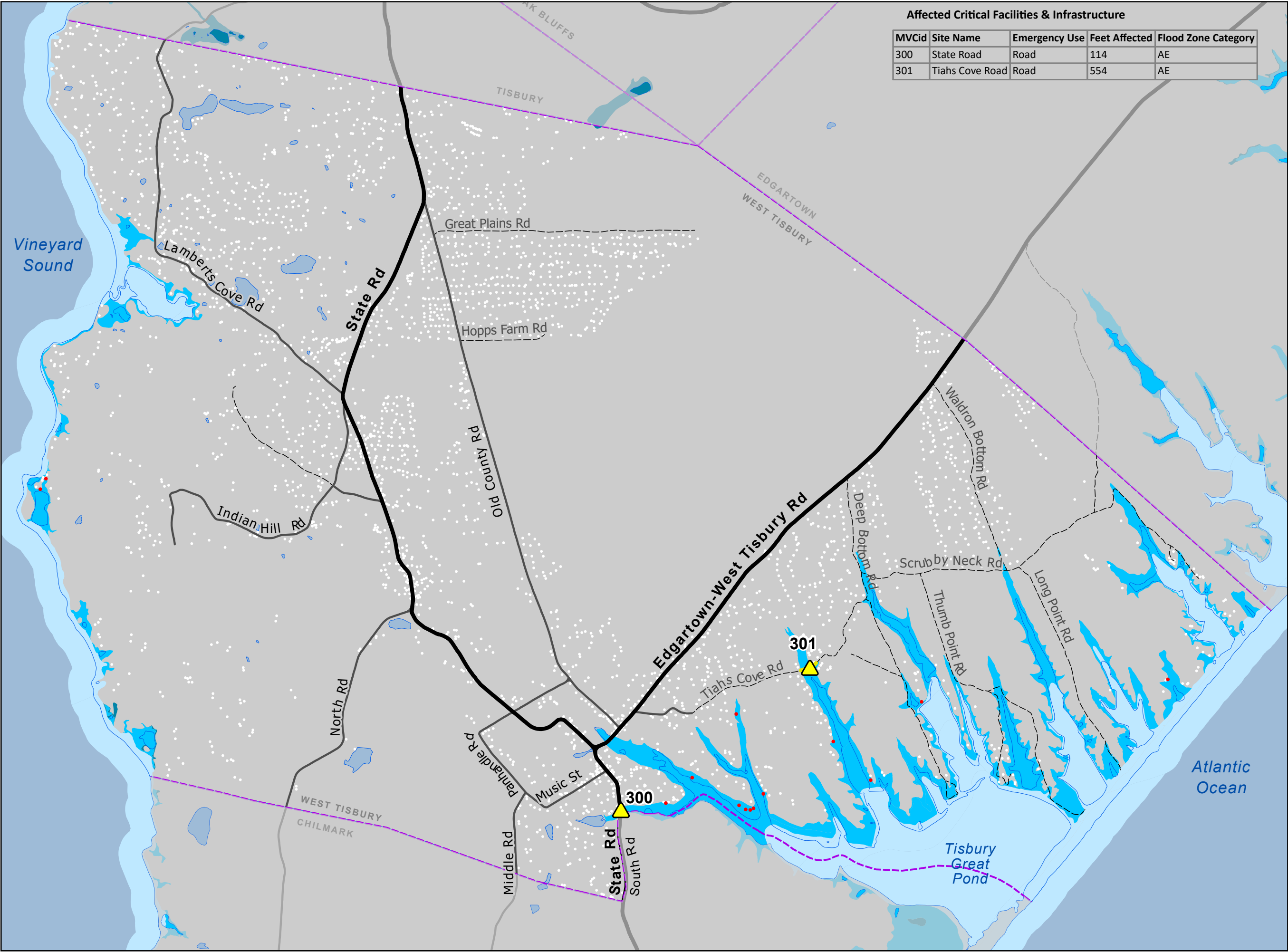
Local Road

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: 1/21/2021 HMPseries\_Fire\_\*.pdf





Affected Critical Facilities & Infrastructure				
MVCid	Site Name	Emergency Use	Feet Affected	Flood Zone Category
300	State Road	Road	114	AE
301	Tiahs Cove Road	Road	554	AE

# FEMA Flood Zones

## West Tisbury, MA

### Hazard Mitigation Plan

Affected Critical Infrastructure

Affected Structures

Unaffected Structures

**FEMA Flood Zone**

100-year flood zone, VE

100-year flood zone, AE

500-year flood zone

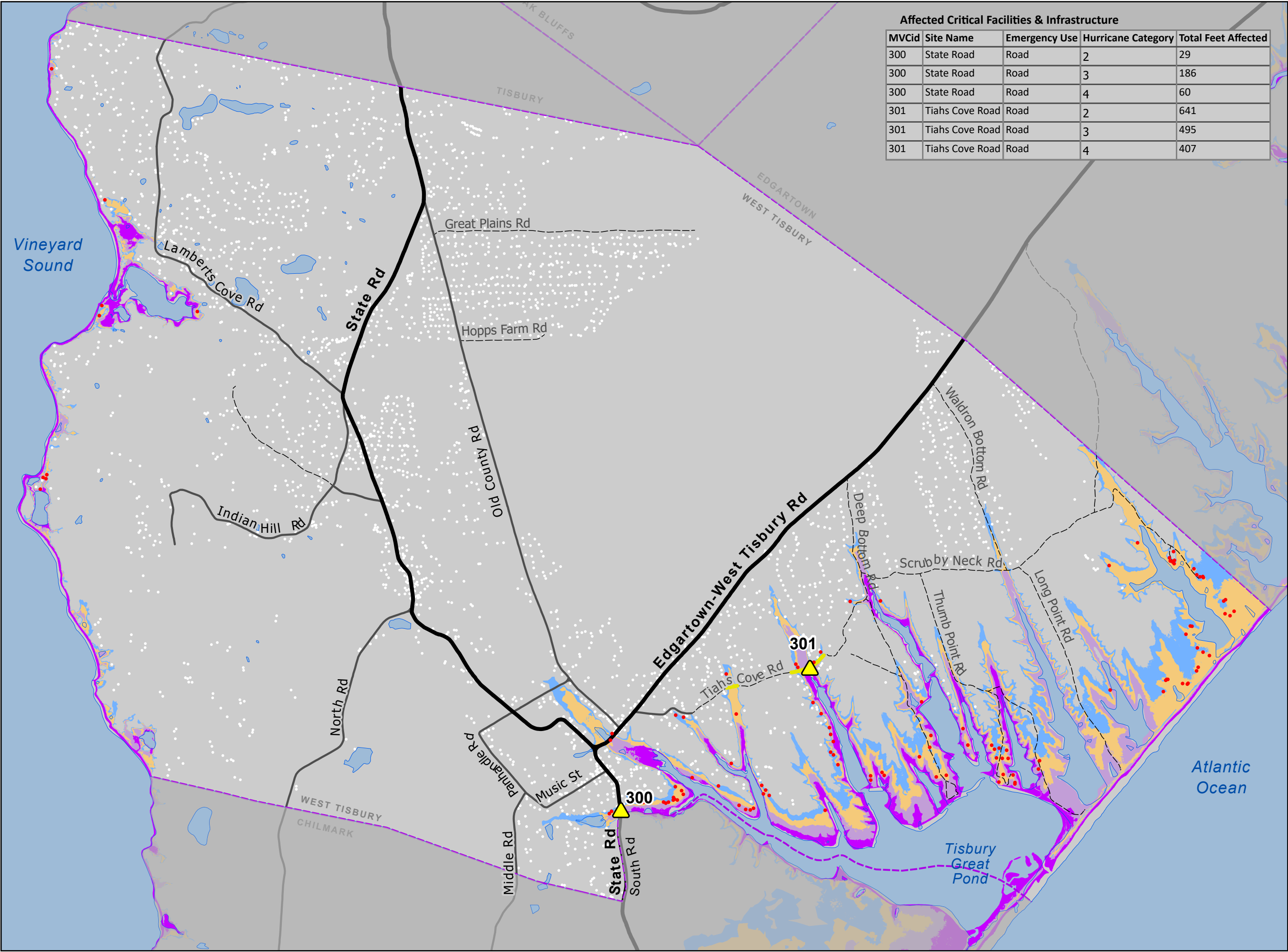
Notes: Effective 2016, the 100 and 500-year flood zones represent a subset of the data presented on FEMA's Flood Insurance Rate Maps (FIRM). These data were developed by FEMA to support planning activities but do not replace the effective FIRM maps. These data are not suitable for engineering activities 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: 1/24/2021 HMPseries\_FEMA\_\*.pdf







Affected Critical Facilities & Infrastructure				
MVCid	Site Name	Emergency Use	Hurricane Category	Total Feet Affected
300	State Road	Road	2	29
300	State Road	Road	3	186
300	State Road	Road	4	60
301	Tiahs Cove Road	Road	2	641
301	Tiahs Cove Road	Road	3	495
301	Tiahs Cove Road	Road	4	407

# Hurricane Surge Inundation

## West Tisbury, MA

### Hazard Mitigation Plan

Affected Critical Infrastructure

Affected Structures

Unaffected Structures

Hurricane Surge Inundation

Worst Case Scenario

Category 1

Category 2

Category 3

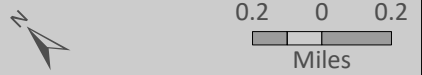
Category 4

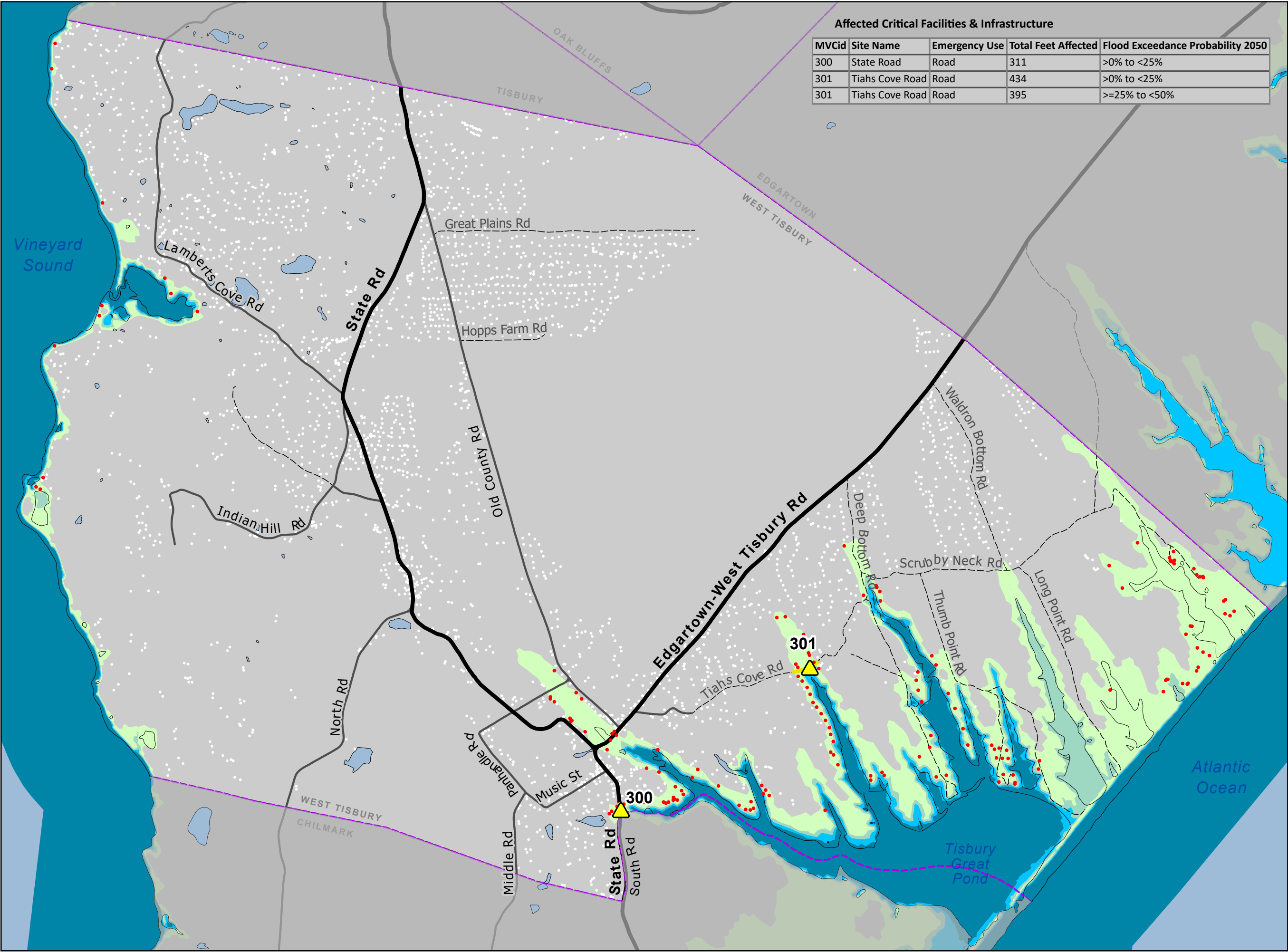
Notes: Per USACE: "Hurricane surge elevations were determined by the National Hurricane Center using the PV2 SLOSH model basin, and assumed peak hurricane surge arriving at mean high water. The hurricane surge inundation areas shown on this map depict the inundation that can be expected to result from 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.

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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;  
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





Affected Critical Facilities & Infrastructure				
MVCid	Site Name	Emergency Use	Total Feet Affected	Flood Exceedance Probability 2050
300	State Road	Road	311	>0% to <25%
301	Tiahs Cove Road	Road	434	>0% to <25%
301	Tiahs Cove Road	Road	395	>=25% to <50%

# Annual Coastal Flood Exceedance Probability

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

## West Tisbury, MA Hazard Mitigation Plan

Affected Critical Infrastructure

Affected Structures

Unaffected Structures

**Coastal Flood Exceedance Probability**

>=75%

>=50% to <75%

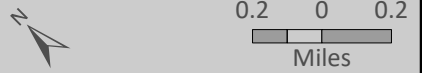
>=25% to <50%

>0% to <25%

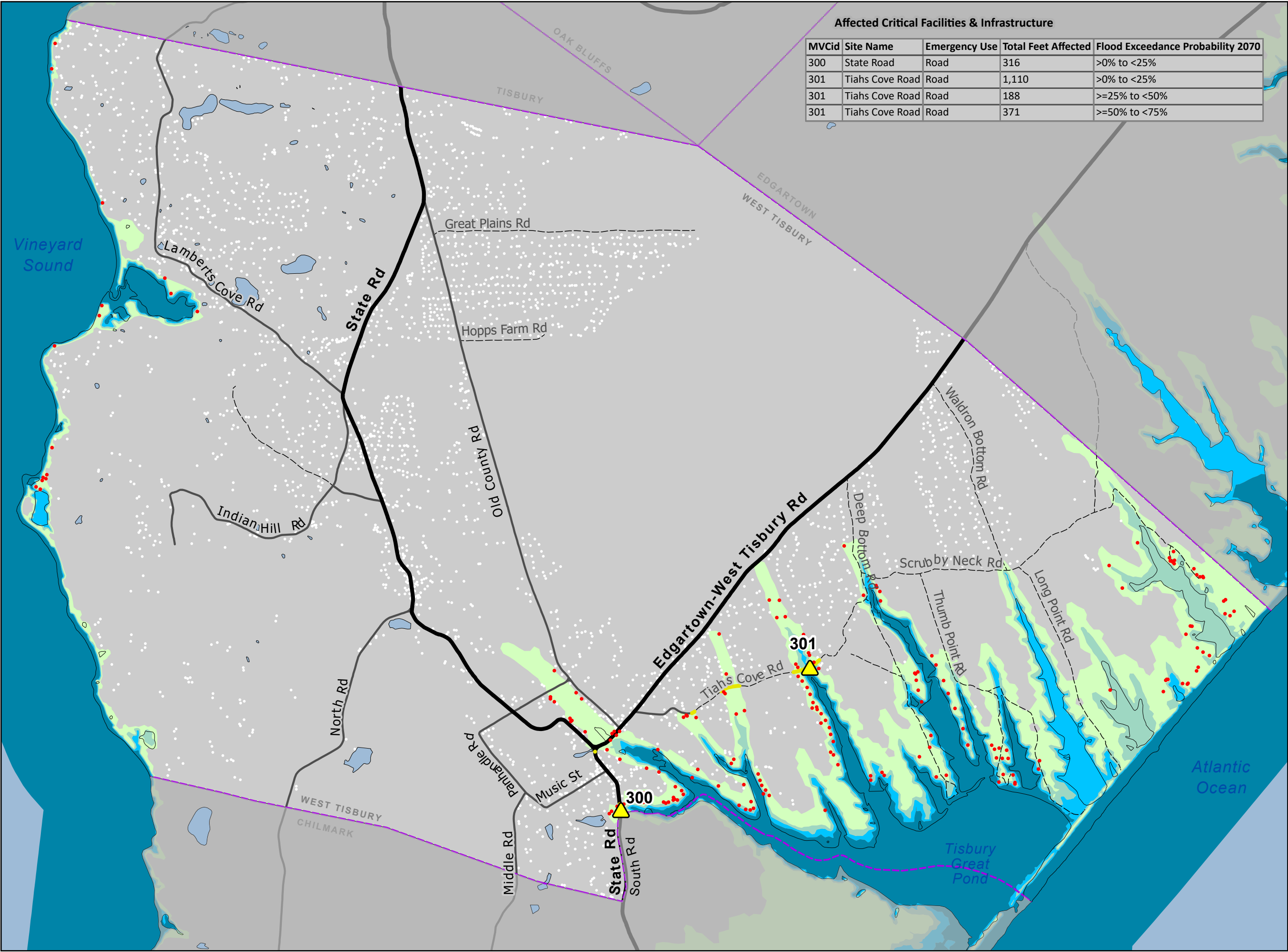
Notes: These data are derived from output of the MA Coast Flood Risk Model (MC-FRM) for several time horizons, sea level rise and coastal storm simulations as described in the report "Assessing the vulnerability of MassDOT's coastal transportation systems to future sea level rise and coastal storms, 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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Data: Structures - MassGIS 2019; Roads 2017;  
Town Line - MassGIS 2003/MVC 2020; ACCEP - 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	Total Feet Affected	Flood Exceedance Probability 2070
300	State Road	Road	316	>0% to <25%
301	Tiahs Cove Road	Road	1,110	>0% to <25%
301	Tiahs Cove Road	Road	188	>=25% to <50%
301	Tiahs Cove Road	Road	371	>=50% to <75%

# Annual Coastal Flood Exceedance Probability

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

## West Tisbury, MA Hazard Mitigation Plan

Affected Critical Infrastructure

Affected Structures

Unaffected Structures

Coastal Flood Exceedance Probability

>=75%

>=50% to <75%

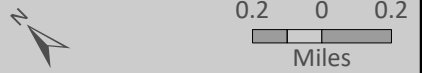
>=25% to <50%

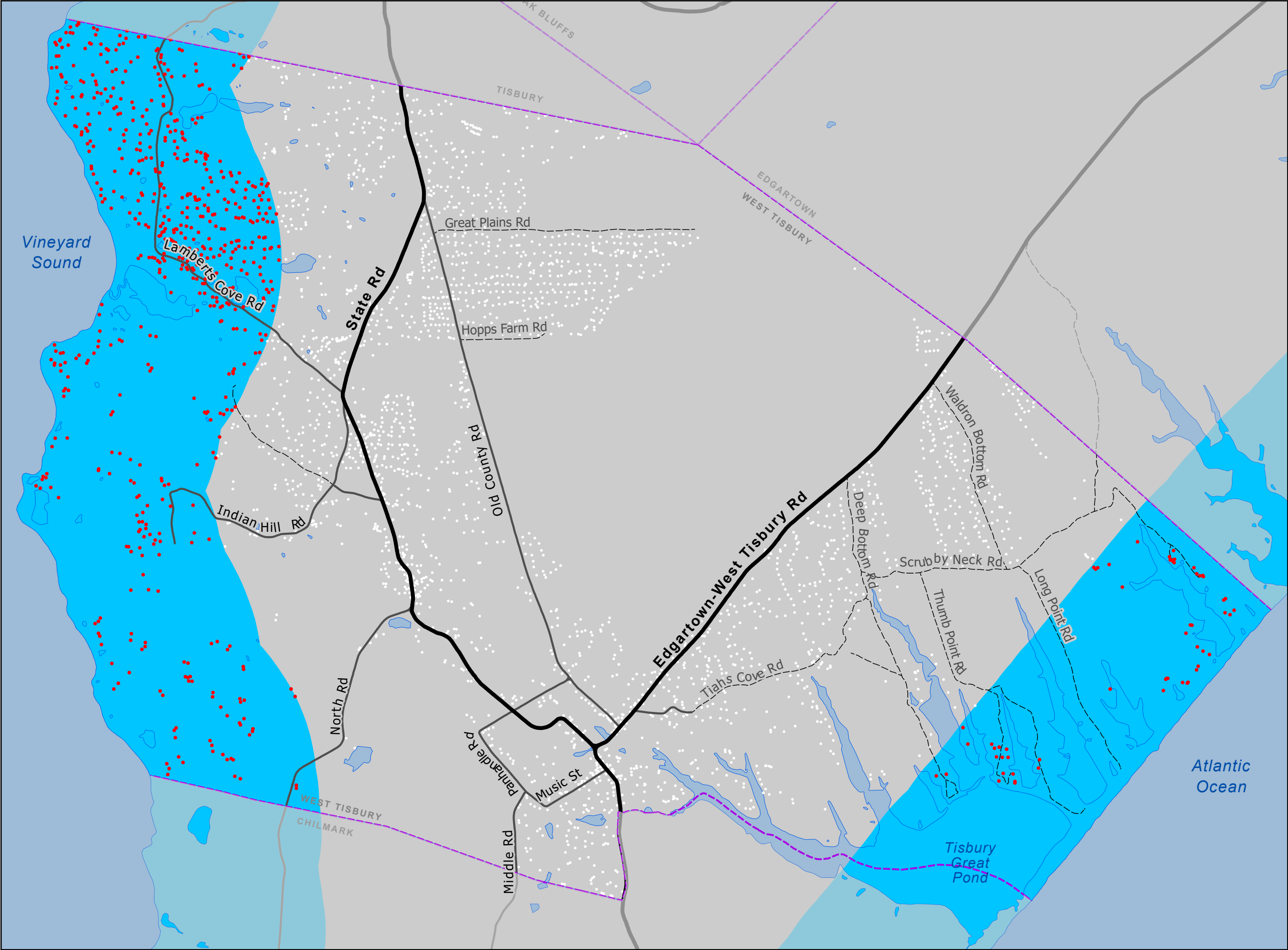
>0% to <25%

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; ACCEP - 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

## West Tisbury, MA

### Hazard Mitigation Plan

No Critical Facilities or Critical Infrastructure is within the Tsunami Hazard Zone in West Tisbury.

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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