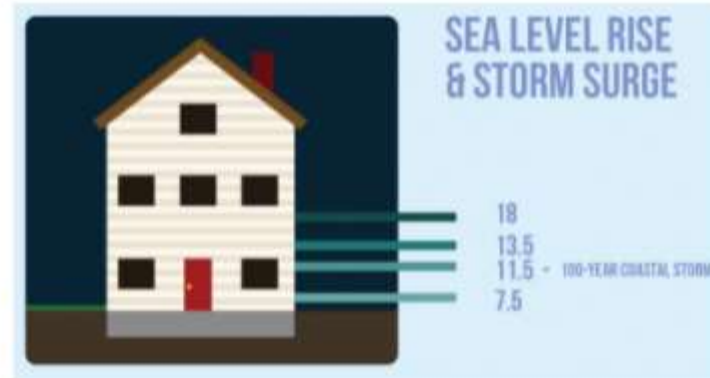


# Prepare. Protect. Portsmouth.

This illustration shows the modeled scenarios (all elevations are relative to current mean sea level).

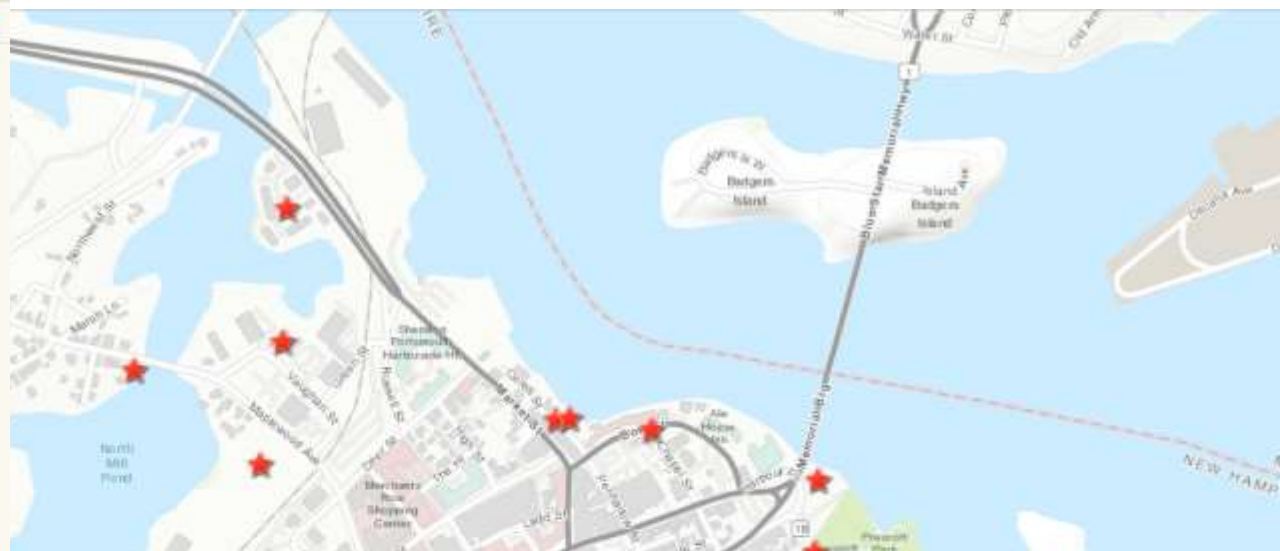
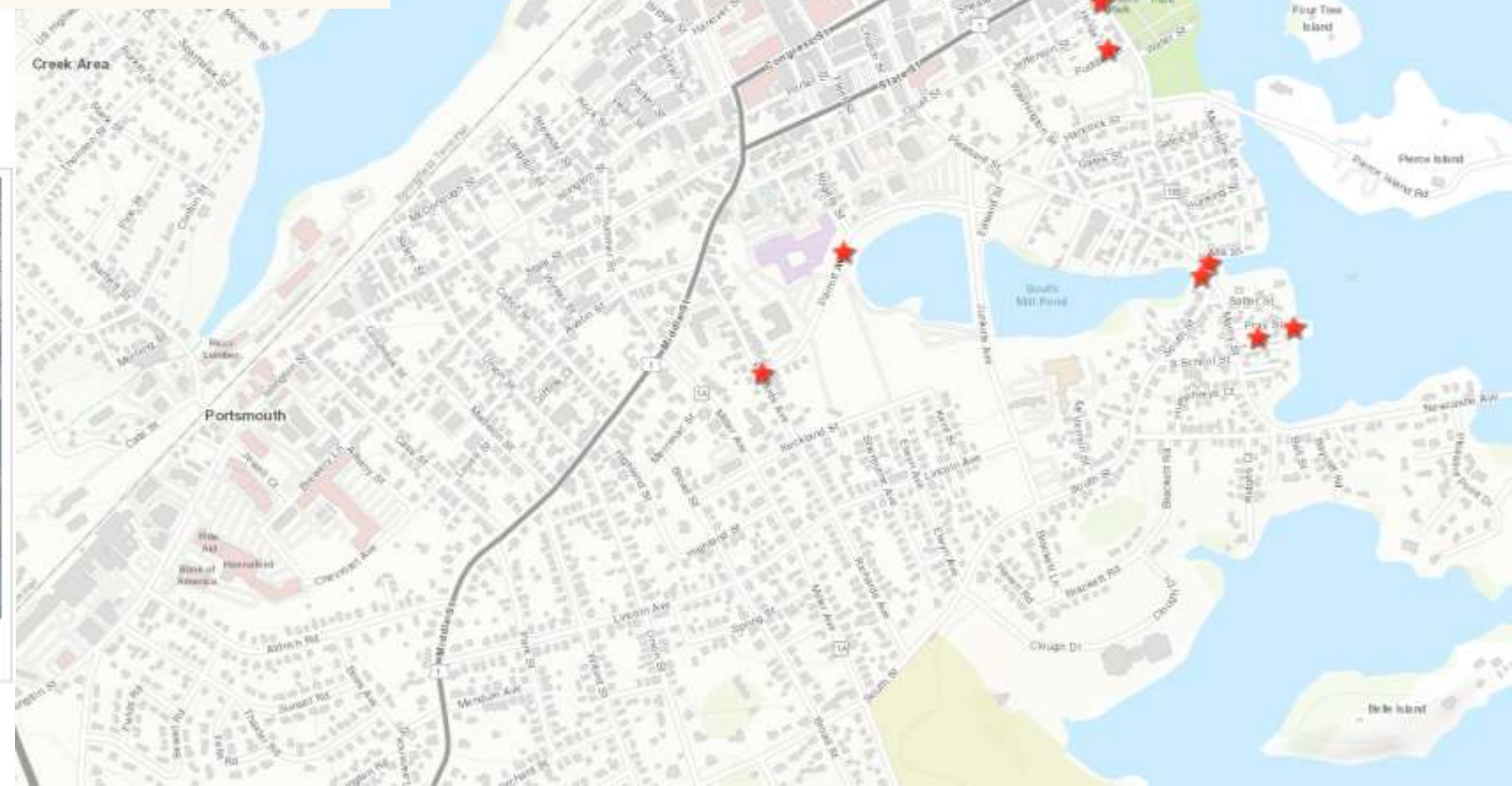
- **7.5 feet** is about 3 feet higher than today's normal high tide and approximates the Mean Higher High Water (MHHW) in 2100 under the best case scenario
- **11.5 feet** is close to the present day 100-year coastal flood at high tide, and also corresponds to the normal high tide in 2100 under the worst case scenario
- **13.5 feet** represents the 2050 100-year storm surge at high tide under the worst case scenario, and the 2100 100-year storm surge at high tide under the best case scenario
- **18 feet** corresponds to the 2100 100-year storm surge at high tide under the worst case scenario



# Portsmouth Historic Vulnerability Assessment

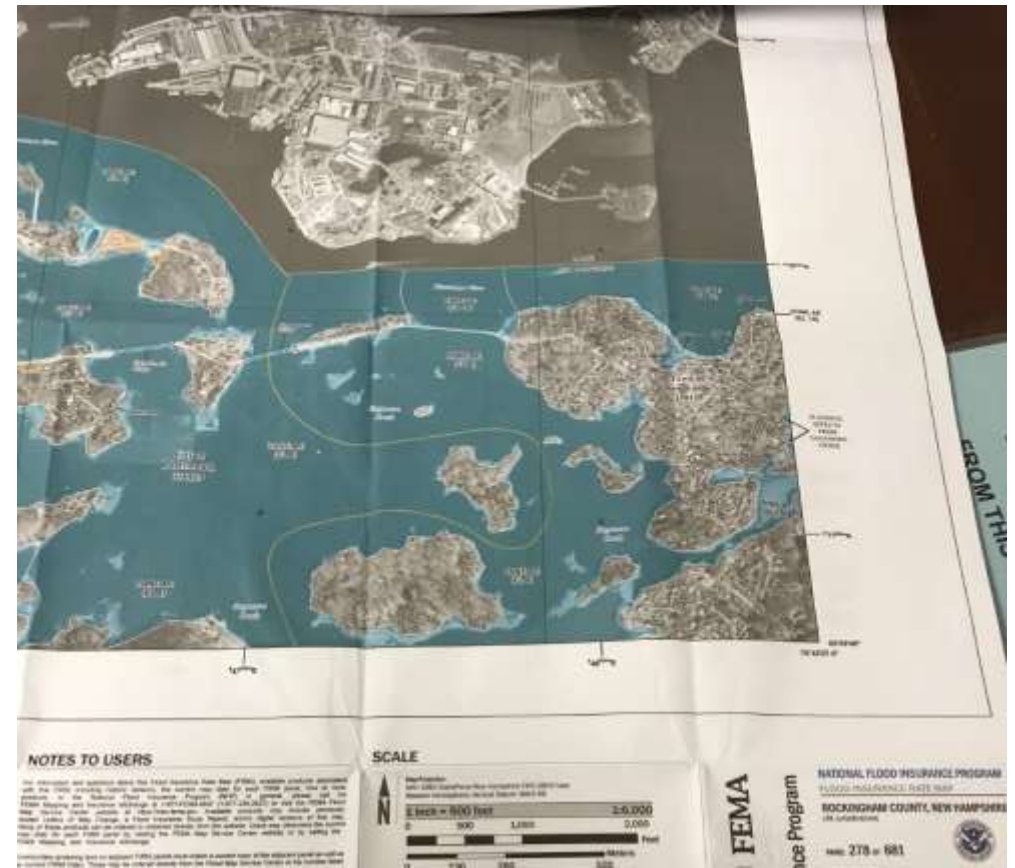
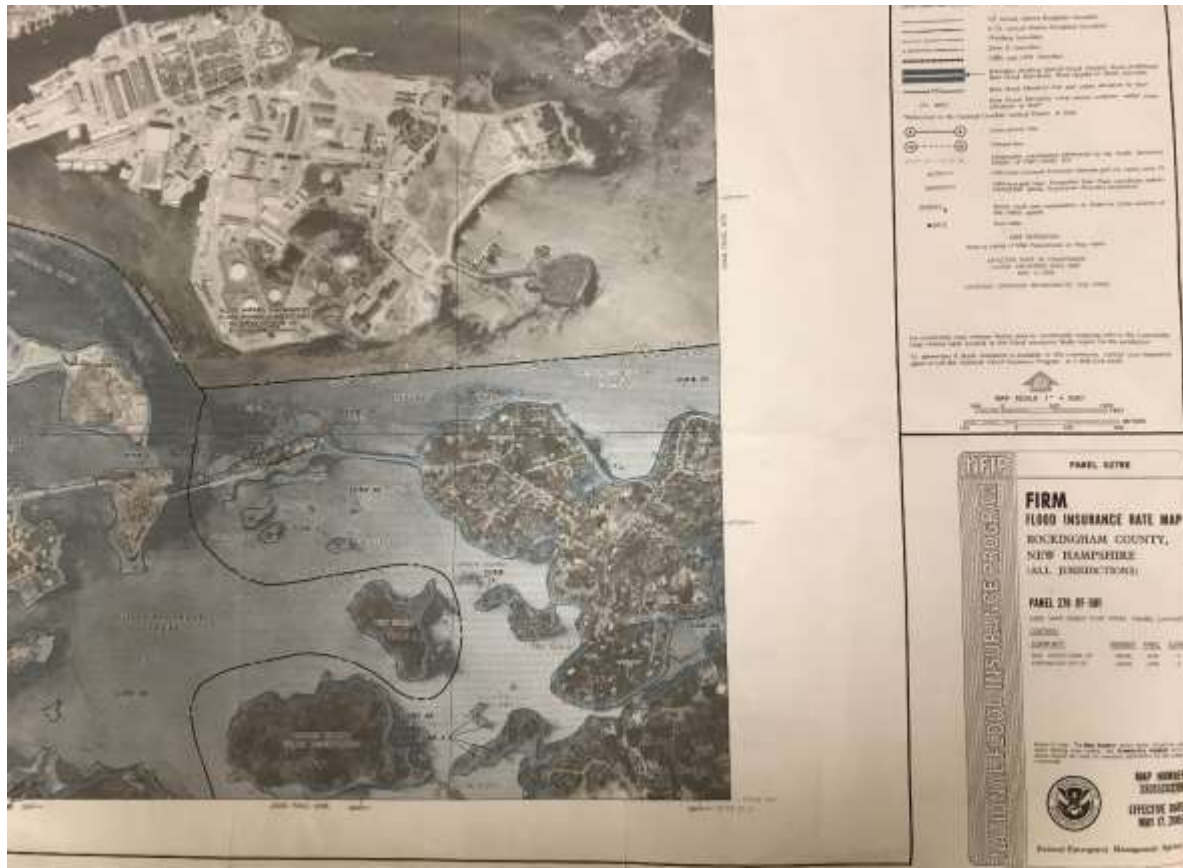
## Portsmouth Historic Properties Climate Change Vulnerability Assessment and Adaptation Planning Initiative

Using coastal flooding projections, Historic District studies, and input from the Local Advisory Committee, a set of adaptation actions has been developed to illustrate a range of approaches that may merit further consideration by the City. For each of 16 actions, this site discusses feasibility, potential effectiveness, cost, and impact on historic character.



# City of Portsmouth floodplain regulation amendments?

1. Compliance with National Flood Insurance Program (NFIP) regulations (needed for federal flood insurance)
2. Incorporate measures to address impacts of climate change



# Changes for Compliance with NFIP

Revisions needed to comply with National Flood Insurance Program (NFIP) regulations

- Updated definitions
- Updated requirements for applicants to change structures located in flood zones
- Provide standard for RV's in flood zones  
for more than 180 days

# Revisions to address impacts of climate change

- Extended Flood Hazard Area
  - Areas less than 2 feet above the Base Flood Elevation in an adjacent Special Flood Hazard Area

Water Level	Elevations Relative to NAVD (North American Vertical Datum)				
	Present Day Elevations (feet)	*Future Scenarios (feet)			
		2050 Low	2050 High	2100 Low	2100 High
Projected SLR	--	<b>+1.0</b>	<b>+1.7</b>	<b>+2.5</b>	<b>+6.3</b>
MHHW	4.4	5.4	6.1	6.9	10.7

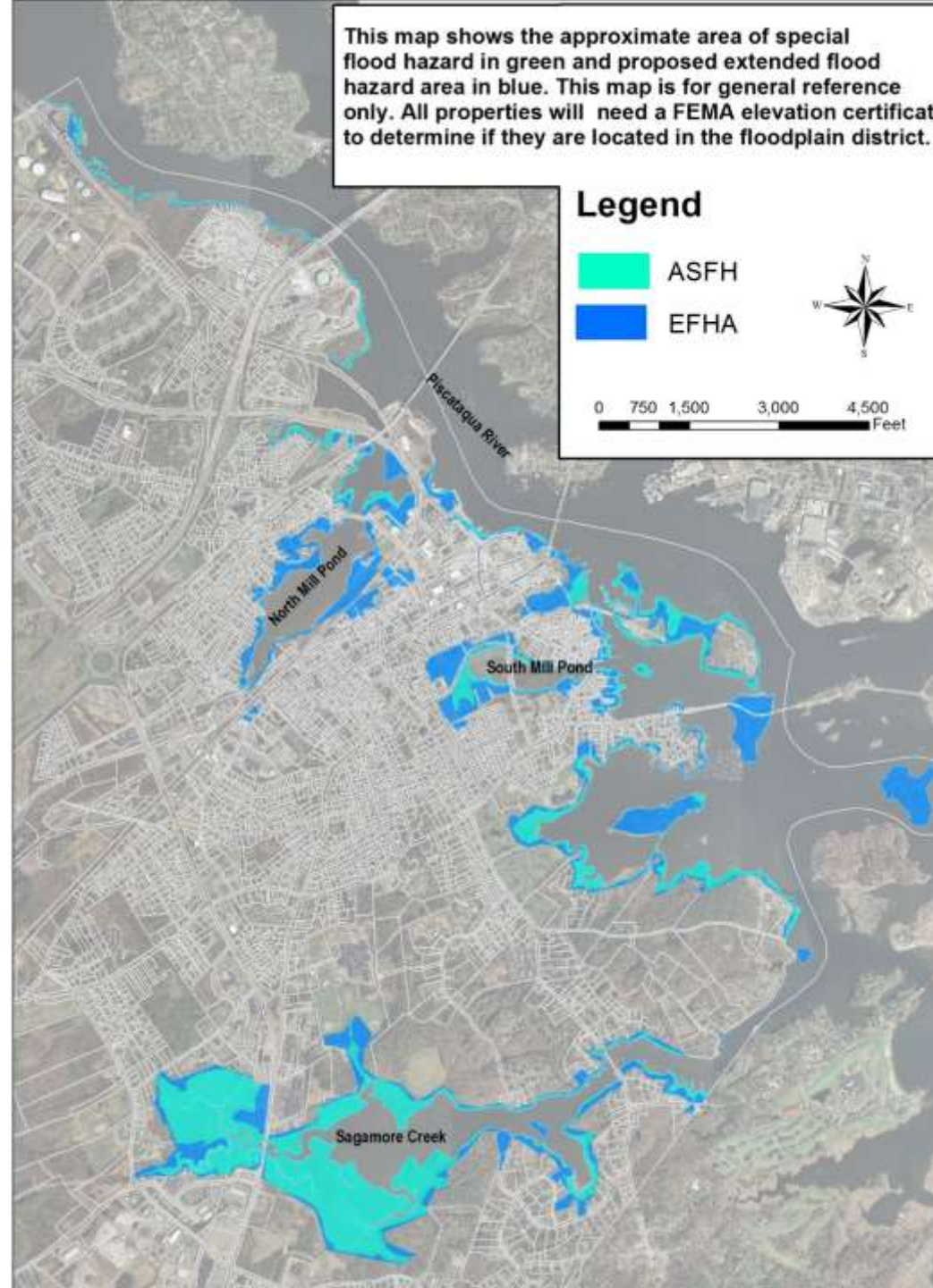
This map shows the approximate area of special flood hazard in green and proposed extended flood hazard area in blue. This map is for general reference only. All properties will need a FEMA elevation certificate to determine if they are located in the floodplain district.

### Legend

- ASFH
- EFHA



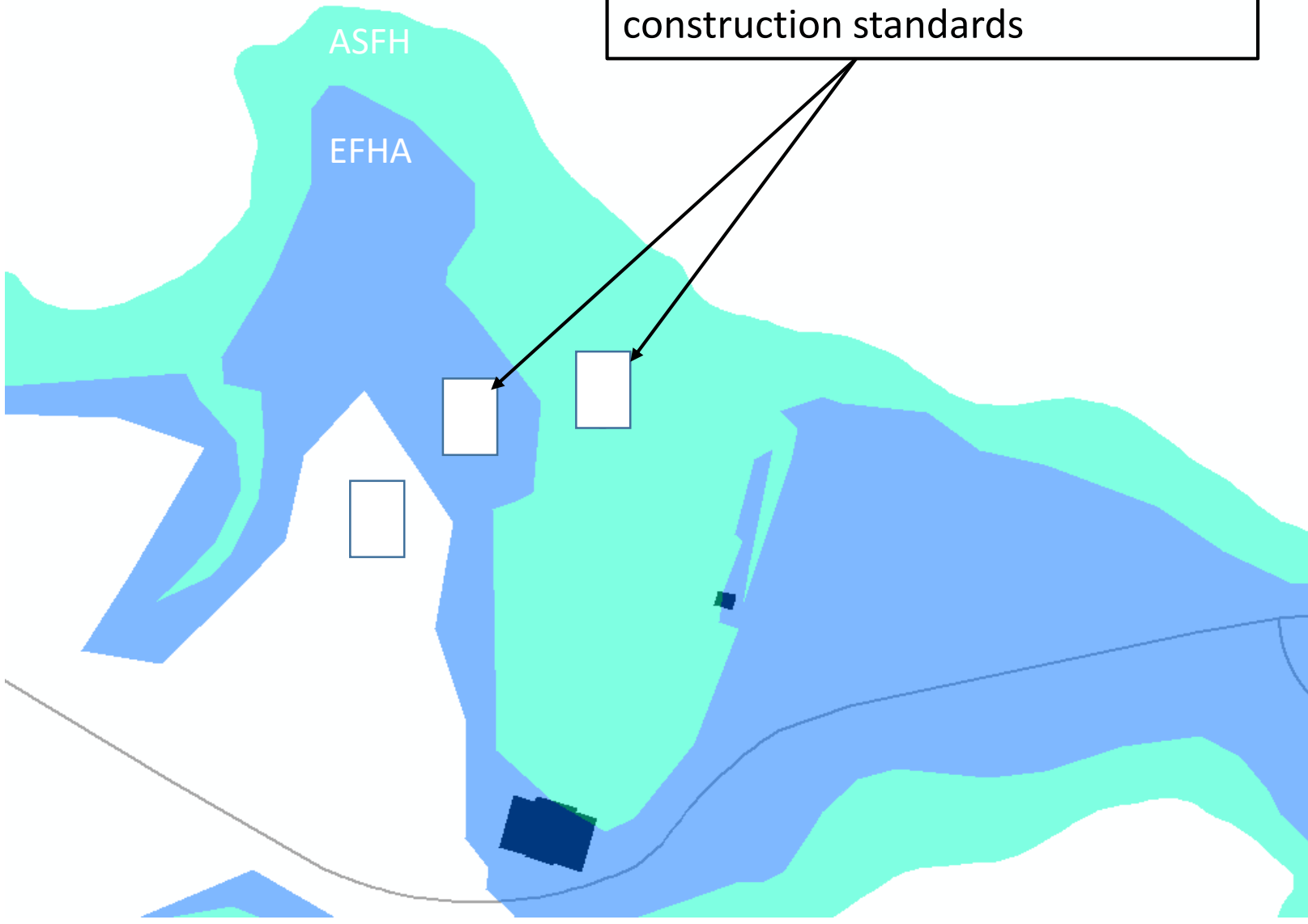
0 750 1,500 3,000 4,500 Feet



Area of Special Flood Hazard (ASFH)  
Extended Flood Hazard Area (EFHA)

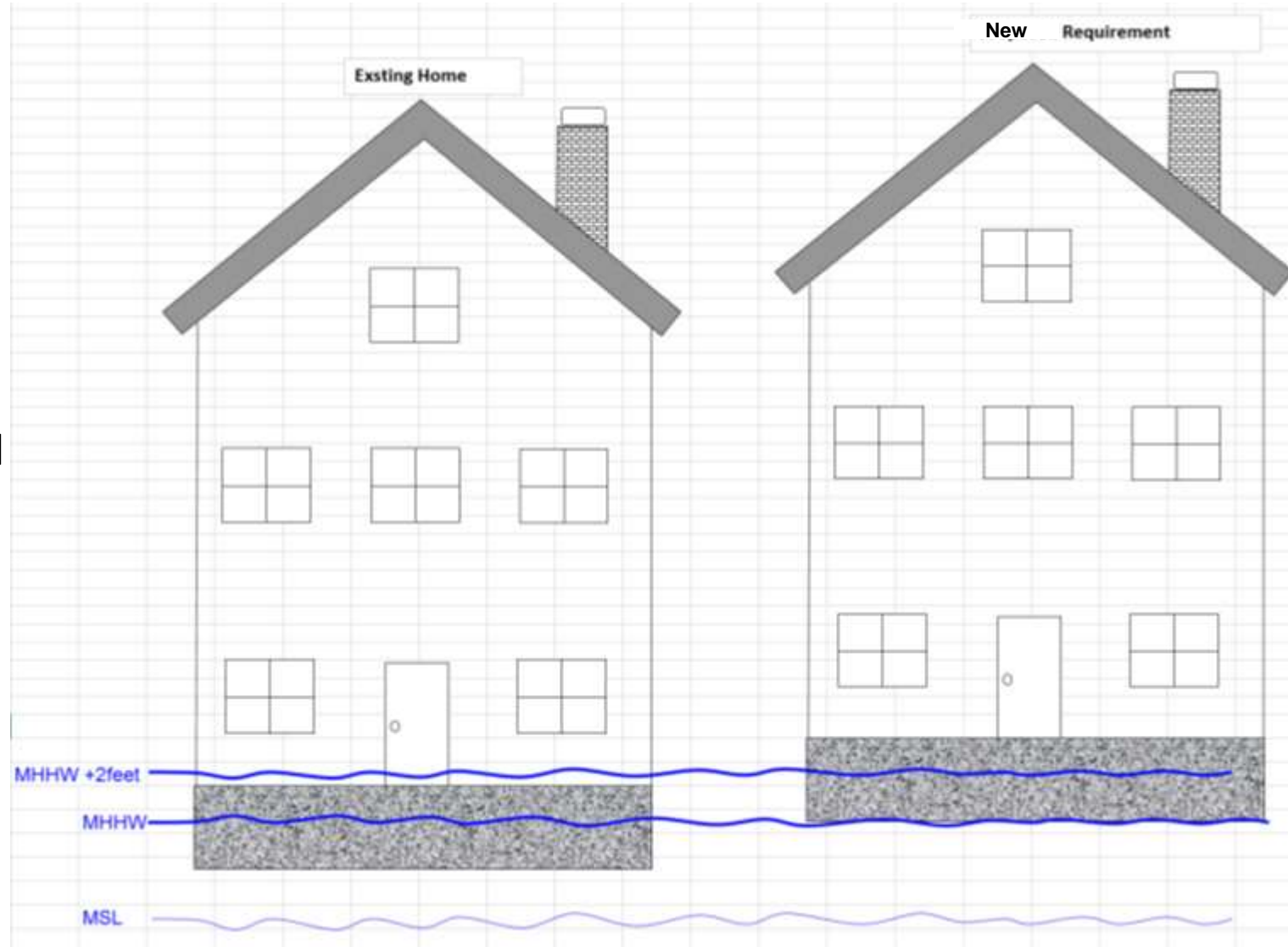
New Construction in these areas  
must comply with flood plain  
construction standards

*Example: If a new residential  
building is built in the ASFH  
or EFHA after January 1,  
2020, the building will be  
required to be elevated to 2-  
ft above BFE.*



# Freeboard

- Require elevation (or floodproofing) to at least 2 feet above the Base Flood Elevation in FEMA Special Flood Hazard Area (Zone A or AE) or Extended Flood Hazard Area for all (residential/nonresidential) **new construction**
- Require elevation (or floodproofing) for **substantial improvements** to at least 1 foot above the Base Flood Elevation in Special Flood hazard area (Zone A or AE)



# Reduced Thresholds

- Definitions of “substantial damage” and “substantial improvement”
- Current regulations apply to cost of restoration or improvement exceeding 50 percent of the market value
- Revised threshold for substantial improvement to 40 percent of the market value, substantial damage kept at 50

Total Value	Property	Structure	Substantial Improvement 30%	Substantial Improvement 40%	Substantial Improvement 50%	Property type
\$875,500	\$651,600	<b>\$223,900</b>	\$67,170	<b>\$89,560</b>	\$111,950	Commercial
\$915,200	\$426,500	<b>\$488,700</b>	\$146,610	<b>\$195,400</b>	\$244,350	Residential

# Thank You



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