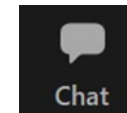
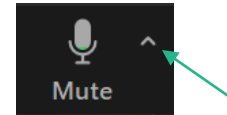


# Eastern Shore of Virginia Hazard Mitigation Plan Steering Committee Meeting

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- Welcome, the meeting will begin shortly!
  - Please remain muted to prevent background noise during introductory and guest presentations.
    - Difficulty with your audio? *Click the up arrow by the “Mute” mic symbol*
    - *You can also click the mic symbol to mute and unmute yourself*
    - *If you’ve called in via phone you can mute & unmute by pressing \**
  - If possible, please turn your video ON so we can see the face that goes with the voice – especially during the breakout sessions. *You can do this by clicking the video camera symbol.*
    - *If you are having difficulty with your video, click the up arrow by the video camera symbol.*
  - Use the Chat feature to communicate with participants & hosts!
  - Change your name to be correct and add affiliation by clicking the ellipsis (3 dots) at the top right of your video feed or the ‘more’ option when you hover over your name in the participant list.
  - *If you cannot use the chat, please contact Shannon Alexander at 757-787-2936 x115*





# EASTERN SHORE HAZARD MITIGATION PLAN

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VIRTUAL EVENT

FEBRUARY 16, 2021



# Welcome & Introductions

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# HMP Team

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Shannon Alexander, Director of Planning

Staff, Coastal Planner

Drew Williams, The Berkley Group

Jon McCoy, The Berkley Group

Tommy Hicks, The Berkley Group



# Roll Call

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Please record your attendance here:

Please use the following link or QR code

<https://arcg.is/0XPK4C1>



# The Importance of the HMP

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What historic storm/event  
impacted your community  
the most ?

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ROUND TABLE

# Discussion of Chair & Vice Chair

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# Proposed Vision Statement

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“Planning and mitigation actions minimize damage and disruption during hazard events. As a result of planning and mitigation actions, damage and disruption will be minimized during natural hazard events. Federal and state agencies cooperate with the local government and guide necessary resources to the governments for recovery activities. To the extent possible, residents **should** will be self-sufficient and **should** will have taken responsibility for their own economic and physical protection. Infrastructure smoothly functions throughout the event and the recovery period following.”

Planning and mitigation actions minimize damage and disruption during hazard events. Federal and state agencies cooperate with the local government and guide necessary resources to the governments for recovery activities. To the extent possible, residents should be self-sufficient and should have taken responsibility for their own economic and physical protection. Infrastructure smoothly functions throughout the event and the recovery period following.

## Motion to accept the Vision Statement



# Locality Meetings and Review

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- Accomack-Northampton Planning District Commission is reviewing and developing draft chapters
- One on One Meetings- Virtual- **Mid March through April**
- Items needed to be reviewed by Committee members:
  - Transportation data
  - Community services and facility data
  - Land use data
  - Recent storm data
- Each chapter needs a good review for correctness.

# Town of Hallwood

Good sources for information:

- U.S. Census Bureau, American Community Survey
- Comprehensive/Town Plans
- Town/County Elected Officials
- Department of Housing and Urban Development
- FEMA NFIP Insurance Report

## Town of Hallwood

### SOCIO-ECONOMIC

Part of assessing hazards in relation to their risk is understanding the people affected. Not all people are affected equally. Some are affected by the factors that relating to their ability to understand risks posed by hazards, and some by their ability to remove themselves from harm's way. Those factors include age, mobility, income and the languages individuals speak and the languages in which individuals are able to access information.

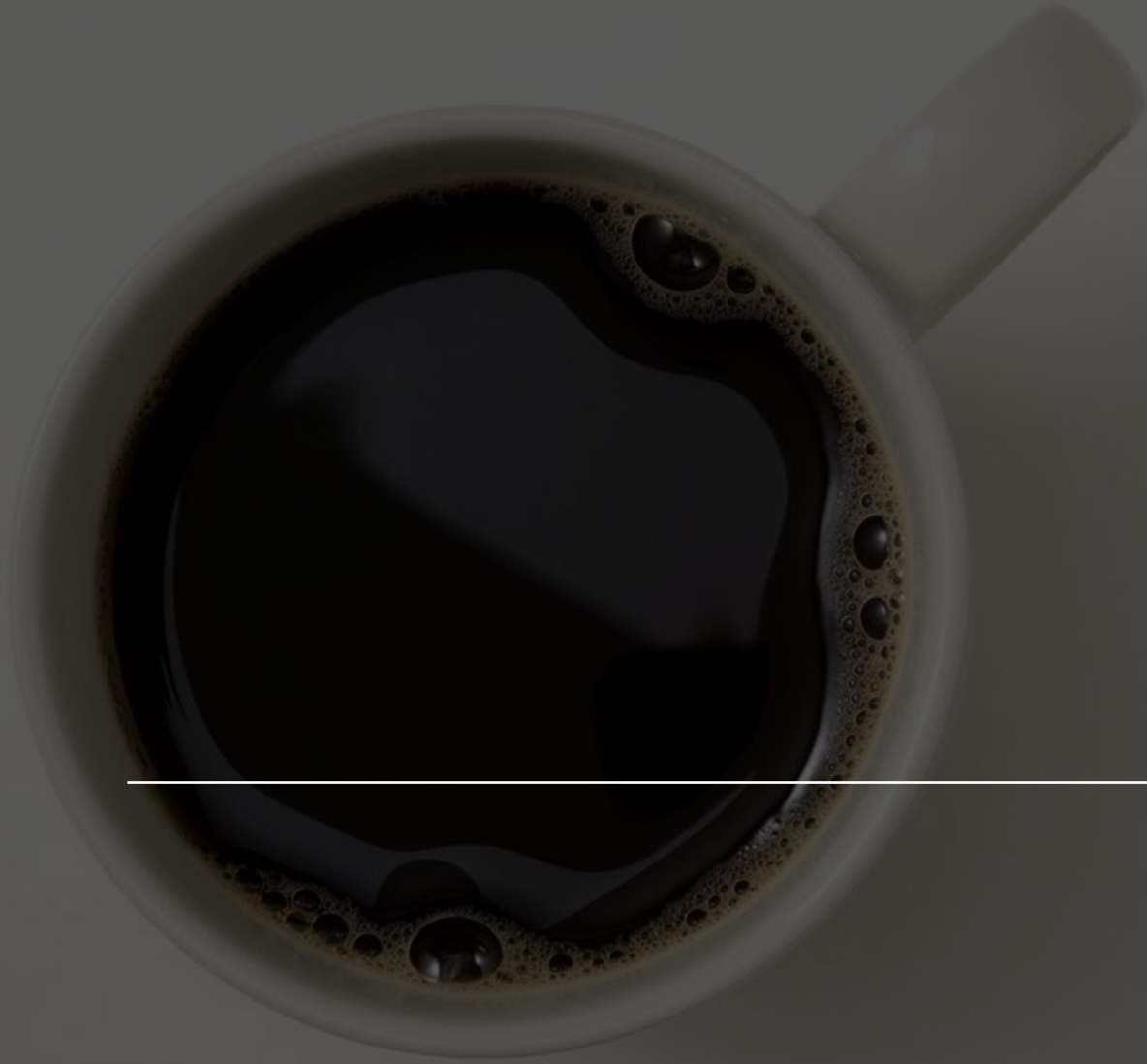
### DEMOGRAPHICS

The 2010 Census indicated the Town had a population of 206, which is a 29.0% decline from the 290 people that lived in the Town during the 2000 Census. The new populations as estimated by the American Community Survey are almost double the 2000 Census figures. The Town Council indicated that the population is most likely about the same as it was in 2010 (Town Council, personal communication, June 2, 2016). The median age for residents in Hallwood in 2014 was 34.0 years. This signifies a younger age than the county, state, and national average. According to the American Community Survey 5-year estimates for 2014, almost 50% of the households in Hallwood have one or more people under 18 and almost 40% with one or more people 60 years and over. Typically younger populations are lower risk populations during a hazardous event, however this low median age seems to be indicative of a large number of children, who require additional aid and attention during emergency situations.

### HOUSING UNITS

Knowledge of a community's housing base contributes to hazard and vulnerability analysis by identifying how many homes are at risk. Vehicles available to households is one indicator of a household's ability to evacuate when necessary.


The new estimates of housing units from the American Community Survey should be ignored as gross over estimates. Town representatives indicated that there are 86 liveable structures, only about 3 of which are unoccupied (Town Council, personal communications, June 2, 2016). The Town does have some dilapidated structures, and has expressed interest in their removal, however, neither the Town nor residents have the resources necessary to do so (Town Council, personal communication, June 2, 2016). Often unoccupied houses are not properly maintained and can cause additional debris hazards during high wind events.



Review Attached Document

# Break

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4:46



# What is the biggest risk to your community today

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ROUND TABLE

# HIRA Facilitation

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# 2016

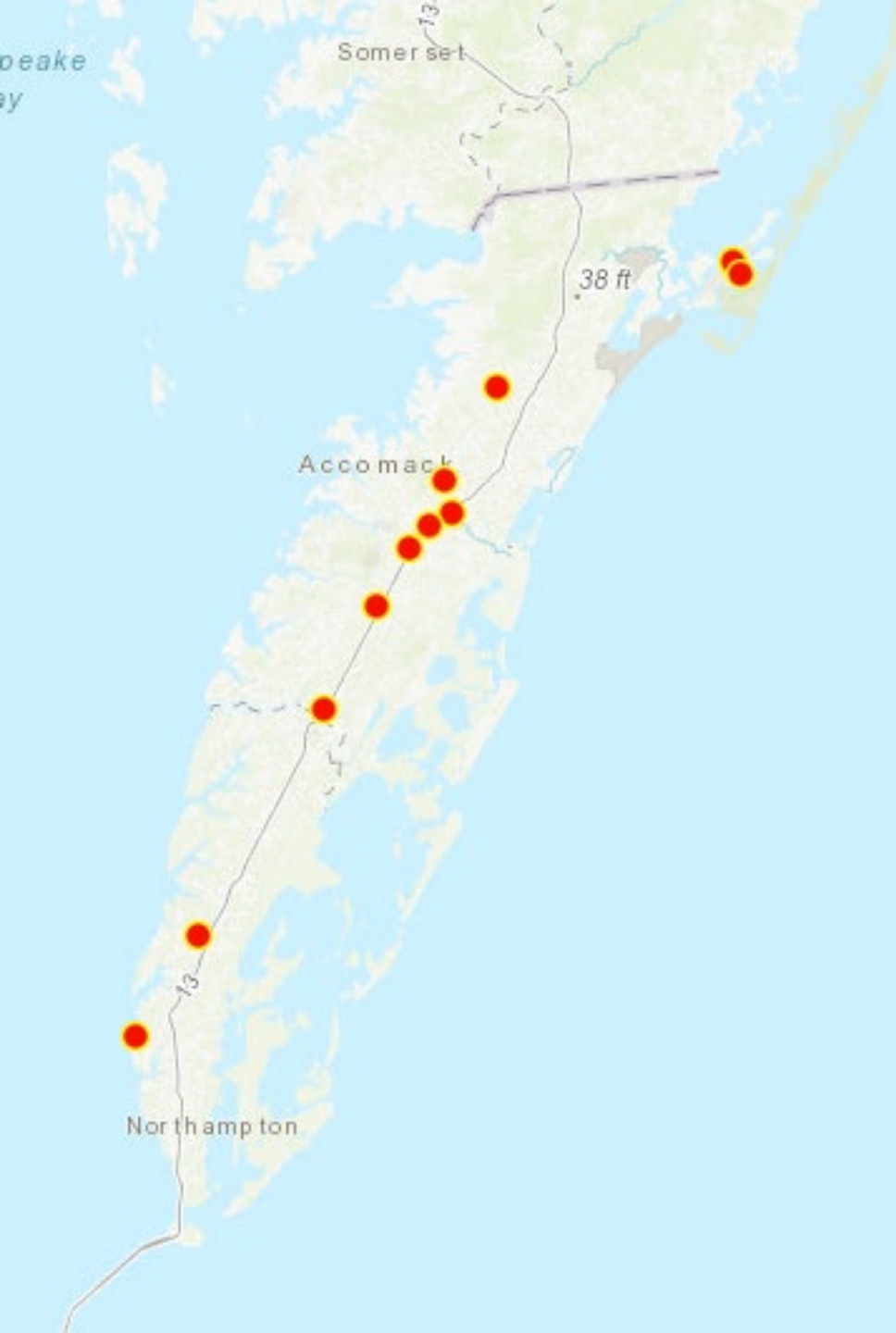
## DEFINITIONS OF EASTERN SHORE HAZARDS

### HIGH PRIORITY HAZARDS

The four high priority hazards scored virtually evenly in the prioritization. All other hazards placed well behind these four. Hazards ranked as medium or low priority are not considered in substantial detail across the region since mitigation options either do not exist or the mitigation options are not as cost-effective as the high priority mitigation options. On the Eastern Shore, mitigating damages from ice/snow events, sewage spills, drought, wildfire, hazmat incidents, heat waves, or biohazards are not as cost-effective as mitigating damages from coastal flooding, storm water flooding, coastal erosion, and high wind events, which cause extensive disruption and damage.

However, individual towns may have prioritized some of the other hazards and provided more detail on extent and vulnerability due to local conditions or experience.





Geographic  
representation of the  
survey participants  
from January meeting

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Hazard	2006	2011	2016
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High Wind	High	High	High
Coastal Erosion	High	High	High
Coastal Flooding	High	High	High
Storm Water Flooding	High	High	High

Well Contamination			Medium
Ice-Snow	Medium	Medium	Medium
Biological Hazards	N/A	N/A	Medium
Drought	Medium	Medium	Medium
Sewage Spills	N/A	Medium	Medium

Wildland	Low	Medium	Low
Hazardous Materials Incidents	Low	Low	Low
Heat Wave	Medium	Low	Low
Fish Kills	Low	N/A	Low
Invasive Environmental Disease	N/A	N/A	Low
Earthquake	N/A	N/A	Low

2021

Hurricane

Coastal Flooding

Pandemic

High Wind

Storm Surge

Coastal Erosion

Water Quality

Infectious Disease

Non-Coastal Flooding

Road and Highway

Substance Use and Overdose

Communications Failure

Active Threat

Electrical Energy Failure

Water or Wastewater Disruption

Tornado

**Hazard**

**2016**

**2021**

**Score**

High Wind

High

Hurricane

9.36

Coastal Erosion

High

Coastal Flooding

9.14

Coastal Flooding

High

Pandemic

8.77

Storm Water Flooding

High

High Wind

8.50

Well Contamination

Medium

Storm Surge

8.43

Ice-Snow

Medium 4.17

Coastal Erosion

7.71

Biological Hazards

Medium

Water Quality

7.29

Drought

Medium 4.42

Infectious Disease

7.15

Sewage Spills

Medium

Non-Coastal Flooding

6.69

Road and Highway

6.25

Wildland

Low 2.83

Substance Use and Overdose

5.85

Hazardous Materials Incidents

Low 3.31

Communications Failure

5.62

Heat Wave

Low 4.93

Active Threat

5.33

Fish Kills

Low 3.93

Electrical Energy Failure

5.17

Invasive Environmental Disease

Low 4.67

Water or Wastewater Disruption

5.17

Earthquake

Low 1.67

Tornado

5.00

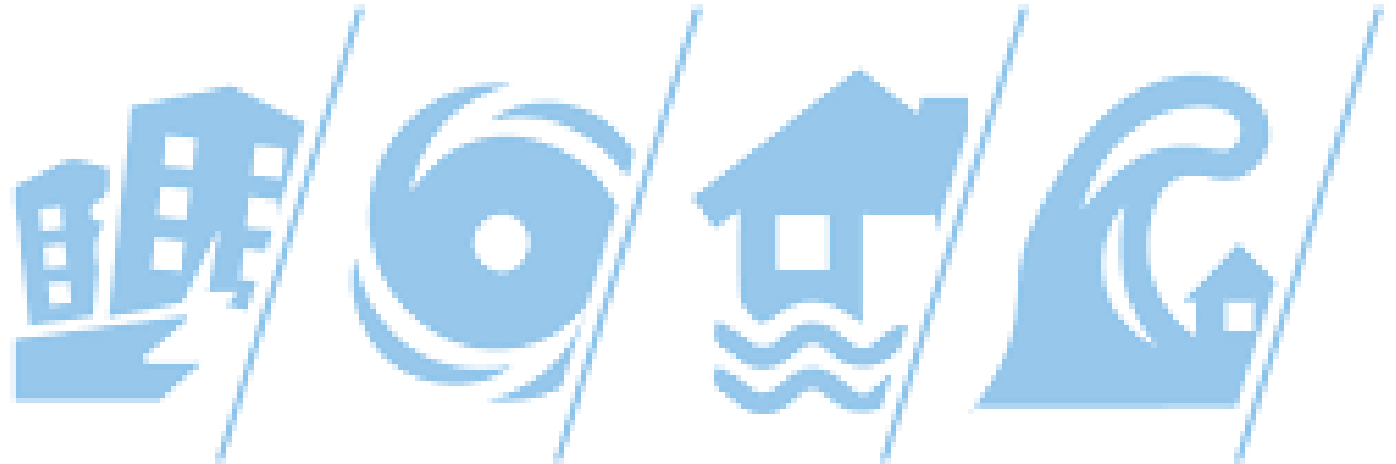
Hurricane Global Risk Report

Region Name: Northampton

Probabilistic 100-year Return

# HAZUS<sup>®</sup>

EARTHQUAKE • WIND • FLOOD • TSUNAMI



# Guidelines for Wind Vulnerability Assessments of Existing Critical Facilities

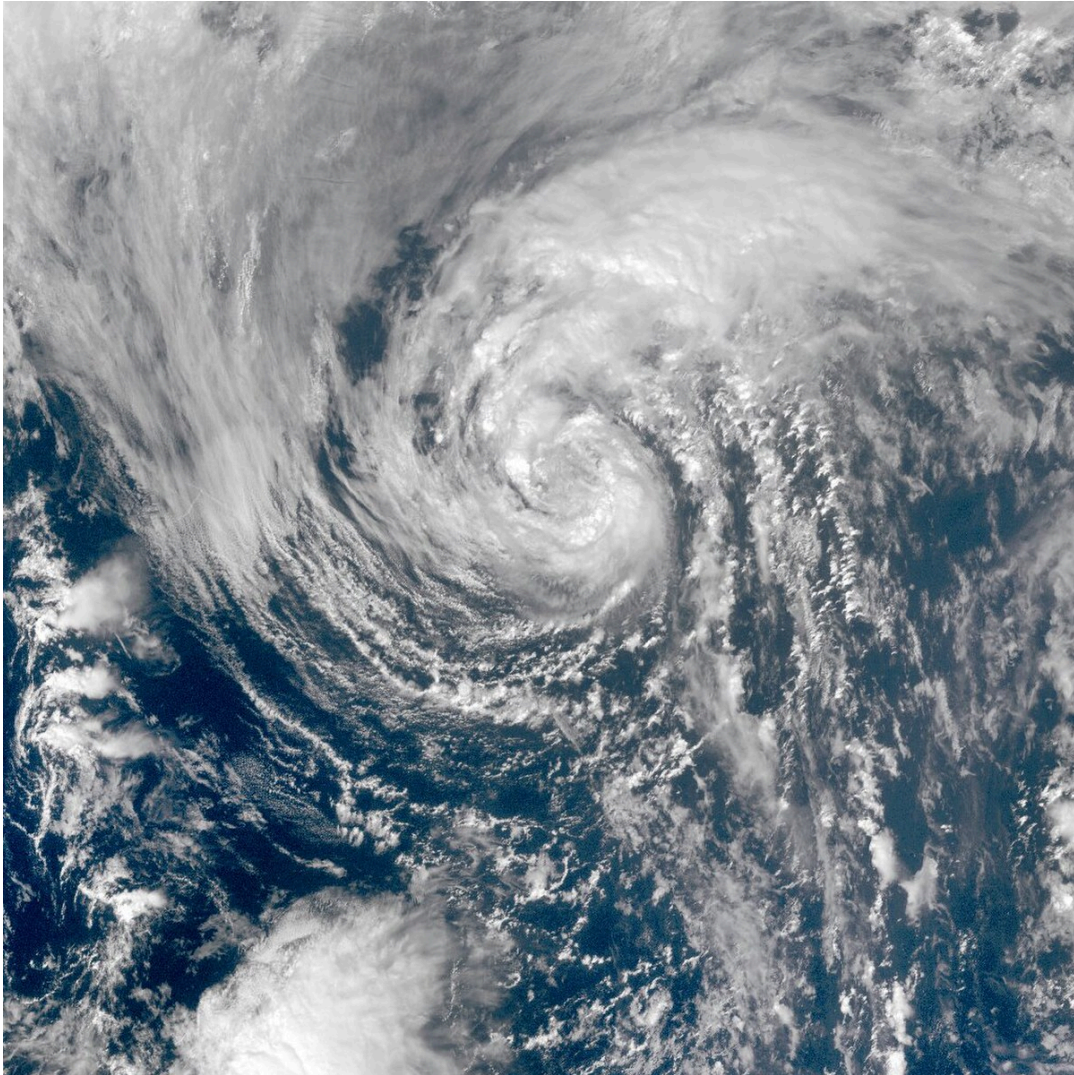
*FEMA P-2062 / September  
2019*

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## HIGH WIND

High wind events are highly likely, affecting large numbers of buildings. These events can result from the same tropical and nor'easter systems as coastal flooding. Primary impacts are seen in the form of direct property damage (building, contents, and inventory) and secondary impacts from business interruption losses (income, relocation, rental, wages). Damage to buildings in such storms is widespread and can be critical, with some suffering more than 49 percent damage from these events.

Damage from thunderstorm wind tends to be more localized, as are those from tornadoes, but tornadoes can be far more destructive, with some buildings suffering more than 49 percent damage. Thunderstorm winds and tornadoes are not typically destructive across the entire region, although tornadoes can draw emergency services from across the region.



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This Photo by Unknown Author is licensed under CC BY-SA

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## COASTAL FLOODING

These events are highly likely, affecting large numbers of buildings, infrastructure, and people. Primary impacts are seen in the form of direct property damage (building, contents, and inventory) and secondary impacts from business interruption losses (income, relocation, rental, wages). Damage to buildings can be critical, with some suffering more than 49 percent damage from these events.

# Guidance for Flood Risk Analysis and Mapping

Coastal Erosion

February 2018

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## COASTAL EROSION

Coastal erosion is considered to be highly likely, affecting large numbers of buildings. Damages can be critical with buildings suffering more than 49 percent damage from these events. Primary impacts to buildings and property are commonly connected to other secondary impacts such as shoaling of navigable waterways and degradation of water quality. These events are not typically disruptive to the entire region.





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## BIOHAZARDS

Biohazards are highly likely, affecting large numbers of people and services, with little impact on buildings, but high impact on the population. Pandemic pathogens, and tick and mosquito-borne illnesses fall into biohazards. This category also includes secondary impacts to primary events, such as illnesses that develop in confined spaces, such as shelters, or from injury or food spoilage following extended power outages.



- ✓ High Wind Events
- ✓ Coastal Flooding
- ✓ Coastal Erosion
- ✓ Biological Hazards

Motion to accept the top 4 high Priority Hazards as listed



- ✓ Water and Wastewater Quality and Management
- ✓ Non-Coastal Flooding
- ✓ Road and Highway
- ✓ Substance Use and Overdose
- ✓ Communications Failure

Motion to accept the 5  
Medium Priority Hazards as  
listed



✓ Communications Failure

✓ Active Threat

✓ Electrical Energy Failure

✓ Tornado

✓ Invasive Environmental  
Disease

Motion to accept the 5 Low  
Priority Hazards as listed





# Next Steps

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## STORM WATER FLOODING

These events are highly likely, affecting large numbers of buildings, infrastructure, and people. Damages can be critical with buildings suffering more than 49 percent damage from these events. These events can be disruptive to the region, causing some displacement and evacuations.





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## WELL CONTAMINATION

This hazard was not ranked in either of the last two plans but rose to the top of the medium priority list for this plan. It was seen as a medium likelihood of occurrence, affecting a moderate number of structures, but with few feasible mitigation opportunities.

# Current Mitigation Goals – Any Changes?

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Goal 1: Local governments guide a comprehensive mitigation program including public education and ongoing hazard assessments.



Goal 2: Residents, businesses, local governments, and other community partners will work together to minimize community disruption through planning and residential and commercial mitigation activities.



Goal 3: Local governments encourage self-sufficiency and personal responsibility for managing risk.



Goal 4: Local governments will work to ensure that infrastructure will continuously function during and after a hazard event.



Goal 5: Local governments will make efforts to reach special needs populations.