







MIDDLE PENINSULA

Regional All Hazards Mitigation Plan Update

Local Planning Team – Meeting 4
February 29, 2021

Middle Peninsula All Hazards Mitigation Plan Update

LOCAL PLANNING TEAM

Meeting 4
Monday, March 29, 2021 at 10am

Agenda

- 1. Welcome & Local Planning Team Introductions
- 2. Follow ups from Meeting 3
 - Public Survey Results
 - Local Hazard Assessment
- 3. Mitigation Strategy Review
- 4. Section Reviews
- 5. Next meeting(s)



PUBLIC



This survey requested information on local hazards and mitigation actions.

Respondents

• 106 respondents

ANSWER CHOICES	RESPONSES	
Essex	2.83%	3
Gloucester	38.68%	41
King William	7.55%	8
King & Queen	16.98%	18
Mathews	11.32%	12
Middlesex	13.21%	14
Town of Urbanna	0.00%	0
Town of Tappahannock	0.00%	0
Town of West Point	9.43%	10
TOTAL		106

• No respondents were affiliated with a Federally Recognized Tribe in the Region.

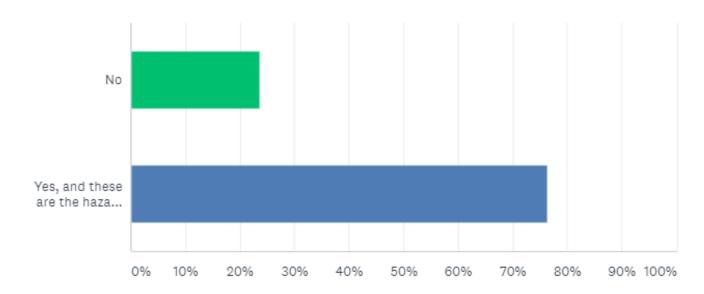
Hazards

- VERY CONCERNED ABOUT:
 - > Flooding
 - > Hurricanes
 - ➤ Tornadoes
 - > Communicable Disease
- LEAST CONCERENED
 - ➤ Dam failure
 - > Earthquakes
 - > Shrink-well Soils
 - ➤ Wildfires



While living in the Middle Peninsula Region, have you ever experienced, or been impacted by a hazard (see the list of hazards in question 4)?

Answered: 106 Skipped: 0



SWER CHOICES RESPONSES		
No	23.58%	25
Yes, and these are the hazards I have been impacted by:	76.42%	81
TOTAL		106



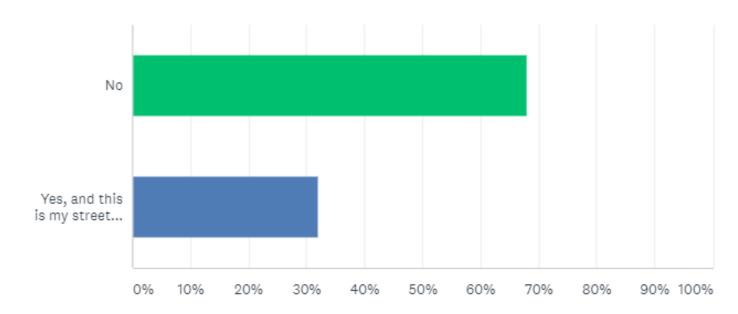
Please select the top three (3) hazards you think are the highest threat to your home or community? Of the top 3 hazards please rank from the highest threat (1) to the lowest (3).

- Highest threat
 - > Hurricane
 - > Flooding
 - > Winter Storms





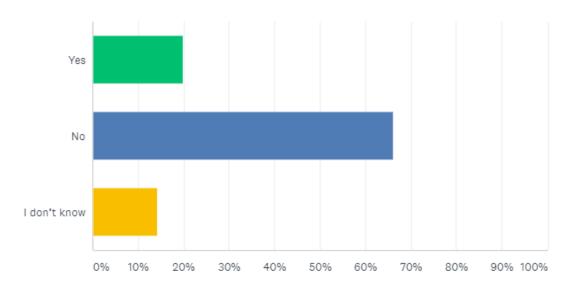
Does your street flood during rain events?



ANSWER CHOICES	RESPONSES		
No	67.92%	72	
Yes, and this is my street and county/town name:	32.08%	34	
TOTAL		106	

os Is your home located in a floodplain?

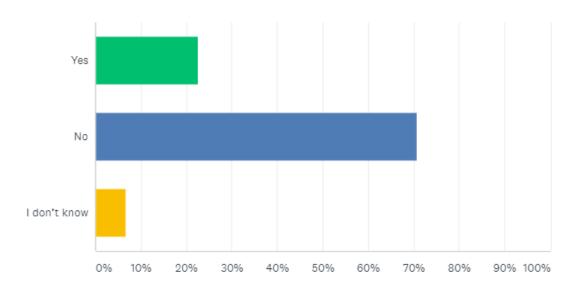
Answered: 106 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	19.81%	21
No	66.04%	70
I don't know	14.15%	15
TOTAL		106

Q9

Do you currently have flood insurance?



ANSWER CHOICES	RESPONSES	
Yes	22.64%	24
No	70.75%	75
I don't know	6.60%	7
TOTAL		106

Q10 Hazards and disasters can have a significant impact on a community but planning for these events can help lessen the impact. The following statements will help us determine community priorities in planning for these hazards. Please tell us how important each one is to you.

Answered: 106 Skipped: 0

	VERY IMPORTANT	SOMEWHAT IMPORTANT	NEUTRAL	NOT VERY IMPORTANT	NOT IMPORTANT	TOTAL
Protecting private property	65.69%	23.53%	9.80%	0.98%	0.00%	
	67	24	10	1	0	102
Protecting critical facilities (hospitals,	87.62%	7.62%	2.86%	0.00%	1.90%	
transportation networks, fire stations)	92	8	3	0	2	105
Preventing development in hazard areas	46.15%	32.69%	17.31%	2.88%	0.96%	
	48	34	18	3	1	104
Protecting natural environment	62.86%	25.71%	8.57%	1.90%	0.95%	
	66	27	9	2	1	105
Protecting historical / cultural landmarks	46.67%	34.29%	13.33%	1.90%	3.81%	
	49	36	14	2	4	105
Promoting cooperation among public	46.15%	35.58%	14.42%	2.88%	0.96%	
agencies, citizens, non-profit organizations and businesses	48	37	15	3	1	104
Protecting and reducing damage to utilities	66.67%	27.62%	4.76%	0.00%	0.95%	
	70	29	5	0	1	105
Strengthening emergency services (police,	57.14%	36.19%	3.81%	1.90%	0.95%	
fire, ambulance)	60	38	4	2	1	105

Q11 What actions have you taken to reduce risk for your house / apartment / property for potential hazards/disasters? (Please check all that apply)

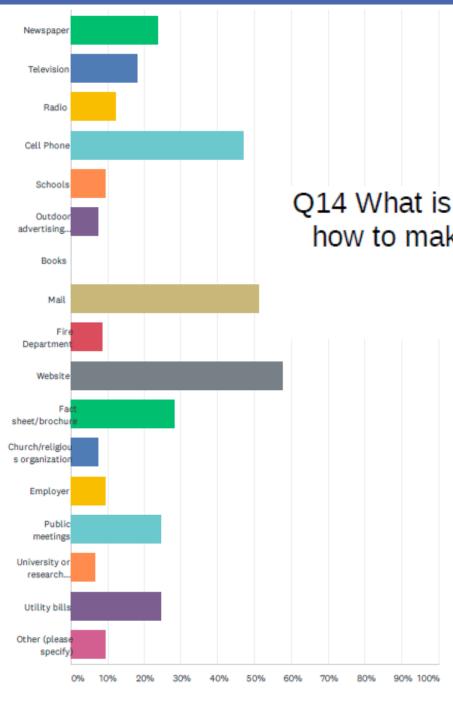
ANSWER CHOICES	RESPON	SES
Purchase homeowners / renters insurance police	92.45%	98
Purchase Flood Insurance	22.64%	24
Floodproofing (elevating furnace, water heaters, electric panels)	18.87%	20
Install retrofits such as high impact windows or doors to withstand high winds; fire resistant siding, roofing or window screens; stormshelters, etc.	16.04%	17
Install fire breaks around home	3.77%	4
Remove dead / dying trees or vegetation	69.81%	74
Purchase and placement of easily accessible fire extinguishers	52.83%	56
Alternate power supply	62.26%	66
Alternate water supply	18.87%	20
None	0.00%	0
Other (please specify)	10.38%	11
Total Respondents: 106		

Q12 Which of the following incentives might encourage you to take actions to reduce risk to your home/apartment/property from hazards? (Please check all that apply)

ANSWER CHOICES	RESPONSES	
Building permit fee waiver	35.85%	38
Insurance premium discount	62.26%	66
Low interest rate loan	24.53%	26
Grant funds	48.11%	51
Property tax break	69.81%	74
Mortgage discount	32.08%	34
State tax incentive	63.21%	67
None	7.55%	8
Other (please specify)	0.94%	1
Total Respondents: 106		

Q13 Which of the following mitigation project types do you believe local government agencies should focus on to reduce disruptions of services and to strengthen the community (please check all that apply):

ANSWER CHOICES	RESPON	SES
Retrofit and strengthen essential facilities such as police, fire, emergency medical services, hospitals, schools, etc.	57.55%	61
Replace inadequate or vulnerable bridges and causeways.	42.45%	45
Retrofit infrastructure, such as elevating roadways and improving drainage systems.	66.98%	71
Work on improving the damage resistance of utilities (electricity, communications, water / wastewater facilities, etc.).	59.43%	63
Install or improve protective structures, such as floodwalls or living shorelines.	26.42%	28
Buyout flood prone properties and maintain as open-space.	23.58%	25
Strengthen codes, ordinances, and plans to require higher hazard risk management standards.	23.58%	25
Provide better information about hazard risk and high-hazard areas.	28.30%	30
Inform property owners of ways they can mitigate damage to their properties.	47.17%	50
Assist vulnerable property owners with securing funding to mitigate impacts to their property(s).	41.51%	44
None	2.83%	3
Other (please specify)	3.77%	4
Total Respondents: 106		



Q14 What is the most effective way for you to receive information about how to make your household and home safer from natural disasters?

(Please check all that apply)



Regional Hazard Ranking

- 1. Summer Storms
- 2. Winter Storms (Ice & snow)
- 3. Hurricanes
- 4. Communicable Disease
- 5. Flooding
- 6. Tornadoes
- 7. Lightning
- 8. High Wind/Windstorms
- 9. Coastal/Shoreline Erosion
- 10.Wildfire
- = Critical Hazards

- 11.HAZMAT
- 12. Extreme Temperatures
- 13.Sea Level Rise
- 14.Drought
- 15. Shrink-Swell Soils
- 16.Earthquake
- 17. Air Quality
- **18.Dam Failure**
- 19.Land Subsidence/Karst

= Non-Critical Hazards

Listed from the highest % of risk to lowest % of risk

= Moderately Critical Hazards

MITIGATION STRATEGY



Mitigation Strategy Development

Goals

What long-term outcomes do you want to achieve? Step #1: 2016 Strategy Review (Section 8)

Actions

What specific actions will local government, community organizations, and others take to reduce risk to hazards?

Step #2: 2016 Mitigation Strategies
Status Updates (Section 7)

Action Plan -

How will the actions be prioritized and implemented? -Step #3: Implementation Plan (Section 9)

Middlesex County 2010 Mitigation Strategies Status Updates								
community ID#	Mitigation Strategy #	Mitigation Strategies	Strategy Mitigation (H= High M= Medium L=Low)	Strategy Status (Completed/ In-progress/ On-going/ Delayed/ Canceled/ Not Started)	If Completed, when? Add Date	If delayed or canceled please explain why? (Lack of funding, support, manpower, etc) If in-progress or on-going, please explain the progress since the last AHMP Plan?	Other Comments	
510098	1.1.1	Reduce or eliminate Flood Damage to residential and						
510098	1.1.2	business structures Flood proof, to the greatest extent possible, existing water dependent commercial buildings						
510098	1.1.6	Improve/maintain/reconstruct public roads that hinder the evacuation of the Middle Peninsula & Tidewater residents fleeing flood waters from severe hurricanes						
510098	1.1.8	Review locality's compliance with the National Flood Insurance Program with a bi-annual review of their Floodplain Ordinance and any newly permitted activity in the 100-year floodplain						
510098	1.1.9	Investigate the FEMA Community Rating System Program in the Middle Peninsula Localities that are not currently participating in it						
510098	1.1.11	Continue to insure that floodplain/zoning/building regulations in flood prone areas are strictly enforced to prevent non-compliant development and the need to invest in additional public infrastructure in these areas in the future.						
510098	1.1.13	Strongly encourage the USDA-Natural Resources Conservation Services staff and the Virginia Soil and Water Conservation District Office staff to ensure that farm pond dams remain structurally sound.						
510098	1.1.15	Promote coastal construction techniques that will minimize soil erosion and shoreline damage caused by coastal storm surges						
510098	1.2.1	Decrease the adverse affects of drought conditions for residents - Adopt a Drought Response and Contingency Plan and ordinance		Completed				
510098	2.2.1	Formalize mutual aid agreements to coordinate the region's fire and emergency medical units to ensure to quick and efficient response to these severe weather events		Completed				
510098	2.2.2	Formalize mutual aid agreements to coordinate the region's fire unites to ensure quick and efficient response to wildfires		Completed				
510098	3.1.1	Enhance/implement the use of rapid notification systems to warn residents of approaching flooding waters and mandatory evacuation notices.		Completed				
510098	3.1.2	Encourage private property owners to perform regular and routine maintenance of ditches and culverts in order to keep them freed of debris, with a special emphasis on road						

keep them freed of debris, with a special emphasis on road sections where there are chronic flooding problems

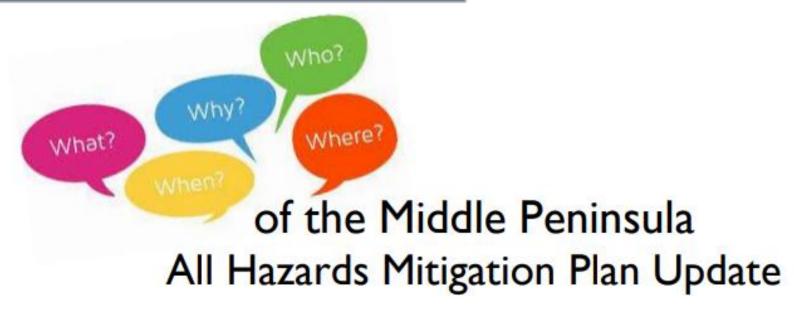
510098	3.1.3	Encourage the two power companies operating in the Middle Peninsula Region to maintain system components, including power line rights-of-way, to minimize interruptions of the electrical power grid for severe weather.			
510098	3.1.4	Promote public education programs to ensure that property owners are fully informed about the flood hazards on the property that they own.			
510098	3.1.5	Develop a public education campaign for residents living in the 100-year floodplain, especially those living on FEMA's list of SRL and RL properties, listing methods for them to decrease flood damage including the availability of any FEMA grant funds for elevation or relocation projects.			
510098	3.1.6	Increase resident and emergency responder safety during severe winter ice storm events by developing a public education campaign to inform residents about the importance of keeping tree limbs away from their homes and electric lines.			
510098	3.1.7	Develop a public education program to ensure that property owners are fully informed about the long range affects that sea level rise will have on low-lying property that they own.			
510098	3.1.8	Promote a public education program to ensure that property owners protect their property by decreasing flammable forest fuels surrounding homes located in wooded settings.			
510098	3.2.1	Incorporate the newly digitized local floodplain maps into each County's GIS database after adoption by the local governing body.	Completed		
510098	3.2.2	HAZUS flood runs for the 1 sq. mi. threshold. In most cases, this will need to be done on priority stream reaches as the program does not run efficiently at this level. Refine and update data sets for GBS and essential facilities, and Re-run HAZUS for plan update to reflect 2010 census data	In-progress	1.HAZUS flood runs for the 1 square mile threshold was completed in the 2015 HAZUS completed by Dewberry 2. During the 2015 HAZUS completed by Dewberry the newest version of HAZUS software (version 2.2) which consisted of new dasymetric Census data (ie. general building stock). 3.2010 Census was not included in HAZUS.	
510098	4.1.1	All Natural Hazards: Adopt and Implement Plan	In-progress	Adopted a floodplain overlay district as a component of the County's zoning ordinance.	

Step#3

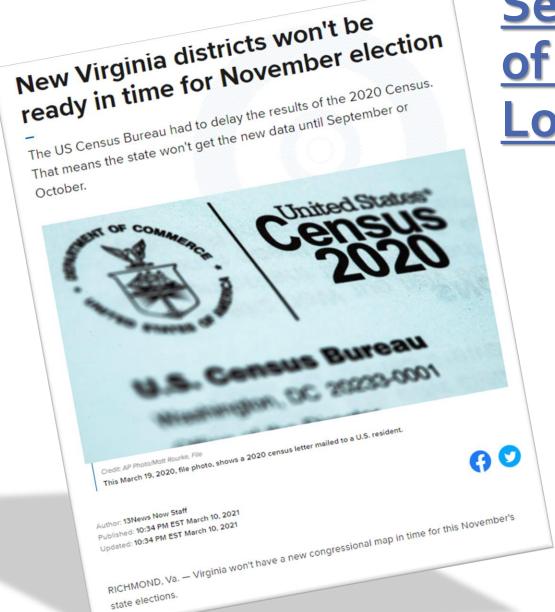
		x County - Locality Sp			
Strategy	Priority	Responsible Party	Funding Source	Status	Comments
1.1.1	High	Zoning	FEMA/land owners	On-going	Managed by Staff on an on-going basis
1.1.2	Low	Building	Local	Not Started	Delayed because lack of staff; any concerns are forwarded to VDOT
1.1.6	Low	BOS/VDOT	VDOT	On-going	Managed by VDOT
1.1.8	High	Zoning	VDOT	On-going	Active program; Ordinance recently readopted
1.1.9	Low	Building/Zoning	Local	Not Started	Delayed because lack of staff
1.1.11	High	Zoning	Local	On-going	Managed by staff on an on-going basis
1.1.13	Moderate	ESC/Planning		On-going	Coordinate with USDA Staff when required
1.1.15	High	Building/Wetlands	Local	On-going	Managed by Staff on an on-going basis
1.2.1	Low	ESC/CAO	Local	Not Started	
2.2.1	High	ESC	Local	On-going	Currently participate in mutual aid, no formal MOU's
2.2.2	High	ESC	Local	On-going	Currently participate in mutual aid, no formal MOU's
3.1.2	Low	ESC	n/a	On-going	This occurs as needed
3.1.3	Moderate	ESC/power co	n/a	On-going	Managed by Staff on an as needed basis
3.1.4	High	ESC	n/a	On-going	Managed by staff during public education deliveries
3.1.5	Low	ESC	n/a	On-going	This occurs as requested
3.1.6	High	ESC	n/a	On-going	Managed by staff during public education deliveries
3.1.7	Low	ESC	Local	Not Started	Reactionary only
3.1.8	High	ESC	n/a	On-going	Managed by Staff during public education deliveries
3.2.2	Low	ESC	n/a	In-progress	I.HAZUS flood runs for the I square mile threshold was completed in the 2015 HAZUS completed by Dewberry 2. During the 2015 HAZUS completed by Dewberry the newest version of HAZUS software (version 2.2) which consisted of new dasymetric Census data (ie. general building stock). 3.2010 Census was not included in HAZUS.
4.1.1	High	ESC	Local	In-progress	Adopted a floodplain overlay district as a component of the County's zoning ordinance.

SECTION REVIEWS

Section 1: Introduction



- Includes associated regulations, benefits, process, and participants
- Will send out the entire section to the LPT for review.
 - > Review and provide comments back by April 23, 2021



Section 3: Community Profile of Middle Peninsula Localities

- With census data delay, the plan will stick with 2010 Census data.
- Will include updates, if any, from LPT previous review
- Will send out the entire section to the LPT for review.
 - > Review and provide comments back by April 23, 2021

Upcoming Trainings

> OneNOAA Science Seminar Series
Understanding the Role Coastal Marshes Play in Protecting Communities from Storm Surge and Flooding
March 31, 2021 12:00 PM - 1:00 PM

As coastal communities strive to safeguard themselves from increasing storm risks, they are looking for ways to maximize the protective powers of their natural features such as coastal wetlands. This webinar will review a project along the Hudson River Estuary in New York and how Piermont Marsh would buffer a village from storm-induced flooding and waves, and whether a proposed plan to restore native cattails within a small area of the Phragmites-dominated marsh would lessen its buffering capacity.

To register, visit: https://attendee.gotowebinar.com/register/2085776169882712590

Next Meetings

- April? May?
 - Lewie and/or Curt will host Regional Mitigation Efforts associated with flooding and coastal resiliency (i.e. Living Shoreline Incentives Program, Fight the Flood program, FEMA/VDEM funding, etc.)
- Monday, July 26th at 10am

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