

# Richmond- Crater Hazard Mitigation Plan Update Public Meeting #1

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CRATER PLANNING  
DISTRICT COMMISSION



## CRATER PLANNING DISTRICT COMMISSION

# Introductions

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Name

Neighborhood

Interest in the Topic

# 23 Participating Communities

- Charles City County
- Chesterfield County
- Dinwiddie County
  - McKenney
- Goochland County
- Greenville County
  - Jarratt
- Hanover County
  - Ashland
- Henrico County
- New Kent County
- Powhatan County
- Prince George County
- Claremont
- Sussex County
  - Stony Creek
  - Wakefield
  - Waverly
- Colonial Heights
- Emporia
- Hopewell
- Petersburg
- Richmond



# 10-Step Process within the 4-Phase FEMA Guidance

## Phase I: Organize Resources

- ✓ Get organized
- ✓ Plan for public involvement
- ✓ Coordinate with other departments & agencies

## Phase II: Assess Risk

- ❑ Identify the hazards
- ❑ Assess the risks

We Are Here

## Phase III: Develop Mitigation Plan

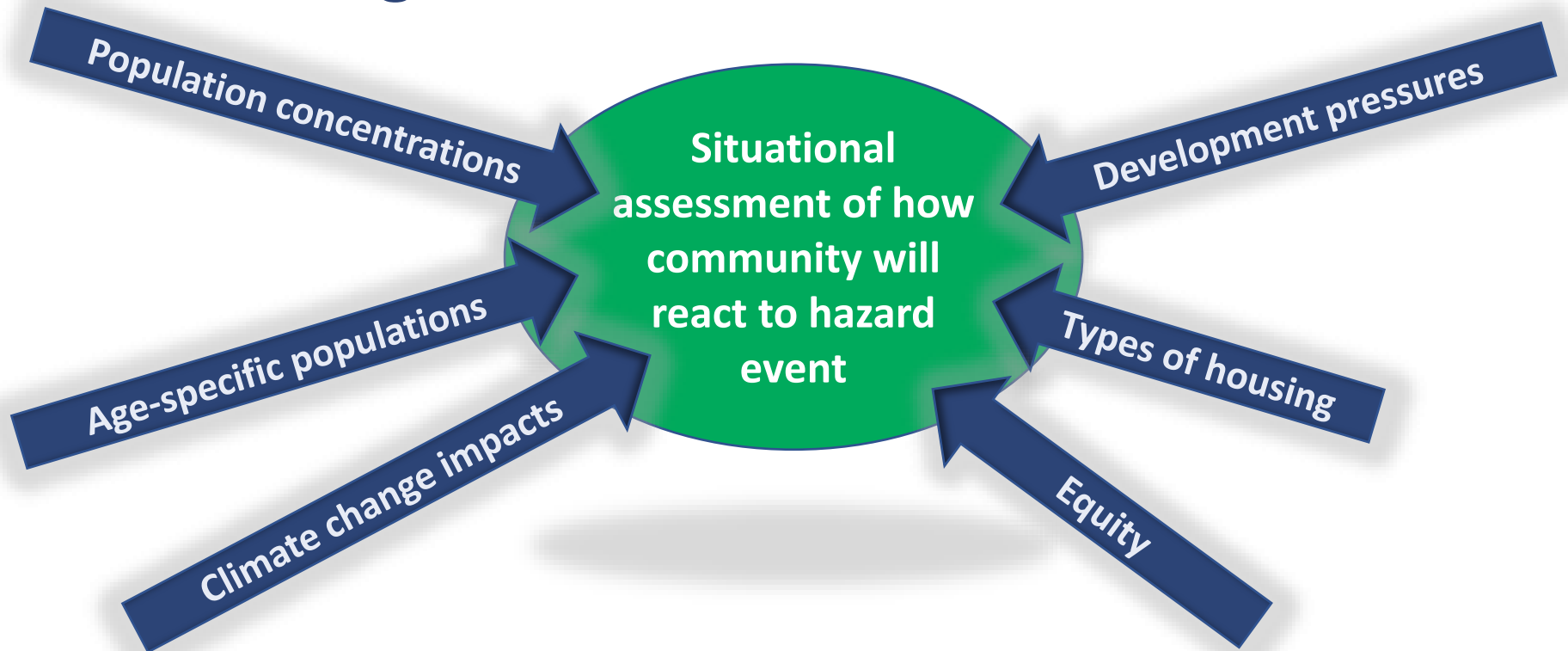
- ❑ Review mitigation alternatives
- ❑ Set planning goals
- ❑ Draft an action plan

## Phase IV: Adopt & Implement

- ❑ Adopt the plan
- ❑ Implement the plan

# Terminology

**Vulnerability:** Susceptibility to harm, damage, or loss



# Terminology

**Exposure:** People, property, systems, or functions that could be lost to a hazard

**Risk:** Probabilistic determination of the likelihood of an event occurring based on past experiences.

- Combines hazard, vulnerability, exposure, and probability



# Terminology

**Mitigation:** Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.

## Why Mitigate?

- Limit the impact of hazard events
- Protect existing development & infrastructure
- Protect future development & infrastructure
- Do so according to a community vision for hazard damage reduction
- Implement & update in accordance with FEMA standards to maintain grant eligibility = \$\$\$ for mitigation projects

# Why Update the Mitigation Plan?

- Required under DMA 2000 every 5 years, or after a disaster
- Opportunity to integrate plan into existing planning mechanisms

## Things change!

- Mitigation actions are completed
- Nature & magnitude of risks may change
- Community goals change
- Resources & capabilities change over time
- Implementation problems





# Natural Hazards Summary

## 2017 Plan's List of Hazards

| Hazard Category | Rank Score | Rank | Rank Category |
|-----------------|------------|------|---------------|
| Hurricanes      | 2.75       | 1    | Significant   |
| Tornado         | 2.73       | 2    | Significant   |
| Thunderstorm    | 2.34       | 3    | Moderate      |
| Flood           | 2.24       | 4    | Moderate      |
| Winter          | 2.08       | 5    | Moderate      |
| Drought         | 1.81       | 6    | Limited       |
| Wind            | 1.79       | 7    | Limited       |
| Wildfire        | 1.13       | 8    | Limited       |
| Earthquake      | 1.13       | 8    | Limited       |
| Landslide       | 1.13       | 8    | Limited       |
| Karst           | 1.13       | 8    | Limited       |
| Mass Evacuation | 0.63       | 12   | Limited       |

## New for 2022!!

- Infectious Disease
- High hazard dams/levee failure
- Climate Change Impacts
- Equity analysis for hazards
- Geological Hazards (landslide, erosion, karst, radon)
- Mass evacuation as secondary hazard discussion
- Cyber security analysis as Capability

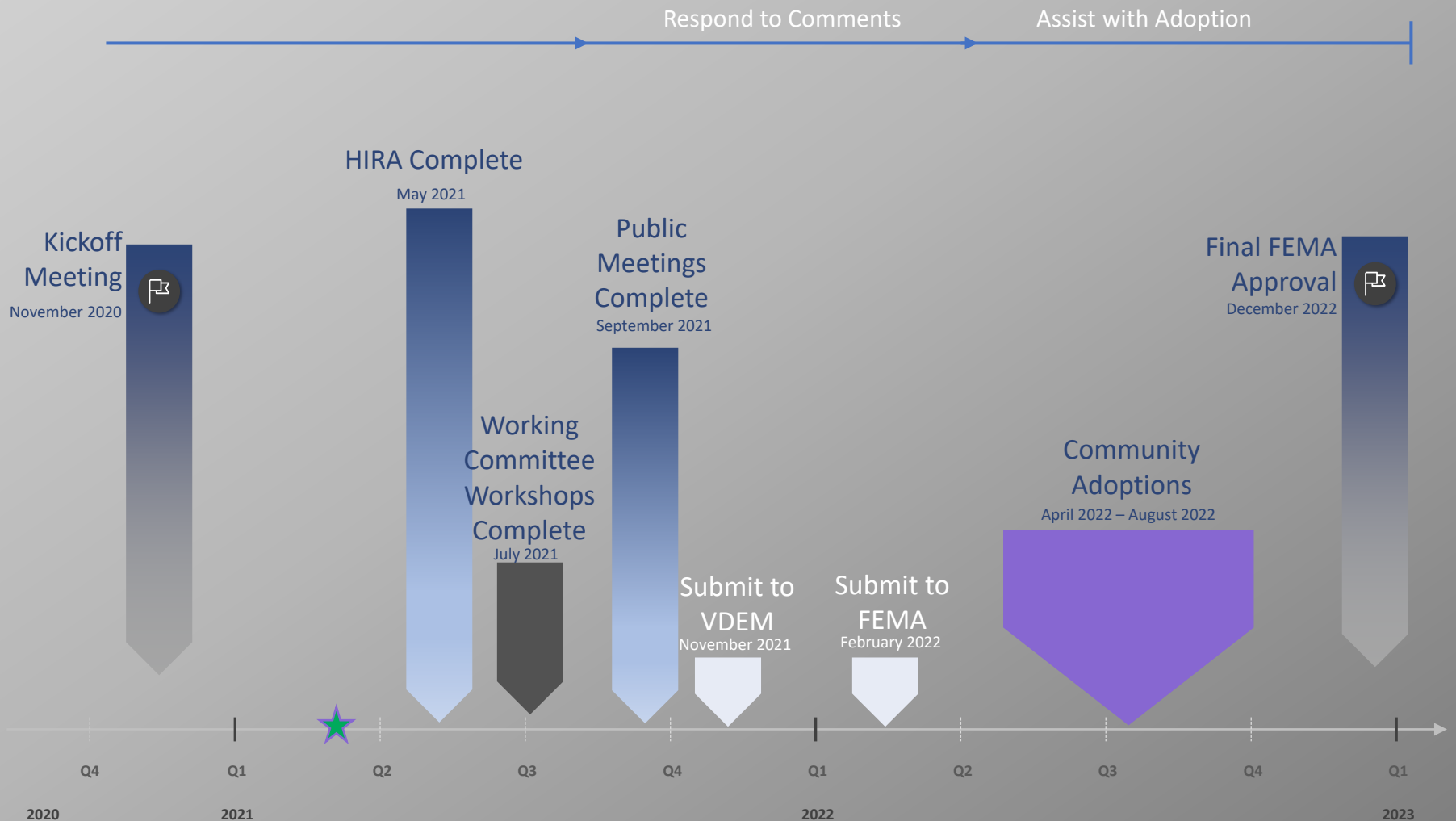
# Flood Risk Assessment: Multiple Approaches

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- Risk to structures and populations by 100-year flood event – [HAZUS analysis underway](#)
- Critical Facilities analysis
- Structure analysis
  - National Flood Insurance Program Claims & Coverage
  - Repetitive Flood Loss Analysis



# PlanRVA Project Milestones







Survey  
questions  
for  
participants

# DISCUSS

- Has your Virginia neighborhood ever been impacted by a natural disaster (besides COVID-19)?
- How concerned are you about impacts from disasters?
- What three natural hazards do you think pose the highest threats?
  - What local hazards keep you up at night, worrying about the safety of your home and loved ones?

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## Hazard Category

Hurricanes

Tornado

Thunderstorm

Flood

Winter

Drought

Wind

Wildfire

Earthquake

Landslide

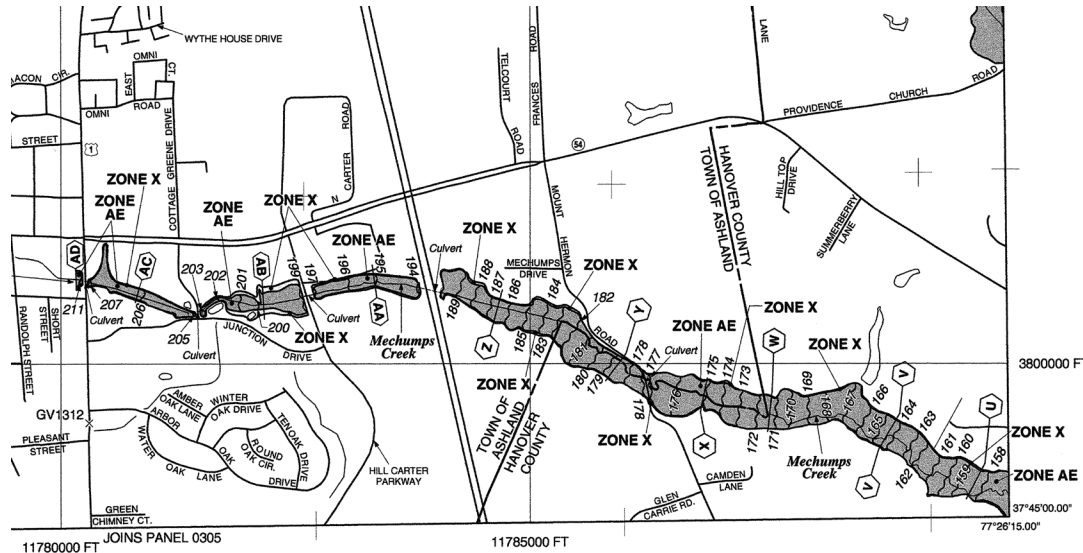
Karst

Mass Evacuation

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# DISCUSS

- Is your home in a floodplain and do you have flood insurance?
- Have you ever actively investigated the potential impacts of hazards on your home or neighborhood?
- Have you ever taken actions to make your home/neighborhood more resistant to hazards?
- Do you want more information on how to make your home or neighborhood more resistant to hazards?
  - What is best way for local government to get you that information?



# Community Mitigation Activity Categories



**Prevention:** Administrative or regulatory actions that influence the way land is developed and buildings are built – *e.g.*, zoning



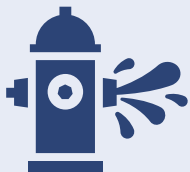
**Property Protection:** Modifications to existing land or buildings to protect from hazard – *e.g.*, storm shutters



**Natural Resource Protection:** Actions to preserve or restore functions of a natural system – *e.g.*, slope stabilization



**Structural Projects:** Lessen impact of hazard by modifying the hazard itself – *e.g.*, dam or levee



**Emergency Services:** protect people and property during/after hazard event – *e.g.*, warning & evacuation planning



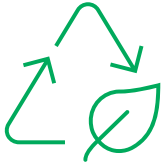
**Education & Awareness:** Inform citizens about hazards and protection techniques – *e.g.*, hazard maps



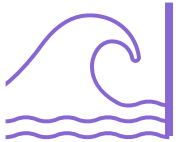
Prevention



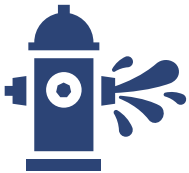
Property Protection



Natural Resource Protection



Structural Projects



Emergency Services



Education & Awareness

## Discuss

**Which do you think are the most important and why?**





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## Questions and Comments

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Take the survey:

<https://craterpdc.org/our-works/environment/environment-hazard-mitigation/>

