



Incorporating Historic and Cultural Resources in Your Hazard Mitigation Plan

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FEMA

January 15, 2020



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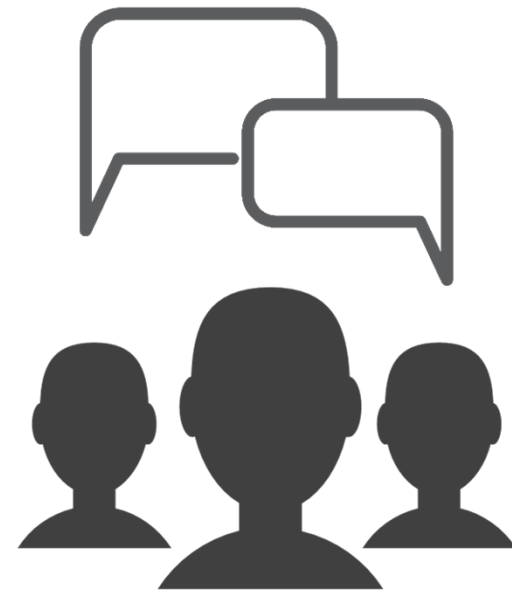
Webinar Housekeeping

- Attendees **are currently muted** to reduce background noise.
 - Please do NOT put your phone on “hold”, it plays hold music for everyone else on this call.
 - If you have to step away, please hang up and rejoin the call later.
- Use “Chat” panel **to all** to ask questions.
 - The chat will be open for 10 minutes following the presentation.
- The PowerPoint slides will be emailed to participants afterwards.
- You may be eligible for Professional Credits:
 - American Institute of Certified Planners (AICP) Certification Maintenance Credit
 - Association of State Floodplain Managers (ASFPM) Certified Floodplain Manager (CFM) Continuing Education Credit
 - Participation certificates and agendas will be sent by request to all participants who attend the whole session and participate in the polls.



Welcome and Overview

- **Presentation**
- **Next Steps**
 - Future Coffee Break webinars
 - Receiving professional credits
- **Wrap-Up and Q&A**



Polling Question 1

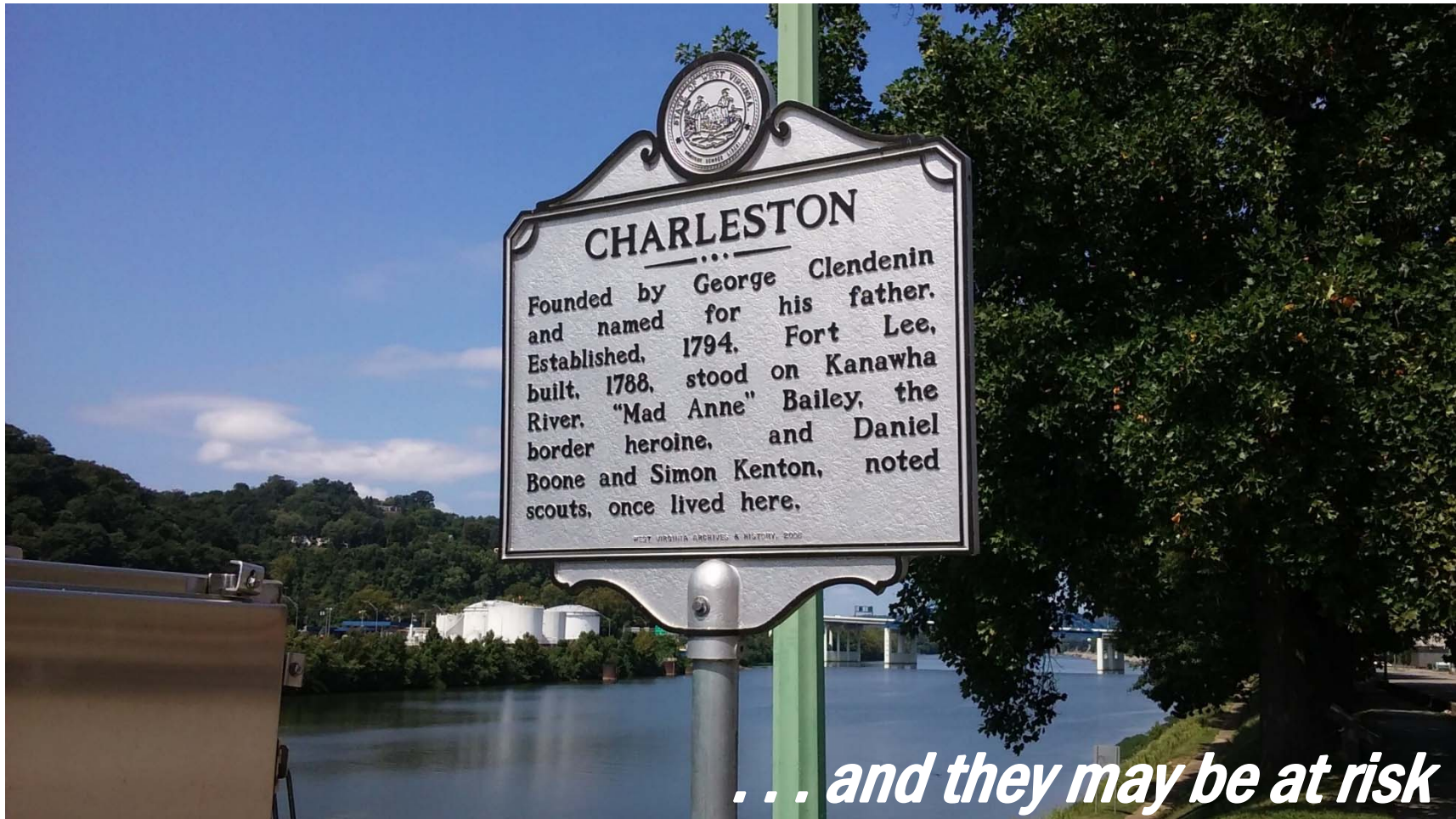
What organization do you represent?

- A. Federal**
- B. State**
- C. Local**
- D. Consultant**
- E. Nonprofit**
- F. Other (please write in chat)**

If know your FEMA region, please feel free to write it in the chat.



You Probably Have Historic & Cultural Resources



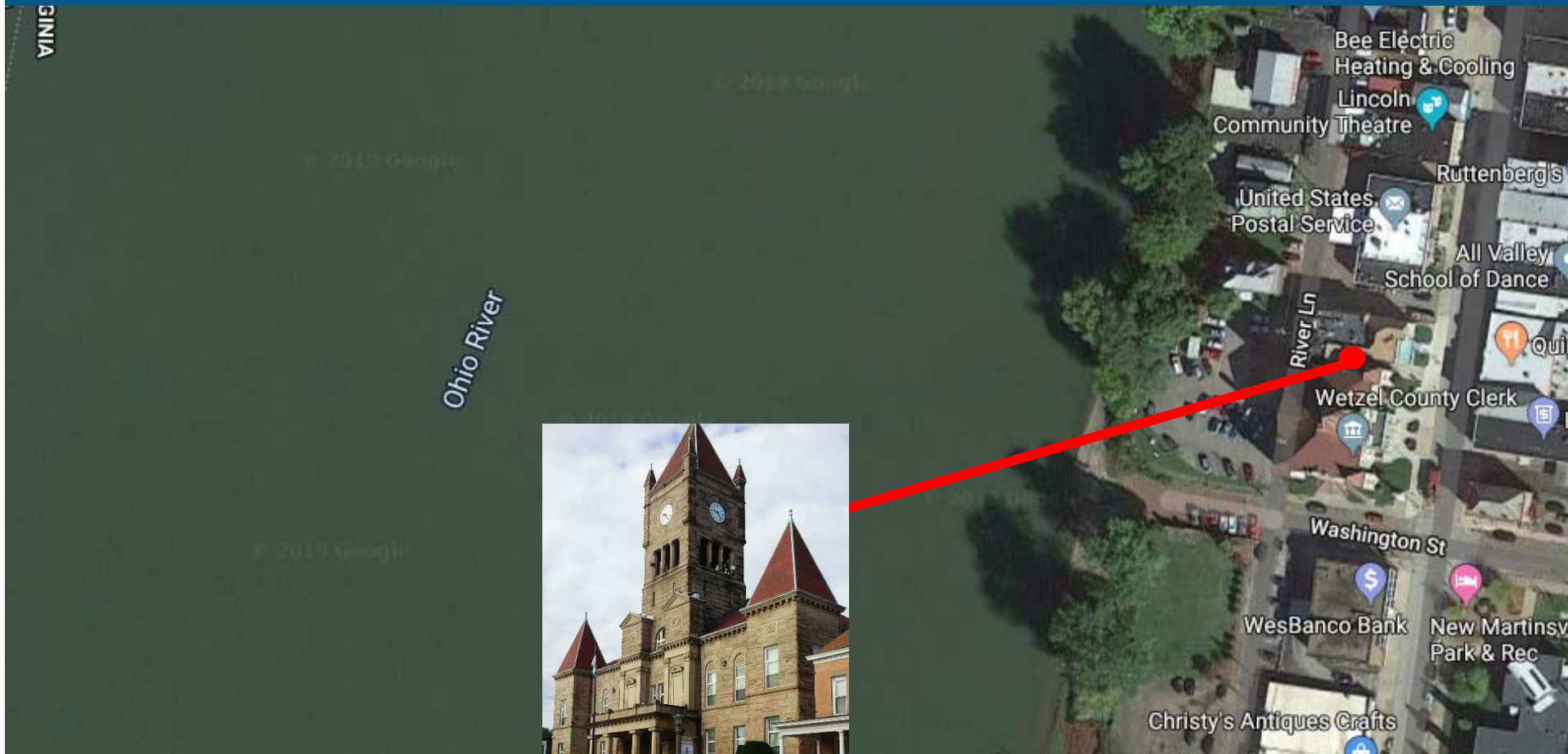
Sometimes, the Resources are Pretty Obvious . . .



Wetzel County Courthouse,
New Martinsville, West Virginia



Sometimes, the Resources are Pretty Obvious . . .



Wetzel County Courthouse,
New Martinsville, West Virginia



Sometimes, Maybe Not So Much . . .



Senior Center, Hundred, West Virginia



Sometimes, Maybe Not So Much . . .



Edgewood Drive, Charleston, West Virginia



Sometimes, Maybe Not So Much . . .



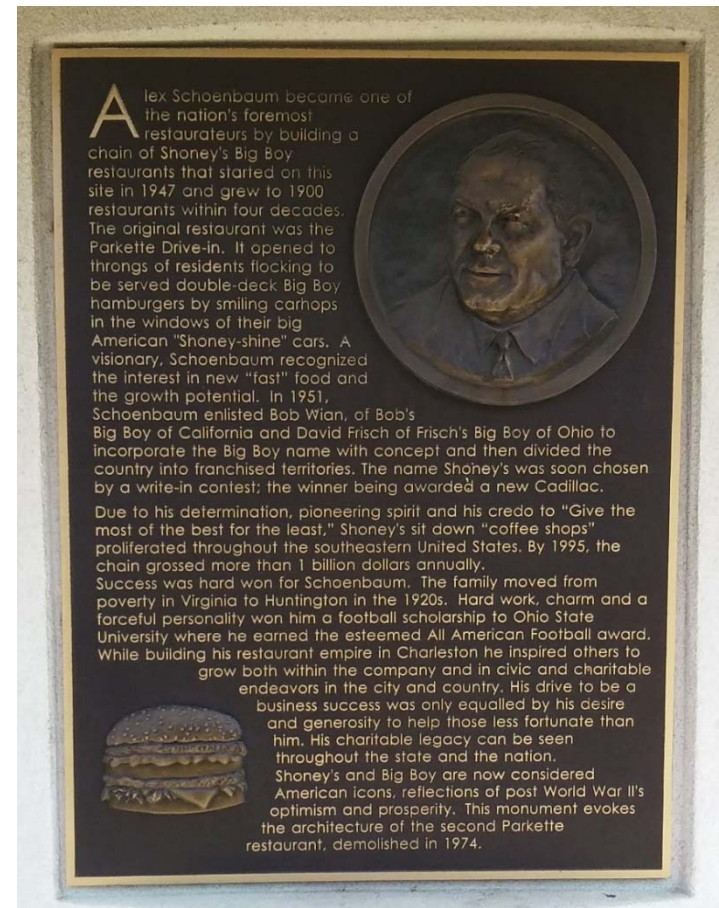
West Fork River Railroad Bridge, west of Fairmont, West Virginia



Sometimes, Maybe Not So Much . . .



Sometimes, Maybe Not So Much . . .



Parkette Drive-In (Shoney's Big Boy) Monument & Alex Schoenbaum Plaque, Charleston, West Virginia



Sometimes, Maybe Not So Much . . .

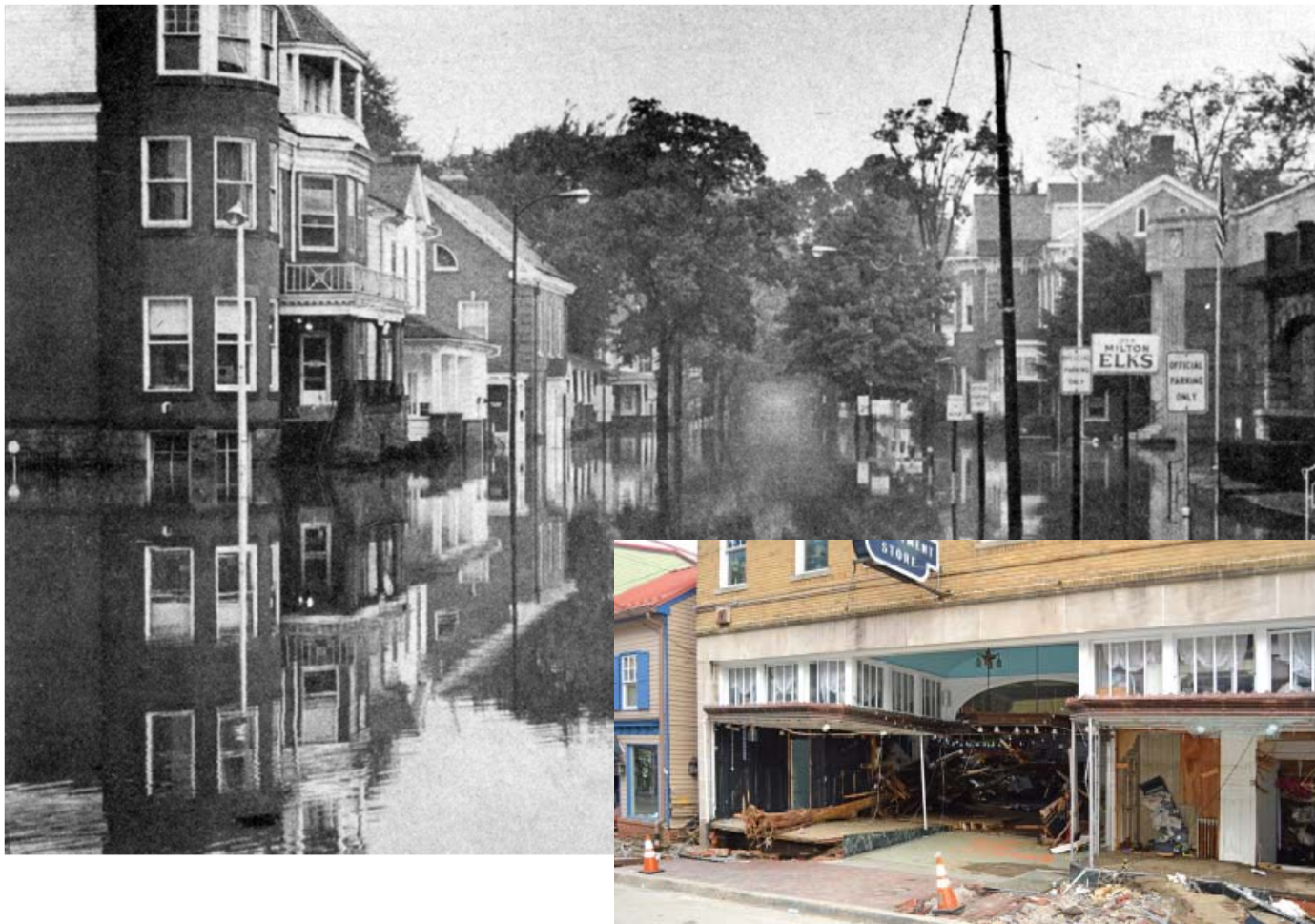


Hazard Mitigation Plan Principles

- **This is your community's plan.**
 - It should reflect your priorities and unique character.
- **Focus on the mitigation strategy.**
 - These ideas should lead directly to projects.
- **Identify processes, relationships, and connections.**
 - These concepts, created while developing the plan, are as important as the plan itself.



... And They May Be At Risk



... And They May Be At Risk



... And They May Be At Risk



**Upper Bodines Road Bridge,
Lycoming County, PA, 2015**



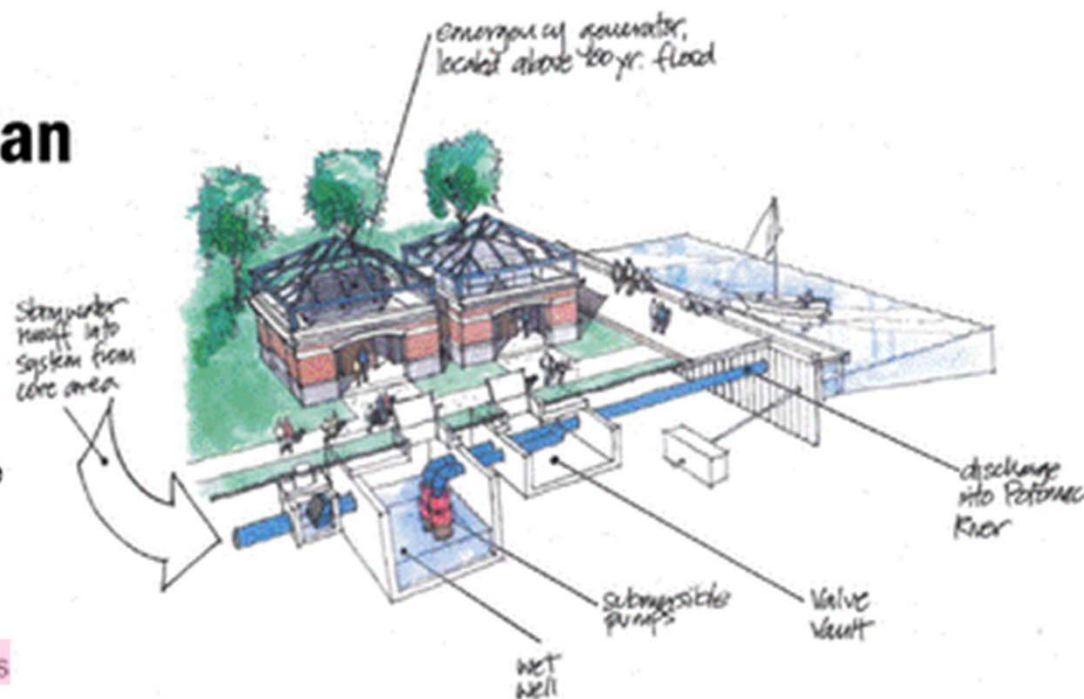
Your Community's Hazard Mitigation Plan

Completing your Hazard Mitigation Plan

Hazard mitigation is best accomplished when based on a **comprehensive, long-term plan**. Hazard mitigation plans allow communities to understand threats from natural hazards and develop strategies to reduce the impacts of disasters.

Effective mitigation planning can break the cycle of disaster damage, reconstruction, and repeated damage. The four core steps in completing a hazard mitigation plan or plan update are to:

1. Organize the planning process and resources
2. Assess risks and capabilities
3. Develop a mitigation strategy
4. Adopt and implement the plan



Hazard Mitigation Plan Elements

Common elements of good mitigation plans include:

- **A community-driven, living document that allows for updates;**
- **A comprehensive risk assessment that provides the factual basis for activities in the strategy;**
- **A hazard vulnerability analysis that anticipates geographic risks and conditions;**
- **A hazard mitigation strategy that includes a description of mitigation goals;**
- **Incorporates periodic monitoring and evaluation mechanisms to allow for review of successes and failures or even just simple updates.**



It's Your Community. So What Are Your Assets?



People?

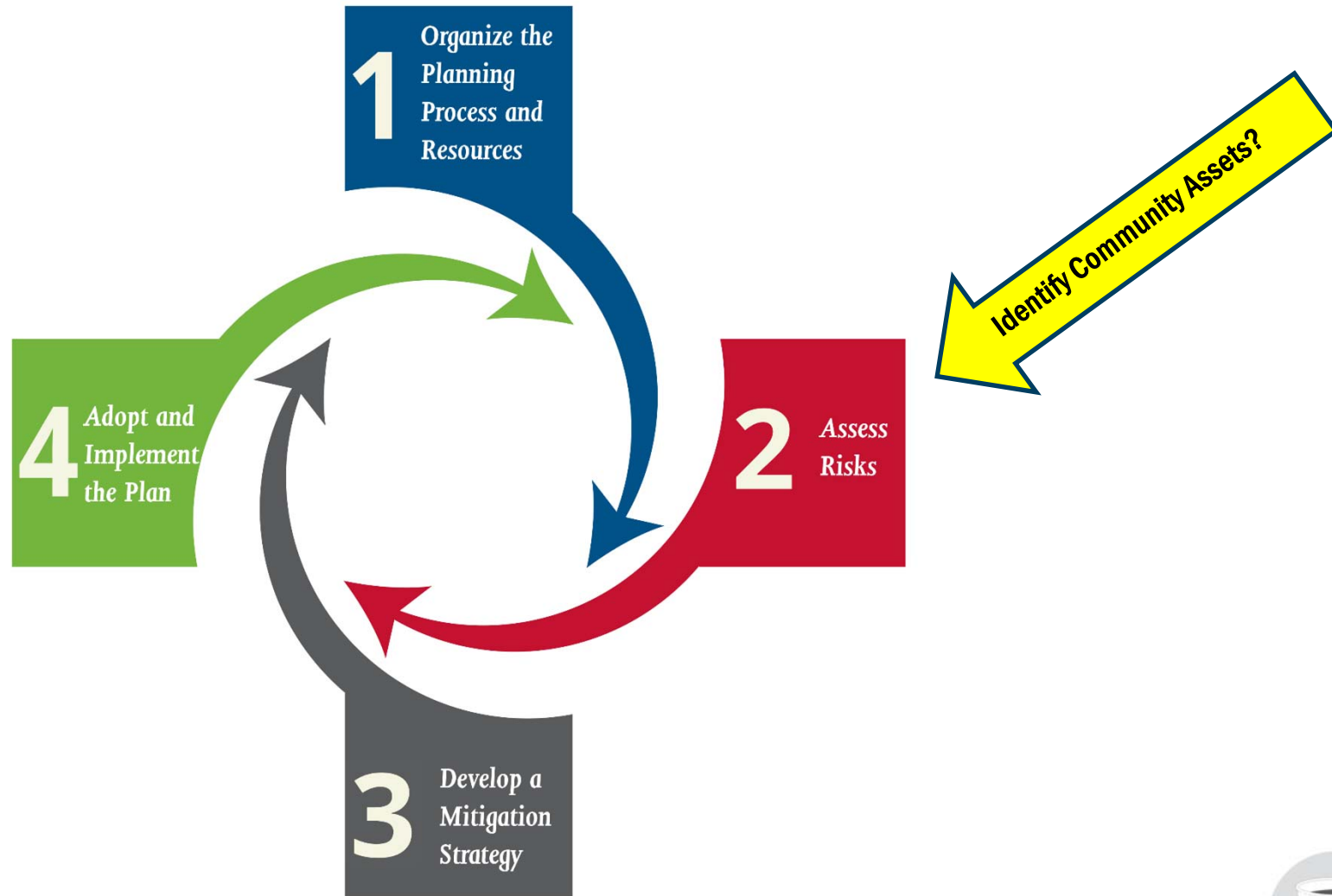
Places?

Facilities?

Resources?



Mitigation Planning Process



Mitigation Planning Process – Identify Assets in Task 5?

Task 5

Conduct a Risk Assessment

Steps to Conduct a Risk Assessment

Figure 5.2 shows the four recommended steps for conducting a risk assessment. The desired outcomes of these steps are 1) an evaluation of each hazard's potential impacts on the people, economy, and built and natural environments in the planning area and 2) an understanding of each community's overall vulnerability and most significant risks. These potential impacts and the overall vulnerability can be used to create problem statements and identify mitigation actions to reduce risk.

For multi-jurisdictional planning efforts, the risk assessment must result in an evaluation of potential impacts and overall vulnerability that each participating jurisdiction will use to develop specific mitigation actions. Assets, vulnerabilities, and overall risk are unique to each community and must be addressed in a multi-jurisdictional plan. Although hazards may be described for the entire planning area, the plan also must explain any hazards that are unique or varied within communities.

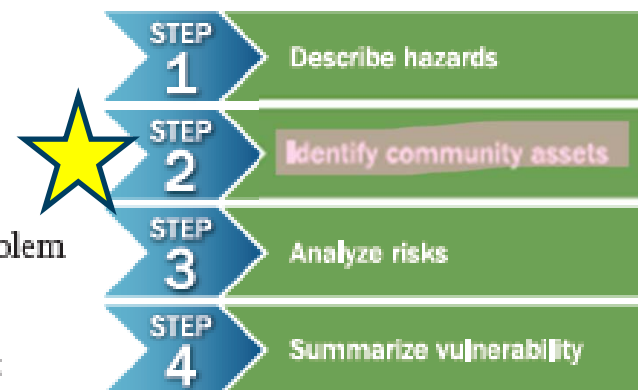


Figure 5.2: Steps to conduct a risk assessment



Element B1



Mitigation Planning Process

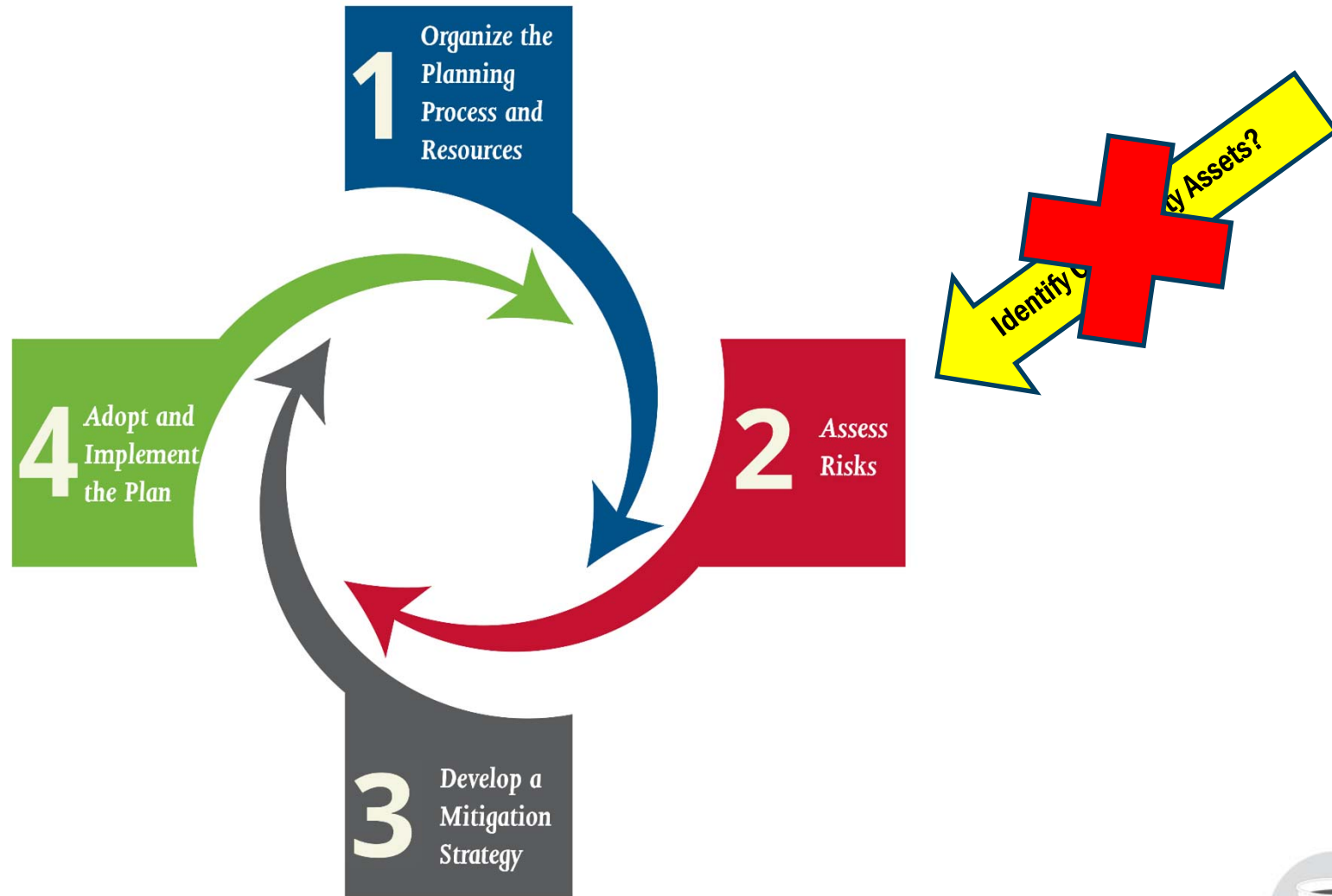


Note: Modified from U.S. Geological Survey and Oregon Partnership for Disaster Resilience Models.

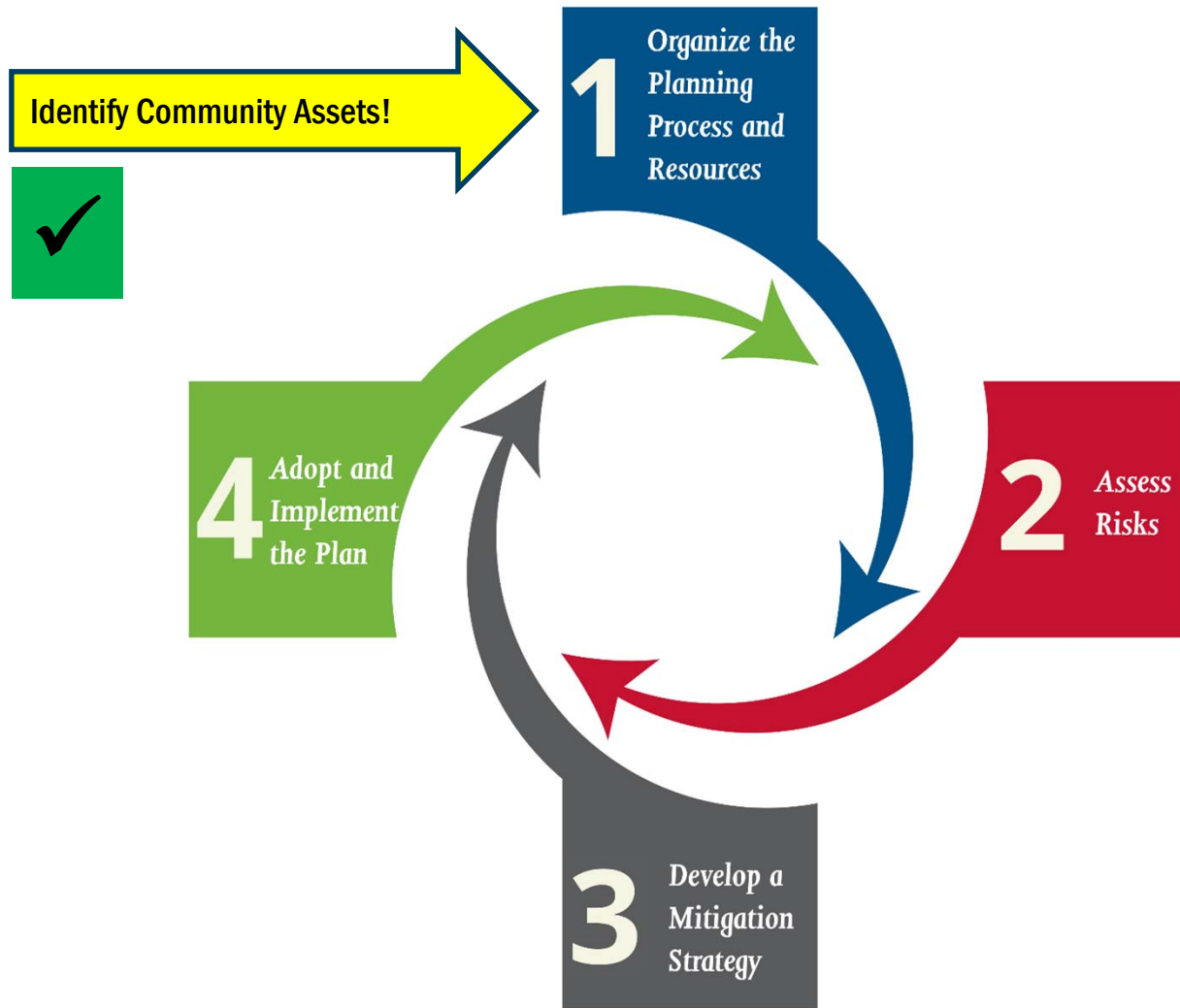
Figure 5.1: Community risk from natural hazards



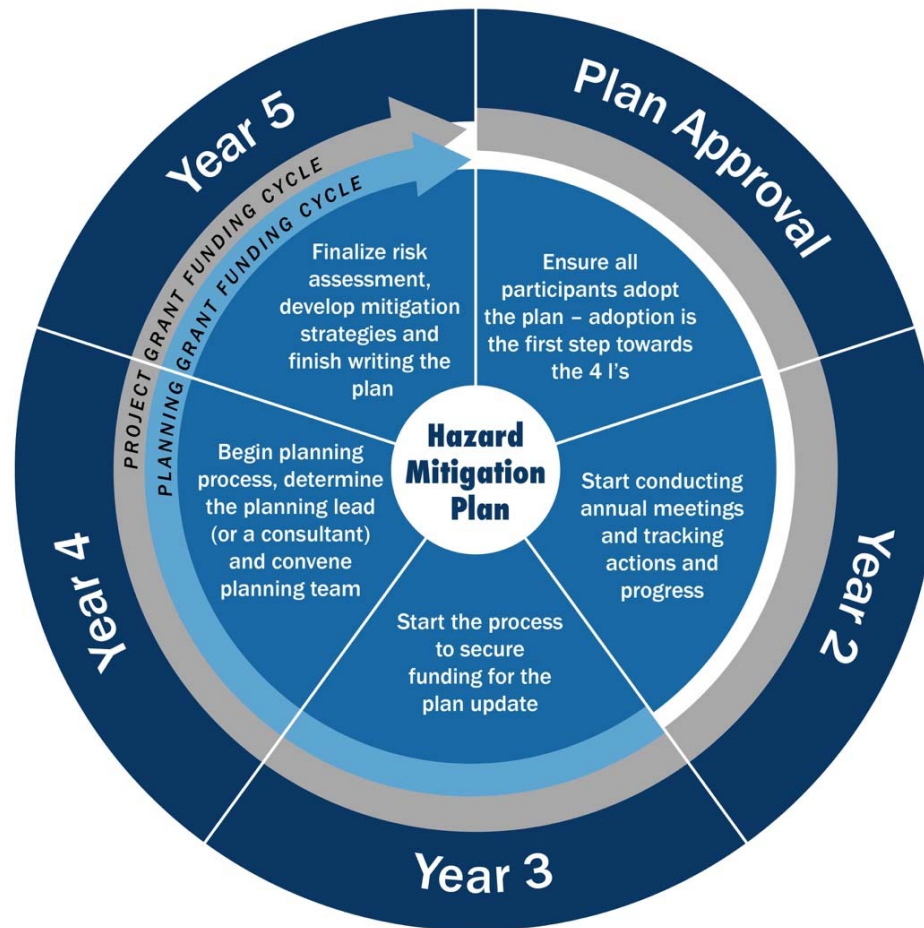
Mitigation Planning Process



Mitigation Planning Process – Do This Earlier!



Mitigation Planning Process



Identify & Inventory Community Assets


Historic and Community Resources



Main Street, Smyrna, DE



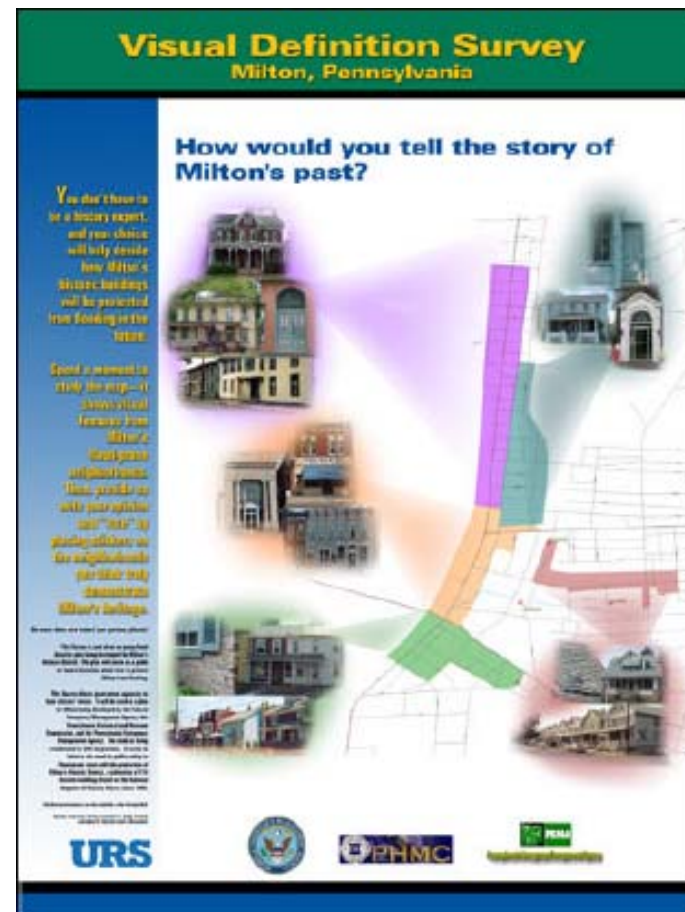
Identify & Inventory Significant Community Assets



Historic Property and Cultural Resource Survey

A process by which historic properties and cultural resources that are potentially significant to the community are documented. Typically a survey involves the collection of documentary photography and completion of survey forms to describe each property or resource. This description includes its landscape (if a property), construction materials, geographic location, and potential significance (see sample survey on page 2-15 and Step 3 in Phase 2 for more details on conducting a survey).

Integrating Historic Property & Cultural Resource Considerations into Hazard Mitigation Planning, FEMA, 2005



Visual Definition Survey Milton, Pennsylvania

How would you tell the story of Milton's past?

You are there to be a history expert, and your choice will help decide how Milton's historic buildings will be protected from flooding in the future.

Spent a moment to study the map - it shows critical features from Milton's development and history. These provide an excellent starting point for your study and "story" of preservation in the neighborhood for their role in Milton's heritage.

The Survey is not about to provide a list of historic properties to be preserved. It is about to provide a list of historic properties that are important to the community. The Survey is not about to provide a list of historic properties that are important to the community. The Survey is not about to provide a list of historic properties that are important to the community.

URS FEMA

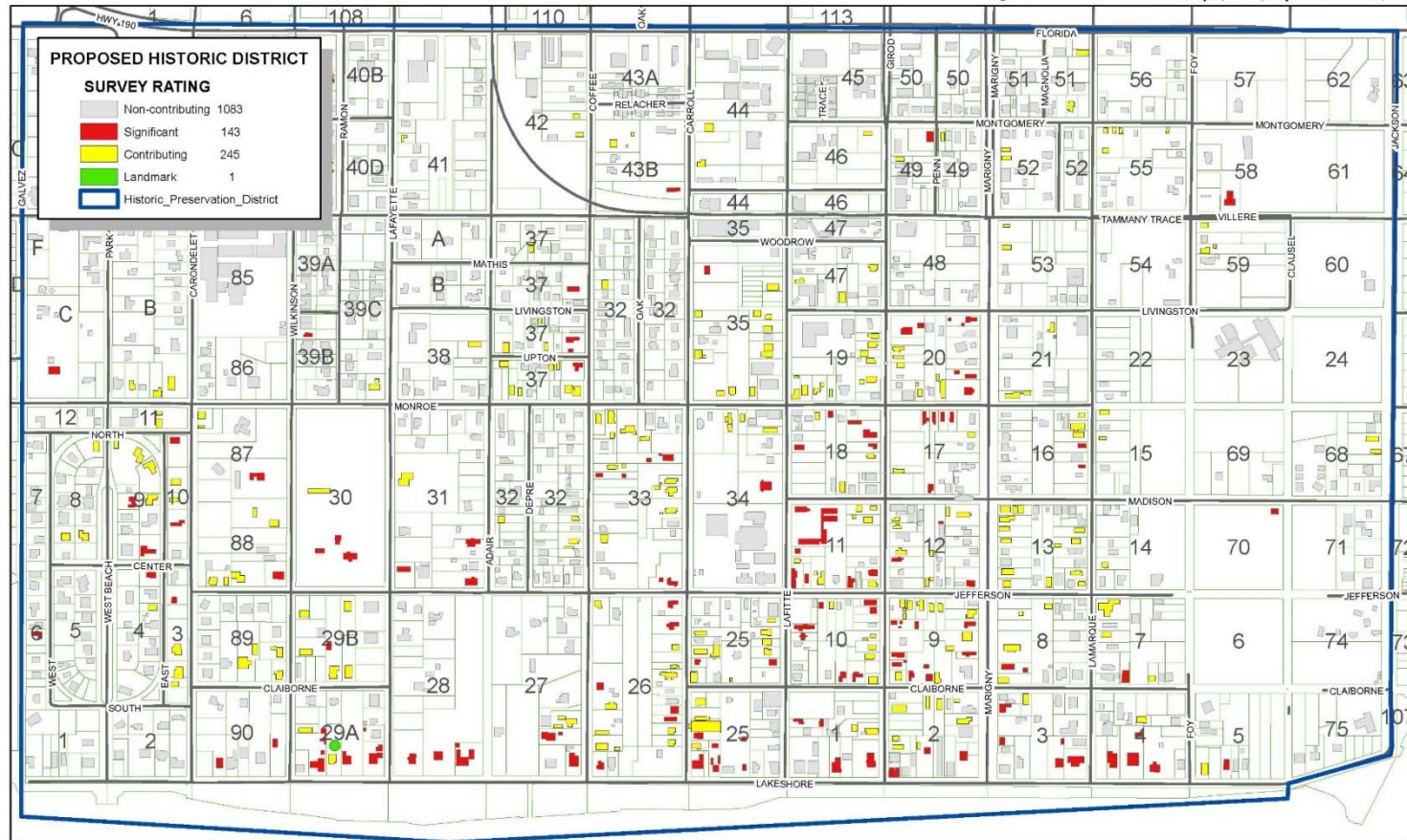
The Visual Definition Survey provided an opportunity for public input useful in developing a Preservation Hierarchy.



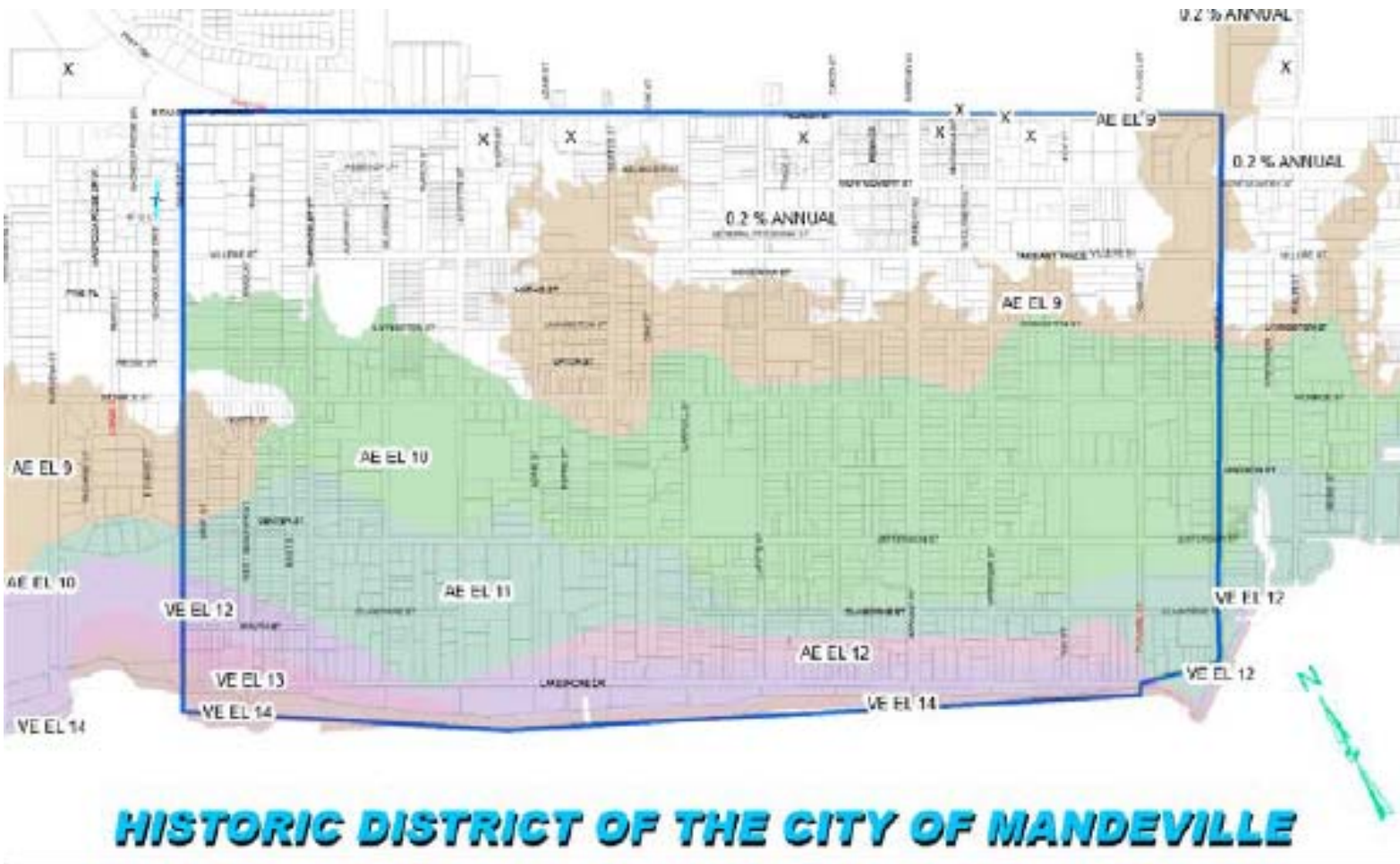
Evaluate & Rank Community Assets

Mandeville Historic Preservation District Survey Map

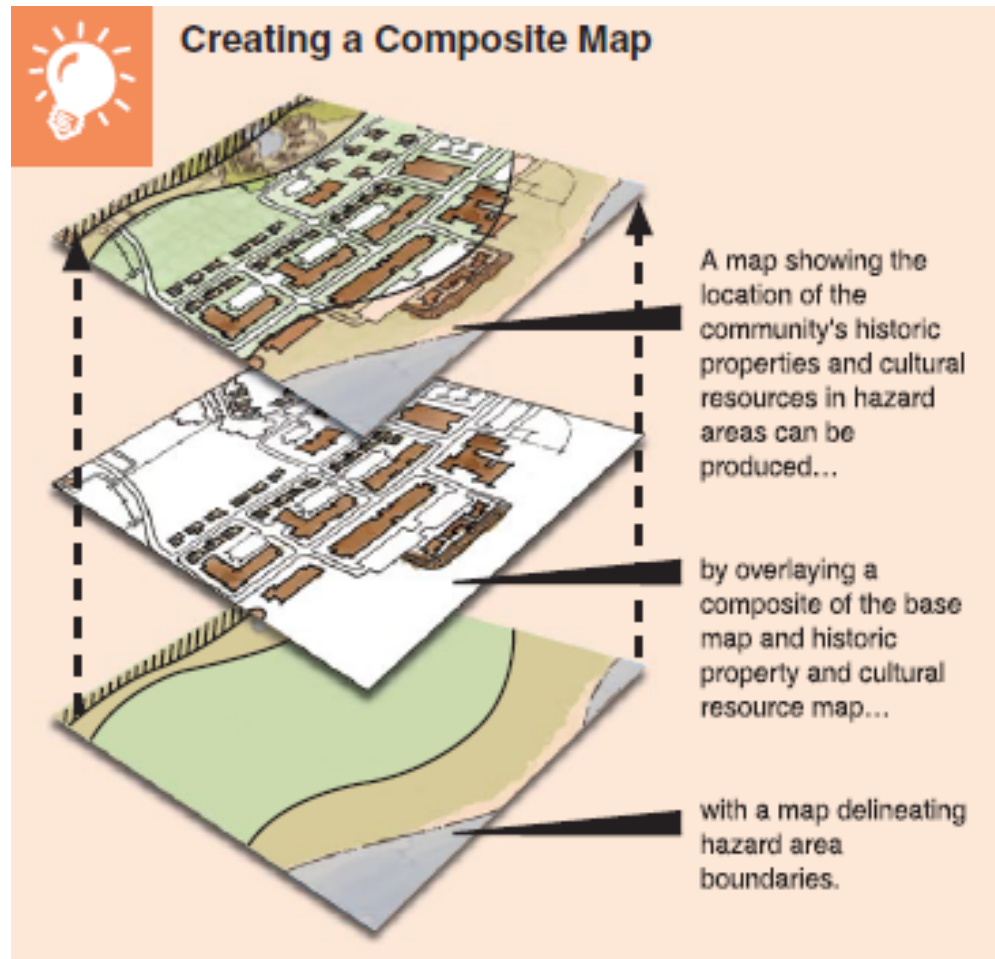
Historic Preservation District
adopted by Ordinance 12-32,
February 7, 2013, City of Mandeville, LA



Assess Risks to Community Historic/Cultural Assets



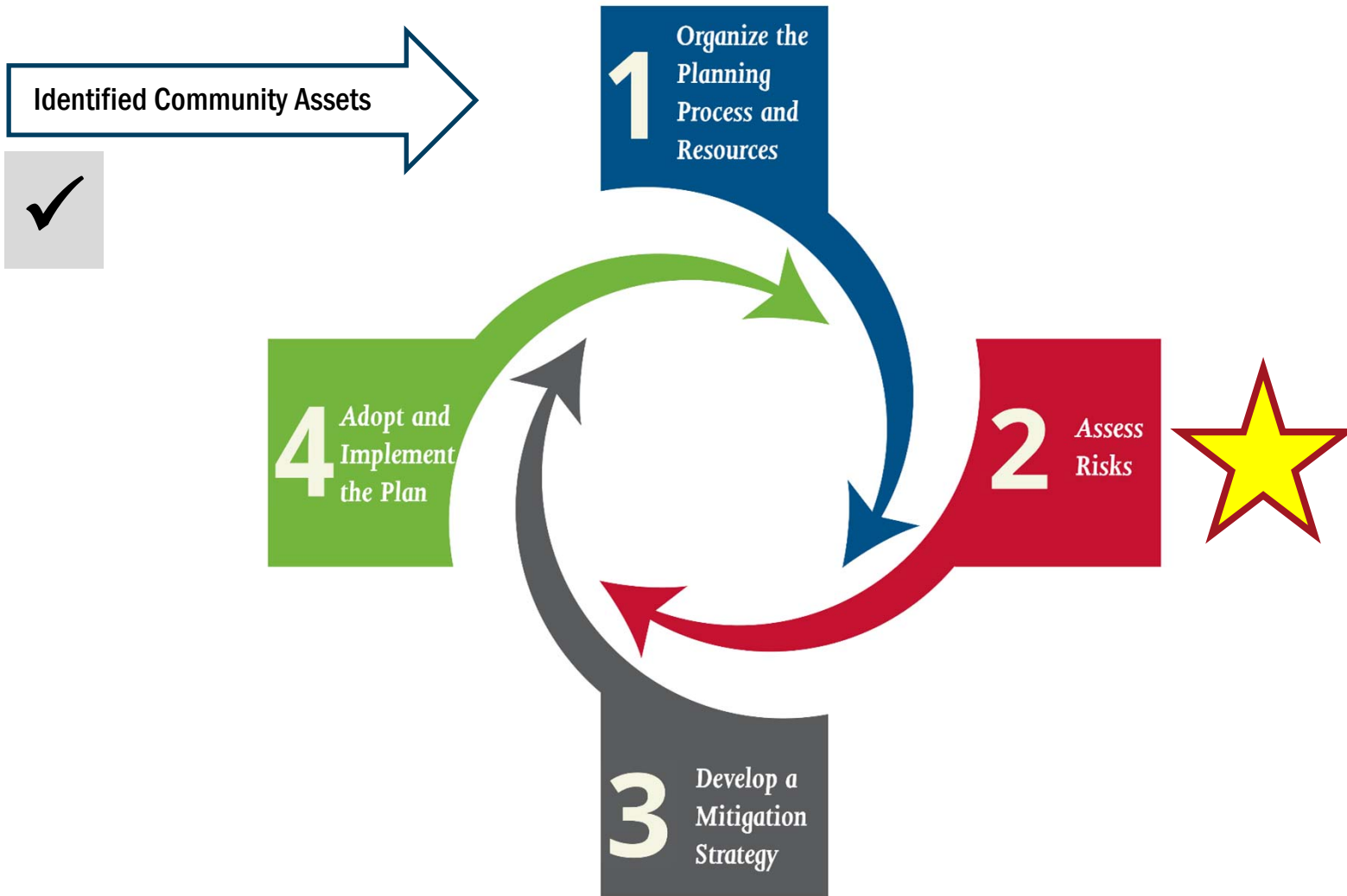
Assess Risks to Community Historic/Cultural Assets



Integrating Historic Property & Cultural Resource Considerations into Hazard Mitigation Planning, FEMA, 2005



Mitigation Planning Process – Ready to go onto Step 2



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Risk Assessment & Vulnerability Analysis

Building Data Requirements by Hazard

Building Characteristics	Flood	Earthquake	Tsunami	Tornado	Coastal Storm	Landslide	Wildfire
Building Type/Type of Foundation	■	■	■		■		
Building Code Design Level/Date of Construction	■	■	■	■	■		■
Roof Material				■	■		■
Roof Construction				■	■		■
Vegetation							■
Topography	■				■	■	■
Distance from the Hazard Zone	■		■		■	■	■

Integrating Historic Property & Cultural Resource Considerations into Hazard Mitigation Planning, FEMA, 2005



Risk Assessment & Vulnerability Analysis

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Name and Address of Asset Subject to Hazard	Date of Construction/Creation	Type of Property/Type of Resource	Square Footage	Structural System	Primary Material(s) of Property/Resource	Current Function/Use	Current Condition	Is Owner Interested in Mitigation? (Yes/No)
HAZARDVILLE OPERA HOUSE 50 MAIN STREET	1905	COMMERCIAL BUILDING	40,000	CONCRETE	BRICK VENEER, CONCRETE, PLASTER CEILING	COMMUNITY CENTER	GOOD	YES (TOWN IS OWNER)
LEIMAN GARDENS CORNER OF MAIN AND NORTH	1840	PARK	43,560	N/A	MARBLE STATUES, GRANITE GRAVESTONES, METAL HISTORIC STREETSCAPE FURNITURE, HEIRLOOM ROSES	PUBLIC GARDEN	EXCELLENT	YES (TOWN IS OWNER)

Column 1	Column 10	Column 11	Column 12	Column 13	Column 14	Column 15	Column 16
Name and Address of Asset Subject to Hazard (same as previous page)	Level of Property Vulnerability (High, Medium, Low)	Loss to Structure (\$)	Loss to Contents (\$)	Loss of Function or Use (\$)	Displacement Cost	Total Loss for Hazard Event	Level of Community Value for Ranking Purposes (High, Medium, Low)
HAZARDVILLE OPERA HOUSE 50 MAIN STREET	MEDIUM	\$300 K	\$150 K	\$30 K	\$190 K	\$670 K	MEDIUM
LEIMAN GARDENS CORNER OF MAIN AND NORTH	HIGH	N/A	\$20 K	N/A	N/A	\$20 K	HIGH

Hazard: Flood
Worksheet #3

Inventory Historic Property and Cultural Resource Assets (page 2 of 3)
Date: January 8, 2007

Hazard: Flood
Worksheet #3
Inventory Cultural Resource Assets
D.



Risk Assessment & Vulnerability Analysis

List the name and address of vulnerable historic properties and cultural assets. For each asset (row), fill in Columns 1 to 6. Define High, Medium, and Low for Columns 3, 4, 5, 6, and 7 at the bottom of this worksheet (optional). Fill in Column 7 by qualitatively adding Columns 3 to 6. Enter the results of Column 7 in Column 16 of Worksheet #3.

Name and Address of Asset	Column 1 Historic Designation (National Register, Local Landmark, etc.)*	Column 2 Geographic Context of Significance (National, Tribal/State, Local)	Column 3 Level of Significance (High, Medium, Low)	Column 4 Public Sentiment (High, Medium, Low)	Column 5 Economic Importance (High, Medium, Low)	Column 6 Degree of Integrity (High, Medium, Low)	Column 7 Total Level of Community Value (High, Medium, Low)
HAZARDVILLE OPERA HOUSE 50 MAIN STREET	NR-LISTED	STATE	HIGH	LOW	MEDIUM	LOW	MEDIUM
CARRUTH HOUSE MUSEUM 22 PRIMROSE LANE	LOCAL LANDMARK	LOCAL	HIGH	MEDIUM	LOW	HIGH	MEDIUM
CARRUTH ARCHIVES 35 NORTH STREET	NOT LISTED	STATE	MEDIUM	MEDIUM	LOW	MEDIUM	LOW
LEHMAN'S GARDEN CORNER OF MAIN AND NORTH	NR-LISTED	NATIONAL	MEDIUM	HIGH	HIGH	MEDIUM	HIGH
DOWNTOWN DISTRICT (MAIN STREET)	NR-LISTED	LOCAL	MEDIUM	HIGH	HIGH	MEDIUM	MEDIUM

*The designation level does not automatically correlate to the level of community value for ranking purposes.

Date: **JANUARY 16, 2007**
Worksheet #4
Determine Community Value for Historic Property and Cultural Resource Assets
phase 2
step 3



Hazard Mitigation Plan Elements

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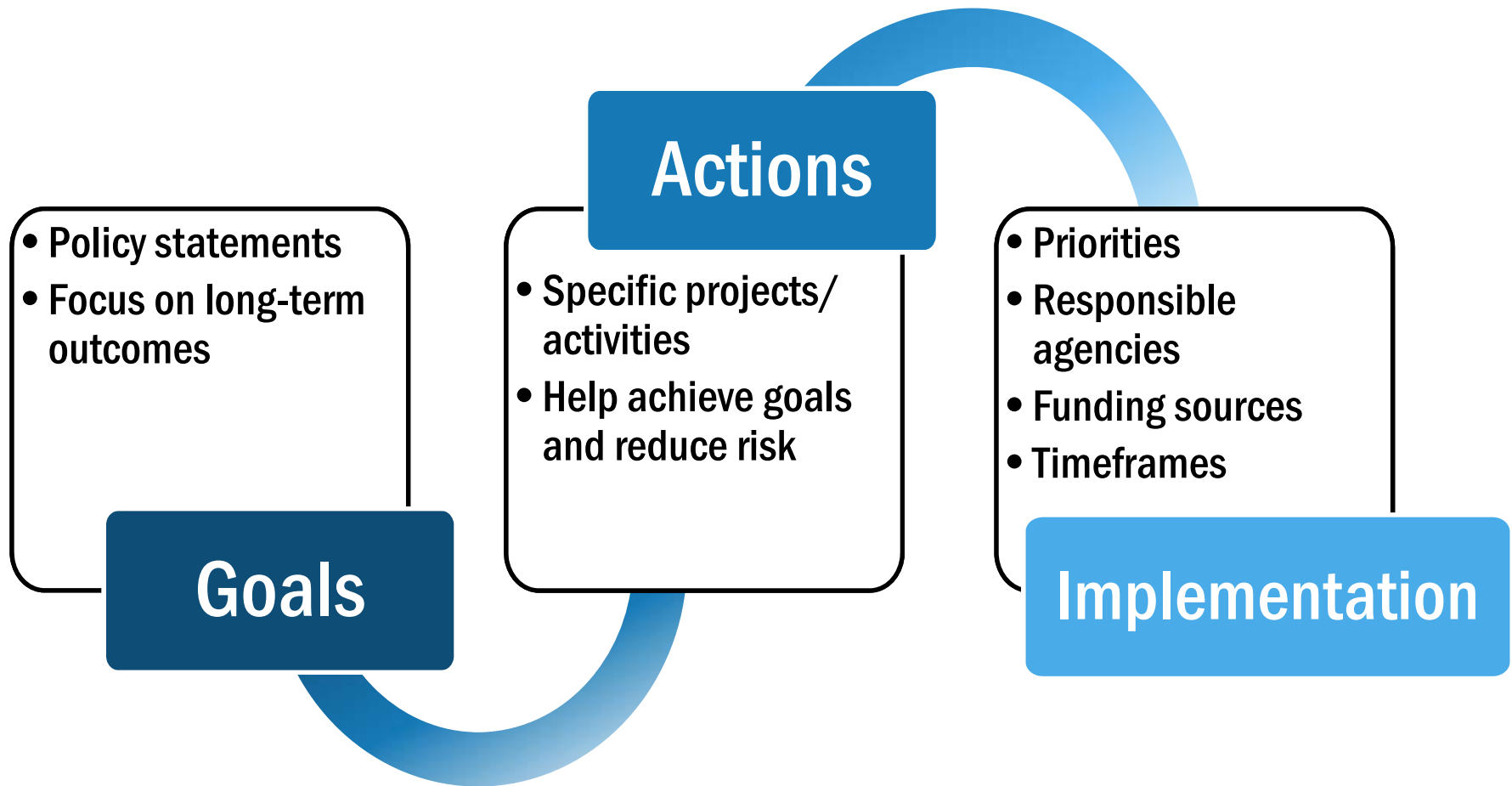
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Mitigation Planning Process – Ready to go onto Step 3



Components of the Mitigation Strategy



Hazard Mitigation Plan Principles

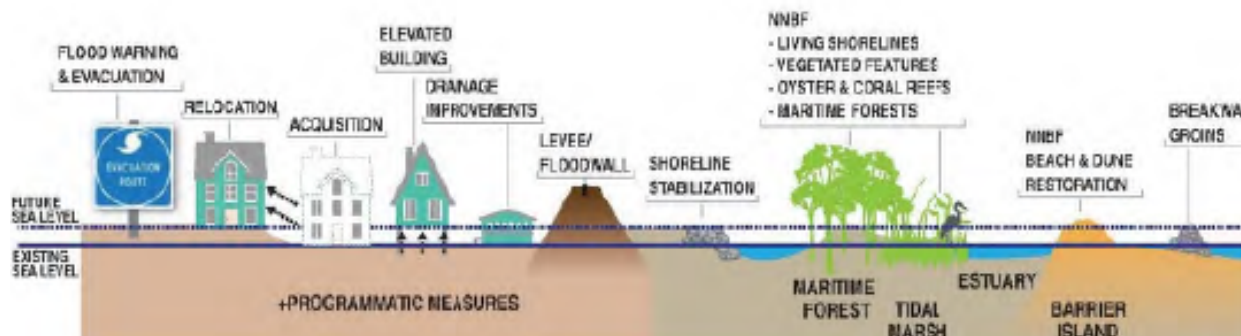
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What Are Your Goals?



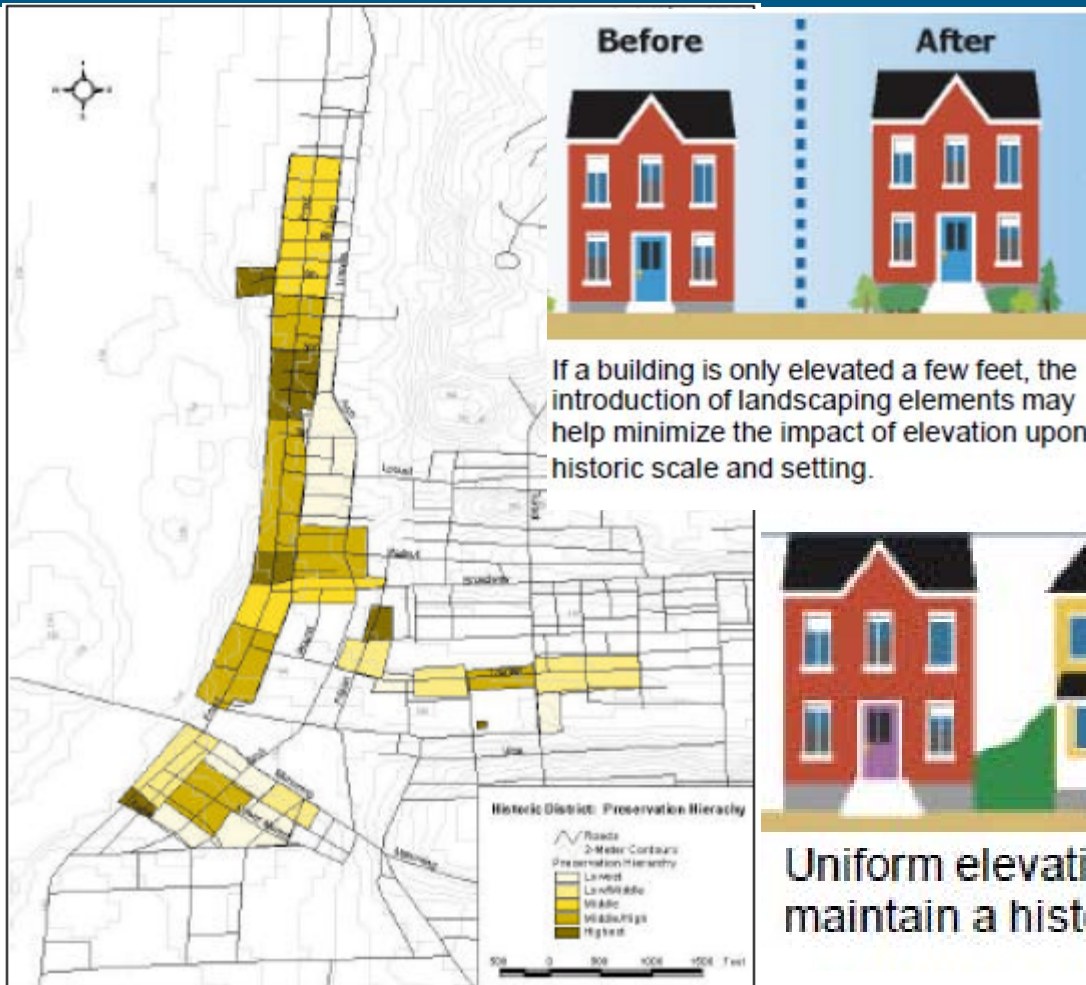
Consider Different Strategies



A combination of strategies has been developed to help manage the risks of coastal flooding. Some, like elevating buildings, are structural. Others, like "living shorelines," are nonstructural and rely on natural resources (marked in the drawing above as NNBF, for natural and nature-based features). A number of experts have urged federal and state governments to devise a national, coordinated plan to manage flooding risks using a variety of methods.
 Source: U.S. Army Corps of Engineers



Consider Different Strategies



If a building is only elevated a few feet, the introduction of landscaping elements may help minimize the impact of elevation upon historic scale and setting.

This diagram demonstrates wet floodproofing methods.



Uniform elevation of a block can help to maintain a historic scale.

A Preservation Hierarchy for Milton's 100-year floodplain. Areas closer to the top of the Hierarchy are shaded darker.



Consider Creative Approaches



Darlington, Wisconsin



Detail Steps to Implementation

Areas of Concern Recommendations	
Area of Concern	Recommendation
Toddville	Prioritize for architectural/historical survey: complete the Maryland Inventory of Historic Properties Form for the two (2) buildings within the Toddville Survey District that were built prior to 1900. Both buildings are highly vulnerable and at-risk to coastal flooding, hurricanes, and sea level rise.
	Prepare sufficient documentation to allow MHT to evaluate the eligibility of the Zion M. E. Church (D-322) for inclusion in the National Register of Historic Places.
	Determine what flood mitigation, if any, has been completed at the five (5) historic properties individually documented in the MIHP. Target these properties for flood mitigation measures that balances protection and preservation. <ul style="list-style-type: none"> • D-322 Zion M.E. Church • D- 732 Meredith & Meredith Seafood Packing • D-734 Toddville Seafood Company • D-836 Toddville House • D-829 Toddville Store
	Determine what flood mitigation, if any, has been completed at the Repetitive Loss Property on Toddville Road, within the Survey District. Target for flood mitigation that balances protection and preservation and architectural/historical documentation.
	Correct the address on the MIHP forms for those resources that have individual forms or are mentioned specifically in the MIHP form for the Toddville Survey District.
	Prepare documentation sufficient to allow MHT to evaluate the Toddville Survey District's eligibility for the National Register of Historic Places as a Historic District.
	Produce an oral history of the Toddville area for publication and posterity.
Wingate	Prioritize for architectural/historical survey-complete the Maryland Inventory of Historic Properties Form, the one (1) building within the Wingate Survey District that was built prior to 1800. This building is highly vulnerable and at-risk to coastal flooding, hurricanes, and sea level rise.
	Determine what flood mitigation, if any, has been completed at the two (2) historic properties individually documented in the MIHP. Target these properties for flood mitigation measures that balance protection and preservation. <ul style="list-style-type: none"> • D-834 Wingate Manor • D-846 Formerly the South Dorchester Bank
	Conduct architectural/historical survey for the following sites and submit MIHP forms to the Maryland Historical Trust: Wingate Manor Cemetery and Wingate Methodist Church.
	Produce an oral history of the Wingate area for publication and posterity.



Mitigation Planning Process – Adopt & Implement



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Technical Assistance & Funding



HOME > PRESERVE AMERICA

SHARE



Introduction

Preserve America is a federal initiative that encourages and supports community efforts to preserve and enjoy our priceless cultural and natural heritage. The goals of the program include a greater shared knowledge about the nation's past, strengthened regional identities and local pride, increased local participation in preserving the country's cultural and natural heritage assets, and support for the economic vitality of our communities.



Preserve America Communities

Preserve America Communities is a designation program that recognizes communities that protect and celebrate their heritage; use their historic assets for economic development and community revitalization; and encourage people to experience and appreciate local historic resources through education and heritage tourism programs.

[READ MORE ABOUT PRESERVE AMERICA COMMUNITIES](#) >



Main Street America Institute

The Main Street America Institute (MSAI) is our targeted professional development training program aimed to equip downtown and commercial district leaders with the tools they need to lead results-oriented and preservation-based community revitalization organizations.

[LEARN MORE](#)



Technical Assistance for Implementation

Technical Preservation Services

National Park Service
U.S. Department of the Interior



- About
- The Standards
- Tax Incentives
- How To Preserve
- Sustainability
- Historic Surplus Property
- Education & Training
- Hot Topics

Home > The Standards > Rehabilitation Standards and Guidelines > Guidelines on Flood Adaptation for Rehabilitating Historic Buildings



Flood Adaptation

Flooding risk has long been a major challenge for many historic properties. Changing weather patterns, stronger hurricanes and other extreme weather events, sea level rise, increased nuisance flooding, king tides, and continuing development in flood plains are some of the factors increasing the risk of flooding events, both in terms of their frequency and magnitude. Some historic properties that have never flooded before may now be exposed to this risk, and those that flooded infrequently in the past may experience more instances of flooding or of water reaching higher levels than ever before.

[Standards for Preservation](#)

[Standards for Rehabilitation](#)

[Standards for Rehabilitation
\(for historic tax credit projects\)](#)

[Standards for Restoration](#)



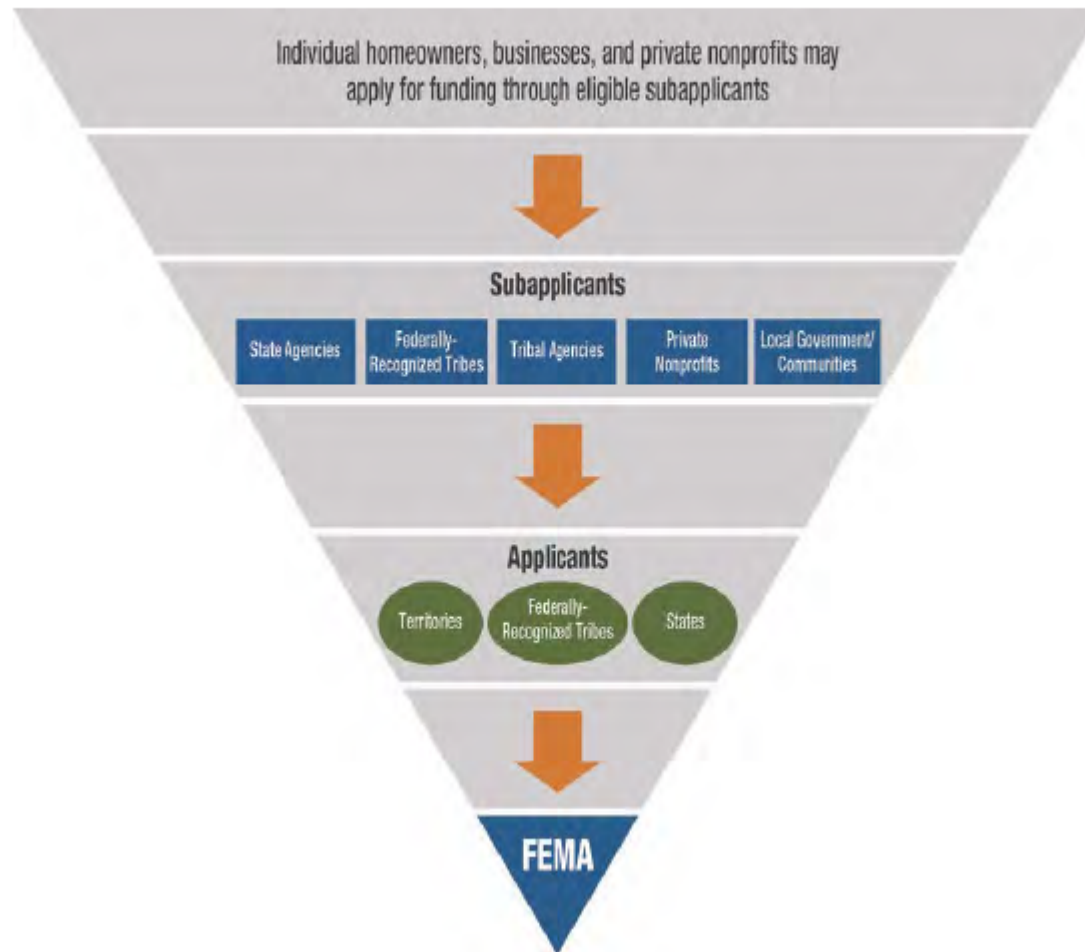
Guidelines on Flood Adaptation for Rehabilitating Historic Buildings

The goal of the [Guidelines on Flood Adaptation for Rehabilitating Historic Buildings](#) is to provide information about how to adapt historic buildings to be more resilient to flooding risk in a manner that will preserve their historic character and that will meet



Plan Implementation & Grants Development

HMGP Application Flow



Polling Question 2

Are you aware of statewide guidance/resources available to integrate historic and cultural resources into your Hazard Mitigation Plan?

- A. I am aware of existing guidance and have utilized it.**
- B. I have heard about guidance, but have not consulted it.**
- C. I am unaware of any guidance.**

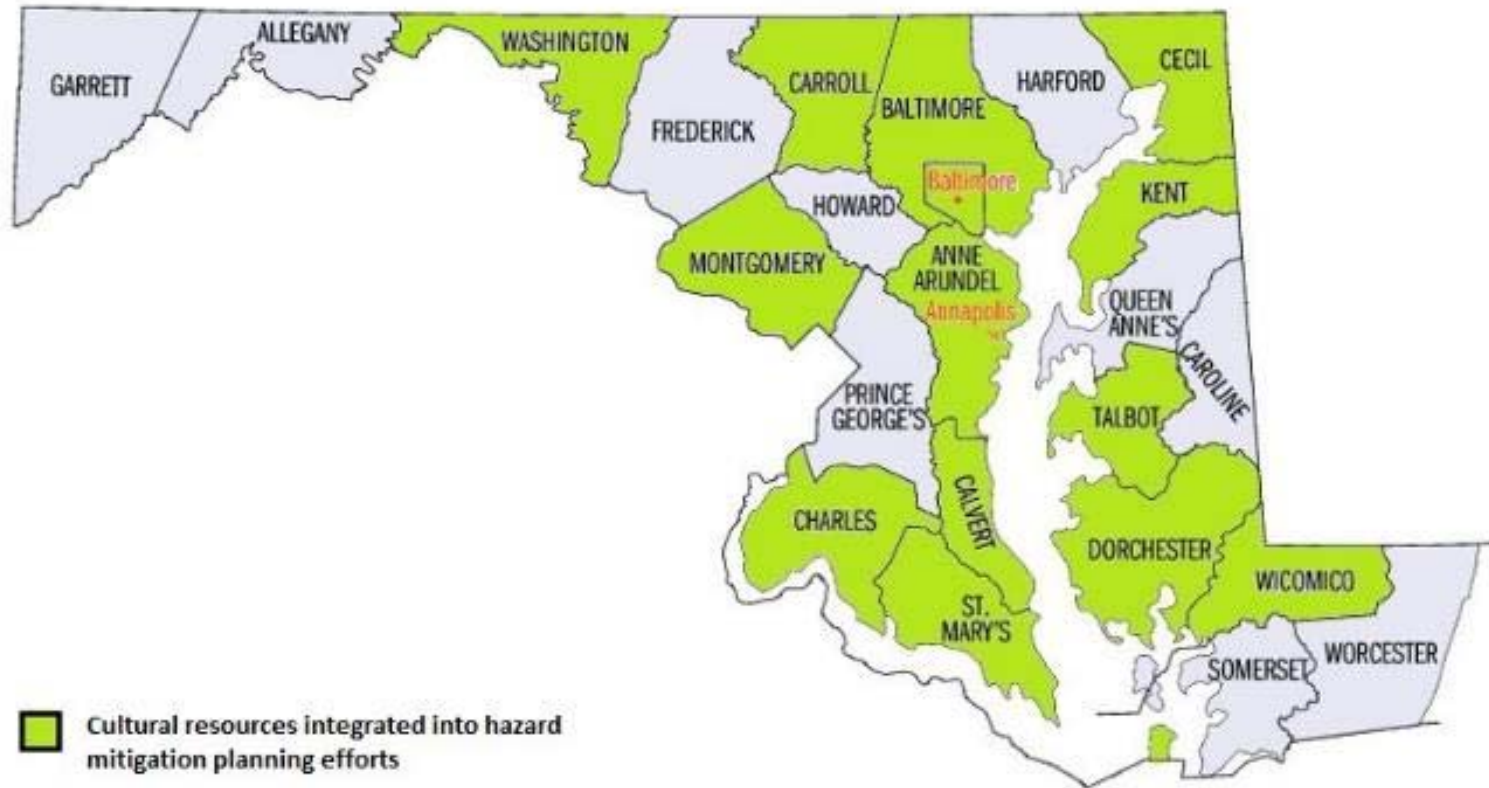


Jennifer Sparenberg, CFM

Senior Environmental Specialist, Maryland Environmental Service



Integration of Hazard Mitigation Planning and Resources in Maryland



Flood Mitigation Guide: Maryland's Historic Buildings

- Flooding & Floodplain Management
- Historic Preservation & Emergency Management
- Selecting Preservation-Sensitive Mitigation Options



TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS

Potential issues related to the improvement of transportation infrastructure include:

- Roadways, bridges, and causeways may require further elevation or structural enhancement as flood conditions worsen
- Costly to construct
- Require regular maintenance

Potential Preservation Benefits:

- Mostly “invisible” and considered necessities rather than visually obtrusive
- Potential to protect historic buildings, structures, settings, and archeological resources

Potential Preservation Challenges:

- Potential abandonment of historic buildings and structures due to failure of infrastructure to provide needed services including access by road
- Potential to impact historic landscapes and archeological resources due to installation of new or elevated transportation infrastructure
- Possible destruction or alteration of cultural resources, particularly archeological resources and historic landscapes, through construction activities

<https://mht.maryland.gov/weatherit.shtml>



Planning for Maryland's Flood-prone Archeological Resources

QUICK GUIDE TO WHAT'S INSIDE

Archeological sites are increasingly threatened by flooding along Maryland's rivers and coastlines. Development projects to help address flooding can also damage archeological sites.

Sections 1 & 3

Identifying vulnerable and undocumented archeological sites is more difficult. Strategies include predictive modeling and field survey.

Section 4

To make decisions about how to treat archeological sites, local governments should work with archeologists and MHT to assess the integrity and potential significance of the site - that is, its ability to yield important information about the past - as well as site vulnerability.

Sections 5, 6, & 7

Treatment options can include local site stewardship programs, additional research and investigation, site protection, and -- in severe cases where important data may be lost -- salvage archeology. Some sites will not be good candidates for treatment and will be lost over time.

Section 7



Annapolis: Weather It Together

Landmark at Risk: Protecting the Historic Seaport of Annapolis, Maryland

View the Plan Here

Landmark at Risk | A Strategic Approach | Weather It Together | Adapting a Landmark | Get Involved | Contact Us

Landmark at Risk

The City of Annapolis' Weather It Together team has collaborated with the Planning Innovation Lab of Michael Baker International to develop an interactive resource that highlights City efforts to address local climate change impacts through proactive cultural resource hazard mitigation planning. This story map entitled Landmark at Risk hopes to become the go-to resource, not only for the citizens of Annapolis, but for other communities facing the challenges of climate change. Please take advantage of this interactive product to click, zoom, or scroll through the diverse media. We will be updating this resource for calendar year 2020.

in your neighborhood in the case of high water, increasing the amount of

ANNAPOLIS WEATHER IT TOGETHER PROTECT OUR HISTORIC SEAPORT

Landmark at Risk

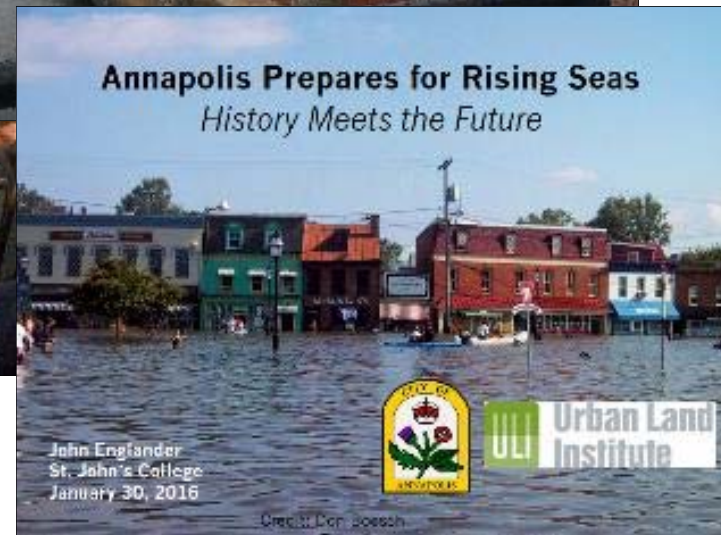
Protecting the Historic Seaport of Annapolis, Maryland

Michael Baker INTERNATIONAL

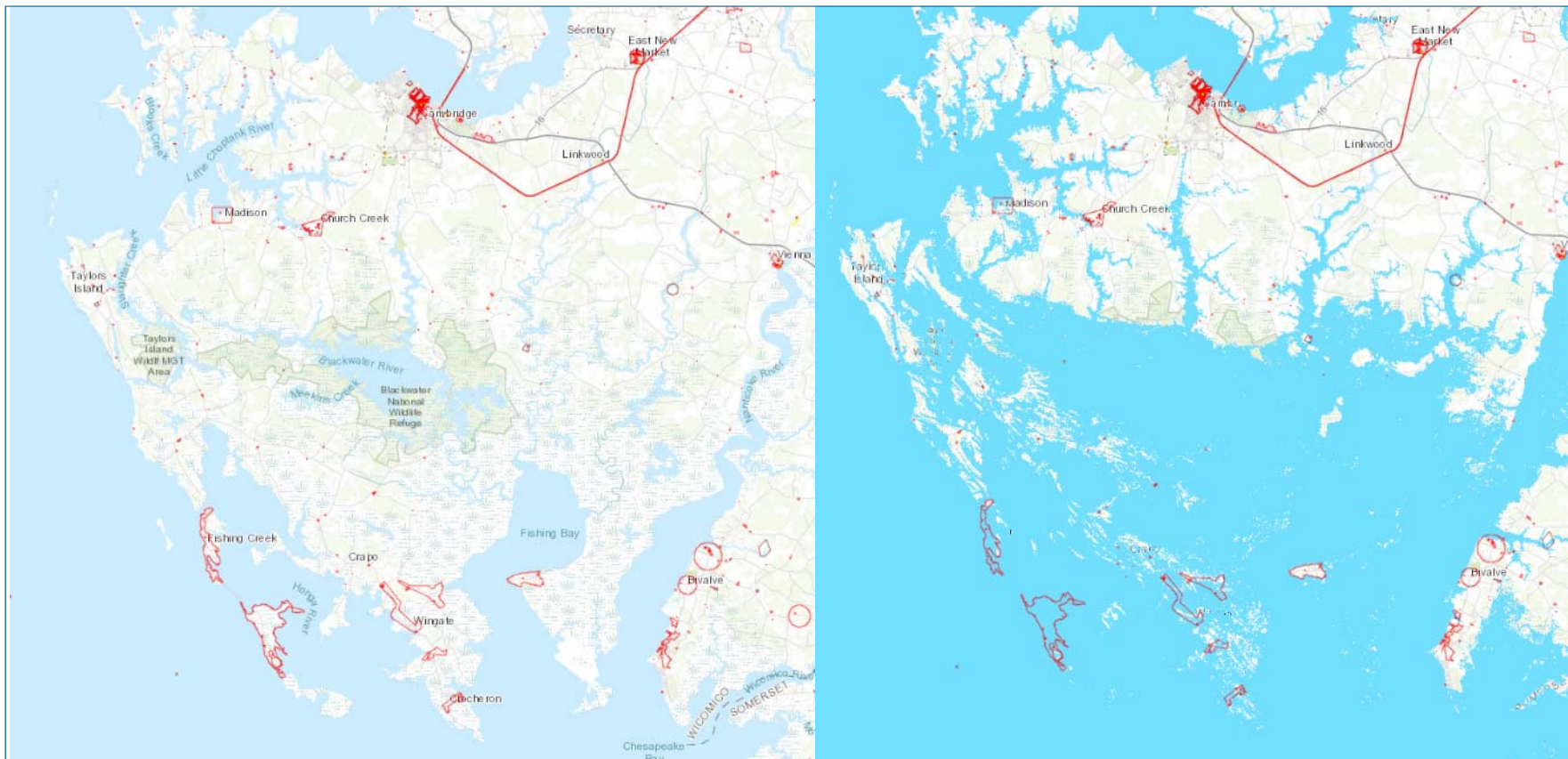
<https://www.annapolis.gov/885/Weather-It-Together>



Annapolis: Weather It Together



Dorchester County: The Future?



Dorchester County – Historic Structures at Risk to Flooding

Flood Zone	# of Buildings
High Risk (SFHA)	
AE	383
A	18
VE	0
Moderate Risk	
X 500 yr.	143
Minimal Risk	
X	1,338
Total # MIHP building within FEMA flood zones: 1,880	

MIHP Buildings in Special Flood Hazard Area (SFHA) High Risk (Zone AE Only)					
AE Flood Zone	Depth of Flooding - MIHP Buildings				
	3 ft. ↑	2.5 ft.- 2.9 ft.	2.0 ft.- 2.4 ft.	1.5 ft.- 1.9 ft.	1.4 ft. ↓
	121	87	51	48	75

Data presented within tables were derived from the following sources: MHT, FEMA Flood Risk Map Products, and Smith Planning and Design

<http://www.preservationmaryland.org/wp-content/uploads/2018/09/dorchester-county-historic-and-cultural-resources-hazard-mitigation-and-risk-plan-public-web-2018.pdf>



Dorchester County – Gap Analysis



577 buildings constructed prior to **1967** located in areas that have not been documented or studied, of which:

201

were vulnerable to the 1% annual chance flood, storm surge inundation, and 2050 SLR inundation.

376

were vulnerable to the 1% annual chance flood and storm surge inundation.



Dorchester County – Recommendations



Conduct architectural/historical survey



Complete of Maryland Inventory of Historic Property Forms for buildings



Prepare documentation to allow for determinations of eligibility

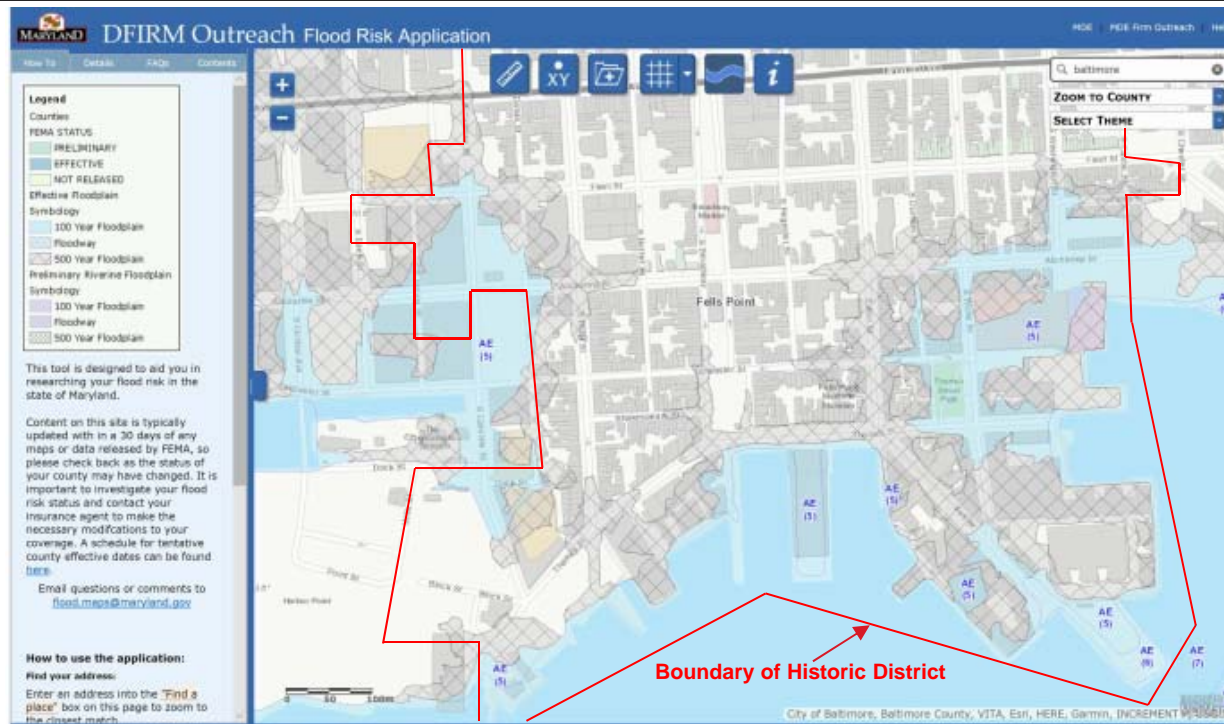


Conduct flood mitigation for historic properties that balances preservation and protection



Fells Point Flood Mitigation Guidelines

Flood vulnerability at individual properties can be checked on Maryland's Digital Flood Insurance Rate Map (DFIRM). The DFIRM website includes valuable information and resource links for property owners addressing flood insurance and mitigation as well as a mapping tool that can be searched by street address.



<https://mdfloodmaps.net/>



Fells Point Flood Mitigation Guidelines

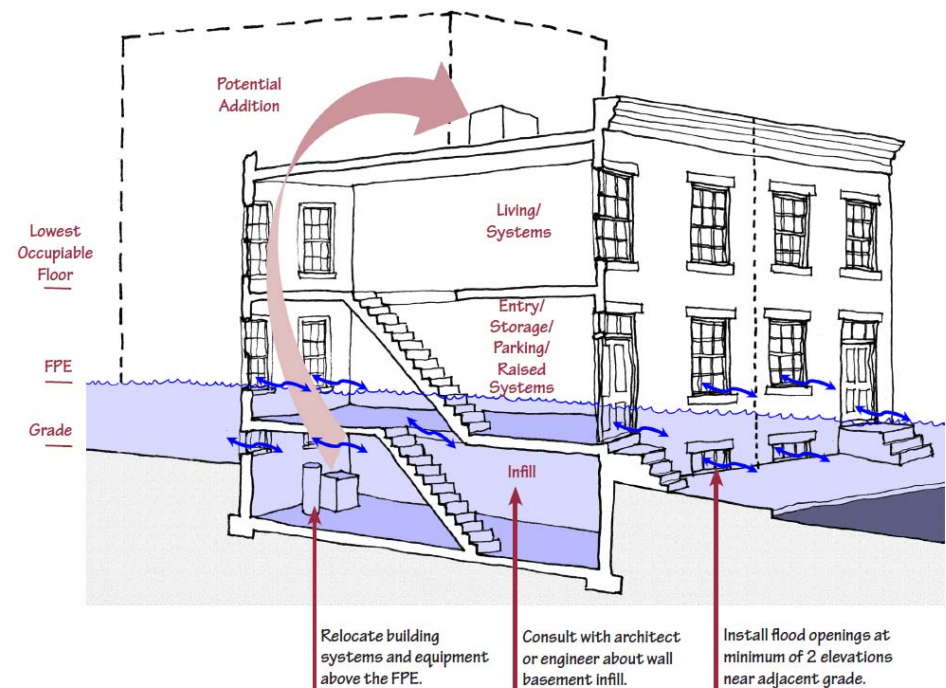
The front elevation (at left) of this wet floodproofed rowhouse maintains its historic character. At the time of renovation, it was missing its rear wall, providing a unique opportunity for substantial alterations. The contemporary rear elevation (at right), includes a roof deck, balcony, and garage door openings. The basement has been infilled and first floor uses limited to an entrance, garage, and storage space.



Fells Point Flood Mitigation Guidelines

Flood Protection Elevation (FPE) Above Existing First Floor Height

- Relocate all systems and equipment from abandoned basement and former first floor level to above the FPE. Limit use of former first floor to entry, storage, and potentially parking. Relocate living spaces including the kitchen and living room to an upper floor.
- Consult with CHAP regarding the potential installation of a garage door at the rear elevation and an addition to compensate for lost living space.



https://chap.baltimorecity.gov/sites/default/files/2018-12_FellsPointFlood_FINAL.PDF



Polling Question 3

Are cultural resources addressed in your local Hazard Mitigation Plan?

- A. Yes, substantively**
- B. Yes, minimally**
- C. No**
- D. I don't know**



John Gardosik

Project Manager, Hurricane Sandy Recovery, State Historic
Preservation Office, Pennsylvania Historical and Museum Commission



FEMA



Disaster Planning for Historic Properties Initiative

Program Background

- Following Hurricane Sandy, PA SHPO applied for and received a competitive grant offered to states with Sandy disaster declarations.
- A small number of Sandy-affected properties received repair subgrants, but the majority of funding has gone toward planning for future disasters and resiliency.

Historic preservation brings economic benefit by offering experiences and investment opportunities that are not available elsewhere.



PROTECTING & PRESERVING SENSE OF PLACE



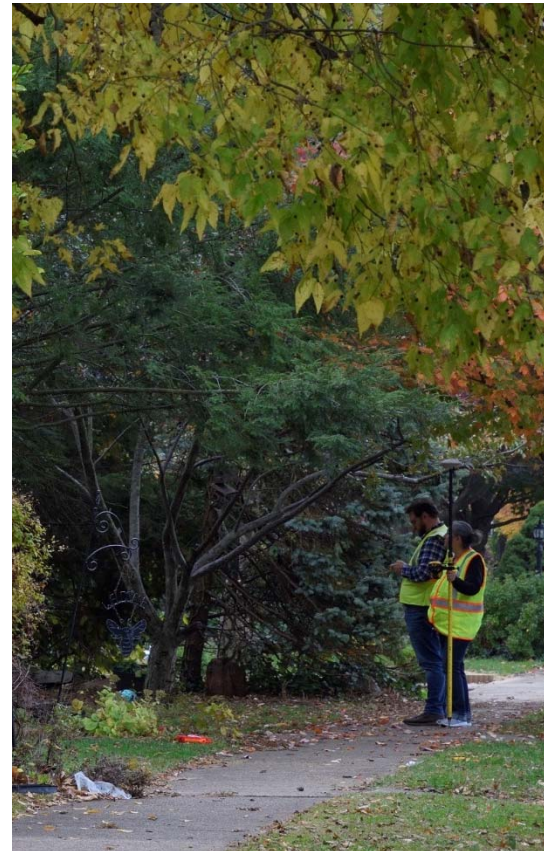
#PreservationHappensHere!



Survey Projects

Survey is the backbone of historic preservation


- The first step in protecting what a community values is knowing what's actually there
- Survey projects provide an opportunity to gather a range of broadly useful data
- Tailoring survey projects to neighborhoods and communities most at risk maximizes their value




Survey Form

A “Flood Risk Details” section was added to our standard survey form and included:

- FIRM # and date
- Flood zone
- Risk from storm surge or sea level rise
- Located in 100 or 500 year floodplain
- Base Flood Elevation
- First Floor Elevation
- Lowest and Highest Adjacent Grade


 Pennsylvania State Historic Preservation Office
 PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION
Disaster Planning for Historic Properties Initiative (2015-17)
 Historic Resource Flood Hazard Vulnerability Survey Form

PASHPO Key # 001480.0001 AECOM ID 460 Current Historic Register Status NHP, FRHP



Photograph of Main Façade

Year Built	1933	Year Built Est.	No
Architectural Style	Classical Revival		
Rowhouse Type	N/A		
Retention of Character-Defining Features	High		
Physical Condition	Excellent		
Primary Exterior Material	Stone		
Structural System	Masonry		
Est First Floor Sq. Ft.	1424.42		
Number of Stories	3		
Basement Present	Yes		


County	Philadelphia	Municipality	Philadelphia
Planning District	University/Southwest	Neighborhood	University City
Address	1 N 30th St		
Latitude	38.955709	Longitude	-75.181907
Resource Type	Structure	Building Type	MISC RR STA+COMM MASONRY
Building Name	30th Street Station / Pennsylvania Railroad War Memorial Sculpture		
Current Function(s)	Transportation		Rail-related

Tax Parcel ID	774833501	Owner Type	Private
Assessed Value	\$42,000,000	Valuation Year	2002
Valuation Source	Philadelphia Office of Property Assessment		



Flood Risk Details (All elevations recorded in feet; NAVD83)

FIRM #	4207570193G	FIRM Date	1/17/2007	Flood Zone	AE
Category-1 Storm Surge	No	100-Year Floodplain	Yes		
Sea Level Rise	N/A	500-Year Floodplain	Yes		

Base Flood Elevation (ft.)	9.300	First Floor Elevation (ft.)	37.064
Lowest Adjacent Grade (ft.)	37.098	Highest Adjacent Grade (ft.)	37.098

Elevation data courtesy of  iStock.com

Site Location: Aerial View: (NAIP2010)N1 Date of Image: 7/25/2015 Parcel Map: (City of Philadelphia)N1

Recorded by: AECOM Page 1 of 2 Date Prepared: June 2016

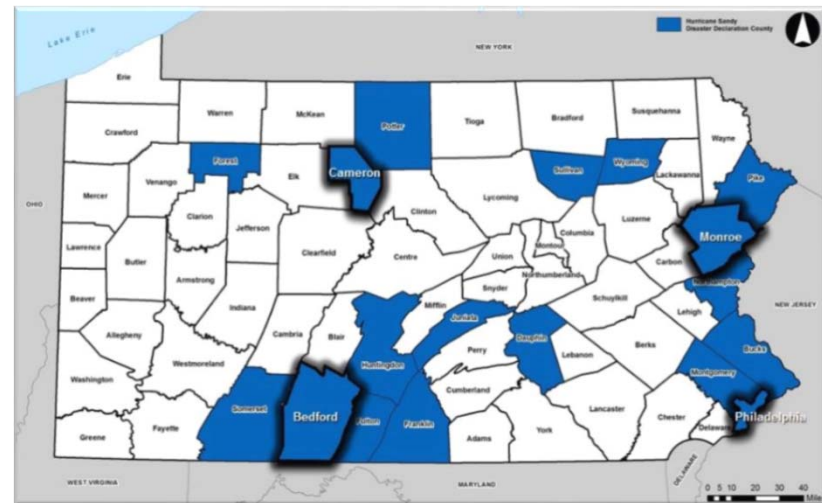
Flood Risk
Details



Pilot Counties

County Selection

- PA SHPO partnered with four pilot counties on comprehensive survey and updates to their Hazard Mitigation Plans
- Survey was focused on the most at-risk properties countywide.
- Counties were selected to represent a broad range of population levels and densities, and geographic contexts



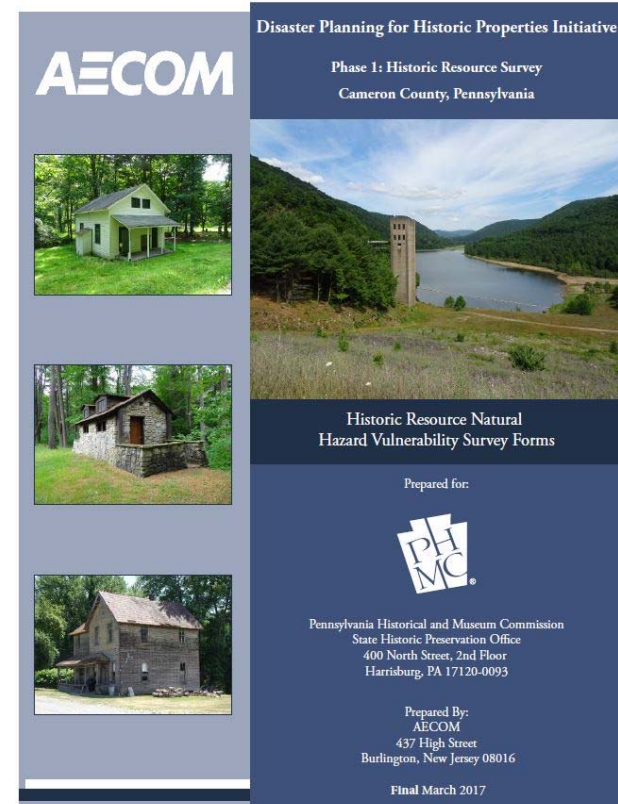
Pilot Counties: Bedford, Cameron, Monroe, Philadelphia



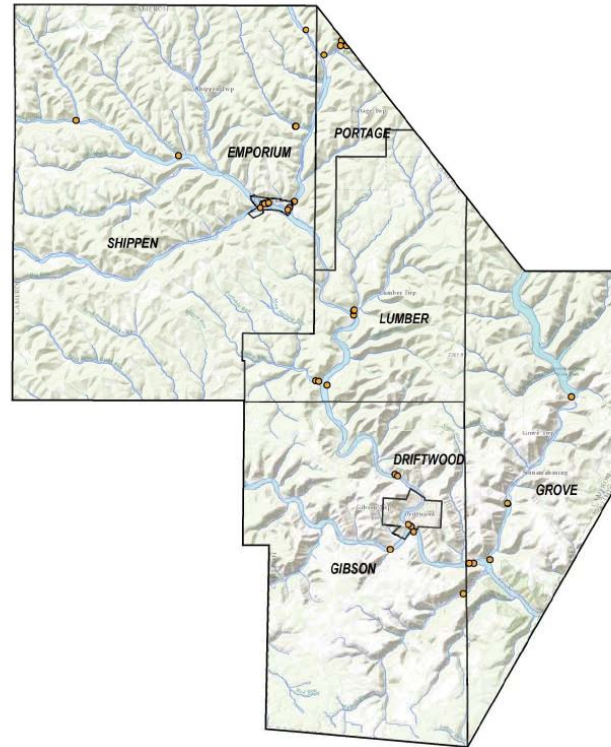
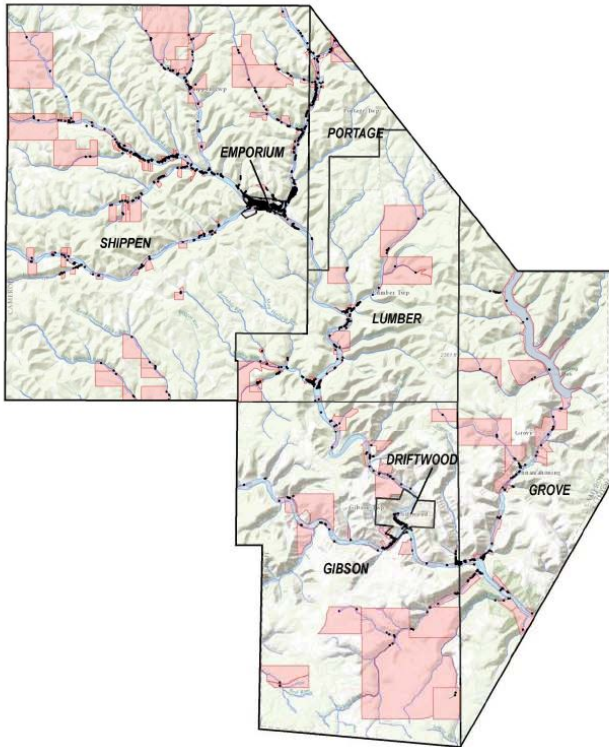
Cameron County Results

Total Properties: 34

- Only 5 properties had previously been identified as eligible for listing in the National Register of Historic Places
- Cameron County is the only county with no current National Register listings



Cameron County Results



AECOM

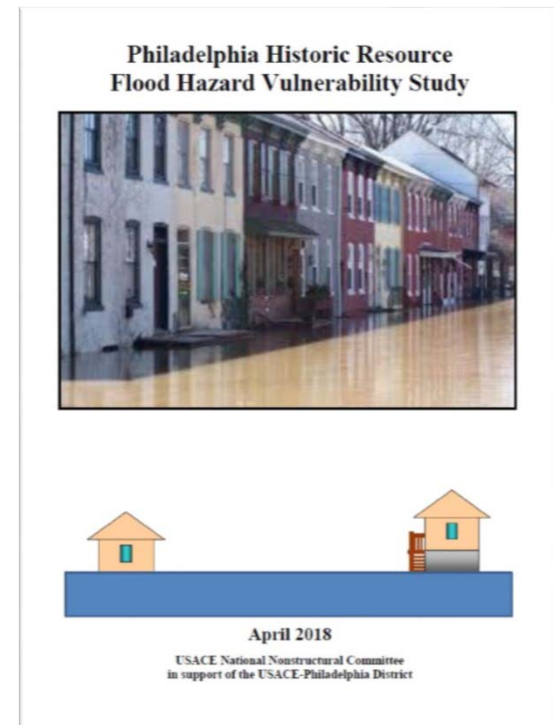
- Surveyed Properties
- Standing Structures in 1971 (Total: 1,682)
- Floodzone
- Pre-1971 Parcels



Philadelphia Survey Results

Total Properties Surveyed: 568

- All properties surveyed had been previously identified as historic.
- This includes properties already listed in the National Register of Historic Places and properties previously determined to be eligible for listing by PA SHPO.
- Properties locally listed on the Philadelphia Register of Historic Places are also included.
- Flood risk data was gathered by USACE, which produced a separate report



Tri-County Survey

We partnered with the Tri-County Regional Planning Commission (TCRPC) on our second survey project.

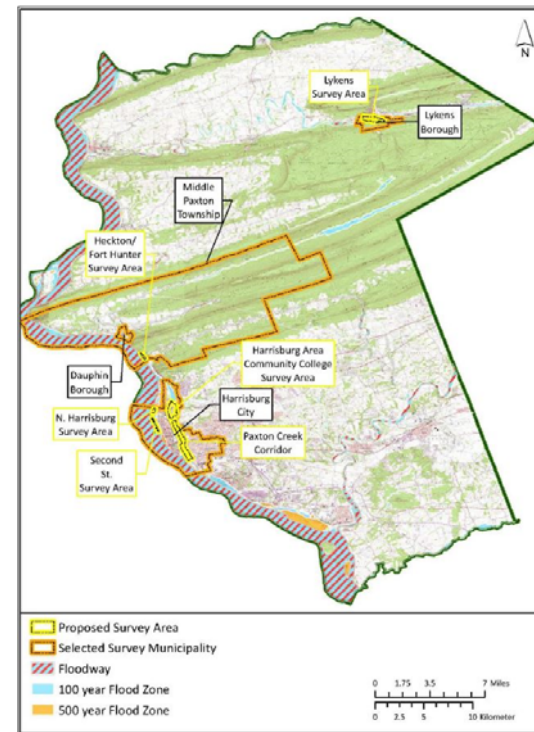
- The Tri-County Region includes Cumberland, Dauphin, and Perry Counties
- All three counties share the Susquehanna River as a border
- The capital city of Harrisburg is located in Dauphin County
- Harrisburg is a Certified Local Government, giving it access to additional grant funding.



Community-Oriented Approach

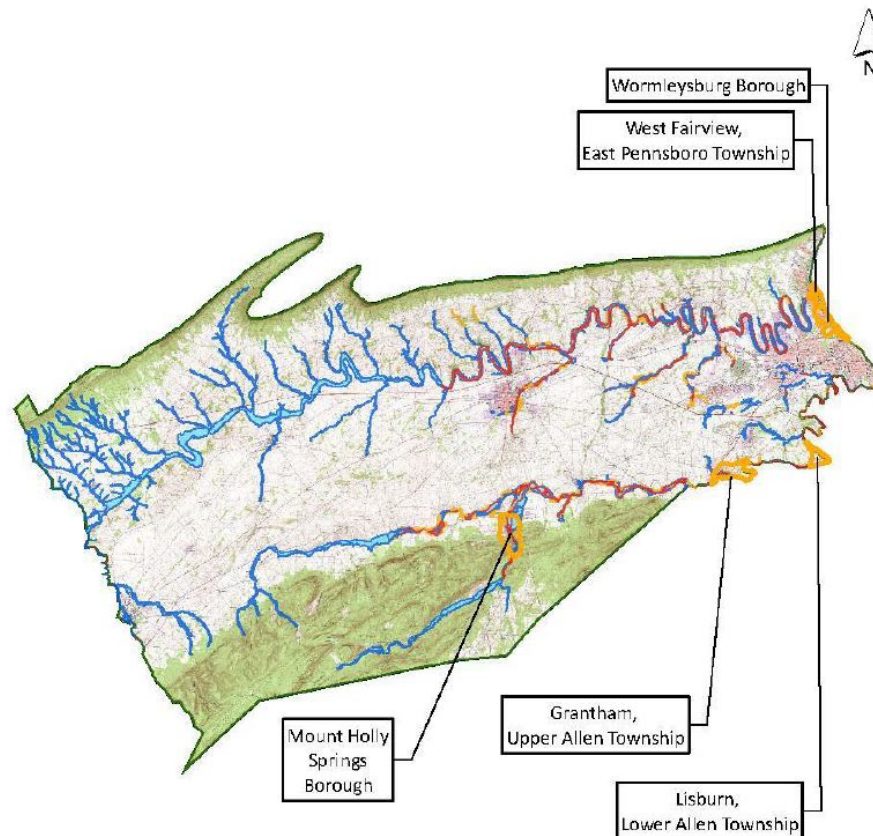
Rather than focus on the most at-risk properties county-wide, we focused on the most at-risk communities in each county.

- Communities without previous survey information were prioritized.
- “Communities” include city neighborhoods, boroughs, villages, and census-designated places (CDPs)
- The project was flexible and able to evolve over time: communities were added to Dauphin County as additional information was gathered in the field.



Cumberland County

Selected communities include boroughs and CDPs. Though not shown here, the borough of New Cumberland was also surveyed.



Preliminary Results

**Total Properties Surveyed:
1,299**

Dauphin County: 764

- Harrisburg: 417
- Lykens: 229
- Middle Paxton Township: 30
- Susquehanna Township: 63
- Union Deposit: 25

Cumberland County: 305

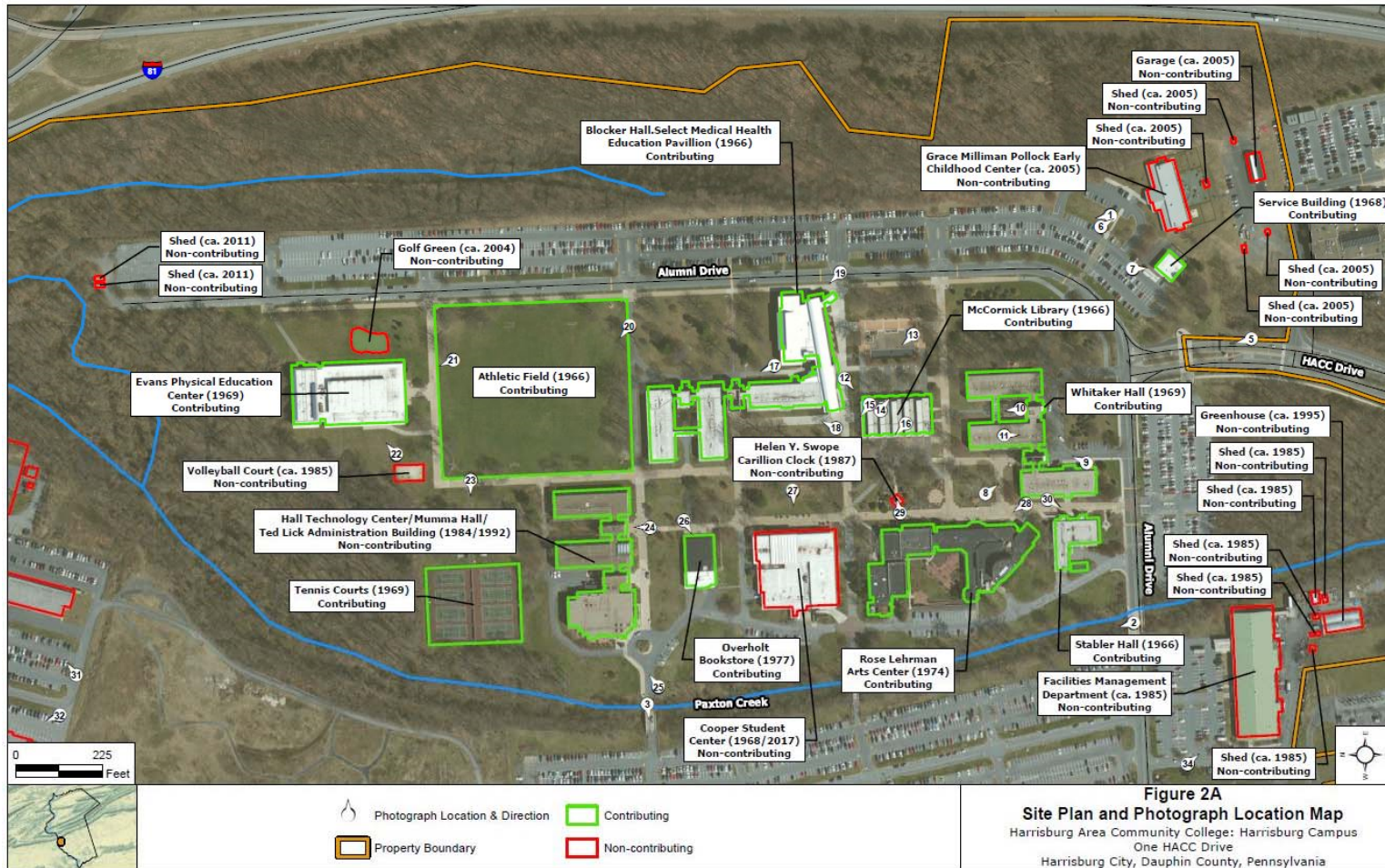
- Grantham: 17
- Lisburn: 13
- Mount Holly Springs: 103
- New Cumberland: 85
- Wormleysburg: 87

Perry County: 230

- Blain: 50
- Duncannon: 102
- Ickesburg: 32
- NE Madison Township: 2
- Newport: 43
- Spring Township: 1



Harrisburg Area Community College



Harrisburg Area Community College: McCormick Library



Juniata County

Our final Sandy-funded survey project is in Juniata County.

- Juniata County is a low-density county bordering the Susquehanna River.
- The current population is roughly 25,000.
- This survey project is smaller, more targeted, and could be more quickly contracted and implemented.
- The estimated number of buildings to be surveyed is less than 150.
- Eligibility recommendations for each community will be included.

Five small communities were selected for survey:

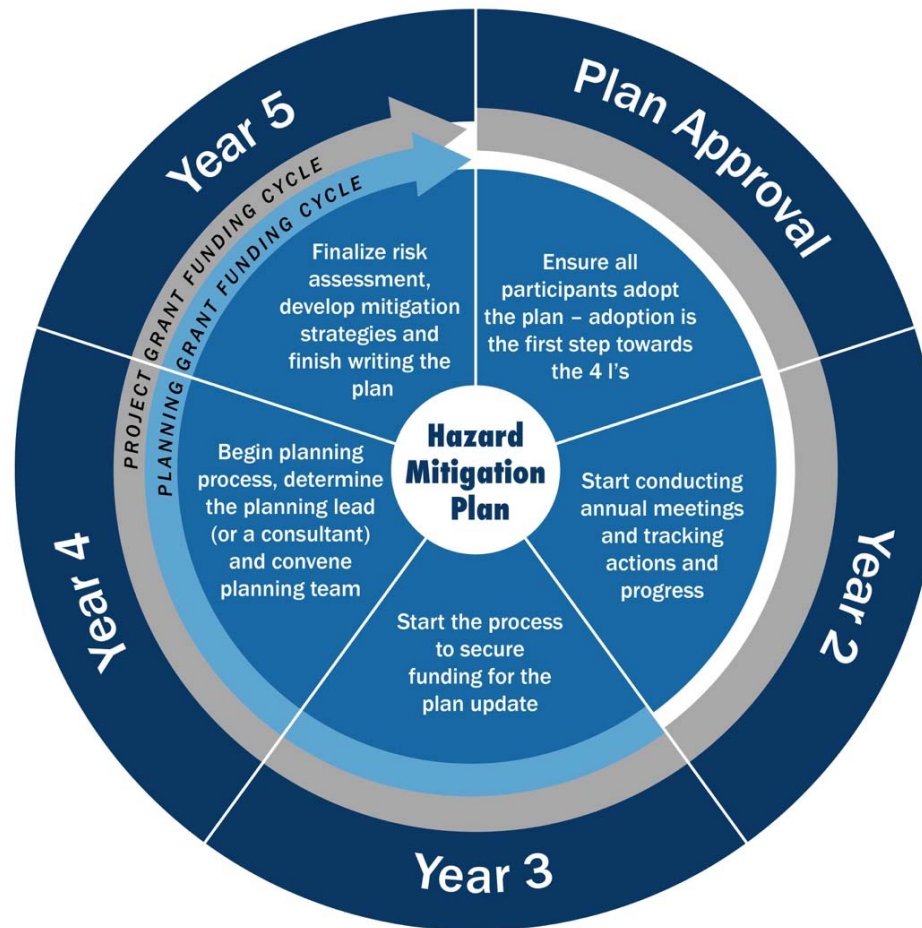
- East Salem, a CDP in Delaware Township
- McAlisterville, a CDP in Fayette Township
- Mexico, a CDP in Walker Township
- Port Royal Borough
- Thompsontown Borough



McAlisterville



Connecting to the Planning Cycle



Region 3 2019 Coffee Break Webinar Schedule Recap

March

Utilizing Universities as Partners in Hazard Mitigation Plan Drafting and Implementation

May

Floodplain Management and Hazard Mitigation Planning

July

Engaging the Arts in Mitigation & Planning

September

Revisiting Loss Avoidance and the Benefit Cost Analysis Process

October

Integrating EPA Programs and Hazard Mitigation Planning

January

Incorporating Historic and Cultural Resources in Your Hazard Mitigation Plan



Region 3 2020 Coffee Break Webinar Schedule

- January** Incorporating Historic and Cultural Resources in Your Hazard Mitigation Plan
- March** Annual Hazard Mitigation Plan Reviews – Options and Outcomes
- May** Building a Better Scope of Work for your Hazard Mitigation Plan
- July** TBD
- September** Tracking Risk Reduction through Your Capabilities Assessment
- November** Bringing Lifelines into Hazard Mitigation Planning



Upcoming FEMA Region III Coffee Break

March 18, 2020

Annual Hazard Mitigation Plan Reviews – Options and Outcomes

- To register, please follow the link* to:
<https://femaregion3coffeebreaks.eventbrite.com>
- To sign up for additional FEMA Region III updates, please follow the link* to:
<http://bit.ly/FEMA-Region-III>

**Please note, the links will be sent out after this presentation.*



You May be Eligible for Professional Credits

Participation certificates and agendas will be sent to all participants who attend the whole session and participate in the polls.



American
Institute
of Certified
Planners (AICP)
Certification
Maintenance

Credit course number:
9193479



Association
of State Floodplain
Managers (ASFPM)
Certified Floodplain
Manager (CFM)
Continuing Education
Credit



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Recovery
State Historic Preservation Office
Pennsylvania Historical and Museum
Commission
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jgardosik@pa.gov



Resources

- [Disaster Planning for Historic Properties](#)
- [Dorchester County 2018 Historic & Cultural Resources Hazard Mitigation & Risk Plan](#)
- [Fells Point Flood Mitigation Guidelines](#)
- [Floodplain Management Bulletin Historic Structures](#)
- [Integrating Historic Property and Cultural Resource Considerations Into Hazard Mitigation Planning](#)
- [National Park Service Rehabilitation Standards and Guidelines](#)
- [Pennsylvania State Historic Preservation Office Blog](#)
- [Weather It Together: Overview](#)
- [Weather It Together: Protecting Maryland's Historic Places from Natural Hazards](#)



Thank you for Participating Today!



We hope to see you all at the next Coffee Break!



Questions?

Please type your question in the chat!





FEMA

