R. Christopher Goodwin & Associates, Inc.

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Planning for Historic/Cultural Resources Coastal Resiliency in Connecticut

Presented to CAFM's 3rd Annual Conference

October 25, 2016

Department of Economic and Community Development

State Historic Preservation Office

Connecticut still revolutionary

Agenda

- Introduction and Project Overview
- Background
- Historic and Cultural Resources
- Resilience
- What is at Risk?
- Incorporating Historic Resources into Resilience
- Example
- Next Steps

Program Sponsors

Department of Economic and Community Development

State Historic Preservation Office

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- Funded by the Disaster Relief Appropriations Act of 2013 (PL 113-2)
- Department of Interior – National Park Service
- Grant to SHPO
  - Funding limited to Sandy impacted Counties

Historic Preservation in CT

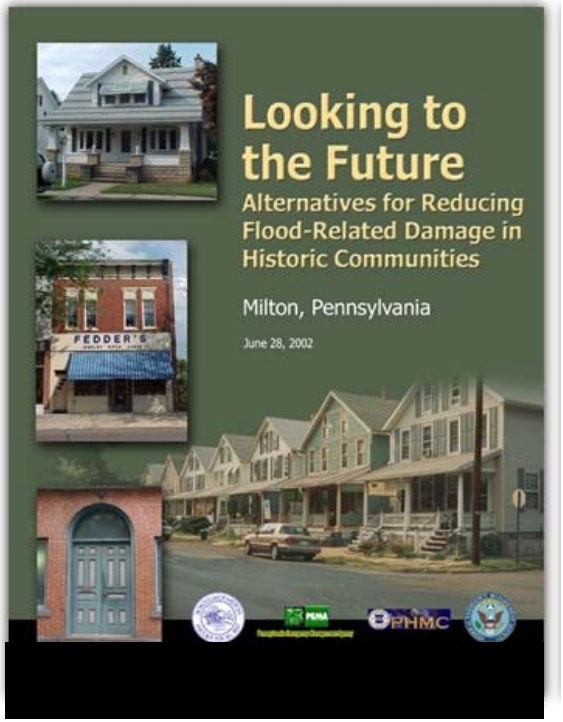
- CT State Historic Preservation Office (SHPO) Programs that Intersect with Local Planning:
  - Historical Designations of Districts, Buildings, Structures, Sites and Objects to the National Register of Historic Places & State Register of Historic Places
  - Certified Local Government Program (CLG)
  - Historic Preservation Grant Programs
  - Federal & State Historic Preservation Tax Credit Programs
  - Archaeological Preserves
  - Cemetery Preservation
  - Local Historic Districts and Individual Historic Properties
  - Village Districts

Project Components

- Modernizing historic inventories
- Serving data to users
- Gap Analysis
- 5 Regional Council of Government Charrettes
- 28 Municipal Technical Assistance Visits and follow on recommendations
- SHPP – Resilience Chapter Update
- Best Practice Guidance

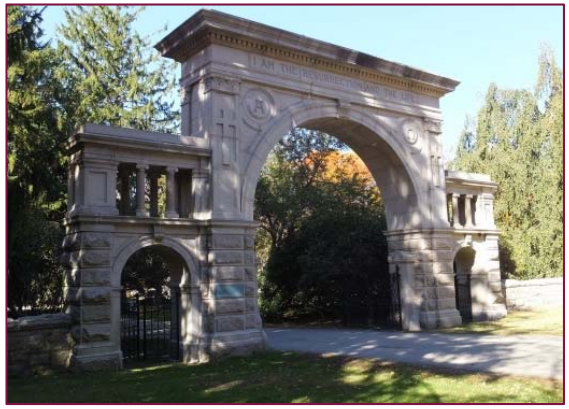
An Emerging Area of Practice

- With few exceptions, natural hazard resiliency planning has not considered Historic Resources
- Addressing hazard related issues for Historic Resources has been reactive and institution specific
- Recognition of the need to incorporate historic resources into planning has increased since Sandy
- CT will be the *first* state to address these planning issues at the statewide level



What are Historic Properties?

Districts, Buildings, Structures, Sites, and Objects that are important on a local, state, or national level



Elm Grove Cemetery, Mystic

Holmes House, Stonington

Orange Street Historic District, New Haven

Historic Properties are cultural resources that are important in:

- American History
- Architecture
- Archaeology
- Engineering
- Culture

Governing Legislation

- National Historic Preservation Act of 1966 created the NRHP, NHLs and SHPOs, and delegated funding and authority to SHPOs through NPS
- CT was a leader at the state level in heritage conservation, and established the CT Historical Commission in 1955

Resilience

Resilience Defined

- **Resilience** is "the ability of any system (infrastructure, government, business, and resources) to resist, absorb and recover from or successfully adapt to an adversity"
- **Community** Resilience is "the ability of a community to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions."
- **Coastal** Resilience is the ability to resist, absorb, recover from, or adapt to coastal hazards such as sea level rise, increased flooding, and more frequent storm surges.

Branford Coast During Irene
Image: Branford Eagle

Why Consider Historic Properties in Resiliency?

- A Proactive Approach at the local level will help:
  - Foster Appreciation for Heritage Resources
  - Assess Cultural Resource Data within the Context of Hazards Planning
  - Establish Community-Level Preservation Priorities
  - Identify Tools & Strategies for Community-Based Preservation
  - Develop Action Plans that consider Historic Resources in Community Planning
  - Position for pre and post-disaster action and funding

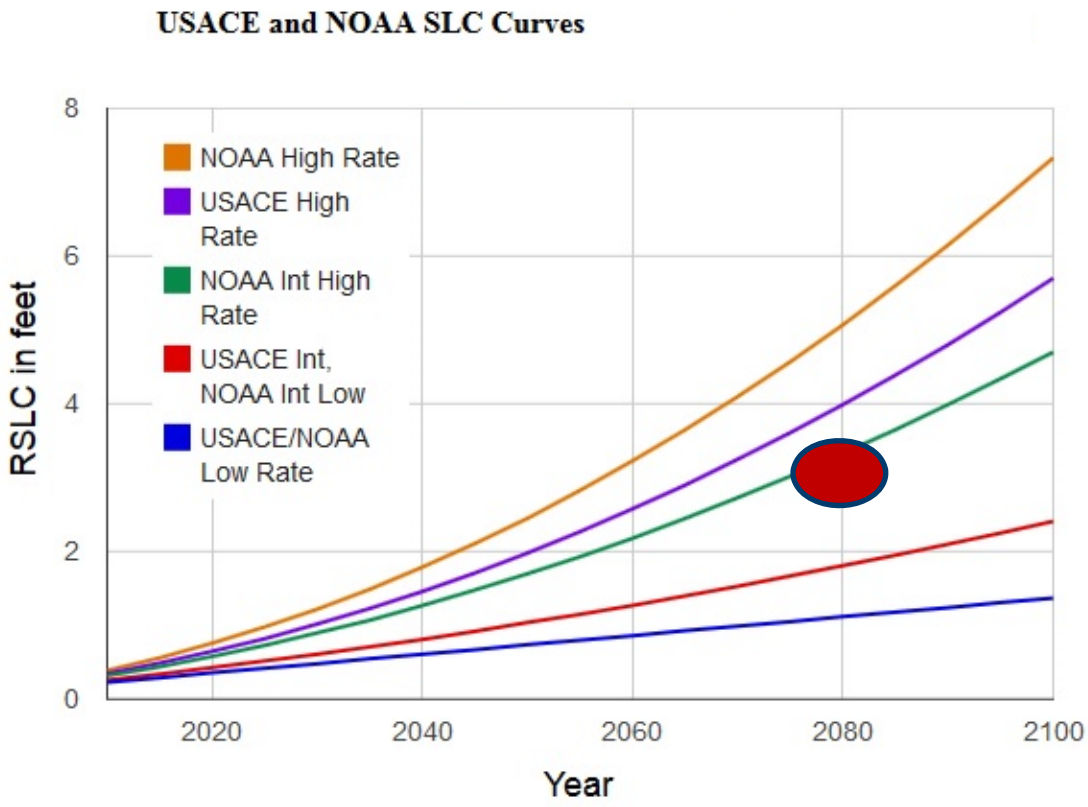
What is at Risk?

Of more than **36,000** historic buildings within the four Connecticut coastal counties, more than **3,200** are at risk for flooding!

Historic Resources and Resilience

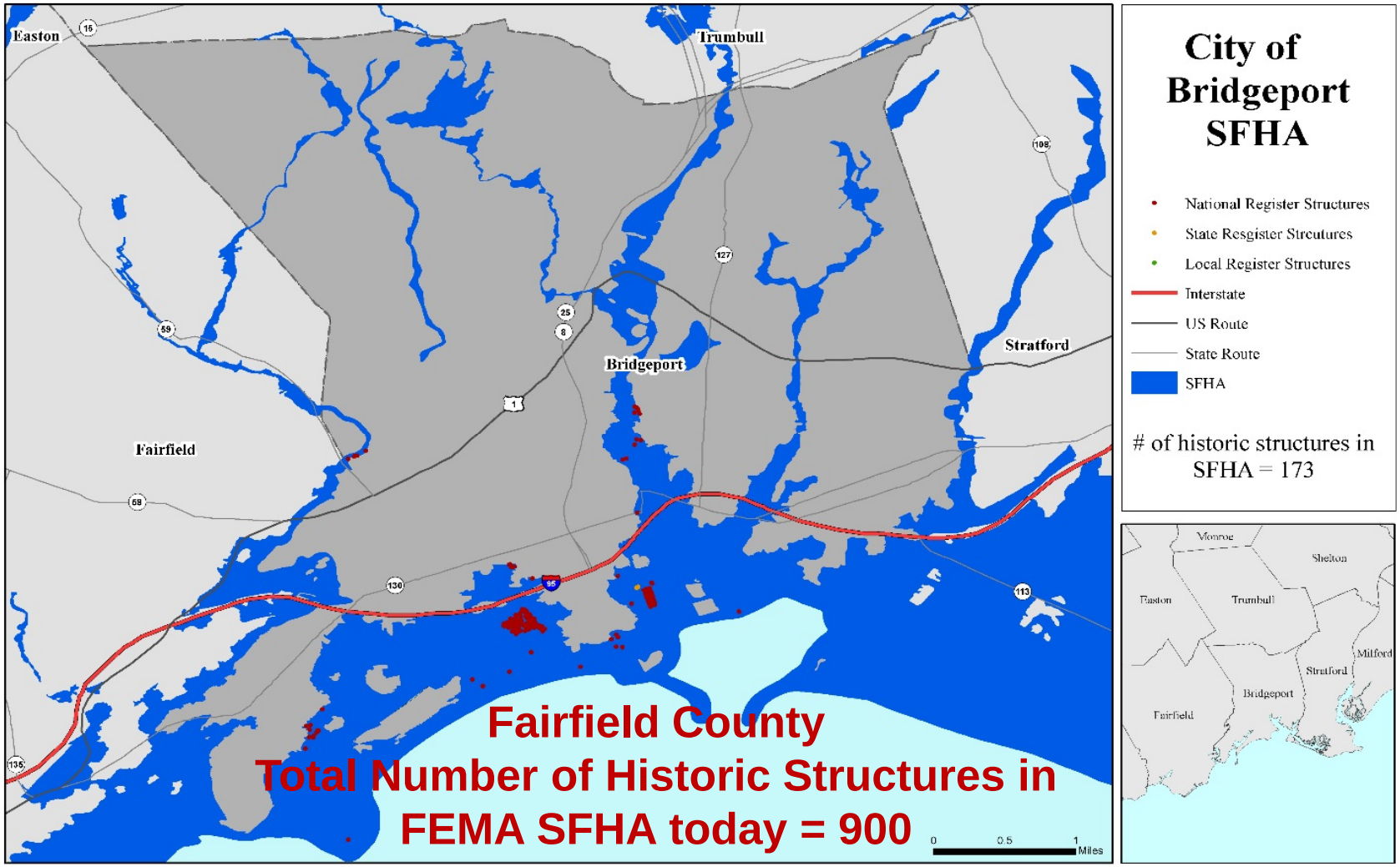
Hazards Considered

- FEMA 1% Annual Chance Flood
- 2080 Scenario Sea Level Rise
- Wind
- Winter Storms

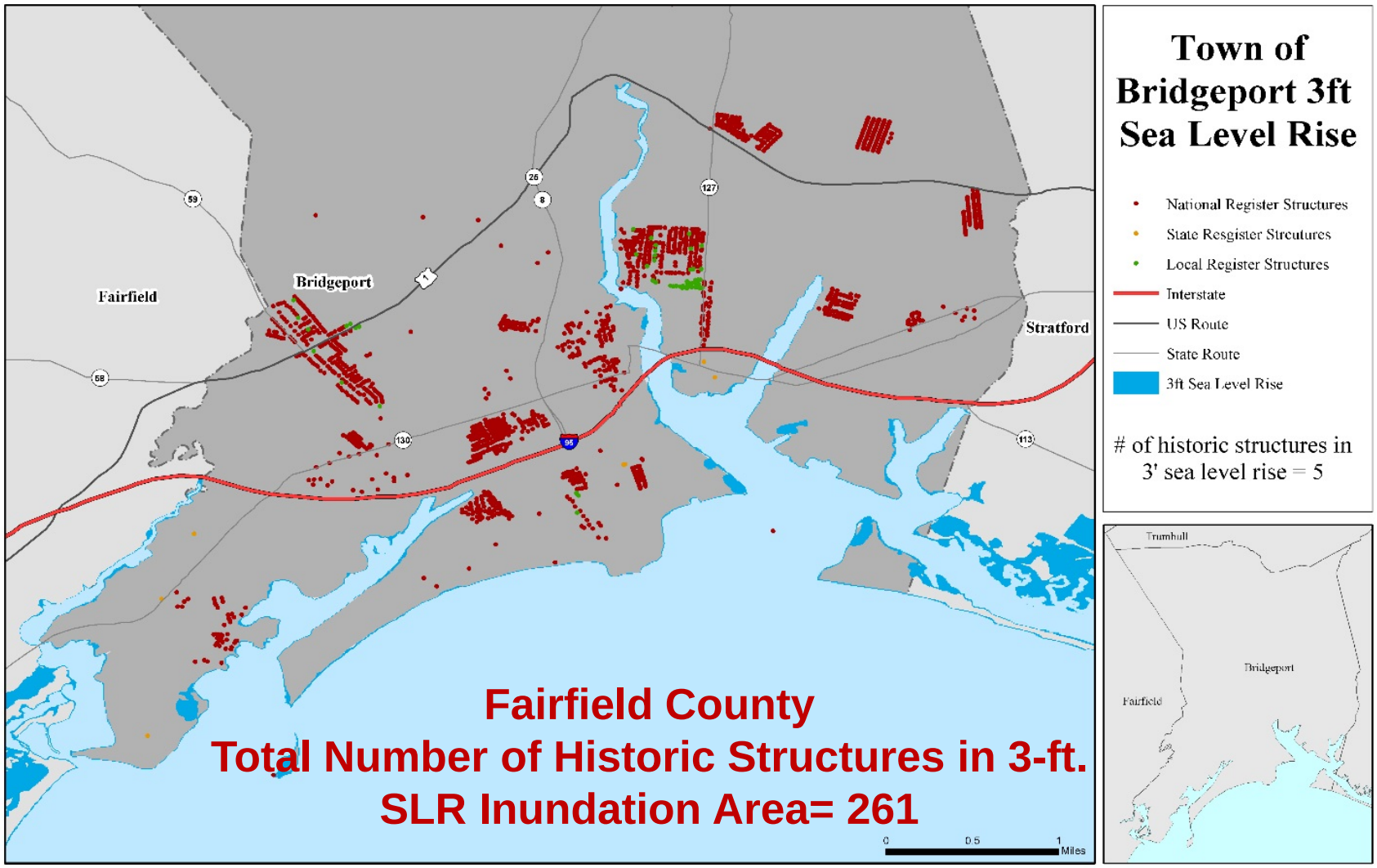


The risk assessment relies on sea level rise projections generated The National Oceanic and Atmospheric Administration Office of Coastal Management.

Fairfield County Example: FEMA 1% Annual Chance Flood



Fairfield County Example: 3 feet of Sea Level Rise



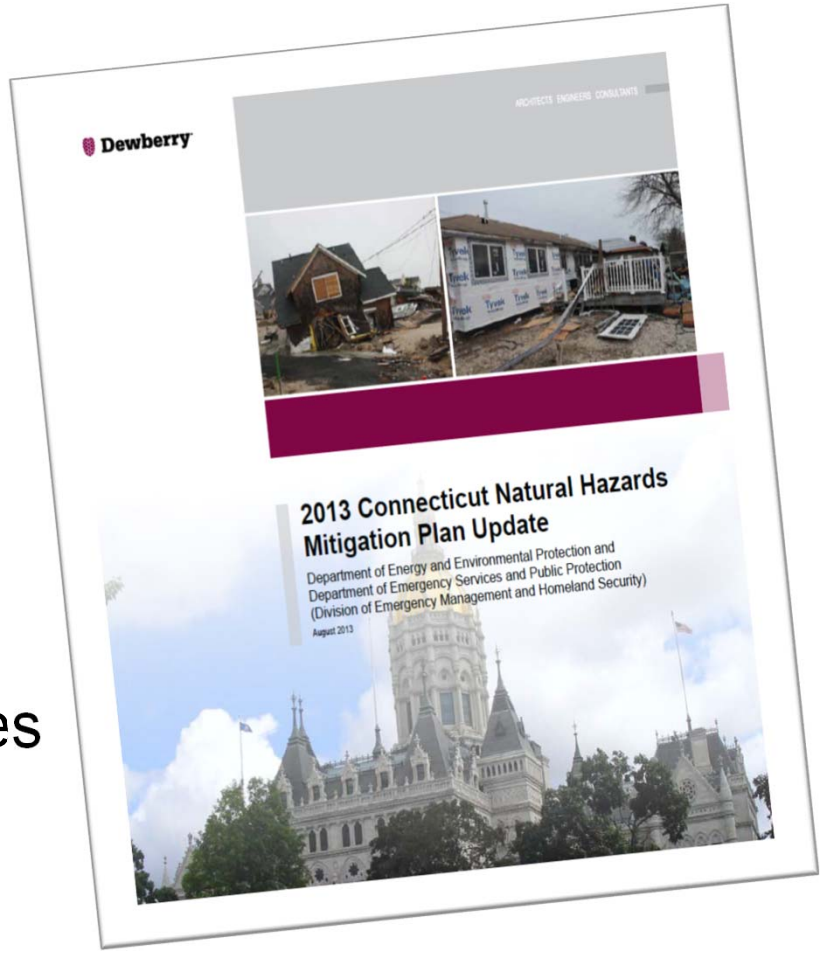
SFHA and SLR Exposure

- Fairfield County = 8,258 total historic buildings
  - Special Flood Hazard Area (SFHA) = 900 (11%)
  - Sea Level Rise (SLR) = 261
- New Haven County = 15,603 total historic buildings
  - SFHA = 619
  - SLR = 95
- Middlesex County = 3,500 total historic buildings
  - SFHA = 251
  - SLR = 18
- New London County = 8,859 total historic buildings
  - SFHA = 1038
  - SLR = 79

Incorporating Historic Resource Resiliency into Planning

What we reviewed

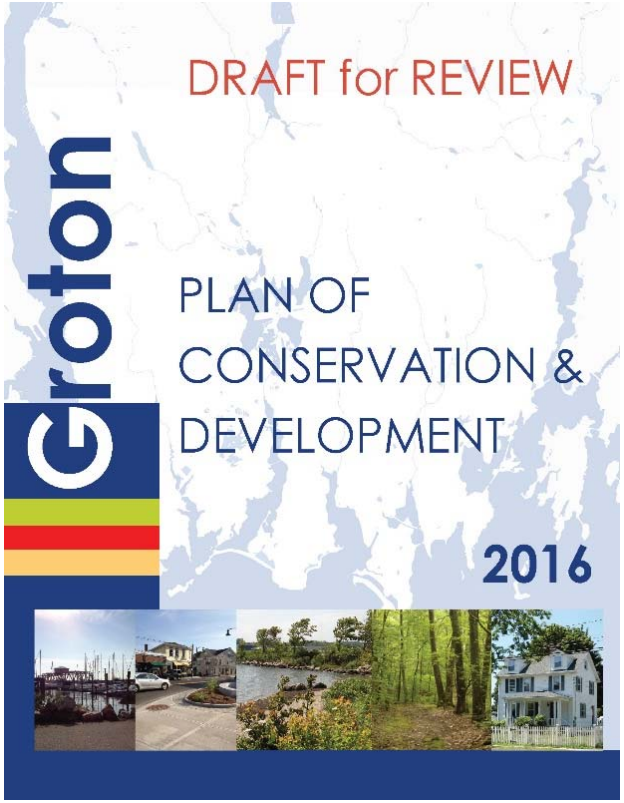
- Hazard Mitigation Plans
- Plans of Cons. and Dev.
- Coastal Resilience Plans
- NFIP Ordinances / Regulations
- Zoning Regulations
- Historic Preservation Ordinances
- Emergency Operations Plans



Best Practices – POCDs

- Historic resources chapter or element should address hazards; and,
- Hazards chapter or element should address historic resources.
- Use hazard data and historic resources point data to describe and quantify what is at risk
- Implementation matrix should include strategies that include historic resources in the context of hazards

Best Practices - POCDs



Recommendations

- Amend zoning and subdivision regulations to allow the Commissions to require archaeological and historic surveys prior to approval.
- Include historic assets and historic districts as critical features that merit protection and/or planning when considering Disaster Mitigation Plans, especially with regards to flooding, storm surge, sea level rise, and coastal erosion.
- Amend regulations to support redevelopment and creative reuse of historic properties while maintaining historic characteristics.

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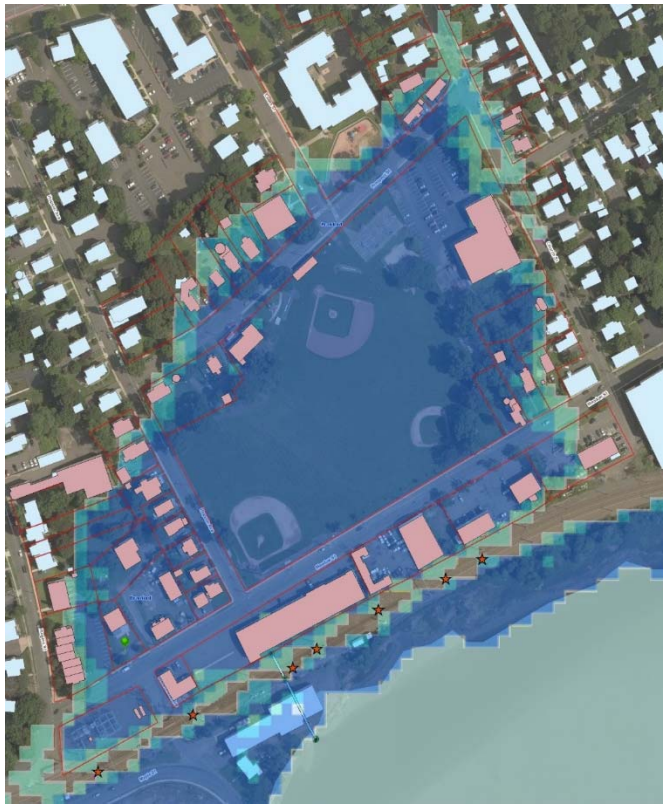
Best Practices – HMPs

- Capability Assessment
  - Describe the community's understanding of its historical resources
  - Does the municipality designate staff or a commission to plan for these resources?
  - Does that staff or commission interact with those that address natural hazards?
- Critical Facilities
  - Are any critical facilities also historic structures?
  - Are any critical facilities located in historic districts?

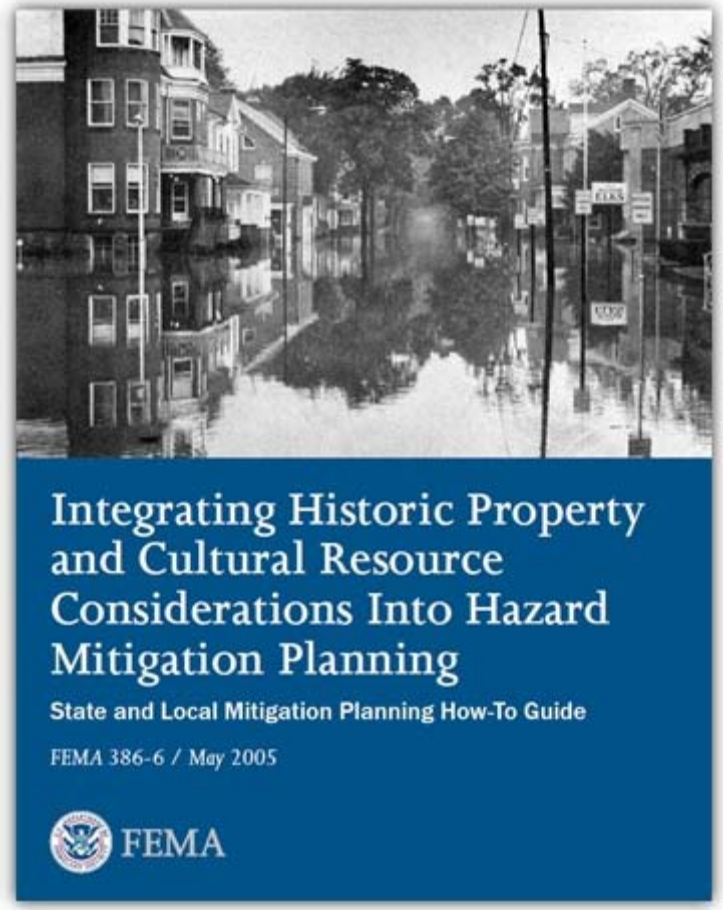
Best Practices – HMPs

- Hazard Assessment
  - Show or describe locations of historic resources in flood zones, sea level rise risk areas, erosion risk areas, wildfire risk areas, etc.
  - Are any specific resources known to be at risk?
  - What Attributes are available to quantify risk?
  - Are historic resources more at risk than other resources? For example, would heavy snow be more or less of a concern?



Best Practices – HMPs

- Loss Estimates
  - Have any historic resources been damaged or suffered losses from hazards?
  - Do the loss estimates for a specific hazard include any known historic resources?



Best Practices – HMPs

- Hazard Mitigation Strategies
  - Add one or more strategies addressing historic resources (include buildings, districts, archaeological sites, the town green, or whatever is appropriate for the community)
- Hazard Mitigation Actions
  - Add one or more *specific* actions linked directly to risk
  - FEMA Region 1 has buckled down on how actions can be worded (no more “Consider…” and no more ongoing actions)

Best Practices – Coastal Resiliency Plans

- Incorporate improved historic resources data into risk and vulnerability assessment
- Use neighborhood level concept planning for historic districts
- Ensure emergency access to historic properties

Best Practices – Historic Preservation Ordinances

- Use new GIS based data to perform analysis of at risk resources
- Utilize and update database of historic resources and rank preservation priorities
- Develop resiliency standards for local historic districts to complement existing standards
- Incorporate other classes of resources (i.e., archaeological, historic landscapes) in revisions to historic district ordinances

Best Practices – Emergency Operations Plans

- Historic resources could be addressed in an “annex,” similar to how all sectors are addressed
- Consider adding a recovery/damage assessment annex if one doesn’t exist
- Point data can used by responders to understand resources
- The annex may describe how a specific department or individual is responsible for checking on the status of historic resources during and after a disaster

Best Practices - Disaster Recovery

- Resiliency Planning for Historic Properties Pre-Positions communities for post-disaster funding from State and Federal Programs and Special Congressional Appropriations
  - Applications for Such Funding require Accurate Data on:
    - ✓Location
    - ✓Type
    - ✓Significance of Historic Properties

Example

Downtown Branford

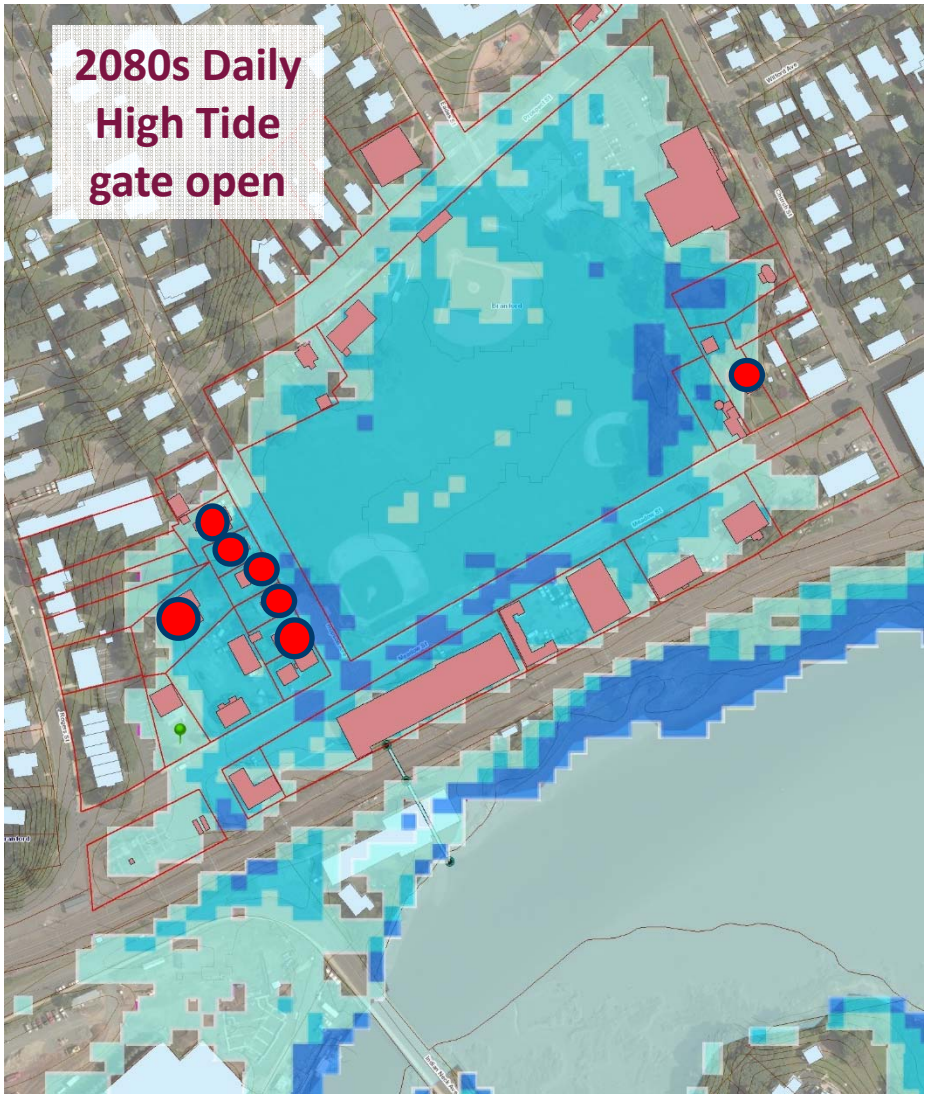
Downtown Branford

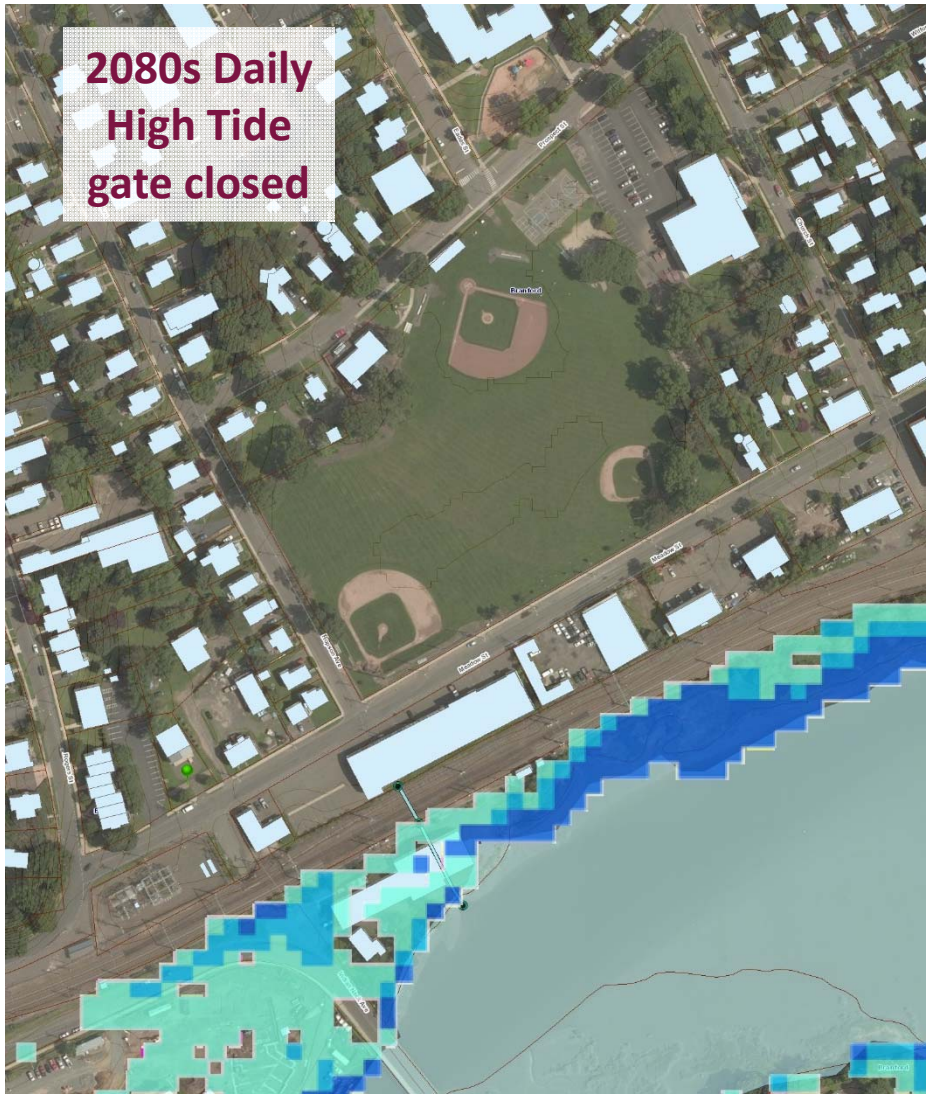
Existing Conditions

Abandon Opening

Flood Gate

Downtown Branford





Next Steps

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- Best Practice Guidance
- SHPP Resilience Chapter Update

Questions

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