Peril of Flood Workshop #4

May 5, 2017
9:30 to 11:00 AM
Tampa Bay Regional Planning Council
Pinellas Park, FL
This Morning’s Agenda

- Overview/recap of the introductory Peril of Flood Workshops
  - Pinellas Park (TBRPC) – March 3rd
  - Brooksville (SWFWMD) – March 27th
  - Webinar (Internet) – March 31st
- Vulnerability Assessments
- City of Clearwater – Pilot Adaptation Community
- Peril of Flood report (coming soon!) - Discussion
Peril of Flood Act and Recap of Peril of Flood Workshops

Brady Smith, AICP, CFM
Principal Planner
Tampa Bay Regional Planning Council
May 5th, 2017
Peril of Flood Act

- CS/CS/CS/SB 1094 approved by Governor Scott on 5/22/15
- Laws of Florida Chapter No. 2015-69
- Effective July 1, 2015

https://www.flsenate.gov/Session/Bill/2015/1094/?Tab=BillHistory
Peril of Flood Act

- Amends s. 163.3178(f)(2), Florida Statutes

- Mandates new requirements for the coastal management element of a local government comprehensive plan
Peril of Flood Act

- s. 163.3178(f)(2), Florida Statutes
  - A redevelopment component that outlines the principles that must be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise. The component must:
Peril of Flood Act

- s. 163.3178(f)(2), Florida Statutes
  - A redevelopment component that outlines the principles that must be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise. The component must:

1. Include development and redevelopment principles, strategies, and engineering solutions that reduce the flood risk in coastal areas which results from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise.

2. Encourage the use of best practices development and redevelopment principles, strategies, and engineering solutions that will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency.
A redevelopment component that outlines the principles that must be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise. The component must:

3. Identify site development techniques and best practices that may reduce losses due to flooding and claims made under flood insurance policies issued in this state.

4. Be consistent with, or more stringent than, the flood-resistant construction requirements in the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. part 60.
A redevelopment component that outlines the principles that must be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise. The component must:

5. Require that any construction activities seaward of the coastal construction control lines established pursuant to s. 161.053 be consistent with chapter 161.
6. Encourage local governments to participate in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for their residents.
Pinellas Park Introductory Workshop
(TBRPC – March 3, 2017)

58 in attendance
Brooksville Introductory Workshop (SWFWMD – March 27, 2017)

19 in attendance
Peril of Flood Webinar
(The Internet – March 31, 2017)
Peril of Flood
Introductory Workshop Recap

- Overview of the Peril of Flood Act and its requirements
- Examples of Peril of Flood related amendments already proposed/adopted
- Presentation from Shawn College on the City of Tampa’s Peril of Flood amendment (DEO #17-1ESR) and corresponding sea level rise vulnerability assessment
Peril of Flood Webinar Recap

- Overview and demonstration of web-based mapping and analysis
- Summary of resources that may help inform the development of Peril of Flood Act-related amendments
Jurisdictions that have proposed and/or adopted Peril of Flood amendments

- St. Petersburg (DEO #15-5ESR)
- Clearwater (DEO #16-1ESR)
- Treasure Island (DEO #16-1ESR)
- Madeira Beach (DEO #16-1ESR)
- South Pasadena (DEO #16-1ESR)
- Tampa (DEO #17-1ESR)
- Belleair (DEO #17-1 ESR)
Jurisdictions that have proposed and/or adopted Peril of Flood amendments

- Boynton Beach (DEO #16-1ER)
- Broward County* (DEO #13-2ESR)
- Cutler Bay (DEO #16-2ESR)
- Duval/Jacksonville (DEO #17-1ER)
- Jupiter (DEO #16-1ESR)
- Jupiter Inlet Colony (DEO #16-1ER)

* Adopted Prior to Peril of Flood Act effective date
Jurisdictions that have proposed and/or adopted Peril of Flood amendments

- Miami Beach (DEO #16-1ESR)
- North Miami (DEO #15-2ESR)
- North Port (DEO #16-2ER)
- Palm Bay (DEO #15-2ESR)
- Pinecrest* (DEO #15-2ESR)
- Santa Rosa County (DEO #16-1ER)

* Adopted Prior to Peril of Flood Act effective date
Jurisdictions that have proposed and/or adopted Peril of Flood amendments

- City of Sarasota (DEO #16-2ER)
- Satellite Beach (DEO #16-1ESR)
Vulnerability Assessments for Peril of Flood Act-related Amendments

Brady Smith, AICP, CFM
Principal Planner
Tampa Bay Regional Planning Council
Pinellas Park, FL
Vulnerability Assessments

- s. 163.3178(f)(2), Florida Statutes
  - A redevelopment component that outlines the principles that must be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise. The component must:
Vulnerability Assessments

- Reduce the flood risk in coastal areas which results from:
  - High-tide events
  - Storm surge
  - Flash floods
  - Stormwater runoff
  - Related impacts of sea-level rise.
Vulnerability Assessments

- Sea Level Rise vulnerability assessment
  - City of Tampa DEO #17-1 ESR
  - Pinellas County vulnerability assessment (future)
Vulnerability Assessments

- Tools to assist with sea-level rise vulnerability assessment
  - Refer to Heidi Stiller (NOAA) presentation from March 31st PoF webinar

http://www.tbrpc.org/events/perilofflood/index.shtml
Vulnerability Assessments

- Types of vulnerability assessments that have already been developed:
  - Multi-jurisdictional Local Mitigation Strategies
  - Regional Evacuation Studies
Vulnerability Assessments

- Local Mitigation Strategy often contains jurisdiction-level flood vulnerability data and information.
Vulnerability Assessments

- Technical Data Report contains Vulnerability and Population Analysis (Volume 1, Chapter 4)
- Tampa Bay SRES
City of Clearwater: Pilot Adaptation Community

Kyle Brotherton
Planner, Long Range Planning Division
City of Clearwater Planning & Development Department
Thank you, Kyle!

Kyle Brotherton
Planner, Long Range Planning Division
City of Clearwater Planning & Development Department

Kyle.Brotherton@MyClearwater.com
TBRPC Peril of Flood Report
Preview, Input, and Discussion

Brady Smith, AICP, CFM
Principal Planner
Tampa Bay Regional Planning Council
Pinellas Park, FL
TBRPC Peril of Flood Report

- Scenarios or opportunities where inappropriate or unsafe development can be eliminated
- Examples of strategies/principles and related engineering solutions that reduce flood risk
- Examples from coastal local governments of policies/measures adopted to reduce flood risk
TBRPC Peril of Flood Report

- Site development techniques that may reduce losses to the local government
- Key lessons learned
- Questions for local governments to consider when developing Peril of Flood-related comprehensive plan amendments
Integrating Hazard Mitigation into the Comprehensive Plan

- Integrating Hazard Mitigation into Local Planning: Case Studies and Tools for Community Officials
- FEMA
- Case Studies and Examples

https://www.fema.gov/media-library/assets/documents/31372
Integrating Hazard Mitigation into the Comprehensive Plan

- Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards
- FEMA
- Flood section – pages 21-31

Integrating Hazard Mitigation into the Comprehensive Plan

- Hazard Mitigation: Integrating Best Practices into Planning, James C. Schwab, Editor
- APA Planning Advisory Service Report #560
- Case Studies
  - Including Lee County, Florida

https://www.planning.org/publications/report/9026884/
Integrating Hazard Mitigation into the Comprehensive Plan

- Coastal Zone Management, Elizabeth Felter and Marya Morris
- APA Planning Advisory Service Report #581
- Chapter 4, page 34
  - Adaptation and Resilience Planning

https://www.planning.org/publications/report/9026904/
Integrating Hazard Mitigation into the Comprehensive Plan

- Subdivision Design and Flood Hazard Areas, James C. Schwab, Editor

- APA Planning Advisory Service Report #584

https://www.planning.org/publications/report/9112664/
Integrating Hazard Mitigation into the Comprehensive Plan

- Multi-jurisdictional Local Mitigation Strategies

### Pinellas County Local Mitigation Strategy

<table>
<thead>
<tr>
<th>GOALS</th>
<th>ACTIVITY CLASS</th>
<th>OBJECTIVES</th>
<th>ACTIONS</th>
<th>IMPLEMENTATION DOCUMENTS</th>
<th>AGENCY/DEPTS.</th>
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<tbody>
<tr>
<td>Goal 1: Become a more disaster resilient community.</td>
<td>Structural Projects</td>
<td>Objective 1.1: Support the construction of structures that reduce the impact of hazards including storm water controls, floodplains, easements, security and monitoring capabilities, and safe rooms.</td>
<td>Inferior land development codes regarding building and development, private and public zone lines, and stormwater management.</td>
<td>Land development regulations.</td>
<td>Public Works, Environmental Management, FCGL.</td>
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<tr>
<td>Goal 2: Minimize Coastal Flooding Losses in the CBHA, Coastal Storm Area and Hurricane Vulnerability Zone.</td>
<td>Preventive Measures</td>
<td>Objective 2.1: Restrict permanent residential density increases, expenditure of public funds, and the location of critical facilities within the Coastal High Hazard Area (CHHA), the Coastal Storm Area (CSA) where applicable, and the Hurricane Vulnerability Zone (HVZ).</td>
<td>Develop appropriate land development regulations to implement coastal protection policies.</td>
<td>Comprehensive Plan, Land development regulations.</td>
<td>Planning, Building Div. Review Services.</td>
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<td>Preventive Measures</td>
<td>Objective 2.3: Develop a program which provides incentives to encourage voluntary flood mitigation construction and design.</td>
<td>Investigate the feasibility of initiating floodplain requirements greater than 1 foot.</td>
<td>Land development regulations.</td>
<td>Building Div. Review Services.</td>
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<td>Preventive Measures</td>
<td>Objective 2.4: Develop local programs in concert with federal and state programs that encourage and provide incentives to residents to elevate their homes or businesses in the CBHA, Coastal Storm Area, and Hurricane Vulnerability Zone.</td>
<td>Participate in Flood Mitigation Assistance Programs through sponsorships of applications for grant funds.</td>
<td>Floodplain Management Plan.</td>
<td>Floodplain Management.</td>
</tr>
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</table>

3 Codetyp refers to construction techniques, materials and standards which record the minimum standard required in the building code. Blueprint for Safety is a code-plus standard for wind resistance (See www.blueprintsafety.org.)

http://www.pinellaslms.org/pdf/Pinellas-LMS.pdf
Integrating Hazard Mitigation into the Comprehensive Plan

- DEO Division of Community Planning
- Adaptation Planning page

Integrating Hazard Mitigation into the Comprehensive Plan

- Lee County Climate Change Resiliency Strategy (CCRS), J.W. Beaver, et al.
- "What Lee County Can Do..."

Integrating Hazard Mitigation into the Comprehensive Plan

- Summary and Commentary on Sea-Level Rise Adaptation Language in Florida Local Government Comprehensive Plans and Ordinances, Thomas Ruppert, Esq. & Alexander Stewart

- Florida Sea Grant

https://www.flseagrant.org/climatechange/coastalplanning/case-studies/
Integrating Hazard Mitigation into the Comprehensive Plan

- City of Satellite Beach Community Based Planning for Coastal Resiliency

Scenarios or opportunities where inappropriate or unsafe development can be eliminated

Examples of strategies/principles and related engineering solutions that reduce flood risk

Examples from coastal local governments of policies/measures adopted to reduce flood risk
Site development techniques that may reduce losses to the local government

Key lessons learned

Questions for local governments to consider when developing Peril of Flood-related comprehensive plan amendments
This workshop will
- Provide a brief overview of sea-level rise and flooding projections
- Showcase regional efforts evaluating vulnerability, reducing flood risk, and planning
- Discuss important infrastructure, legal, and financial challenges
- Discuss state law requiring planning for flooding and sea-level rise
- Review the changing landscape of flood insurance
- Provide a forum for interaction with presenters and other attendees
Thank you for your participation in TBRPC’s Peril of Flood Workshops!

Peril of Flood Workshops web page: http://www.tbrpc.org/events/perilofflood/index.shtml

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