



EXECUTIVE SUMMARY

TO: Bob Vitas, City Manager
Mark Finigan, Asst. City Mgr.

Through: Donald Craig, Director, Planning Dept.

FROM: Scott Fraser, FEMA Coordinator

DATE: January 22, 2013

RE: **Update the City's flood damage prevention ordinances** to be in harmony with newly adopted state building codes and current FEMA compliance requirements, by repealing specific sections of the current floodplain ordinances in their entirety and replacing those sections with the state *Model Floodplain Ordinance* as amended to apply to this island community and adopt state recommended local technical amendments to the new *2010 Florida Building Code* pertaining to the design and construction of buildings and structures in flood hazard areas.

Action statement:

This resolution would:

- Repeal existing floodplain related sections of Chapters 14, 34 and 108, the requirements of which have mostly now been incorporated within the *2010 Florida Building Code* that became effective March 15, 2012 and,
- Adopt in large part, a new unified State *Model Floodplain Ordinance* designed to work in harmony with the new building codes that went into effect statewide March 15, 2012, and eliminate conflicts that would otherwise exist between these new building codes and the city's outdated flood ordinances.
- Adopt State floodplain management recommended local technical amendments to the new statewide Building Code.
- Enacts a standard that state and federal flood officials may deem inappropriately less than required, in reference to Coastal A Zones, and could cause the City Commission to revisit this ordinance at a later date should FEMA descent.

Background:

During 1968, Congress created the National Flood Insurance Program (NFIP) to address an increasing nationwide inability of property owners to purchase flood insurance in areas where flooding was likely, and to do so at reasonable rates.

Communities requesting to participate in the NFIP were required to adopt approved local floodplain management ordinances that would have the effect of:

- Reducing flood related injuries and deaths.
- Ensuring new construction met requirements aimed at reducing future flood losses, by requiring construction above anticipated flood heights, the use of flood resistant materials and venting below these flood heights, and restricting the usage of building space located below flood zone elevation levels as identified on the Flood Insurance Rate Maps (FIRMs).
- Grandfathered structures existing before enactment of the local floodplain management ordinances, until such time as any structure is renovated by a value equal to or greater than, half the appraised market value of that structure; at which point compliance with flood damage preventive measures would be required.
- Exempting qualifying historic structures from having to comply with flood protection requirements, regardless of the value of improvements.

From when the local floodplain ordinances were first adopted during the mid-1970s, until March of 2012, NFIP requirements were mostly encapsulated within these local special ordinances.

Effective March 15, 2012, state statute enacted the new *2010 Florida Building Code* as the statewide standard for all communities. These new building codes move most of the specific construction related requirements out of local floodplain ordinances, and into the statewide uniform building codes.

To avoid conflicts between outdated local floodplain ordinances and the new *2010 Florida Building Code*, communities statewide are urged to adopt a companion “*Model Floodplain Ordinance*” that functions in concert with the new building codes. Where the old local ordinances called for specific floodplain construction requirements, the new *Model Floodplain Ordinance* makes numerous references to specific sections within the new building codes.

Included within this proposed ordinance, Staff is proposing a series of local amendments to the *2010 Florida Building Code* designed to accompany the *Model Floodplain Ordinance*, as allowed within Section 553.73, F.S., and recommended by the State Floodplain Management office.

These proposed building code amendments are largely housekeeping measures designed to ensure floodplain management harmony between the new building codes and the new *Model Floodplain Ordinance*. In communities such as Key West, with a staff Floodplain Administrator (FEMA Coordinator), regulatory oversight of the floodplain is conferred upon the Administrator, working in concert with the Chief Building Official. Additional building code amendments outline the exemption requirements for contributing historic structures.

Two provisions within this Key West proposed ordinance have been identified by State flood officials as possibly NOT in harmony with what is considered appropriate by FEMA when adopting a floodplain ordinance: 1.) Non-regulation of utilities; 2.) Non-regulation of a new flood zone type known as Coastal A Zones.

1. Utilities: State statute prohibits municipalities from regulating electric utilities, exclusively delegating such oversight to the state Public Service Commission [266 *f.s.*].
 - a. Yet, the state *Model Floodplain Ordinance* seeks to include within local floodplain management oversight, structures exempt from the building code, to include electrical generation, transmission and distribution utilities.
 - b. Staff objects to including within a local ordinance, a provision that conflicts with state statute. This provision has been stricken from the draft ordinance presented. [That stricken passage read: “~~Those structures or facilities of electric utilities, as defined in section 366.02, F.S., which are directly involved in the generation, transmission, or distribution of electricity.~~”]
 - i. Update: State floodplain management staff have recently concluded the argument advanced by Key West Staff opposing local floodplain regulation of utilities appears to have merit. As a result, state staff is researching whether this section should be removed from the state’s *Model Floodplain Ordinance*.
2. Coastal A-Zones: Current FEMA flood maps delineate Coastal High Hazard Flood areas known as V-zones, where damaging wave action of three-feet or more above the height of standing flood waters can be expected. Inland of V-zones, rest A-zones, where specified “standing” flood waters can be anticipated.
 - a. Recently, FEMA concluded significant damage occurs with wave action between 3- and 1.5-feet in height. Sometime in the future, FEMA intends to delineate on flood maps a Limit of Moderate Wave Action line (LIMWA line), showing the portion of A-zones expecting to have wave action within these parameters. These areas will become known as Coastal A-Zones.
 - b. When eventually drawn on flood maps, these LIMWA lines will be informational only, not regulatory, unless a community chooses to adopt these new zones for such purposes.
 - c. If adopted, structures within Coastal A-Zones would need to comply with the considerably more stringent V-Zone standards.

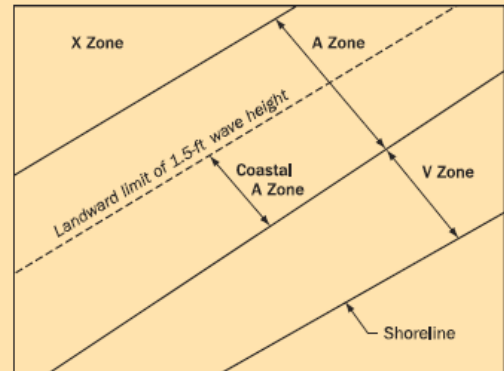
- d. While FEMA's Coastal A-Zones are only informational, the new *2010 Florida Building Code* makes these zones subject to local regulation by invoking American Society of Civil Engineers design standards (ASCE 7 & 24). Those standards call for the regulation of Coastal A-Zones.
- e. Until FEMA maps Coastal A-Zones, it will be up to local officials, designers, engineers and nearly anyone else, using highly subjective interpretations, to determine Coastal A-Zone boundaries. Staff recommends language already included in the draft ordinance that precludes regulatory oversight of these areas; at least not until mapped by FEMA.
 - i. The State recommended text of the *Model Flood Ordinance* has been modified by adding the phrase underlined below (appears on page 4 of the draft ordinance, and excerpt immediately below). The key words in this sentence are "... have been delineated on the printed FIRM ...". While this sentence references Coastal A Zones, with this language, such zones wouldn't be regulated by the City until delineated/mapped by FEMA.
 - 1. **Sec. 34-123.3 - Basis for establishing flood hazard areas.**

The Flood Insurance Study for Monroe County, Florida and Incorporated Areas dated February 18, 2005, and all subsequent amendments and revisions, and the accompanying Flood Insurance Rate Maps (FIRM), and all subsequent amendments and revisions to such maps, are adopted by reference as a part of this ordinance and shall serve as the minimum basis for establishing flood hazard areas. Flood hazard areas that have been delineated on the printed FIRM as subject to wave heights between 1-½ feet and 3 feet shall be established as Coastal A Zones. Studies and maps that establish flood hazard areas are on file at the FEMA Coordinator/Floodplain Administrator located at the City of Key West Planning Department, Key West, Florida.
 - ii. Staff recommends passage as-modified by City staff. State floodplain staff have concurred with this concern voiced by City staff, and are presently seeking modification of this ASCE-24 standard, so that standard would read similar to the proposed language recommended herein.

Coastal A Zone, Defined

Coastal A Zone: area landward of a V zone, or landward of an open coast without mapped V zones. In a Coastal A zone, the principal source of flooding will be astronomical tides, storm surges, seiches or tsunamis, not riverine flooding. During base flood conditions, the potential for wave heights between 1.5 and 3.0' will exist. At least 2 to 4' of stillwater depth is necessary to support these wave heights.

Coastal A-zone design and construction practices described herein are not mandated by the NFIP, but are recommended for communities that wish to adopt higher floodplain management standards. Community Rating System (CRS) credits are available for doing so. Note that some Coastal A-zone practices may be required by the International Building Code®, through its reference to ASCE 24, *Standard for Flood Resistant Design and Construction*.



Plan view showing a Coastal A zone landward of a V zone (source: ASCE 24-05).

Purpose:

This Staff proposed action would repeal the following sections of the floodplain management ordinances: Chapter 14, Sections 391-407; and Chapter 34, Sections 26-121; and Chapter 108, Section 821-927 in their entirety (copies attached).

New sections would be created within Chapter 34 to accommodate the new statewide *Model Floodplain Ordinance*, as amended for our island community (The model ordinance has been amended to extract a lengthy series of regulations that apply only to designated floodways (rivers) which don't exist within our city.)

Adopts several administrative/technical amendments to the *2010 Florida Building Code* recommended by State floodplain management staff, as allowed within 553.73, F.S.

City Actions:

Planning Board May 31, 2012

Options/ advantages/ disadvantages:

Option 1. Repeal identified sections of the existing floodplain management ordinances in their entirety and replace with an amended version of the State *Model Floodplain Ordinance* and adopt recommended administrative/technical amendments to the new building code:

a. Advantages:

1. Would simultaneously meet an existing need to update the currently outdated floodplain ordinances

2. Would enact a floodplain ordinance designed to work in concert with the newly enacted building codes.
3. Eliminate conflicts between the newly enacted building codes and currently outdated local ordinances.
4. Moves specific construction related floodplain requirements out of local ordinances into the statewide building codes.
5. Adopts administrative/technical amendments to the new building code as recommended by the State.
6. Assists in the pursuit of flood insurance rate reductions for all flood policy holders citywide under the Community Rating System (CRS).

b. Disadvantages:

1. None identified

Option 2. Opt not to proceed with adoption of model flood ordinance:

c. Advantages:

1. None identified

d. Disadvantages:

1. Leaves decades old outdated flood ordinances in place, lacking current definitions and maintaining ambiguities that lack FEMA compliance.
2. Local ordinances would conflict with newly enacted statewide building codes.
3. Reduces likelihood of obtaining favorable CRS flood insurance discounts for policy holders.

Financial impact:

None

Recommendation:

Staff recommends Option #1,

ATTACHMENTS:

- A. Resolution
- B. Proposed ordinance, draft, as recommended by Planning Board
- C. State flier, *Answers to Questions About the New Model Ordinance and Code Amendments*
- D. State recommended model flood ordinance
- E. Relevant *2010 Florida Building Code* excerpts