Coastal High Hazard Areas: Establishing Elevated Development Standards for Multi-family development within the CHHA

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Overview
To reduce loss of life and property caused by natural disasters, the State of Florida requires local governments to identify a Coastal High Hazard Area (“CHHA”) in which public expenditures and population growth are limited (see Section 163.3178, Florida Statutes).

The CHHA is defined as “the area below the elevation of the Category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model.” Areas included in the CHHA are governed both by state law and the policies adopted to administer those provisions in the local government comprehensive plans.

While the CHHA has existed since 1985, the definition and applicable standards have changed several times, starting in 2006, 2010, and most recently 2016. These changes have led to an expansion of the CHHA and have caused the City of St. Petersburg to re-evaluate its adopted policies. Figure 1 CHHA map shows the the 2010 area for the City of St. Petersburg in yellow, and the 2016 area is shown in red. The CHHA land area more than doubled from 7,705 acres to 16,328 acres. Many of our economic centers initially developed outside of the CHHA are now located within the CHHA boundary, restricting redevelopment options.

Proposed Amendments
Land Use Policy 7.1 of the City’s Comprehensive Plan currently prohibits requests for residential density increases with the CHHA. A proposed text amendment would allow consideration of land use plan amendments, subject to review criteria. Four mandatory criteria would include: Utilization of Existing and Planned Infrastructure; Utilization of Existing Disturbed Areas; Location within an Activity Center, Target Employment Center, Special Area Plan or Multi-modal Corridor; and Implements the Goals and Policies of the Integrated Sustainability Action Plan (ISAP), Complete Streets and Health in All Policies (HIAP) plans. Additional review criteria include: Access to Emergency Shelter Space & Evacuation Routes, Maintenance of Scenic Qualities & Improvement Public Access to the Water, Water Dependent Uses, Part of Community Redevelopment Area, Overall Reduction of Density or Intensity, Clustering of Uses, Integral Part of Comprehensive Planning Process, and Reduction of Storm Vulnerable Structures.

In conjunction with this proposed text amendment are amendments to the City’s Land Development Regulations and Building Code to establish elevated design standards, intended to result in structures which are more resilient to storm surge and sea level rise, mitigate for service and infrastructure needs during and immediately following a major storm event, and enable safe re-occupation as quickly as possible following an evacuation. As currently proposed, these elevated design standards would apply to all new residential multi-family development with the CHHA, regardless of whether or not an increase in density increase was considered. The elevated land development and building code standards are summarized as follows:
Proposed Changes
1. Prepare Hurricane Evacuation and Re-entry Plan: all multi-family and hotel projects
2. Reduce Risk for Water: elevate an additional 2-feet above the required design flood elevation, for a total of 4-feet above Base Flood Elevation (addresses both Sea Level Rise and Storm Surge)
3. Reduce Risk for Wind: construct the building to meet design requirements of next higher classification of Risk Category, e.g. increase from 145 to 155 mph standard, Category 2 to 3 storm event
4. Enhance Recovery through selection of a Resiliency option: such as provision of on-site storage of solar generated power, increased efficiency HVAC systems, or providing solar or tank-less water heating systems. Projects up to 199 units select one option, projects over 200 units select two options
5. Projects which increase density must mitigate for Hurricane Evacuation Shelter space

Evolution of the Policy amendments
About the same time that the CHHA map was updated 2016, City staff was working on the adoption of a new planning area known as the Innovation District, when it became clear that this policy could limit the planned vision for the district. The CHHA overlapped with a portion of the proposed plan and zoning changes for the district. As part of that effort, staff first proposed the amendment to the policy in August of 2017, and then brought it back again last summer with the Innovation District package. Council requested a workshop to address the CHHA, which was held last January, where the concept of adopting elevated design standards was introduced. Over the course of the last two years since the consideration of the comprehensive plan policy change was intiated, there have been several storm events that led to the consideration of imposing the elevated building and design standards. These standards were initially based on a recent effort by the City of Norfolk Va, which established Resiliency Quotient requirments for all development within their City, which has similar coastal development issues to St. Petersburg.

After the January 2019 workshop, staff held several meetings with stakeholders and the Urban Land Institute (ULI) provided technical assistance in developing these innovative zoning and development standards. A second workshop was held with City council on July 25th to report the ULI findings, and Council recommended that staff bring back a more refined amendment, based on cost estimates. After a review of the estimates, staff revised the draft LDR amendment, determined that an amendment to the local Building code will also be required and held additional stakeholder meetings before presenting at a final council workshop on October 24th. Adoption hearings are scheduled for the first quarter of 2020.

Summary
Continuing to prohibit any changes in density within the CHHA may conflict with other policy goals and initiatives such as redevelopment of obsolete commercial sites along our muti-modal corridors with mixed-use higher density and intensity projects which support transit and removal of substandard buildings and housing, including mobile home parks. These goals need to be balanced with the concern of allowing more people to live in vulnerable areas. If we are going to increase multifamily residential development opportunities in the CHHA, we also need to increase the building and design standards to make that development safer and to address resiliency and sustainability.
Figure 1. Coastal High Hazard Areas - 2010 and 2016
Figure 2. Qualifying Areas within the Coastal High Hazard Areas