

# **Report On Proposed 2007B Series' Text Amendment To The Conservation/Coastal Management Element**

## **RESOLUTION 2007- 578**

### **What is the Coastal High Hazard Area?**

The Coastal High Hazard Area (CHHA) was previously defined the evacuation zone for a Category 1 hurricane established in the regional hurricane evacuation study applicable to the local government. Pursuant to House Bill 1359 of 2006, the Florida Department of Community Affairs (DCA) now defines the CHHA 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. This model is used in the regional hurricane evacuation study applicable to the local government. In the City of Jacksonville, the CHHA includes almost 59,000 acres including areas along the Atlantic coast, Intracoastal Waterway, Nassau River, St. Johns River, Trout River, Ribault River, Ortega River, Cedar River and Julington Creek. The Northeast Florida Regional Council (NEFRC) prepared the Northeast Florida Hurricane Evacuation Study (HES), 1998. This study included the Storm Surge Atlas for Duval County. The study and atlas serve as the basis for the Hurricane Evacuation Plan presented in the Comprehensive Plan. In 2006, NEFRC released the 2005 HES with updated information, including clearance times.

Land within the CHHA is subject to storm surge, high winds, waves, and rainfall in the event of a severe storm. Roads are subject to flooding. Problem locations and water heights of flooding can be found in the Comprehensive Emergency Management Plan.

### **Evacuation Clearance Times**

Clearance time is the time required to clear the roadways of all vehicle evacuating in response to a hurricane situation. Clearance time begins when the first evacuating vehicle (as defined by a hurricane evacuation behavioral response curve) enters the road network and ends when the last evacuating vehicle reaches an assumed point of safety. Clearance time includes the time required by evacuees to secure their homes and prepare to leave (referred to as mobilization time). Clearance time does not relate to the time any one vehicle spends traveling on the road network. Clearance times allow for the last vehicle leaving reaching its destination or the county line whichever comes first.

Using information developed as part of the Northeast Florida Hurricane Evacuation Study and other research, the City of Jacksonville, as a policy of its Comprehensive Plan (Policy 7.1.1), established several years ago a maximum acceptable hurricane evacuation time standard of 23 hours for a Category 3 storm event with medium

response time. This evacuation time, or clearance time, is the time required to clear all vehicles evacuating in response to a hurricane situation from area roadways.

According to the recently released 2005 HES, the evacuation time for a Category 3 storm event with medium response time has exceeded the maximum of 23 hours adopted in the Comprehensive Plan. The policy currently in the Plan, see below, presents a problem because clearance times have been exceeded.

### **Current CCME Policy 7.1.1**

The City establishes 23 hours as the maximum acceptable hurricane evacuation time standard for a Category 3 storm event, based upon the following criteria:

- A. The evacuation should be complete prior to the arrival of gale force winds.
- B. That the clearance time to evacuate for a category 3 hurricane with average public urgency will be 16 <sup>3</sup>/<sub>4</sub> hours.
- C. Provides six hours for evacuation message to reach all of those affected.
- D. Recognizes that all hurricane evacuation situations are unique, with numerous factors that may contribute to longer required evacuation periods.

As the current Northeast Florida Hurricane Evacuation Study shows that these times have been exceeded, the City of Jacksonville has several options.

It can retain the policy as drafted. Under this scenario, State and regional agencies will review proposed amendments for consistency with their plans and the Comprehensive Plan, and each proposed amendment will be reviewed case-by case. Future land use map amendment proposals in the recent past, that showed an increase in evacuation time based on analysis, have attempted to provide site-specific mitigation programs to address hurricane evacuation times. They have been found out of compliance by the State.

It can remove the policy and not replace it. Under this scenario as well, State and regional agencies will review proposed amendments for consistency with their plans, and each proposed amendment will be reviewed case-by case. House Bill 1359 says that if a local government does not adopt a clearance time into their plan but wants to changes future land use map designations using a mitigation approach, the out-of-county clearance time will be 16 hours. If a case-by case review is undertaken on a site specific mitigation plan, it will impossible for the City of Jacksonville to demonstrate compliance with a 16 hour standard.

It can replace the policy with the evacuation time standards contemplated under House Bill 1359, and can strengthen policies addressing citywide mitigation and add policies to address site specific mitigation, so that each proposed future land use map amendment is reviewed within a consistent framework and using consistent assumptions for analysis. The following is a summary of the portions of House Bill 1359 relevant to this issue:

A proposed comprehensive plan amendment shall be found in compliance with state coastal high-hazard provisions pursuant to rule 9J-5.012(3)(b)6. and 7., Florida Administrative Code, if:

1. The adopted LOS for out-of-county hurricane evacuation time is maintained for a category 5 storm event, **and**
2. A 12-hour evacuation time to shelter is maintained for a category 5 storm event and shelter space reasonably expected to accommodate the residents of the development contemplated by a proposed comprehensive plan amendment is available; **or**
3. Appropriate mitigation is provided that will satisfy the provisions of 1. or 2. Appropriate mitigation shall include, without limitation, payment of **money**, contribution of **land**, and construction of hurricane **shelters** and **transportation** facilities. Required mitigation shall not exceed the amount required for a developer to accommodate impacts reasonably attributable to development.

Based on discussions with DCA, an acceptable program of appropriate mitigation should be a multifaceted approach to reduce clearance times. Transfer of Development Rights or elimination of unbuilt development potential alone has not been acceptable. Measures for mitigation program are:

- Vehicles taken off evacuation routes
- Additional capacity added to evacuation routes
- Residential density removed from CHHA
- Additional capacity added to shelters

## **HIGHLIGHTED MITIGATION STRATEGIES FROM THE PROPOSED OPTION**

### **Removing Development Potential from the CHHA**

The current Northeast Florida Hurricane Evacuation Study assumed that growth would occur based on trends and assuming no changes to future land use category or rezonings that would add additional residential density. In order to lessen or maintain overall evacuation times, it is important that there be incentives to reduce the addition of residential units to the CHHA. For this reason, a program to allow for Coastal Units to be removed forever from development in CHHA is included in the preferred local mitigation program text, using the incentive of elimination of the requirement for shelter mitigation fees. In addition, the city would continue its policy of acquisition of lands in the CHHA, to preserve environmentally sensitive lands and remove development potential from the CHHA. As of 2007, more than 50% of the total lands within the Coastal High Hazard Area have been placed in public ownership in the Coastal High Hazard Area within the City of Jacksonville. They are identified on the future land use map, for the most part, in the Conservation Land Use category. This program is an important part of the overall City mitigation program, as it reduces evacuation times by removing the potential for residential development on these lands.

## **Shelter Space**

Shelter demand estimates are derived with the assistance of the Northeast Florida Hurricane Evacuation Study. The City currently has a deficit in State ARC 4496 design criteria-compliant shelter spaces according to the State of Florida Department of Community Affairs Division of Emergency Management Annual Statewide Emergency Shelter Plan. The Emergency Preparedness Division, the Planning and Development Department, the Duval County School Board and other potential providers of shelter space are working to retrofit and build new schools and other public buildings to reduce the deficit. It is the City's intent to monitor the relationship between population growth and shelter capacity to ensure the provision of additional shelter spaces, as determined to be necessary.

The City has required payment into a shelter mitigation fund for residential construction within CHHA as included in the policies within the CMM since 2002. The preferred text amendment would require payment of a fee by all new residential development, and as such, would provide a dedicated funding source to be used to add shelter spaces or otherwise reduce hurricane evacuation times. It is projected that the fee has the potential to generate an annual revenue of approximately \$1.5M dollars.

## **City Of Jacksonville Options**

**2007-582- VERSION CURRENTLY PENDING BEFORE CITY COUNCIL:** The text amendment currently pending before City Council is no longer supported, based on discussion with the DCA and stakeholders, and additional work by the Planning and Development Department, Northeast Florida Regional Council staff and the Emergency Preparedness Division.

**NO MITIGATION PROGRAM OPTION (EXHIBIT B):** Adopt new CHHA map and definition. Clearance times as adopted into the Plan, or the State default clearance time (effective July 1, 2008) of 16 hours for out-of-county and 12 hours to in-county shelter will preclude any further LU changes in CHHA without an acceptable site-specific mitigation plan.

**NO MITIGATION PROGRAM YET OPTION (EXHIBIT C):** Adopt new CHHA map and definition, and a clearance time based current data, and a policy referring to a working group to work on a city mitigation program. If future land use map amendment changes are proposed before a city mitigation programs is approved, they will require an acceptable site specific mitigation plan.

### **SUMMARY OF PREFERRED APPROACH (EXHIBIT A):**

#### **Outline of Proposed Citywide Mitigation**

- Acquisition funds to buy repetitive loss properties and/or properties in the areas most vulnerable to flooding
- A local program to provide grants or incentives to upgrade unsafe homes, using inspection programs such as “My Safe Florida Home” as a source to homeowners of baseline data regarding the safety of their home in a high wind event.
- Include policies that address education aimed at lessening shadow evacuation and public understanding of evacuation procedures
- Require a shelter mitigation fund payment for all new residential units in the city. Such payments shall be less outside any evacuation zone, and more in CHHA
- Shelter Mitigation and Optional shelter mitigation fund payments may be made to a fund that shall be used for projects in the Local Mitigation Strategy plan that will upgrade housing stock in vulnerable areas, increase shelter spaces, or lower evacuation times, at the discretion of the Chief of the Emergency Preparedness Division
- Land Acquisition

- Prioritize roads with evacuation potential in CIP review
- Require the designation of wetlands in CHHA to Conservation
- Schools, colleges and community centers outside evacuation zones should be built as shelters
- Shelter Mitigation and Optional shelter mitigation fund payments may be made to a fund that shall be used for projects in the Local Mitigation Strategy plan that will upgrade housing stock in vulnerable areas, increase shelter spaces, or lower evacuation times, at the discretion of the Chief of the Emergency Preparedness Division

### **Site Specific Mitigation Options**

- Build evacuation route to standards (assume capacity in analysis)
- Signage in residential unit development of more than 100 units (assume additional ½ % to shelter)
- All new residential development shall be required to pay into the shelter mitigation fund (assume additional 2% to shelter)
- Shelter mitigation fund payments are required except developments outside of CHHA may offset the payment for units proposed for development by obtaining Coastal Units.
- Coastal Units are residential development potential existing as of January 2008, to be removed forever from the residential development potential of the Coastal High Hazard Area.
  1. A Coastal Unit must come from Coastal Developable Lands or Coastal Developed Land With Unused Development Potential within the CHHA.
  2. A Coastal Unit may be used only outside the CHHA.
  3. 1 Coastal Unit shall equal 1 unit outside the CHHA but within evacuation zones 1-5
  4. 1 Coastal Unit shall equal 2 units outside any evacuation zone
  5. 1 Coastal Unit shall equal 4 units within transit oriented developments
  6. Coastal Units shall be removed from development potential. Such restriction shall be enforced in the following ways:
    - a) A deed restriction shall be placed on the property containing the Coastal Unit(s) limiting the residential development potential, in

perpetuity, to the maximum residential development potential under the future land use map category, minus the Coastal Units.

- b) The Planning and Development Department shall track Coastal Units, make such tracking system available to the public, and the affected parcel shall be flagged on City maps available to the public on the City's web site.

- Case by case credits
- Required evacuation plan and hazard notice on plat and covenants and restrictions (assume additional 1% to shelter)

**The Planning and Development Department recommends APPROVAL of the text amendment in the attached revised EXHIBIT A to 2007-578.**