Chapter VI
COASTAL MANAGEMENT ELEMENT
SUPPORT DOCUMENT

Evaluation and Appraisal Amendments 2017

Coastal Management

Evacuation

The Town's response to a hurricane and other natural disasters is guided by the Ponce Inlet Comprehensive Emergency Management Plan (CEMP) and is coordinated with the Volusia County Emergency Management Division and the County CEMP. Evacuations and other responses to hurricanes are coordinated with the County and other jurisdictions on a county-wide and state-wide basis. The Town's primary evacuation route is north on South Atlantic Avenue to Dunlawton Avenue, then west to I-95 or I-4. Given its location on a barrier island, Ponce Inlet's evacuation procedures must also be coordinated with the other barrier island communities using the same evacuation route, such as Daytona Beach Shores and unincorporated Wilbur-by-the Sea, and with the jurisdictions through which the evacuation route passes, especially Port Orange.

The Town's adopted evacuation standard is to maintain an evacuation time of, "…no more than sixteen hours from the time of the first official order to evacuate during a Category 5 storm event as measured on the Saffir-Simpson scale." According to the Town's CEMP, evacuation decisions are timed at the State and County levels to provide at-risk populations the maximum amount of time to evacuate safely based upon each hurricane scenario. Evacuation orders are timed so that the at-risk population can evacuate before the arrival of tropical-storm-force winds (> 39 mph). The Town's evacuation standard is intended to apply to the entire Town population.

In 2015, the East Central Florida Regional Planning Council (ECFRPC) completed the update of its regional evacuation study. The Study measured evacuation need and behavior, capacity of public shelters and evacuation routes, and clearance times. The Study describes "clearance time" as including,

> "…the time required for evacuees to secure their homes and prepare to leave, the time spent by all vehicles traveling along the evacuation route network, and the additional time spent on the road caused by traffic and road congestion. Clearance time does not relate to the time any one vehicle spends traveling along the evacuation route network, nor does it guarantee vehicles will safely reach their destination once outside the County."

The Evacuation Study measures clearance time in different ways:

Clearance Time to Shelter - The time necessary for all in-County trips to have reached their shelter destination within the County.

In-County Clearance Time - The time it takes for all in-County trips to have reached their shelter destination AND all trips leaving the county or passing through the county have left the Evacuation Zone.

Out-of-County Clearance Time - The time necessary for all in-County trips to have reached their shelter destination AND all trips leaving the county or passing through the county have left the county.

The Evacuation Study revealed that it will be necessary to evacuate the Town's population to safe shelter as a result of a Category 1 or 2 hurricane, based on its barrier island location, low elevation above sea level, population, storm surge levels, roadway capacity, and other factors. The Study showed under its base scenario that the coastal barrier portions of Volusia County, including Ponce Inlet, would achieve a clearance time to shelter of thirteen hours, an in-county clearance time of sixteen hours, and an out-of-county clearance time of 16.5 hours. These times were projected to remain constant in the short-term period through the year 2020. The Study does not provide long-term evacuation projections.

The Study noted that there are 43 public shelters in Volusia County, capable of housing over 28,200 people during a storm event. The town operates no public shelters, as all its citizens would have to leave the municipality to seek shelter. According to the Ponce Inlet CEMP, the designated public shelter for the Town is the Port Orange YMCA, although additional facilities could be used if necessary.

The results of the Study took into account shelter preferences based on resident surveys. The Study found that only 5% of the population currently living in site-built homes on the barrier island would seek safety at a public shelter; 65% would travel to the home of a friend or relative; 15% would find lodging in a hotel/motel; and the remaining 15% would find other various refuge locations. These preferences remained constant regardless of the hurricane category. Using these rates, approximately 211 Ponce Inlet permanent or seasonal residents would take refuge in a public shelter. By the time the town is built-out, with a combined population of 5,039, the number using a public shelter increases to 252.

Being located at the end of a barrier island and mostly built-out, with limited remaining vacant land, future development in Ponce Inlet is not expected by itself to exceed the Town's evacuation standard of sixteen hours for a Category 5 storm event. It is also not expected to exceed Volusia County's standard of twelve hours to reach an in-county shelter. Any impacts to evacuation times are likely to be caused by development and traffic between the Town limits and the County line or to the nearest shelter space. For this reason, the Town must continue to work with the County and adjacent jurisdictions to monitor the capacity of its evacuation routes. The Town will also continue to require hurricane

evacuation studies to be submitted with applications for future land use amendments, rezoning, or development plans that have the potential to increase evacuation times.

The Town is not proposing changes to its evacuation LOS standard at this time, but should continue to coordinate with Volusia County and adjacent cities to ensure that the evacuation times are consistent and achievable. The Town is proposing to add a policy (1.5.2) in its Coastal Management Element to this effect. Other proposed policy changes are to improve the existing language and organization only. New CME Policy 1.5.3 is an existing policy in the Future Land Use Element that is simply being moved to this location.

Coastal High Hazard Area (CHHA)[1]

State regulations regarding comprehensive planning in coastal areas have changed over the past ten years. Before 2006, comprehensive plans were required by FAC Rule 9J-5.012 to "Direct population concentrations away from known or predicted coastal high-hazard areas." The Town's existing policies prohibiting *any increases in residential density in the entire town* (not just in the CHHA) were intended to comply with this rule[2]. In 2006, the provisions under Florida Statutes Ch. 163.3178(8) were created allowing local governments to meet Rule 9J-5.012 if new development did not negatively impact hurricane evacuation times or if the development mitigated such impacts through new shelter space, donations of land or funds to build shelters, etc. In 2011, the Community Planning Act repealed 9J-5 altogether, and with it the prohibition on plan policies allowing additional population in the CHHA. Local government comprehensive plans must still contain data, analysis and policies guiding protection and limitations on development in the CHHA[3]. In the 2015 legislative session, these requirements were expanded regarding redevelopment policies in the CHHA. Pursuant to F.S. 163.3178(f), the Coastal Zone Element must contain a redevelopment component that must be used to eliminate "inappropriate and unsafe development in coastal areas as opportunties arise," including policies to reduce flood risk from impacts of sea-level rise, removal of properties from flood zones, implement development techniques to reduce flooding losses and claims, and apply construction requirements "consistent or more stringent than" those of the Florida Building Code. As a whole, these statutes are focused on protecting the natural coastal environment, maintaining evacuation times, and minimizing property risk and loss, while still allowing limited appropriate development.

[1] Per F.S. 163.3178(2)(h), 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."
[2] See Future Land Use Element Policy 1.1.4, Objective 1.4 and Policy 1.4.1, and Coastal Zone Element Policy 1.4.1.
[3] F.S. Ch. 163.3177(6)(g) and 163.3178.