

Florida Department of Community Affairs Division of Community Planning Comprehensive Planning

Adaptation Action Area

Origin:

The Southeast Florida (SE FL) Regional Climate Change Compact, ratified on January 10, 2010 by Broward, Monroe, Palm Beach and Miami-Dade Counties (Compact Counties), recognizes the vulnerability of SE FL to the impacts of climate change and calls for the identification of areas uniquely vulnerable to the impacts of climate change, especially sea level rise. In January 2011, the Compact Counties adopted state and federal policies related to the creation of Adaptation Action Areas and jointly advocated to the Florida Legislature for the definition of Adaptation Action Areas in Florida law.

On May 8, 2011, the Florida Legislature adopted the Community Planning Act, HB 720, that provides for a definition of Adaptation Action Areas. Subsequent to state action, the concept of Adaptation Action planning moved to the federal level. On May 13, 2011 members of Congress signed onto a letter supporting the definition of Adaptation Action Area in federal law and requesting funds to study, define and designate several Adaptation Action Areas. On July 6, 2011, the Compact Counties requested consideration by Congress to fund Adaptation Action Areas through the Interior and Environment and Related Agencies Appropriations bill.

Statutory Authority

- Section 163.3164(1), Florida Statutes
- Section 163.3177(6)(g)(10), Florida Statutes

Summary

"Adaptation action area" or "adaptation area" is an optional comprehensive plan designation for areas that experience coastal flooding and that are vulnerable to the related impacts of rising sea levels for the purpose of prioritizing funding for infrastructure needs and adaptation planning. Local governments that adopt an adaptation action area may consider policies within the coastal management element to improve resilience to coastal flooding. Criteria for the adaptation action area may include:

- Areas below, at, or near mean higher high water
- Areas which have a hydrological connection to coastal waters
- Areas designated as evacuation zones for storm surge

Impacts of Rising Sea Levels

Communities that are subject to sea level rise may experience an increase in coastal vulnerability. Impacts to communities may include:

- Increased flooding and drainage problems,
- Destruction of natural resource habitats,
- Higher storms surge, increased evacuation areas and evacuation time frames,
- Increased shoreline erosion,
- Saltwater Intrusion, and
- Loss of infrastructure and existing development

Adaptation Planning Strategies

Adaptation to sea level rise is the steps a community takes to become more resilient to the impacts of rising seas over a period of time. The three main strategies a community may use to adapt to sea level rise are:

- I. **Protection** - Protection strategies involve "hard" and "soft" structurally defensive measures to mitigate the impacts of rising seas, such as shoreline armoring or beach renourishment, in order to decrease vulnerability yet allow structures and infrastructure in the area to remain unaltered. Protection strategies may be targeted for areas of a community that are location-dependent cannot be significantly changed structurally (i.e. downtown centers, areas of historical significance, water-dependent uses, etc.).
- II. **Accommodation** - Accommodation strategies do not act as a barrier, but rather alter the design through measures such as elevation or stormwater improvements, to allow the structure or infrastructure system to stay in place. Adaptation measures do not prevent flooding or inundation of the property but do protect the structure. Accommodation strategies may be suitable for location-dependent structure that could be changed to accommodate water, without compromising the use (i.e. bridge elevation, residential home elevation, downtown stormwater improvements, etc.).
- III. **Retreat** - Retreat strategies involve the actual removal of existing development and possible relocation to other areas and the prevention of future development in these high risk areas. Retreat options usually involve the acquisition of vulnerable land for public ownership, but may also include other strategies such as transfer of development rights, purchase of development rights, rolling easements, conservation easements, etc.

Relationship to Hazard Mitigation

The actions a community will take to mitigate vulnerability to coastal flooding are very similar to those that a community might take in sea level rise adaptation. The main difference is that sea level rise adaptation assumes a longer time frame for impact and therefore a longer time frame for need and implementation. Sea level rise also assumes an increase in the vulnerability of areas already subject to coastal flooding and therefore adaptation projects take into account the increased vulnerability.

Relationship to the Coastal High-Hazard Area

While the definition and boundary of the Coastal High-Hazard Area (CHHA) is standardized as the category one storm surge zone as delineated by the SLOSH model, there is no standard boundary for the Adaptation Action Area. If a community chooses to designate an Adaptation Action Area, it is up to the local government to decide what property should be included in the boundary. The main difference between the CHHA and the Adaptation Action area is that the CHHA considers current coastal flooding conditions while the Adaptation Action Area encourages planning for future vulnerability as well.

Adaptation Planning in Florida

Florida has a number of sea level rise adaptation planning projects completed and under development at the state, local and regional levels. Notable projects include:

- [The Southeast Florida Regional Climate Compact](#) - The Southeast Florida Regional Climate Change Compact represents a joint commitment of Broward, Miami-Dade, Palm Beach and Monroe Counties to partner in mitigating the causes and adapting to the consequences of climate change. The compact is the lead alliance that supports planning for "adaptation action areas," and is working to secure funding to further this effort.
- [The City of Punta Gorda Adaptation Plan](#) - The City of Punta Gorda completed a publically lead adaptation planning process at the city-level to address sea level rise in their downtown area.
- [Municipal Adaptation to Sea-Level Rise: City of Satellite Beach, Florida](#) - In the fall of 2009, the City of Satellite Beach, Florida embarked on a project to: assess municipal vulnerability to rising sea level and initiate the planning process to properly mitigate impacts.