SPECIAL REPORT: SEA LEVEL RISE AND FLORIDA

Impact: Community Planning

Part of the Equation

Lilly Rockwell | 7/8/2013

Twenty years ago, the Tampa Bay Regional Planning Council issued a report that warned about the implications of sea level rise for Sarasota Bay. It was noteworthy as an early study of how sea level rise affects a particular community in Florida.

In recent years, several more communities have launched their own sea level rise studies. "It's the cities and the counties and municipalities where the rubber meets the road," says Leonard Berry, director of the Florida Center for Environmental Studies at Florida Atlantic University.

Four counties, Monroe, Palm Beach, Broward and Miami-Dade, banded together to form the Southeast Florida Regional Climate Change Compact in 2009 to study their own vulnerabilities to sea level rise, issuing a lengthy report that also detailed a list of strategies for how to cope. The three coastal counties north of Palm Beach are considering signing on to the compact. Smaller communities, such as Punta Gorda and Satellite Beach, have also studied how sea level rise may harm them.

The state has taken some steps to help local governments plan and pay for sea level rise. In 2011, the Florida Legislature passed a law that allows counties to create "adaptation action areas," designated areas that are vulnerable to sea level rise and have higher priority for funding. Broward County is serving as a pilot case to test the concept, amending its comprehensive plan to allow for certain areas to be "adaptation action areas."

Advocates for sea level rise planning say the most important step isn't changing building codes or spending money. It's incorporating the expectation of sea level rise into government decision-making at every level, such as when building a new fire station or plotting where a new road or airport runway will be located.

"Every investment has to be looked at this way," Berry says. "Sea level rise has to be built into the way you think when planning for anything lasting longer than 10 or 15 years."

Resources

"About 5% of the City landscape will submerge during the initial +2 ft. (0.6 m) rise, with inundation generally restricted to fringing wetlands and finger canal margins proximal to the Banana River. ... The 'tipping point' towards catastrophic inundation is +2 ft (0.6 m), forecast to occur around 2050."

— "Municipal Adaptation to Sea-Level Rise: City of Satellite Beach, Florida,"
RW Parkinson Consulting, 2010

"With much of the Tampa Bay region, especially along the coast, being fully developed, residential land use is the single largest use that would be affected by sea level rise. ... The sea is already rising and many shores are already eroding. It is important to keep in mind that an effective response may require a lead-time of many decades."

— "Sea Level Rise in the Tampa Bay Region," Tampa Bay Regional Planning Council, 2006

Tags: Environment, Sea Level Rise