

Sea rise threatens Florida coast, but no statewide plan

May 10 2015, by Jason Dearen And Jennifer Kay



In this Tuesday, Feb. 3, 2015 photo, the Castillo de San Marcos fort, built over 450 years ago, is separated from the Matanzas River by a sea wall in St. Augustine, Fla. St. Augustine is one of many chronically flooded Florida communities afraid their buildings and economies will be inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)

America's oldest city is slowly drowning.

St. Augustine's centuries-old Spanish fortress and other national

landmarks sit feet from the encroaching Atlantic, whose waters already flood the city's narrow, brick-paved streets about 10 times a year—a problem worsening as sea levels rise. The city has long relied on tourism, but visitors to the fortress and Ponce de Leon's mythical Fountain of Youth might someday have to wear waders at high tide.

"If you want to benefit from the fact we've been here for 450 years, you have the responsibility to look forward to the next 450," said Bill Hamilton, a 63-year-old horticulturist whose family has lived in the city since the 1950s. "Is St. Augustine even going to be here? We owe it to the people coming after us to leave the city in good shape."

St. Augustine is one of many chronically flooded communities along Florida's 1,200-mile coastline, and officials in these diverse places share a common concern: They're afraid their buildings and economies will be further inundated by rising seas in just a couple of decades. The effects are a daily reality in much of Florida. Drinking water wells are fouled by seawater. Higher tides and storm surges make for more frequent road flooding from Jacksonville to Key West, and they're overburdening aging flood-control systems.

But the state has yet to offer a clear plan or coordination to address what local officials across Florida's coast see as a slow-moving emergency. Republican Gov. Rick Scott is skeptical of man-made [climate change](#) and has put aside the task of preparing for [sea level rise](#), an Associated Press review of thousands of emails and documents pertaining to the state's preparations for rising seas found.

Despite warnings from water experts and climate scientists about risks to cities and drinking water, skepticism over [sea level](#) projections and climate change science has hampered planning efforts at all levels of government, the records showed. Florida's environmental agencies under Scott have been downsized and retooled, making them less effective at

coordinating sea level rise planning in the state, the documents showed.

"If I were governor, I'd be out there talking about it (sea level rise) every day," said Eric Buermann, the former general counsel to the Republican Party of Florida who also served as a water district governing board member. "I think he's really got to grab ahold of this, set a vision, a long-term vision, and rally the people behind it. Unless you're going to build a sea wall around South Florida, what's the plan?"



In this Tuesday, Feb. 3, 2015 photo, traffic makes it way along U.S. Highway 1, in St. Augustine, Fla. The street, located near the Matanzas River, often floods during heavy storms. St. Augustine is one of many chronically flooded Florida communities afraid their buildings and economies will be inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)

The issue presents a public works challenge that could cost billions here and nationwide. In the third-most populous U.S. state, where most

residents live near a coast, municipalities say they need statewide coordination and aid to prepare for the costly road ahead.

Communities like St. Augustine can do only so much alone. If one city builds a seawall, it might divert water to a neighbor. Cities also lack the technology, money and manpower to keep back the seas by themselves.

In a brief interview with the AP in March, Scott wouldn't address whether the state had a long-range plan. He cited his support for Everglades restoration and some flood-control projects as progress but said cities and counties should contact environmental and water agencies to find answers—though Scott and a GOP-led legislature have slashed billions in funding from those agencies. Spokespeople for the water districts and other agencies disputed that cuts have affected their abilities to plan.

"We will continue to make investments and find solutions to protect our environment and preserve Florida's natural beauty for our future generations," the governor said in a statement.



In this Tuesday, Feb. 3, 2015 photo, tourists make their way down Hypolita Street, in St. Augustine, Fla. The street, located near the Matanzas River, often floods during heavy storms. St. Augustine is one of many chronically flooded Florida communities afraid their buildings and economies will be inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)

Florida's Department of Environmental Protection is in charge of protecting the state environment and water but has taken no official position on sea level rise, according to documents. DEP spokeswoman Lauren Engel said the agency's strategy is to aid local communities and others through the state's routine beach-nourishment and water-monitoring programs.

In St. Augustine, downtown streets around 19th century buildings built by oil tycoon Henry Flagler often close during nor'easters because of flooding. While the city's proximity to the sea has always made flooding

a problem, residents say it's worsened over the past 15 to 20 years.

St. Augustine's civil engineer says that the low-lying village will probably need a New Orleans-style pumping system to keep water out—but that but no one knows exactly what to do and the state's been unhelpful.

"Only when the frequency of flooding increases will people get nervous about it, and by then it will be too late," engineer Reuben Franklin said. "There's no guidance from the state or federal level. ... Everything I've found to help I've gotten by searching the Internet."

Across coastal Florida, sea levels are rising faster than previously measured, according to federal estimates. In addition to more flooding at high tide, increasing sea levels also mean higher surges during tropical storms and hurricanes, and more inundation of drinking wells throughout Florida.



In this Tuesday, Feb. 3, 2015 photo a sea wall separating the Matanzas River and U.S. Highway 1 is seen, in St. Augustine, Fla. St. Augustine is one of many chronically flooded Florida communities afraid their buildings and economies will be inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)

Water quality is a big concern for many communities. It's especially bad in South Florida—just north of Miami, Hallandale Beach has abandoned six of eight drinking water wells because of saltwater intrusion. Wells in northeast and central Florida are deemed at risk too.

While South Florida water officials have led the charge in addressing sea level rise concerns in their area, their attempt to organize a statewide plan was met with indifference, documents show. The Scott administration has organized just a few conference calls to coordinate local efforts, records show. Those came only after Florida's water district managers asked DEP for help.

In a recent visit to Everglades National Park, President Barack Obama said the wetlands, vital to Florida's tourism economy and drinking-water supply, already are threatened by infusions of saltwater from rising seas.

The list of other problems across the state is growing. Miami Beach is spending \$400 million on new stormwater pumps to keep seawater from overwhelming an outdated sewer system.

In St. Augustine, homes built on sand dunes teeter over open space as erosion eats at the foundations. Beachside hotel owners worry about their livelihoods.

Tampa and Miami are particularly vulnerable to rising seas—many roads

and bridges weren't designed to handle higher tides, according to the National Climate Change Assessment. Officials say Daytona Beach roads, too, flood more often than in the 1990s.

South Miami passed a resolution calling for South Florida to secede from the more conservative northern half of the state so it could deal with climate change itself.

Insurance giant Swiss Re has estimated that the economy in southeast Florida could sustain \$33 billion in damage from rising seas and other climate-related damage in 2030, according to the Miami-Dade Sea Level Rise Task Force.

Cities like St. Augustine have looked for help, but Scott's disregard for climate change science has created a culture of fear among state employees, records show.



In this Tuesday, Feb. 3, 2015 photo, cars travel on the Bridge of Lions, to and from St. Augustine, Fla., over the Matanzas River. St. Augustine is one of many chronically flooded Florida communities afraid their buildings and economies will be inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)

The administration has been adamant that employees, including scientists, not "assign cause" in public statements about global warming or sea level rise, internal government emails show.

For example, an April 28, 2014, email approving a DEP scientist's request to participate in a National Geographic story came with a warning: "Approved. Make no claims as to cause ... stay with the research you are doing, of course," the DEP manager, Pamela Phillips, warned.

"I know the drill," responded Mike Shirley, manager of the Guana Tolomato Matanzas National Estuarine Research Reserve near St. Augustine.

Agency spokeswoman Engel said Phillips was a lower-level staffer whose views didn't necessarily reflect the entire administration. When asked whether staffers are told not to assign cause, Scott's office said "the allegations are not true".



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Most towns say they cannot afford the cost of climate change studies or regional coordination.

"For us, it's a reality, it's not a political issue," said Courtney Barker, city manager of Satellite Beach. The town near Cape Canaveral used to flood during tropical weather, but now just a heavy rainstorm can make roads impassable for commuters.

"When you have to listen to that mantra, 'Climate change, is it real or not?' you kind of chuckle, because you see it," Barker said.

Scott administration officials are moving forward on a five-year plan that will provide basic guidance to cities dealing with sea level rise. Scott has appointed the Department of Economic Opportunity as the lead agency overseeing the project.

The DEO has received nearly \$1 million in federal grants for the plan. More than half has been spent on staff time and travel or hasn't yet been allocated, according to documents. The rest, about \$450,000, went to contract researchers who are helping create the document, due in 2016. Agency spokeswoman Jessica Sims wouldn't comment and refused requests for the program's manager to be interviewed.

In one grant-funded study, Florida State University researchers asked local leaders about sea rise. Some officials complained to researchers about the "poisonous political atmosphere" over climate change hampering progress. The AP obtained the report in a public records request.



In this Tuesday, Feb. 3, 2015 photo, the Lightner Museum, housed in a building constructed in 1887, is seen the in St. Augustine, Fla. St. Augustine is one of many chronically flooded Florida communities afraid their buildings and economies will be inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)

"In some cases, especially at the local level, planners are constrained by perceptions among elected officials that there is a lack of reliable scientific information to support the existence of sea level rise," report authors summarized.

Scott's office again said "the allegations are not true" when asked about the political atmosphere in government agencies.

As for concerns over drinking water, water district officials said they were happy with the state's funding. But internal emails show frustration among those working behind the scenes to better organize a statewide sea level rise planning group.



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"I often worry about the next generations; I think they will survive in spite of us," Dave DeWitt, a staffer at the Southwest Florida Water Management District, said in an email to colleagues. A district spokeswoman wouldn't comment on policy beyond the district.

St. Augustine officials say they need state-level coordination, or in coming decades much of historic downtown could be ankle-deep in water at high tide.

Franklin, the engineer, said, "Are we going to be early to the game in terms of planning for this, or late?"



In this Wednesday, Feb. 4, 2015 photo, a culvert that empties flood waters from King Street to Lake Maria Sanchez and connects to the Matanzas River is seen in St. Augustine, Fla. St. Augustine is one of many chronically flooded Florida communities afraid their buildings and economies will be inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)



In this Tuesday, Feb. 3, 2015 photo, traffic makes it way along U.S. Highway 1, in St. Augustine, Fla. The street, located near a sea wall on the Matanzas River, often floods during heavy storms. St. Augustine is one of many chronically flooded communities along Florida's coast, and officials in these diverse places share a common concern: They're afraid their buildings and economies will be further inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)



In this Wednesday, Feb. 4, 2015 photo, beach erosion is seen at a home on Vilano Beach in St. Augustine, Fla. Homes built on strands of white sand in Vilano Beach now teeter precariously as high tides cover their front steps. St. Augustine is one of many chronically flooded communities along Florida's coast, and officials in these diverse places share a common concern: They're afraid their buildings and economies will be further inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)



In this Wednesday, Feb. 4, 2015 photo, beach access stairs are seen broken in front of a home at Vilano Beach in St. Augustine, Fla. Homes built on strands of white sand in Vilano Beach now teeter precariously as high tides cover their front steps. St. Augustine is one of many chronically flooded communities along Florida's coast, and officials in these diverse places share a common concern: They're afraid their buildings and economies will be further inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)



In this Wednesday, Feb. 4, 2015 photo, a home with a steel and wooden barricade to protect it from beach erosion is seen on Vilano Beach in St. Augustine, Fla. Homes built on strands of white sand in Vilano Beach now teeter precariously as high tides cover their front steps. St. Augustine is one of many chronically flooded communities along Florida's coast, and officials in these diverse places share a common concern: They're afraid their buildings and economies will be further inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)



In this Wednesday, Feb. 4, 2015 photo, a home surrounded by a rock barricade to protect the home from beach erosion is seen on Vilano Beach in St. Augustine, Fla. Homes built on strands of white sand in Vilano Beach now teeter precariously as high tides cover their front steps. St. Augustine is one of many chronically flooded communities along Florida's coast, and officials in these diverse places share a common concern: They're afraid their buildings and economies will be further inundated by rising seas in just a couple of decades. (AP Photo/John Raoux)

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