

Fort Lauderdale is looking at raising roads to battle rising seas

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It's a scary thought: Sea levels rising by as much as 2 feet, swallowing up land, homes and everything else not on high ground.

It could happen as soon as 2060, experts say.

Fort Lauderdale, with its overabundance of low-lying neighborhoods both inland and along the coast, is already looking at one drastic, "last-resort" option to help keep streets high and dry: Raising roads.

Higher seawalls, bigger pipes and better pumping stations won't be enough to armor the city, Fort Lauderdale officials warn.

Fort Lauderdale is seeking input from experts with the Urban Land Institute, a nonprofit organization made up of land-use experts who also have offered guidance to other cities vulnerable to flooding, including New Orleans, Boston, New York City, Chicago and El Paso.

A panel of ULI experts recently toured Fort Lauderdale's most flood-prone neighborhoods, then held two public meetings with the community to hear from residents and share what might lie ahead.

During the first meeting, Fort Lauderdale resident Judy Mudge told panelists she's about to grow gills and fins.

"We're really impacted by the king tides," she said of her Las Olas Isles neighborhood. "It's really frustrating. The road becomes a river. The seawall does not stop the water. We really need your help."

'Living in a bathtub'

Resident John Roth chimed in.

"We are living in the bottom of a bathtub," he said. "People are running out to buy high-clearance vehicles or a boat. I have both. We're still building road diets around here (where lanes are removed to slow down traffic). That's the wrong way to go, guys. You have to (give) people (a

way) to escape."

Fort Lauderdale is raising seawalls, upgrading drainage and installing tidal valves in an attempt to reduce [coastal flooding](#), Assistant Public Works Director Nancy Gassman said. But for flood-prone areas where upgrades have not solved the problem, roadway elevation has been proposed as the next potential solution.

ULI's advisory panel plans to return to Fort Lauderdale in a few months with a list of recommendations for the city on how to choose which roads to raise and suggestions on how high to raise them. The panelists will also suggest ways to find funding.

A controversial road-raising project is already underway in Miami Beach, where some residents are complaining of roads so high that lawns flood while streets stay dry.

If a road is raised by 2 feet, nearby homes can flood unless they are elevated along with the road. And that can cost a pretty penny.

Raising a home above base elevation can cost anywhere from \$30,000 to more than \$100,000, according to FL Home Builder.

"Road elevation is the last resort," Commissioner Steve Glassman told the South Florida Sun Sentinel on Friday. "Miami Beach had issues, but we have to learn from that. How do we mitigate those issues? I think we can learn from those who have already done this. And you do a better job when you learn from mistakes that have been made."

If Fort Lauderdale officials move forward with a plan to elevate roads, they are likely going to get pushback from homeowners, said Kitty McGowan, a local activist who has served on Fort Lauderdale's Marine Advisory Board.

"If you put a mountain next to something that's lower, the water is going to run down," McGowan said.

To avoid a deluge, residents would have to pay an "insane" amount to have their homes elevated to the same level as the road, McGowan said.

McGowan lives in Fort Lauderdale's Edgewood neighborhood, where nearly 300 homes were damaged in a record-breaking rainstorm that hit last year on April 12—including McGowan's. Many homeowners did not have flood insurance.

"I lost everything," McGowan said. "It took nine months to get back in my house. Dozens of people in my neighborhood are still displaced. We were ground zero for that flood."

Retreating from the coast?

Another option considered by some coastal cities is what is known as managed retreat, where property owners voluntarily leave flood-prone areas.

Municipalities typically rely on planning, zoning and environmental impact assessments to subtly manage retreat, according to a report authored by Gabriella Mickel published last year in the *UCLA Journal of Environmental Law Policy*.

"For example, Punta Gorda limits new development in flood-prone areas and prohibits hard shoreline armoring," Mickel wrote. "Punta Gorda has also utilized another managed retreat tactic—buyouts. Punta Gorda buys out properties to help people move away from the coastline. It then uses the land to build living shorelines that buffer floods and facilitate the inland migration of coastal habitats."

Fort Lauderdale officials have made no mention of buying out private property owners—not yet, anyway.

"How do you tell people it's not really worth trying to save your street or your home?" Glassman said. "It's scary. It's a scary thought. But it might be the reality of the future. But that's part of a much larger discussion."

Last year, Fort Lauderdale commissioners gave unanimous approval to new seawall height requirements, increasing the minimum top elevation from 3.9 feet to 5 feet.

Seawalls are not cheap.

A homeowner with a 100-foot-long seawall might end up paying anywhere from \$125,000 to \$200,000.

The new rule, mandated by Broward County to address [sea-level rise](#) and tidal flooding, will apply to homeowners who fall into one of three categories:

- Those who are building a new seawall.
- Those with seawalls in significant disrepair, with damage to more than 50% of the structure.
- Those with seawalls so low that tidal flooding breaches the seawall and sends water into neighboring yards and nearby roadways.

In March 2020, Broward County adopted new seawall standards for more than a dozen cities susceptible to high-tide flooding and gave them two years to adopt the new rules.

Several cities have already done so, including Hollywood, Dania Beach, Hallandale Beach, Davie, Deerfield Beach, Pompano Beach, Wilton

Manors, Oakland Park and Lauderdale-by-the-Sea.

Fort Lauderdale homeowners cited by the city will have one year to build or replace their [seawall](#). If they miss the 365-day deadline, they can be fined \$100 a day.

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