



# LAUDERTRAC

## RESILIENCY UPDATE FORT LAUDERDALE

Tracking Progress on Commission Priorities for 2021



November/December 2021

## CREATING A STRONGER COMMUNITY

In 2021, the Fort Lauderdale City Commission named Resilience as a top priority for the second year in a row. Since then, the City has made significant progress in making Fort Lauderdale more sustainable and resilient.

### Beach Resiliency

Fort Lauderdale has more than six miles of beach that is not only prized by residents and tourists, but provides a protective barrier against storms, surges, and waves. To renourish our beach in the wake of Hurricane Irma, the Army Corps of Engineers is currently adding sand to restore impact areas and safeguard our beach for years to come.

### Flooding

The City dedicates approximately \$4 million each year to street level capital improvements and implements more than \$1 million in small-scale projects to reduce flooding impacts. For example, we are working to install back-up power generators for two downtown stormwater pump stations. The long-term Community Investment Plan includes 17 Adaptation Action Areas where we have identified 45 capital projects to address coastal flooding. Substantial progress has been made as well on developing a Community Rating System Strategic Plan that further reduces overall risk from flooding, reducing the cost of flood insurance.

### Sea Level Rise

Fort Lauderdale has now installed more than 185 tidal valves to reduce tidal flooding on roadways with direct outfalls to the City's 165 miles of waterways. This comes after the City had 138 high tides in 2020 that exceeded our previous flooding preparations for the lowest-lying areas. From the 2000 baseline, we estimate a sea level rise of 10-17 inches by 2040 and 21-64 inches by 2070. To cope with that, we have moved to revise the City's seawall ordinance to match Broward County's requirements. The County has already set a five foot NAVD minimum elevation for all new tidal barriers.

The City has also moved forward with its Seawall Master Plan. We have already installed nearly half a mile of new seawall along Cordova Road between SE 7th Street and SE 11th Court to minimize roadway flooding. An additional seven seawalls, including four along the Las Olas Boulevard evacuation route, one on Southeast 10th Street, and two on Hendricks Isles, are already funded and in the works.

The City is currently studying road elevation to understand which streets are vulnerable to future flooding. Fort Lauderdale has also applied for a state grant to conduct a citywide vulnerability assessment.



Crews are currently adding sand to Fort Lauderdale Beach

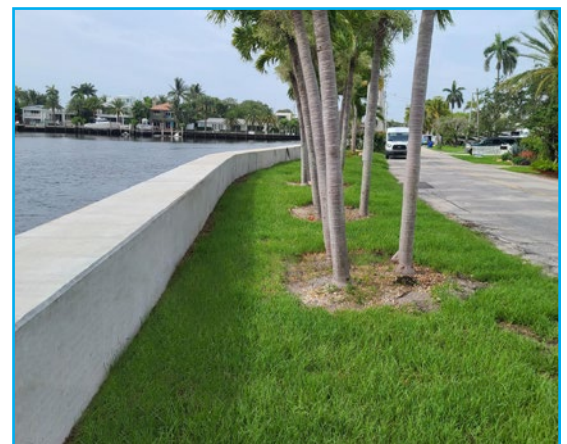


Photo of completed Cordova Road seawall

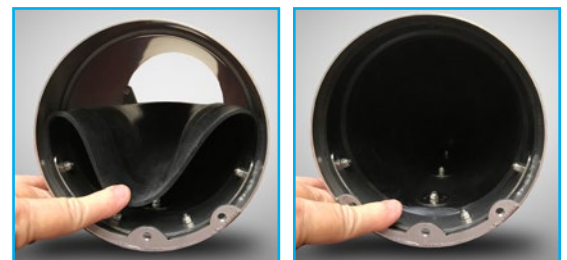


Photo showing tidal valve open on left and shut on right



Melrose Park Drainage Culvert: Clogged with Tropical Storm Eta sediments



Melrose Park Drainage Culvert: Cleaned & Restored

## Stormwater Infrastructure

Seven neighborhoods are currently on track to get drainage improvements to alleviate flooding vulnerabilities. \$70 million is being spent on comprehensive drainage improvements in the Edgewood and River Oaks neighborhoods. The City is also looking into bonds and low-interest Water Infrastructure Financing and Innovation Act funding from the Environmental Protection Agency to support stormwater improvements in five additional neighborhoods: Victoria Park, Durrs, Dorsey Riverbend, Southeast Isles, and Progresso Village.

After widespread flooding from Tropical Storm Eta, the City has comprehensively restored the drainage system in the Melrose Park neighborhood. In addition, conceptual design of a stormwater management system is underway to add an estimated \$30 million in infrastructure to the Melrose Manors neighborhood in 2025.

## Asset Management

Fort Lauderdale has thousands of utility assets such as pipes, pumps, lift stations, catch basins, and valves. Keeping track of all of them helps us continually operate, maintain, and improve our system.

The City is now investing in the CityWorks Asset Management System that is expected to go live in 2022. This system not only creates an inventory of underground assets, but also tracks their condition, repair work, maintenance costs, and replacement schedules.

We have made significant strides with wastewater assets, especially force mains. We have now pinpointed the locations of our water distribution valves and gathered even more information about our stormwater catch basins, manholes, and easements. The City is planning to develop an asset inventory for the G.T. Lohmeyer Wastewater Treatment Plant as well.

As all of these projects advance, the City will move closer to becoming a more sustainable and resilient community.



Fort Lauderdale Manhole Cover