



An Introduction to Stormwater & Flooding

City of Deerfield Beach Stormwater & Flood Resiliency Master Plan

Deerfield Beach faces flooding from rain, tides, and hurricanes. The City reviews the infrastructure every few years to ensure the community is well-protected, roads remain passable during rainstorms, and disruptions are minimized. This process culminates in a Stormwater Master Plan tailored to the needs of the community.

WHAT IS A STORMWATER SYSTEM?




A stormwater system is designed to move rainwater away from roads and public areas in an organized way during a rain event. It is the series of storm drains and swales you see on the side of the road, pipes under ground, and in South Florida, the canals and flood control structures working together to prevent flooding.



WHAT IS A STORMWATER MASTER PLAN?

- The Stormwater and Flood Resiliency Master Plan is designed to:
- Review the overall condition and performance of the existing stormwater system
 - Address the effects of sea level rise, nuisance flooding, and heavier precipitation/rain
 - Identify needs and opportunities of stormwater and coastal drainage infrastructure improvements
 - Provide recommendations for stormwater best management practices for developers and private property owners
 - Evaluate and make recommendations regarding the City's longer-term coastal infrastructures needs

PRIMARY FLOODING CHALLENGES

-  Nuisance Flooding From the Coast
-  Aging Coastal Infrastructure
-  Neighborhood Flooding

RAINFALL & TIDAL FLOODING EXPLAINED

- **Rainfall Flooding:** Flooding associated with rain events, such as thunderstorms, tropical systems, or cold fronts. This occurs when large amounts of rain fall within a short period of time.
- **Tidal Flooding:** Flooding associated with high tides, which can be caused by weather or phases of the moon. As sea levels rise, so will tides, causing tidal flooding in low-lying coastal areas.

WHAT THE STORMWATER MASTER PLAN TAKES INTO ACCOUNT:

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|------------------|---------------------------|---------------|-----------------------|
| • Sea Level Rise | • Flood Protection | • Land Use | • Runoff |
| • Heavy Rainfall | • Environment and Ecology | • Topography | • Regulations |
| • Tidal Flooding | • Water Quality | • Floodplains | • Saltwater Intrusion |

HOW DOES THE STORMWATER MASTER PLAN ADDRESS THESE CHALLENGES?

- Identifies crucial improvements to aging coastal infrastructure
- Provides recommendations for best long-term stormwater management practices
- Enhances the existing landscape by incorporating green infrastructure, which provides additional areas to store stormwater, as well as environmental and recreational benefits
- Investigates and assesses innovative methods to manage stormwater in a cost-effective manner
- Evaluates and identifies the best course of action for long-term financing and sustained operability of the stormwater system to provide adequate flood protection

For more information, please contact **Environmental Services** at (954) 480-4270.