

WHEN IT RAINS, IT POURS

Understanding Aventura's Stormwater Drainage Systems

The City is only responsible for draining the publicly owned streets. Private property owners such as shopping centers, Aventura Mall and condominiums are solely responsible for draining their parking lots, driveways and roadways.

When it rains, water is directed towards catch basins located where the curb meets the pavement, or to the grassy swales between City streets and sidewalks.

The run-off water, called stormwater, is then directed through a system of underground structures, wells, and pipes. It is here that the water is pre-treated, or cleaned, when debris, leaves and other materials sink to the bottom of catch basins and the clean water then drains through a pipe, located near the top of the basin. These catch basins are cleaned on a regular basis to prevent a build-up of debris and silt, and to ensure that the maximum volume of the pre-treated stormwater is able to move through the basins and then directed to outfalls that drain into the Intracoastal Waterway.

Some of the stormwater drains into the grassy swales, designed to hold a certain volume, which then naturally percolates back into the underground water tables.

Since the incorporation of the City, many improvements have been made to the stormwater system throughout the City, including upsizing pipes, adding drainage pipes where none was available, and increasing capacity to the existing system. In fact, over \$10 million, including State funding, has been spent on these improvement over the past 19 years.

Why does Aventura experience some flooding after major rain events?

The answer lies within how much total rain the City receives during a storm. During a recent severe rainstorm, approximately eight inches of rain fell within three hours. There have been other severe rain events that have caused flooding in some areas of the City, and the common factor was the excessive amount of rain that fell within a short period of time.

There is no drainage system that can remove stormwater during those extreme rain events, without causing temporary flooding or ponding in some areas of the City. The good news is that during the recent storm, most streets were clear after an hour and a half after the rain stopped, and all City streets were clear three hours after the storm had passed. This is a good indication that the

Stormwater System Improvements

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system works. Severe rainstorms are regional events that affect all of South Florida. There have been several private properties in Aventura and other neighboring cities that had to close streets and parking lots for up to 24 hours, after the same storms.

The City continues to monitor the system and include projects in our Capital Improvement Program, to improve drainage and reduce flooding. An example of this process is the NE 29 Place and Aventura Boulevard drainage improvements, partially funded by State grants, which will commence in the spring of 2015. Fiscal year 2015/16 improvements will include NE 191 Street.

During major rainstorms, it is advisable to stay indoors whenever possible. If you see other stalled vehicles, don't attempt to try to make it through the area. It is not advisable to drive through any standing water, since submerged debris could cause major damage to your vehicle.