

REFLECTIONS



MANAGING FLOOD WATER

Before and After the Storm

Before and After the Storm



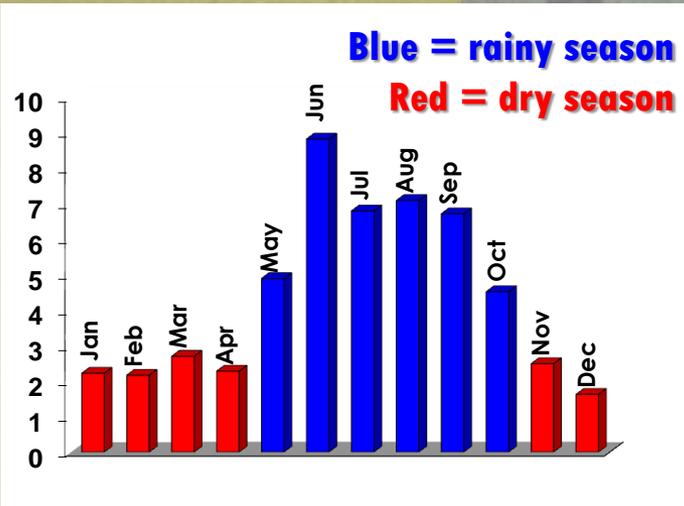
Marshes and swamps once covered our tropical-like region



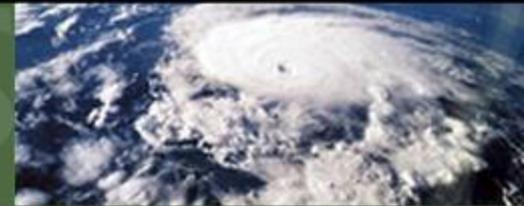
Before and After the Storm



Our terrain is low and flat, and seasonal rainfall can be intense



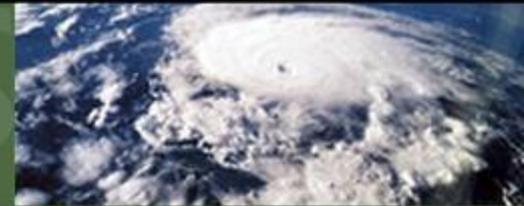
Before and After the Storm



This land is now home to more than 8.1 million people



Before and After the Storm

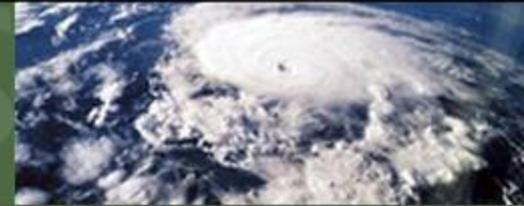


The South Florida Water Management District operates the regional flood control system

- **2,100 miles of canals**
- **2,000 miles of levees**
- **600 structures**
- **625 culverts**
- **70 pumping stations**



Before and After the Storm



SFWMD role:

- Monitor weather conditions and water levels around-the-clock
- As needed, open gates to lower water levels in primary canals in anticipation of expected inflows
- During and after heavy rains, route excess water through waterways to storage or coastal discharge points



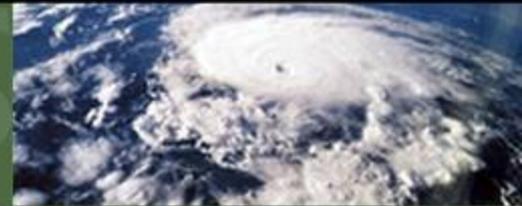
Before and After the Storm



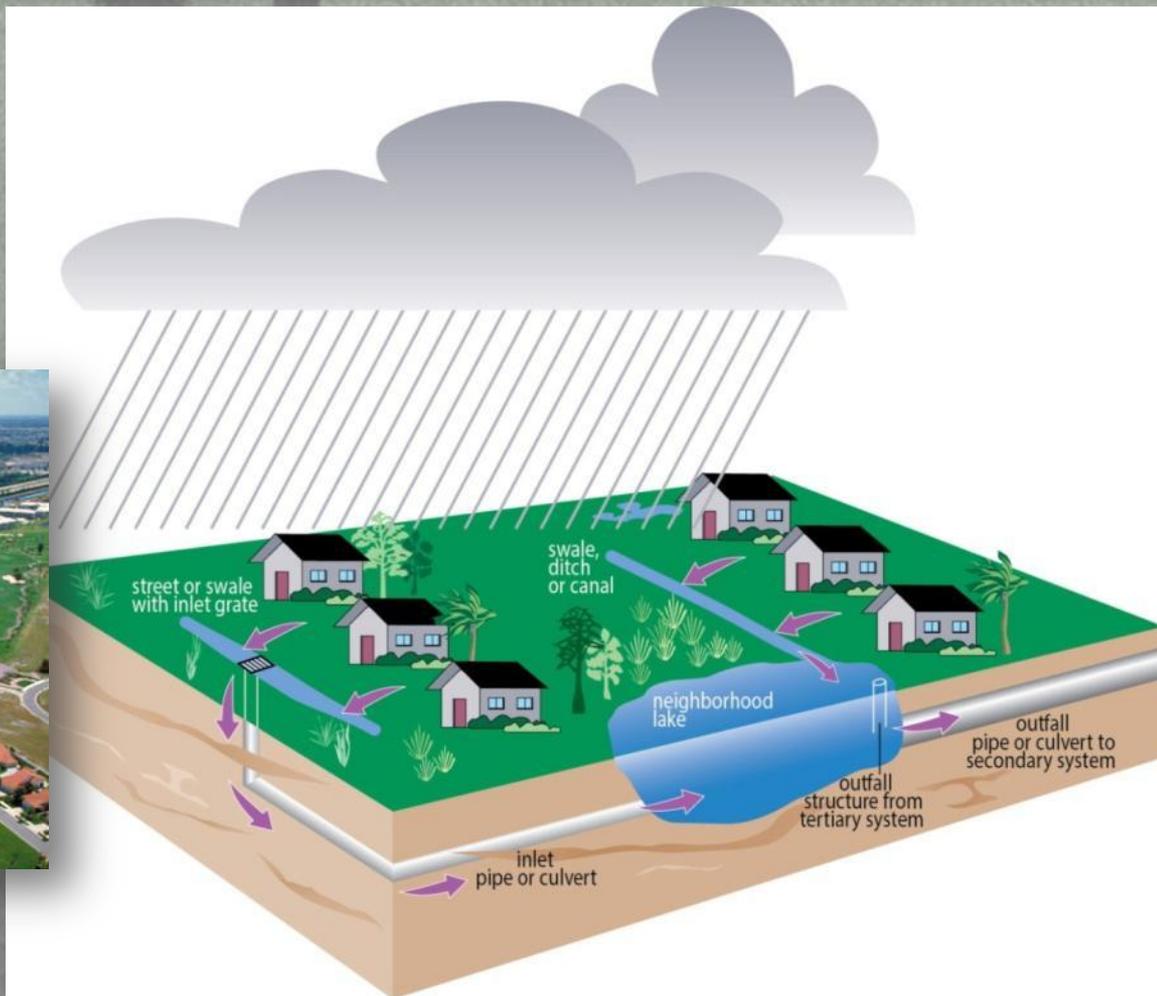
**Optimum flood control
is a three-tiered system
– functioning much like
a roadway system**



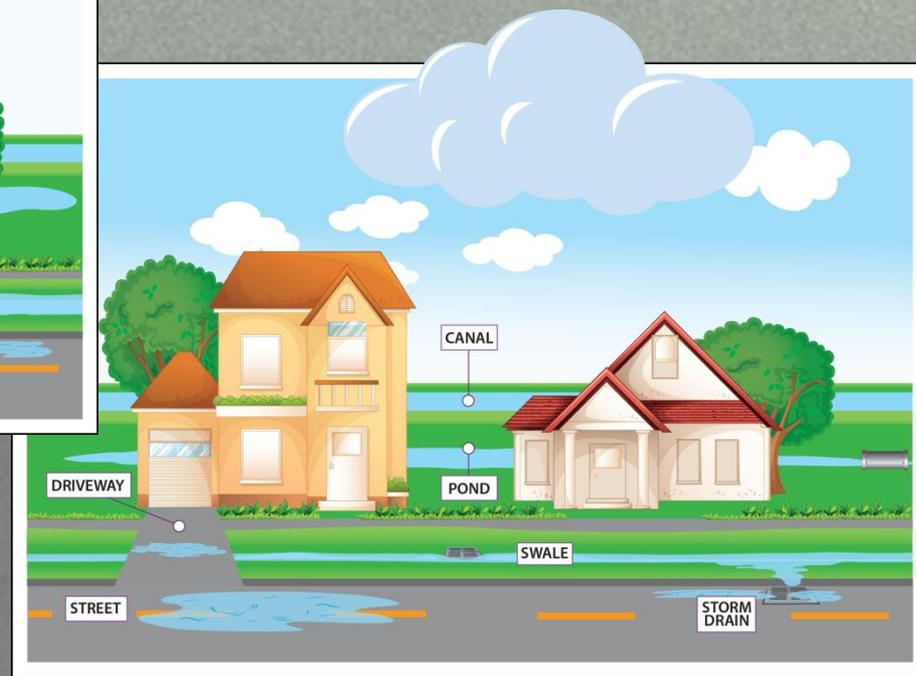
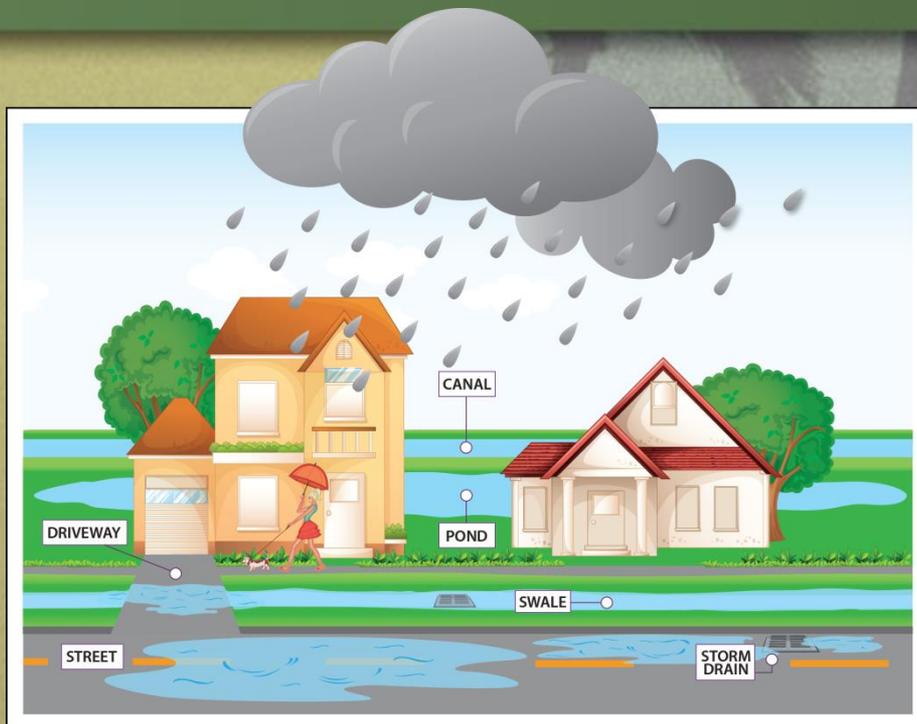
Before and After the Storm



It starts in
your
community...



Before and After the Storm

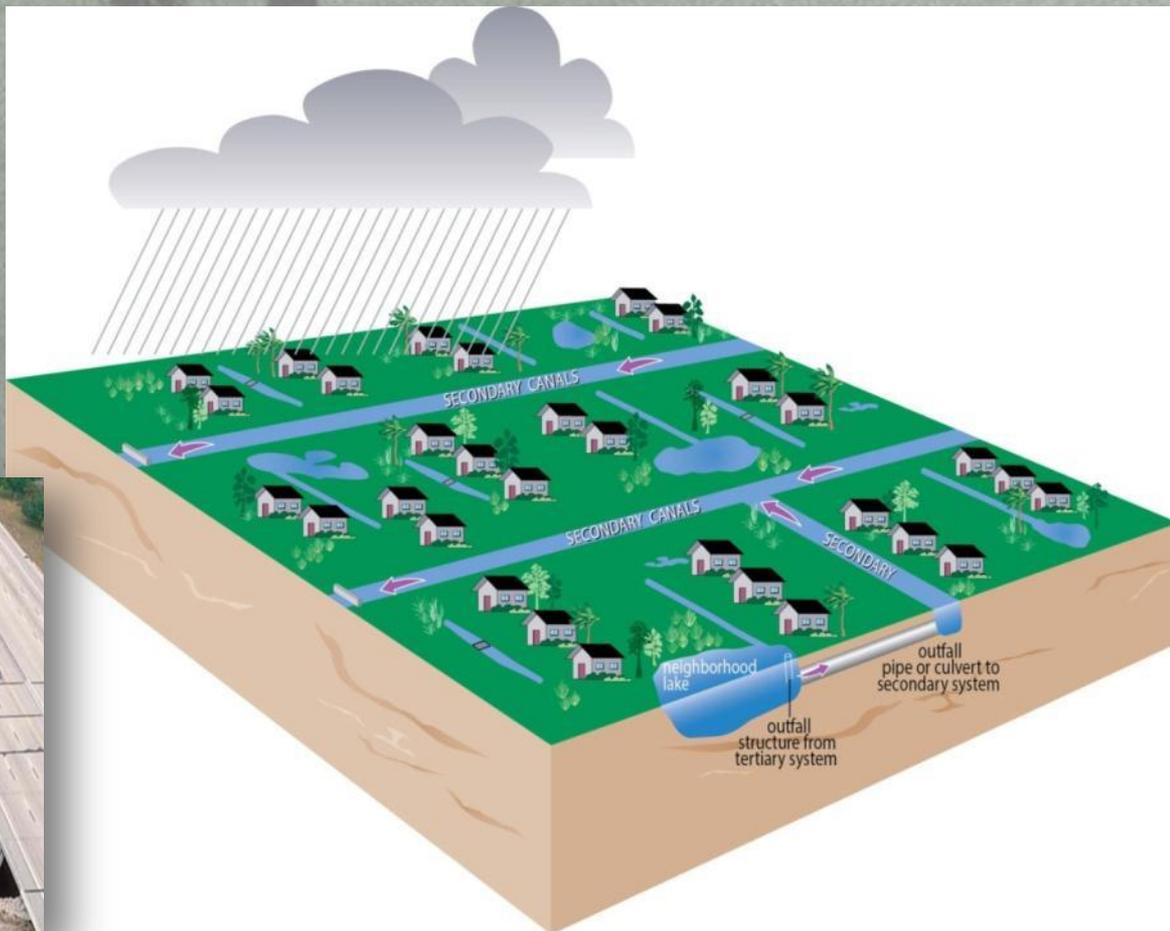


Raining vs Draining

Before and After the Storm



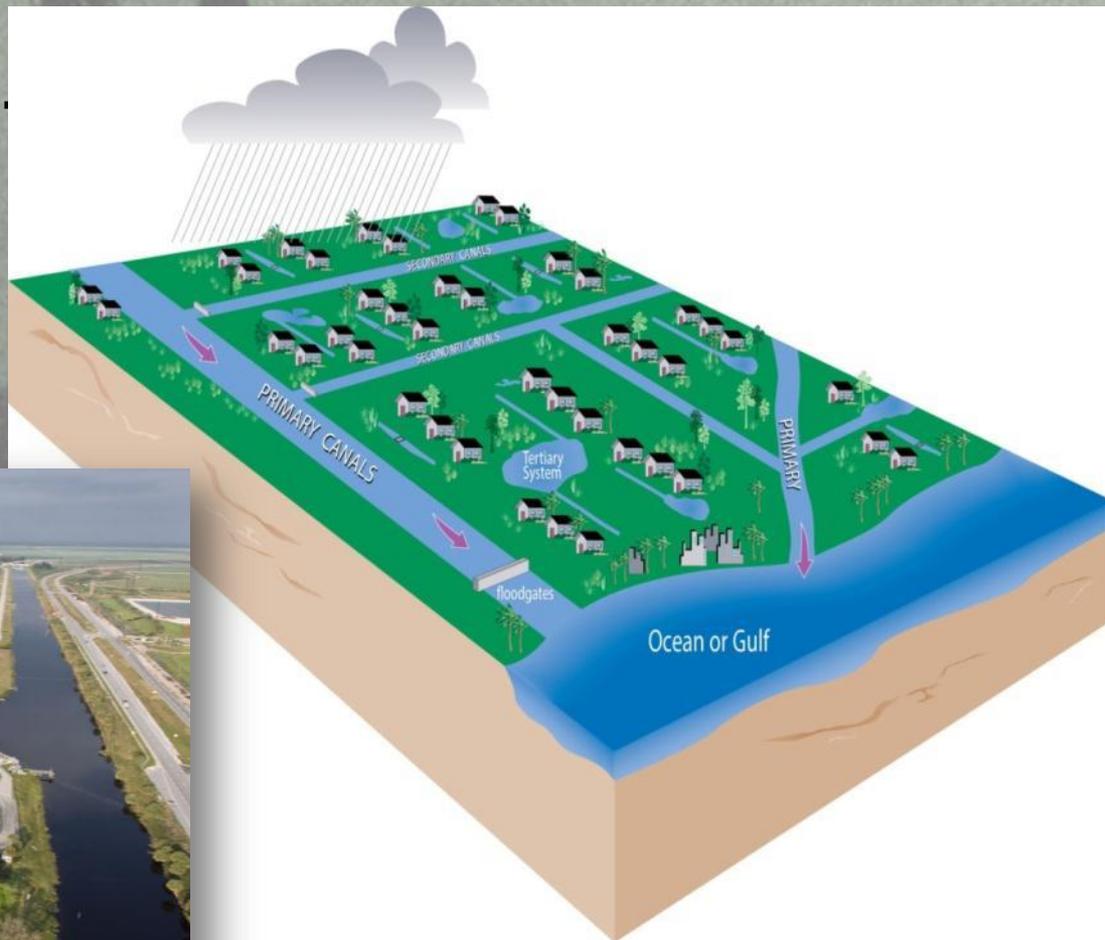
Secondary canals connect to farm and neighborhood systems



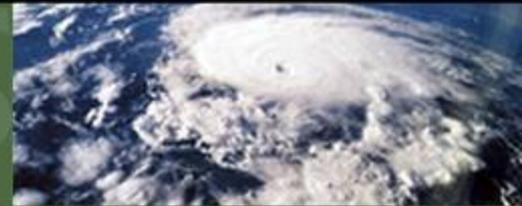
Before and After the Storm



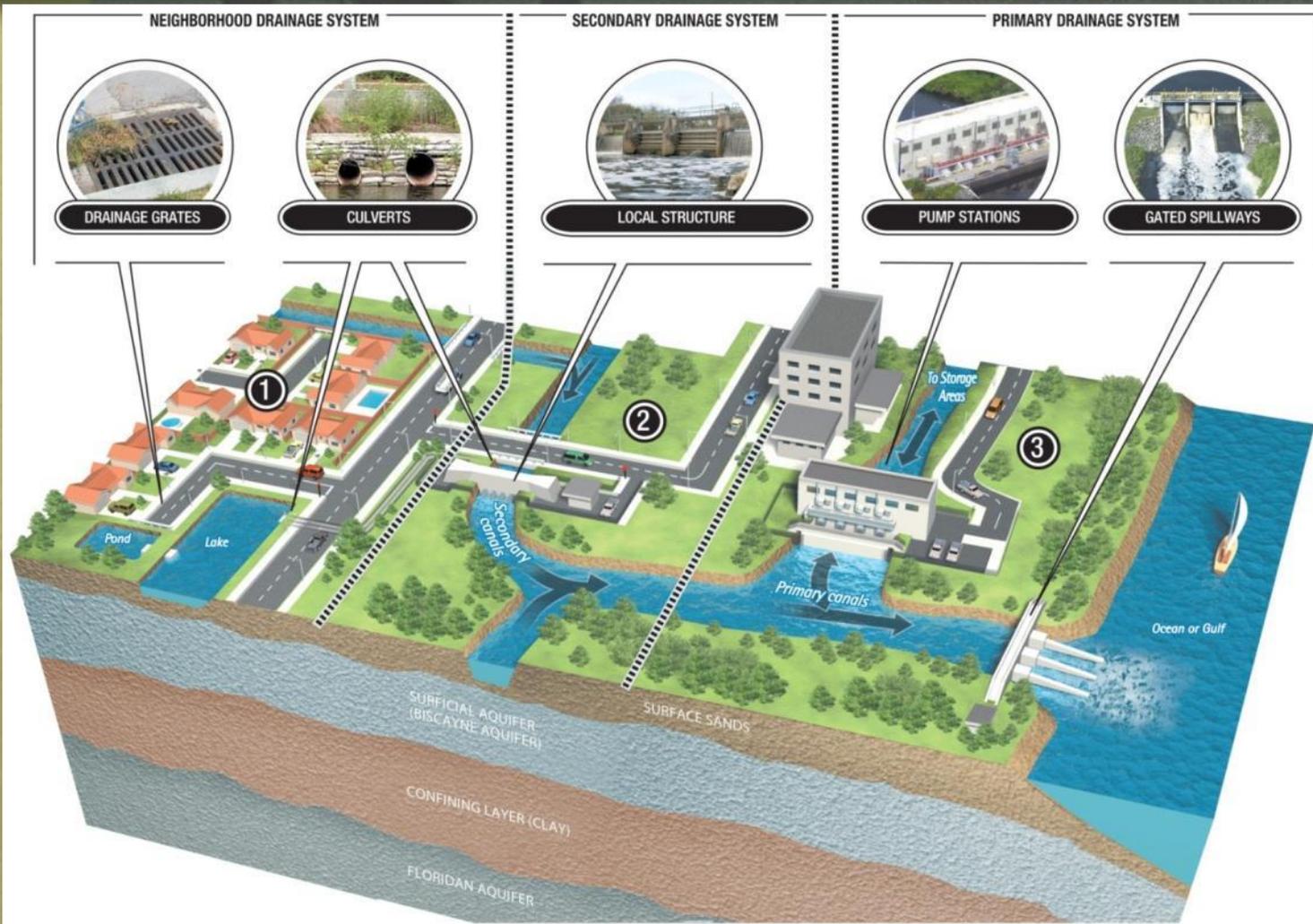
Major canals receive inflows & move water into storage or to the coast



Before and After the Storm



The three systems must all work together



Before and After the Storm



Heavy rain in a short period of time may result in flooding



Before and After the Storm



4 to 6 inches of rain in a 24-hour period

What to expect:

- **Standing water in yards, swales and ditches**
- **Crowns of road should remain passable**



Before and After the Storm



7 to 10 inches of rain in a 72-hour period

What to expect:

- **Roads, as well as swales, ditches and yards flood**
- **Buildings should remain dry**



Before and After the Storm



**10 to 20 inches
or more of rain
in a 72-hour
period**

What to expect:

- **Many houses and businesses can be expected to flood**



Before and After the Storm

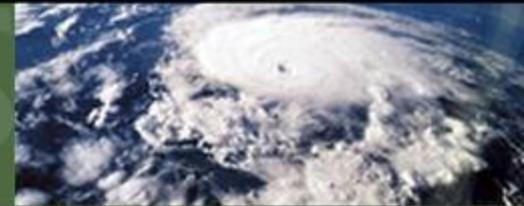


Flood Factor:

Surface waters cannot receive new water if they are full or flow is blocked



Before and After the Storm

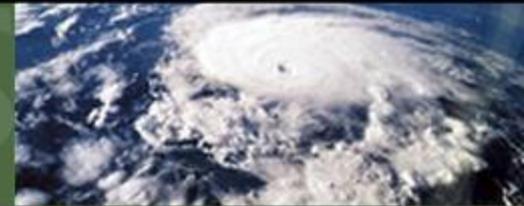


Flood Factor:

Water cannot soak into the ground if the water table is high – results in ponding and standing water



Before and After the Storm



Flood Factor:

High tides and on-shore winds inhibit discharge capability to the coast



Before and After the Storm

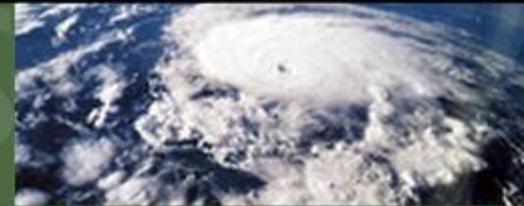


Flood Factor:

Older neighborhoods with no, or limited, community drainage systems in place are prone to flooding



Before and After the Storm

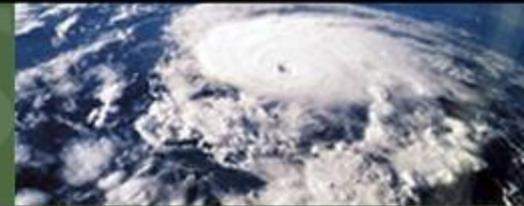


Shared Responsibility

Communities play a key role in managing flood situations



Before and After the Storm



Shared Responsibility

Drainage facilities should be regularly maintained



Before and After the Storm

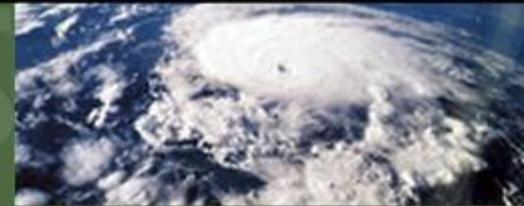


Shared Responsibility

System components should not be obstructed



Before and After the Storm

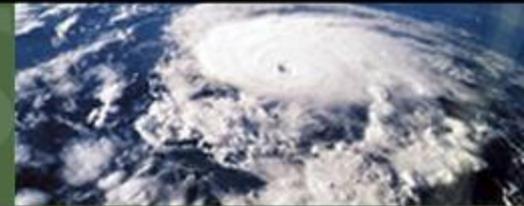


Shared Responsibility

Control structures must be functioning to prevent blockages



Before and After the Storm

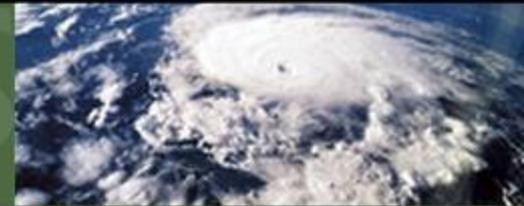


Shared Responsibility

Grassed water storage areas need regular mowing



Before and After the Storm

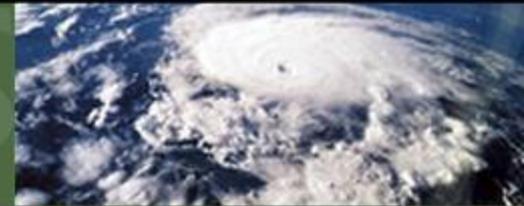


Shared Responsibility

Side slopes should be checked for erosion



Before and After the Storm

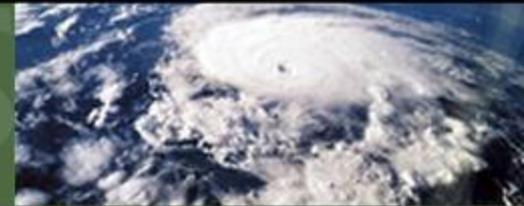


Shared Responsibility

**Washouts of dikes
and berms should
be repaired**



Before and After the Storm



Shared Responsibility

**Rights-of-way must
not be obstructed**



Before and After the Storm



Shared Responsibility

Clear rights of way help improve flood protection



After



Before

Before and After the Storm



South Florida flood control basics:

- **Flat terrain and intensive rains**
- **Drainage is through a 3-tiered water control system, which starts at the neighborhood level**
- **To function properly, all components must be kept in working order**
- **Always check with permit requirements before making significant repairs/upgrades**

Before and After the Storm

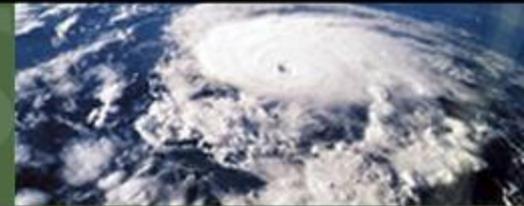


Tip: Keep a list of pertinent numbers and websites for reporting drainage problems



- **Homeowners' Association/Property Manager**
- **City, County, Local Drainage Districts**
- **South Florida Water Management District**

Before and After the Storm



**We work year-round
to prepare for the
rainy season**

Are YOU ready?



Before and After the Storm



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WATER MANAGEMENT DISTRICT

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June is Flood Awareness Month

Follow the leader... and learn how we work to help keep your feet dry during the wet season

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quick facts on...
Keeping the Canal Right-of-Way Clear
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