

# FLOOD FACTS

Important property protection information for Ormond Beach residents and property owners

In Ormond Beach, the primary threat of flooding results from the “ponding” of water during heavy storms. Some flooding can result from overflow of small ditches and streams during significant storm events, especially when the ocean and river tides are running higher than normal. Since Ormond Beach is relatively flat, however, stormwater sometimes simply overwhelms street drainage and storm outfall devices. Leaves and other debris can clog storm drains, causing water to back up into lower-lying areas. Residents are encouraged not to blow yard waste (i.e. grass clippings, leaves, and small branches) into the street to prevent clogging of the stormwater grates and other similar devices.

There are several areas throughout the City that have recurring flooding problems. South Beach Street and John Anderson Drive

are fairly low-lying streets which quickly become inundated during significant storm events; not only during hurricane season, but also during the winter months, when “nor’easters” blow in off the ocean and often “park” over the area for days, dumping huge quantities of rain on the area. The natural low point running the length of the peninsula side of the City (lying roughly between State Road A1A and John Anderson & Riverside Drive) is especially subject to the “ponding” effect. Many stormwater catch basins are located in this area, but are often overwhelmed, causing minor flooding. On rare occasions, flood waters may invade the lower-lying homes in those areas. Other areas of the City subject to localized flooding include Hand Avenue (near Bostrom Lane and between Coolidge Avenue and Woodgate Court) and Fleming Avenue (between Laurel Oaks Drive and Aston Circle). The general area between the Florida East Coast railroad tracks and Nova Road is an area in which streets may flood, depending on the water levels in the streams and tributaries of the Tomoka River and neighborhood stormwater retention ponds.

## The Flood Warning System

In the event of a major storm, the City receives notification from the Volusia County Emergency Management Center and certain City departments are put on alert. Local news media sources (radio

and television) are notified and distribute instructions to the public. If needed, the City Fire and Police Departments may notify area residents by door-to-door personal contact, telephone, and use of sirens and public address systems. During significant storms, the City Police and Fire Departments monitor storm updates and pass information on to media sources for distribution.

## Volusia County Emergency Operations Center (EOC)

The City of Ormond Beach works with the Volusia County EOC, the National Weather Service, and the National Hurricane Center to monitor flood and storm threats and advise the community accordingly.

## Volusia County-Ormond Beach Emergency Operation Plan

When a storm or flood threatens to impact the City, City staff monitors the event, relying on information from Volusia County officials and the National Weather Service for detailed and site specific information regarding storm conditions and flood threats. The National Weather Service issues updates, warnings, and evacuation notices.

## Flood Safety Measures

Protective measures can be taken to ensure the safety of life and property before, during, and after a flood:

**Do not walk through flowing water.** Drowning is the number one cause of flood deaths, mostly during flash floods. Currents can be deceptive; six (6) inches of moving water can knock a person off his feet. If walking in standing water, use a pole or stick to see how deep the water is.

**Do not drive through a flooded area.** More people drown in cars than anywhere else. Do not drive around road barriers; the road or bridge may be washed out.

**Stay away from power lines and electrical wires.** The number two cause of death after drowning is electrocution. Electric current can travel through water. Report downed power lines to the power company or emergency staff.

### Flood Insurance

For many people, their home and its contents represent their greatest investment. Property losses due to flooding are not covered under most standard homeowners’ insurance policies; however, flood insurance can be obtained through the National Flood Insurance Program (NFIP).

NFIP is a federal program established by Congress in 1968 that enables property owners to buy flood insurance at reasonable rates in participating communities. In return, those communities carry out flood management measures designed to protect life and property during future flooding. The Federal Emergency Management Agency (FEMA), through its Federal Insurance Administration, administers the NFIP. The City of Ormond Beach has participated in the NFIP since 1973. To find out more about flood insurance, contact an insurance agent. Since there is usually a thirty (30) day waiting period before a flood insurance policy takes effect, do not wait until a storm threatens before securing flood insurance.

## Maximum Flood Insurance Coverage Available in Ormond Beach

<u>TYPE</u>	<u>BUILDING</u>	<u>CONTENTS</u>
Single-Family Dwelling	\$250,000	\$100,000
Other Residential	\$250,000	\$100,000
Non-Residential	\$500,000	\$500,000
Small Business	\$500,000	\$500,000

## Property Protection Measures

Flooding causes more property damage in the United States than any other type of natural disaster. While recent construction practices and regulations have made new homes less prone to flooding, many existing structures remain susceptible. Throughout the country there is a growing interest in developing practical and cost effective methods for reducing or eliminating exposures to flooding hazards. Several effective ways include relocation of a building to a site not subject to flooding, construction of floodwalls or berms to keep water away from the property, or retrofitting structures to make them floodproof. Retrofitting is a different approach in that the property itself remains subject to flooding while the building is modified to prevent or minimize flooding of habitable space, and can be accomplished by elevation of the structure above flood protection levels, construction of barriers (floodwalls, berms), and/or dry floodproofing (permits entry and passage of flood waters).

### When a flood threatens, it is advisable to take the following emergency actions:

- Sand bag to reduce erosion and scouring;
- Elevate furniture above flood protection levels;
- Create floodway openings in non-habitable areas such as garage doors;
- Seal off sewer lines to the dwelling to prevent backflow of sewer waters.

## Floodplain Development Permit Requirements

Any development in the floodplain requires a building permit according to Chapter 342 of the Unified Land Development Code. To obtain a flood zone determination, contact the Ormond Beach Planning Department at 386-676-3238. The Ormond Beach Building Department may be able to provide a FEMA elevation certificate for structures built after 1991 and located inside special flood hazard areas. For more information, or if you suspect illegal floodplain development is occurring, call the Ormond Beach Building Department at 386-676-3233.

## Substantial Improvement Requirements

The City of Ormond Beach requires that if the cost of reconstruction, rehabilitation, addition, or other improvements to a building equals or exceeds 50% of the building’s assessed tax value, the building must meet the same construction requirements as a new building. Substantially damaged buildings must also be brought up to the same standards (e.g., a residence damaged so that the cost of repairs equals or exceeds 50% of the building’s value before it was damaged must be elevated above the base flood elevation). The assessed value of the structure, as listed by the Volusia County Property Appraiser’s Office, shall be determined before the improvement is started, or if the structure has been damaged and is being restored, before the damage or destruction occurred.

## Drainage System Maintenance

A community can lose a portion of its drainage system carrying or storage capacity due to dumping, debris, soil erosion, sedimentation, and overgrowth of vegetation. When this happens, flooding occurs more frequently and reaches higher elevations, subjecting otherwise protected properties to unnecessary risk of damage. Keep grass clippings and other debris out of stormwater drainage systems to prevent clogging and loss of stormwater storage and treatment capacity.

**If you experience or are aware of any localized drainage problems, including illegal stream dumping, please notify the Ormond Beach Public Works Department at 386-676-3220 so that the problem can be corrected.**

*Thank you!*

### Stations serving the Volusia County & Ormond Beach Area

**AM/FM Radio:**  
**WNDB 1150 AM**  
**WELE 1380 AM**  
**WKRO 93.1 FM**  
**WHOG 95.7 FM**  
**WGNE 99.9 FM**  
**WVYB 103.3 FM**

**Television:**  
**WESH Ch. 2**  
**WKMG Ch. 6**  
**WFTV Ch. 9**  
**CFN News Ch. 13**  
**WOFL Ch. 35**  
**WB WKCF Ch. 18**

**Ormond Beach Emergency Management:**  
**(386) 676-3220**

**Volusia County Citizen Information Center:**  
**(386) 254-4658**

**Websites for flood & emergency information:**

**City of Ormond Beach:**  
[www.ormondbeach.org](http://www.ormondbeach.org)

**Volusia County:**  
[www.volusia.org/emergency](http://www.volusia.org/emergency)

**FEMA:**  
[www.fema.gov](http://www.fema.gov)

**National Weather Service:**  
[www.srh.noaa.gov/mlb](http://www.srh.noaa.gov/mlb)

# City comes together after historic visits by Hurricanes Charley, Frances, Jeanne

It may not be November 30 yet, but as far as Ormond Beach residents are concerned, hurricane season is over. Residents, city crews, and storm debris contractors are finishing the cleanup efforts left after the historic visits of Hurricanes Charley, Frances and Jeanne.

The direct hit by Charley, and the impacts of Frances and Jeanne within a six-week period, caused several million dollars in damages to homes, businesses and city facilities.

Debris cleanup costs alone are expected to reach \$5 million, although about 90 percent of that figure may be reimbursed by federal and state funding. The debris cleanup is expected to reach 300,000 cubic yards by the time Public Works and Waste Management crews complete the final pass through the city by mid-November.

"Our residents, our emergency staff and many community agencies came together to keep people safe, minimize the damage and provide help for those who needed it most," said Mayor Fred Costello. "I couldn't be prouder of how our entire community responded to these unwelcome intruders."

Hurricane Charley hit town on Friday the 13th of August, traveling across the state from the west for a rare direct hit on Ormond Beach with hurricane gusts of 88 mph and recorded sustained winds of 69 mph.

The city had activated its Emergency Operations Center at Police Headquarters earlier that day, expecting 30-40 mph winds in the area. But at about 1:30 p.m., the storm shifted, putting Ormond Beach in its direct path.



The fury of Hurricane Frances pushed the Halifax River over its banks at Cassen Park and the Granada Pier Bait & Tackle shop along Beach St. directly across from City Hall. The fishing piers and the bait shop survived the storm and are open again to the public. *Photo by Ormond Beach Police.*

The EOC was staffed around the clock by staff members from Police, Fire, Public Works, Public Information, Information Systems, and Administration. Virtually all departments had a role: Leisure Services provided thousands of meals to emergency workers, Planning and Building Inspection conducted damage assessments immediately after the storms, and Human Resources provided some day care for children of employees working the storm recovery.

While the main brunt of the storm passed within a few hours, Charley left virtually the entire city without electrical power, blowing down thousands of trees, and putting the city on the brink of losing its water-sewer service.

Residents were urged to minimize water and sewer use, and they responded with a 30 percent reduction, which kept the systems

running until more power was restored.

Hurricane Charley hit the city's trees hard, racking up \$4 million in tree debris removal costs. Total damage to homes was \$2.7 million, with \$300,000 in damages to businesses and \$261,000 to city facilities.

Then Hurricane Frances visited the state on Labor Day weekend, coming in from from the Atlantic, traveling south and west of Ormond Beach, but bringing more than 24 hours of tropical storm-force winds. Sustained winds of 58 mph were measured at the EOC, with gusts of 79 mph on the beachside. In addition, Frances dumped 7.2 inches of rain on the city.

The city again activated its Emergency Operations Center and implemented some internal adjustments to improve the response.

"We brought in more generators for the water and wastewater systems and did everything we could to improve communications between police, fire and public works," said City Manager Isaac Turner. "I am very proud of the response by our staff who put in long hours under very stressful situations to keep our citizens safe and provide for their needs."

Since it was unsafe to leave during the storm, many staff members stayed in the EOC for 30 hours straight to ensure a quick response immediately after the storm.

Before Frances hit, Police and Fire personnel canvassed the evacuation areas on beachside and in manufactured home parks, and in some cases went door-to-door to encourage evacuations and track those who refused to leave. They also assisted many special needs residents to ensure their needs were being met.

Public Works maintained its citizen information line, staffed 24 hours a day, even during the storms. The Police non-emergency line was also utilized by citizens, especially to report downed power lines.

Immediately after the winds died down, Fire, Police, Public Works and Planning crews went out to the beachside and other parts of the city to resume 911 calls, clear roads, secure areas with downed power lines and flooded streets, and conduct early assessments of damage to city facilities, businesses and homes.

This early response enabled all major roads to be cleared by 10 a.m. Monday morning, allowing residents and business owners to return to the beachside.

The city opened a Comfort Station at the old Scotty's parking lot on Granada Boulevard, with ice, hot lunches and dinners provided with the help of the American Red Cross and Fire Department CERT volunteers.

Kevin Gray (right), the city's Environmental Systems Manager, has supervised the massive storm debris cleanup effort in coordination with Waste Management's Route Supervisor Pedro Pratt.



Public Works Maintenance Worker Joe Scott handles the chainsaw while Bookie Rigsby controls the front loader as they clear a city tree from a right-of-way. Clearing the streets, right-of-ways and parks of fallen trees has kept city Public Works crews busy for over two months. The city's contractor, Waste Management (pictured below) handles the curbside storm debris pickups, which will be completed by mid-November.

Damage estimates from Frances indicated at least \$4.51 million in damages to businesses and city facilities. The heavy rains caused additional water damage to many homes and businesses.

Soon after Frances, Hurricane Ivan threatened to take a track similar to Charley, but turned to the north, hitting the Florida Panhandle. However, Hurricane Jeanne then impacted the area on the weekend of September 24-25, fortunately with less force than initially feared, but causing serious beach erosion.

During the storms, Ormond Beach experienced temporary street flooding along the Halifax River on Beach Street and in other areas that impacted several homes within the city limits, but avoided the serious house flooding that hit some areas.

The beach erosion was also less severe in Ormond Beach than further south. Experts say that most of the sand pulled off the beach by the hurricanes will return naturally within about a year.



City Commissioners Jeff Boyle, Bill Partington and Mayor Fred Costello visited with Gov. Jeb Bush during the governor's visit to the Handi Ace Hardware Store in Ormond Beach.