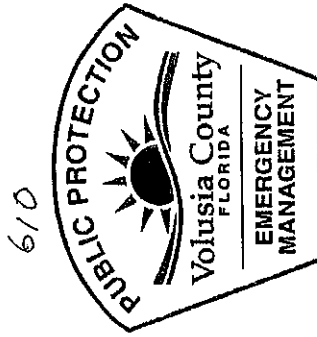




PSRST STD
U.S. POSTAGE
PAID
Bountstown, FL
PERMIT NO. 85

**COUNTY OF VOLUSIA
EMERGENCY MANAGEMENT**
*This information is being provided to you because your
property is in or near an area subject to flooding.*

CONTACT AND INFORMATION NUMBERS

Volusia County
Emergency Management
(386) 254-1500

Volusia County
Citizen Information Center
1-866-345-0345 (toll free)
Volusia County Building
& Zoning Department
(386) 626-6591

GENERAL FLOOD & EMERGENCY INFORMATION

Volusia County
www.volusia.org/emergency

FEMA

www.fema.gov

National Weather Service
www.srh.noaa.gov/mlb

RADIO & TV STATIONS

AM/FM Radio
WNOB 1150 AM, WKXO 93.1 FM, WHOG 95.7 FM
WVVB 103.3 FM, WLOY 98.5 FM, JOSE 98.1 FM
Television
WESH Ch. 2, WKMG Ch. 6, WFTV Ch. 9
WCFN News Ch. 13, WOFL Ch. 35, WDSC Ch. 15
UNIVISION Ch. 26, TELEFUTURA Ch. 43

FLOODING IN VOLUSIA COUNTY

In Volusia County, the primary threat of flooding results from the "pending" of water during heavy storms, and, potentially, storm surge from hurricanes. Some flooding can result from overflow of small ditches and streams during significant storm events, especially when the ocean and river tides are turning higher than normal. Since the County is relatively flat, however, storm water 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 storm water grates and other similar devices.

There are many areas throughout the County that have recurring flooding problems. The natural low point running the entire length of the peninsula side of the County is especially subject to the "ponding" effect. Many storm water 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 County subject to localized flooding include the inhabited areas adjacent to the St. Johns River, Maytown Road area; Tomoka Estates; the Samsula area; and the Plantation Pines development, depending on the amount of rainfall and levels in streams and tributaries of the Halifax, Tomoka, and St. John's rivers, and neighborhood storm water retention ponds.

Know your flood hazard – you are receiving this brochure because your property is in an area that has either flooded in the past, or is near a property that has experienced one or more floods. To find out what flood zone you are in, call your local Building and Zoning Department for a flood zone determination.

DRAINAGE SYSTEM MAINTENANCE

A community can lose a portion of its drainage system carrying or storage capacity due to clogging, debris, sedimentation, 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, tree limbs, and other debris out of storm water drainage systems to prevent clogging and loss of storm water storage and treatment capacity. Remember, "The home you flood may be your own." If you experience or are aware of any localized drainage problems, including illegal stream dumping, please call the Public Works Department at 386-822-6422. Chapter 106, Sec 108-41 of the Volusia County Code of Ordinances prohibits the disposal of any solid waste in any stream, ditch, river, pond, or creek.



FLOOD SAFETY MEASURES

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

BEFORE A FLOOD

- Avoid building in a floodplain.
- Construct barriers (levees, beams, floodwalls) to stop floodwater from entering your home.
- Seal walls with waterproofing compounds to avoid seepage.
- If a flood is likely in your area, listen to the radio or television for information.
- Know the difference between a flood watch and a flood warning. A watch means flooding is possible. A warning means flooding is occurring or will occur soon.
- Designate a place where your family can rendezvous after an evacuation order is lifted in case you get separated.

WHEN A FLOOD IS IMMINENT

- Place sand bags to reduce erosion and scouring.
- Elevate furniture and electronic equipment above flood protection levels.
- Create doorway openings in non-habitable areas such as garage doors.
- Be prepared! Pack a bag with important items in case you need to evacuate. Don't forget to include needed medications.
- If advised to evacuate your home, do so immediately.
- If possible, bring in outdoor furniture and move essential items to an upper floor.
- Turn off utilities at the main switches or valves if instructed to do so. Disconnect electrical appliances.

DURING A FLOOD

- Do not walk through moving water. As little as 6 inches (15 centimeters) of moving water can make you fall.
- If you have to walk in water, wherever possible, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you. Wear rubber boots. Be aware that snakes and other creatures will be displaced from their regular habitat.
- Do not drive into flooded areas. If floodwaters rise around your car, abandon the car and move to higher ground if you can do so safely. "Turn around, don't drown!" More people drown in their car than anywhere else.
- Do not touch electrical equipment if you are wet or standing in water.

AFTER A FLOOD

- Listen for news reports to learn whether your water supply is safe to drink.
- Avoid floodwaters: water may be contaminated by oil, gasoline, or raw sewage. Water may also be electrically charged from underground or downed power lines.
- Avoid moving water.
- Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a car.
- Stay away from downed power lines, and report them to your power company.
- Return home only when you are told it is safe.

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. 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 flood proofing (permits entry and passage of flood waters).

FLOOD INSURANCE

For most people, their home and its contents represent their greatest investment. Property losses due to flooding are not covered under most homeowners' insurance policies; however, flood insurance can be obtained through the National Flood Insurance Program (NFIP). NFIP was established by Congress in 1968, enabling 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 County of Volusia 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.

DEVELOPMENT PERMIT REQUIREMENTS

Any development in a floodplain requires a building permit according to Chapter 72, Section 72-746 of the Volusia County Land Development Code. To obtain a flood zone determination or to discuss any related inquiries, please call the Building Department at 386-626-6591. The Volusia County 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, please call the Building Department, 386-626-6591.

NATURAL AND BENEFICIAL FUNCTIONS OF THE FLOODPLAIN

Flood plains are areas adjacent to rivers, ponds, lakes, and oceans that are periodically flooded at different points in time. Floodplains are hydrologically important, environmentally sensitive, and ecologically productive areas that perform many natural functions. They contain both cultural and natural resources that are of great value to society. Flooding occurs naturally

along every river and coastal areas. Flood waters can carry nutrient-rich sediments which contribute to a fertile environment for vegetation. Floodplains are beneficial for wildlife by creating a variety of habitats for fish and other animals. In addition, floodplains are important because of storage and conveyance, protection of water quality, and recharge of groundwater.

Floodplains provide cultural, educational, recreational, and scenic values to humans. The earliest Native Americans settled in and around floodplains, as they provided a wealth of food and provided the easiest means of travel. Consequently floodplains include many archaeological and historical sites. Floodplains also serve as a nature study center for scientific research. Due to the scenic value that they provide, floodplains are ideal locations for parks and campgrounds. Water-oriented sports and recreational activities such as boating, swimming, hiking, and camping are all dependent on floodplain areas. Wildlife resources in floodplains can be managed for observation, and recreational hunting and fishing. Natural floodplains are valuable in providing the "wilderness experience" that is an important part of Floridan culture.

Marshes, near-shore ocean bottoms, beaches, bays, coastal dune lakes, tidal flats, and estuaries are all components that make up the coastal floodplain of Volusia County. Coastal beaches, dunes, banks, and tidal flats all play roles in protecting the land from destructive coastal storms, such as hurricanes. In coastal systems, aside from major storm events where waves may overrun large areas, inundation follows a largely predictable tidal cycle. Coastal floodplains are recognized for their importance to estuarine and marine fisheries. Estuarine wetlands are important for breeding, nursery, and feeding grounds for marine fisheries and coastal floodplains are important to waterfowl and other wildlife. Shallow coastal areas such as estuaries, tidal flats and rivers, and beaches are significant for shellfish, reptiles, and other fin-fish. The water quality in these areas is affected by changes in sediments, salinity, nutrients, oxygen, temperature, and the addition of various pollutants. Rivers, creeks, and lakes that have an unimpeded connection to the sea provide breeding and feeding grounds for a variety of coastal marine life. Do not pick sea oysters or tamper with sea turtle nests - it's illegal and carries a significant fine

Riverine systems such as the Indian, Halifax, and Tomoka Rivers vary in steepness, width, flow, sediment deposition, and erosion. These riverine floodplains typically flood during the tropical storm events, but are subject to periodic flooding due to excessive rainfall. The flooding brings erosion and deposition of soils and can determine considerably the shape of the floodplain, the depth and composition of soils, the type and density of vegetation, the presence and extent of wetlands, richness and diversity of wildlife, and the depth of groundwater. The major flood component of a riverine system is the flood way. Flood ways are defined as that area of the watercourse that is necessary to carry the base flood without increasing the water surface elevation more than one foot. Development is heavily regulated in flood way areas. Riverine

systems are important habitats for a variety of fish, reptiles, vegetation, and tubenosing wildlife. These systems provide feeding and breeding grounds for these species.

The importance of maintaining natural floodplains is not a difficult idea to understand. However, humans have always been attracted to floodplains because of their many sustaining attributes. Human development and industrialization take a toll on the natural functions of the floodplains. Development in the floodplains causes decreases in water quality, loss of wildlife habitats, and an increase in severity and frequency of flood losses. Understanding the importance of maintaining the natural functions of floodplains can lead to better floodplain management approaches that will better protect the natural and beneficial functions of floodplains.

HURRICANE PREPAREDNESS

Hurricanes are strong storms that can be life-threatening as well as cause serious property-threatening hazards such as flooding, storm surge, high winds and tornadoes. Preparation is the best protection against the dangers of a hurricane. Know the difference between the threat levels and plan accordingly.

HURRICANE WATCH

Hurricane conditions are a threat within 48 hours. Review your hurricane plans. Get ready to act if a warning is issued, and stay informed. Don't forget your pets.

HURRICANE WARNING

Hurricane conditions are expected within 36 hours. Complete your storm preparations and leave the area if directed to do so by authorities.

- Listen to a NOAA Weather Radio for critical information from the National Weather Service (NWS).
- Check your disaster supplies. Replace or restock as needed.
- Bring in anything that can be picked up by the wind (bicycles, lawn furniture).
- Close your windows, doors and hurricane shutters. If you do not have hurricane shutters, close and board up all windows and doors with plywood.
- Turn your refrigerator and freezer so that food will last longer if them closed as much as possible so that food will last longer if the power goes out.
- Turn off propane tank.
- Unplug small appliances.
- Fill your car's gas tank.
- Create a hurricane evacuation plan with members of your household. Planning and practicing your evacuation plan minimizes confusion and fear during the event.
- Find out about your community's hurricane response plan. Plan routes to local shelters, register family members with special medical needs and make plans for your pets to be cared for.
- Obey evacuation orders. Avoid flooded roads and washed out bridges.

SUBSTANTIAL IMPROVEMENT REQUIREMENTS

The County of Volusia 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 at least one foot 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. If the structure has been damaged and is being restored, a determination would be made of what the assessed value was before the damage or destruction occurred.

FUNDING SOURCES FOR REPETITIVE LOSS

PROPERTIES

Repetitive Loss properties represent only one percent of all flood insurance policies, yet historically they account for one-third of the claim payments. Mitigation of flood risk to these repetitive loss properties reduces the overall costs to the National Flood Insurance Program (NFIP) as well as to individual homeowners. The Federal Emergency Management Agency (FEMA) has several grants and an extra flood insurance program available to help repetitive loss property owners reduce exposure to flood damage.

Hazard Mitigation Grant Program (HMGP) - a grant made available after a Presidential disaster declaration
www.fema.gov/government/grant/hmgp/index.shtml
-Flood Mitigation Assistance (FMA) - a grant that the County can apply for each year (www.fema.gov/government/grant/fma/index.shtml)

-Pre-Disaster Mitigation (PDM) - a nationally competitive grant that the County can apply for each year (www.fema.gov/government/grant/pdm/index.shtml)
-Severe Repetitive Loss (SRL) - a grant that is reserved for "Severe" repetitive loss properties, i.e., those with their flood insurance policies administered by FEMA's Special Direct Facility rather than a private insurance company (www.fema.gov/government/grant/srl/index.shtml)
-Increased Cost of Compliance (ICC) - an extra flood insurance claim payment that can be provided if an insured building was flooded and then declared substantially damaged by the local permit office. (www.fema.gov/library/viewRecord.do?id=30110)
Most of the FEMA grants provide 75% of the cost of a project. The owner is expected to fund the other 25%. ICC pays up to \$30,000 of the cost of bringing the damaged building up to the local ordinance flood protection standards.

What you can do:

- Check the websites and read up on the details of the funding programs that are appropriate for your situation. For example, if Florida has not been declared a Federal disaster area for some time, look at the grants that have annual application procedures, not HMGP.
- Keep your flood insurance policy in force. All grants and ICC only fund properties that currently have a flood insurance policy.