

# ASTOR FLOOD STUDY

## Flood Early Warning System

A Large Portion of Astor Lies within the River's Natural Floodplain

The majority of the reported flooding problems lie within the special flood hazard areas



### Flood Early Warning System

- ◆ Provide as much advance notice as possible of an impending flood
- ◆ Protects citizens in flood prone areas
- ◆ Warning enable residents and businesses to secure property and move to safety
- ◆ Crucial for public safety



### Lake County Flood Facts

IMPORTANT INFORMATION FOR RESIDENTS AND PROPERTY OWNERS REGARDING FLOOD RISKS

**The Local Flood Hazard:** Flooding is an act of nature, which respects no boundary lines, either community or personal. Flooding in Lake County may be caused by heavy rainfall that occurs in short periods, as is common during seasonal storms. Tropical storms and hurricanes can also cause flooding not just along a coastline but far inland as well. Because of Lake County's location between the Gulf of Mexico and the Atlantic Ocean, and because of its low-lying areas, there is always a flood threat from heavy storms. The Federal Emergency Management Agency (FEMA) has identified portions of the County as a Special Flood Hazard Area (SFHA) on the Flood Insurance Rate Maps (FIRMs). If you live in unincorporated Lake County, you can call Lake County Public Works Department at (352) 253-4931 and for a small fee you can find out if your property is located in a flood zone. In addition, on-site visits and technical assistance are provided to residents who are experiencing problems in areas of flooding and drainage. Please direct inquiries to (352) 253-4990.

**Flood Safety Measures:** You can protect yourself from flood hazards by taking measures to ensure the safety of life and property before, during, and after a storm. Do not walk through flooding water. Drowning is the number one cause of flood deaths, mostly during flash floods. Currents can be deceptive; six inches of moving water can knock you off your feet. If you walk in standing water, use a wooden pole or stick to see how deep the water is.

**Do not drive through a flooded area.** More people drown in their 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.** Electric current can travel through water. Report downed power lines to the Power Company or the County Emergency Management Office.

**Natural and Beneficial Function of Floodplains:** Floodplains in their natural state provide several beneficial functions. They can spread flood waters over a large area, thus reducing the velocity of the water; they act as a buffer between the flood waters and developed areas to reduce potential damage to buildings; they can improve water quality by filtering water before it reaches our underground water supply; and they can provide habitat for flora and fauna.

**Flood Warning System:** Lake County has a Comprehensive Emergency Operation Plan (CEOP) that provides citizens with information on impending storms or flood threats. Lake County Emergency Operation Center (EOC) works with the Cities, the National Weather Service, and the National Hurricane Center to monitor storms and flood threats to advise the community accordingly. When a storm or flood threatens to impact the County, the Emergency Management staff monitors the event and relies on information from the National Weather Service for details and site specific information regarding storm conditions and flood threats. Emergency Management issues updates, warnings and evacuation notices. Stay tuned to local radio and TV stations for official advisories or bulletins.

The following AM stations service the Lake County area  
WBQ AM 1410 WKIQ AM 1240 WLBE RADIO AM 790

**Flood Insurance: The National Flood Insurance Program:** (NFIP) was established by Congress in 1968 and is administered by the Federal Emergency Management Agency (FEMA) through its Federal Insurance Administration. It makes federally guaranteed flood insurance available at a reasonable rate to property owners and renters in communities that voluntarily adopt and enforce the NFIP's floodplain management requirements. Unincorporated Lake County has participated in the NFIP since 1982.

As a result of steps taken by Lake County Board of County Commissioners and County staff, unincorporated Lake County is now rated a Class 8 community. This rating means that flood insurance issued or renewed, for property located in the Special Flood Hazard Areas (SFHAs), will receive a 10% premium discount on Flood Insurance. To find out more about flood insurance for your property and its contents, contact your insurance agent or visit your local library. There is usually a 30-day waiting period before a flood insurance policy takes effect, so do not wait until a storm threatens before you secure the flood insurance you need.

Remember that standard homeowner's insurance policies do not cover losses due to flooding.

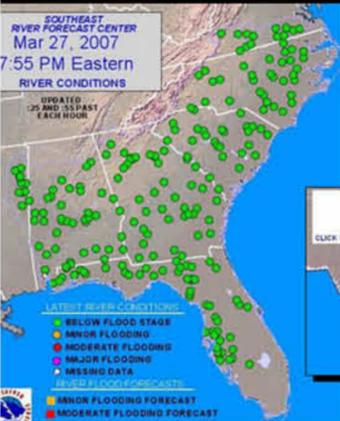
#### Flood Insurance Coverage:

The following chart lists the amount of maximum coverage available to property owners within Lake County.

BUILDING COVERAGE		CONTENTS COVERAGE	
Single Family Dwelling	\$250,000	Residential	\$100,000
Other Residential	\$250,000	Non-residential	\$500,000
Non-residential	\$500,000	Small Business	\$500,000
Small Business	\$500,000		



### Forecast Points by Southeast River Forecast Center (SERFC)



Currently, the closest forecast point to Astor is Deland

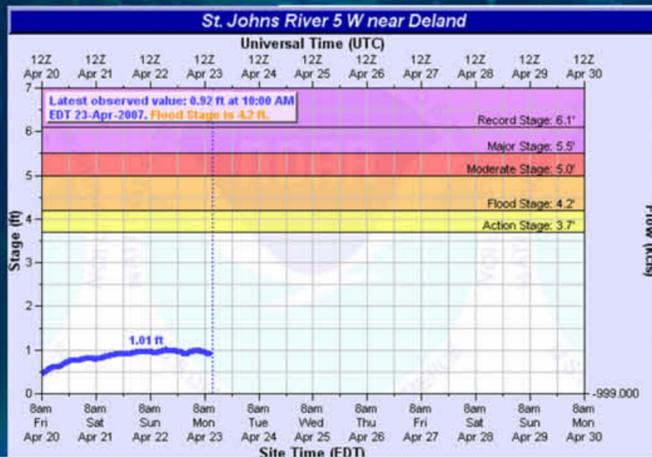


<http://www.srh.noaa.gov/serfc/>

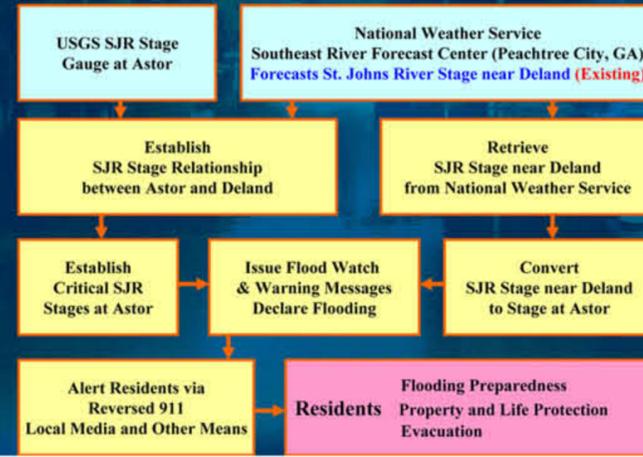
### Possibility 1



### Real-time River Stage of SJR near Deland



### Possibility 2



### Lake County Flood Facts

IMPORTANT INFORMATION FOR RESIDENTS AND PROPERTY OWNERS REGARDING FLOOD RISKS

**Property Protection Measures:** Flooding causes more property damage every year in the United States than any other type of natural disaster. There are several cost-effective techniques for decreasing or eliminating exposures to flooding. Several effective ways include relocation of a building to a site not subject to flooding, construction of floodwalls and berms to divert water from the property, or floodproofing (retrofitting) a structure. It is also important that the building site has the proper lot grading to insure that water is diverted away from the structures, dispersing it and collecting it in a proper area such as a swale or a retention pond. Remember that it is also important that you do not cause your neighbor's property to become susceptible to flooding due to your flood protection measures.

Here are some common retrofitting approaches:

1. Elevate the structure above the Special Flood Hazard Area (SFHA).
2. Construct barriers (floodwalls, berms).
3. Wet floodproofing (permits entry and passing of floodwaters through the structure).

**Flood Safety:** There are several actions you can take to minimize the damaging effects of flooding.  
1. Sand bag to reduce erosion and prevent water from encroaching on your structures.  
2. Elevate furniture above your flood protection level.  
3. Create roadway openings in non-habitable areas (such as garage doors).  
4. Seal off sewer lines to prevent the backflow of sewer water.

**Before the Storm:** If your home is well constructed, and local authorities have not called for evacuation, stay home and make emergency preparations. If told to evacuate, follow all instructions from local authorities and follow safe evacuation routes to shelter. Your personal emergency plan should provide for your pets, hurricane supplies (food, water, medicine, first aid kit, battery-powered radio, flashlights, extra batteries, etc.) and insurance considerations. When evacuating, take proper identification and important personal papers and documents. For an information kit on preparing your home and family for emergency, please contact Lake County Emergency Services at (352) 343-9420.

**During and After the Storm:** If you are in a public shelter, remain there until informed by those in charge that it is safe to leave and return home. Carefully check for structural damage before entering a building after a storm. Turn electricity on one breaker at a time and watch for smoke or sparks. Report broken sewer, water mains and downed power lines to your utility companies.

**Floodplain Development Permit Requirements:** What is the 100-year flood? This is a storm event having a 1% probability of occurring in any given year. This event can occur several times within a year. Any development in the floodplain requires a building permit. This requirement includes, but is not limited to, construction of new structures (including the placement of mobile homes or park models and RVs if permanently secured and on the site for more than 180 days), improvements to existing structures, excavation, filling, dredging, paving, drilling, mining, land clearing, grading, driving of piles, and permanent storage of materials and/or equipment.

Lake County also requires that if development occurs within an area of a flood zone that the finished first floor of the structure is at a minimum of one and a half feet (18") above the Base Flood Elevation (BFE) for that Special Flood Hazard Area. A Federal Emergency Management Agency (FEMA) Elevation Certificate will be required certifying the height of the finished first floor.

**Substantial Improvement / Damage:** If the cost of improvements or the cost to repair the damage of an existing structure exceeds 50% of the market value of the building, it must be brought up to current floodplain management regulations. This means an existing structure must meet the requirements for new construction.

**Drainage System Maintenance:** A community can lose a portion of its drainage system carrying or storage capacity due to dumping, debris, soil erosion and sedimentation, and overgrowth of vegetation. When this happens, flooding occurs more frequently and reaches higher elevations, subjecting properties otherwise protected 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 suspect that illegal floodplain development is occurring or illegal dumping into a stormwater drainage system or water body, contact Lake County Code Enforcement Department at (352) 343-9639. If a Lake County stormwater drainage system needs some maintenance or needs to be repaired, call Lake County Public Works Department at (352) 253-4990.

Visit <http://www.fema.gov/> for more information relating to flood-related issues.



For More Information on Floods, contact:  
Lake County Public Works Department  
Stormwater Division  
123 N. Sinclair Ave  
Tavares, FL 32784  
(352) 253-4931

