

Sanibel's Flood Threat

Flooding on Sanibel is caused by heavy rainfall that occurs in short periods of time, as is common during summer thunderstorms, and by tidal surges that accompany coastal storms, tropical storms and hurricanes. Hurricane tidal surges are Sanibel's greatest flood threat, and can cause flooding up to 24 hours before the "eye" of the storm reaches the coast. The table below indicates possible storm surge levels of various categories of hurricanes.

<u>Category</u>	<u>Wind Speed</u>	<u>Storm Surge</u>
1	74 - 95 mph	4 to 5 feet
2	96 - 110 mph	6 to 8 feet
3	111 - 130 mph	9 to 12 feet
4	131 - 155 mph	13 to 18 feet
5	156 mph+	19 feet+

Because of Sanibel's low land elevations and proximity to the Gulf of Mexico, the flood threat is significant. Due to this threat, the Federal Emergency Management Agency (FEMA) has identified the entire City as a Special Flood Hazard Area on the Flood Insurance Rate Maps. These maps establish base flood elevations for all development, with the lowest permitted habitable floor levels ranging from 8 to 19 feet above sea level.

Sanibel had a four foot surge, much less than the 18 feet that was predicted, from Hurricane Charley. The potential for flood losses on the Island, however, always exists. Some storms, such as the March 13, 1993 "Storm of the Century" produced coastal flooding that resulted in significant property damage. Island residents should know that every structure on Sanibel is in a flood hazard area and is subject to flooding. Residents need to respect this hazard and be prepared to deal with it accordingly.

Flood Safety Measures

Sanibel residents can protect themselves from the flood hazard on this vulnerable barrier island by taking measures to ensure the safety of life and property before, during, and after a flood occurs. Safety precautions that can minimize the potential losses in such events include:

Before the Storm. Know Sanibel's flood warning procedures. Many of these procedures are outlined in this brochure. Plan your evacuation in advance. Know when, where, and how you are going to evacuate prior to a storm. Sanibel has posted all primary evacuation routes with blue and white signs. Evacuation time for Sanibel

could be as long as 18 hours. Because some of the Island's evacuation routes are prone to flooding early in a storm, the time required to evacuate may be longer. Your evacuation plan should provide for special needs candidates, pets, your personal hurricane supplies (food, medicine, etc.) and insurance considerations. If you evacuate, take proper identification and important personal papers and documents along with you. If you live in an area that is particularly vulnerable to flooding, you may want to keep plywood, plastic sheeting, lumber, and other materials in stock to help prepare your property for the storm and to aid in emergency repairs afterwards.

Preparation for Evacuation. Keep a battery powered radio tuned into local stations, and if an evacuation order is given comply with it. Even if the evacuation order turns out to be unnecessary, leaving the Island is better than risking the potential loss of life by staying. Don't wait for a storm to strike.

When preparing your home prior to evacuation, it is advisable to turn off all the electricity. Remember to empty the contents of your refrigerator. Also, fill your tubs, sinks, and any available containers with water, in case fresh water is not available after the storm. Shut off your water main to prevent any contaminated water from backing up into your house. If possible, board up your windows to protect them from flying debris. Move as many valuables as possible to upper floors or higher elevations. Elevate furniture if possible.

Permanent property protection measures such as structural elevation and flood proofing are non-emergency improvements designed to minimize potential flood damage. Since every structure on Sanibel is unique in its permanent property protection needs, individuals should call the Building Department (472-4555) for assistance.

After the Storm. The City will be working as quickly as possible after the storm to insure a speedy and safe return to the Island. Often more people are injured after a storm due to unsafe buildings, downed power lines, contaminated water, and other unsafe conditions than are injured in the storm itself. Carefully check for structural damage prior to entering a building. Use caution when reentering the structure. Turn on electricity one breaker at a time and watch for smoke or sparks.

For More Information. These are just a few safety measures residents can take to minimize the loss of life and property associated with flooding. Additional information on flood safety measures can be obtained through the Sanibel Emergency Management Plan (SEMP). If you are interested in finding out more about

what you can do to help prepare for and recover from a storm, contact SEMP coordinator, Major Murray at 472-3111.

Additional sources for flood safety measures on the internet are:

National Hurricane Center...

www.nhc.noaa.gov

Florida Division of Emergency Management...

www.floridadisaster.org

Federal Emergency Management Agency...

www.fema.gov

City of Sanibel; www.mysanibel.com

Or call:

1-800-933-6093

Flood Warning Systems

Residents should be aware that the Sanibel Emergency Management Plan (SEMP) includes a number of warning systems, outlined below, which provide Islanders with up to the minute information on impending storms or flood threats.

Lee County Emergency Operations Center (EOC).

The Lee County EOC works with the City, the National Weather Service, and the National Hurricane Center to monitor flood and storm threats and advise the community accordingly. Potential flood alerts are issued over local radio and television stations, and over NOAA weather alert radio frequency of FM-162.475 MHZ.

Sanibel Emergency Management Plan (SEMP).

When a storm or flood threatens to impact the City, the Sanibel Emergency Operations Center (EOC) is activated at City Hall. The City has its own weather consultant who provides EOC staff with detailed and site specific information regarding storm conditions and flood threats. EOC workers issue updates, warnings and evacuation notices as needed over cable television, alert radios, web-site, communicator,

Alert Radios. In addition to the weather warnings and updates broadcast on television and radio, the Sanibel Police Department broadcasts local updates over tone activated "Alert Radios".

Permit Requirements

With Sanibel's participation in the National Flood Insurance Program (NFIP), the City administers flood management regulations and measures designed to minimize the potential of flood losses on the Island. Any development on Sanibel requires a permit from either the City Planning or Building Department, or both. Through this process, the City ensures development is taking place according to flood regulations. Regulations include required elevations of living floor areas, floodproofing of certain construction, limitations on placement of fill and prohibitions of certain substantial improvements, additions or reconstruction.

In accordance with NFIP standards, the City of Sanibel requires that if the cost of any reconstruction, rehabilitation, addition or other improvements to a building equals or exceeds 50% of the building's market value, such work is considered a substantial improvement. The existing building is then required to meet the same standards as a new building. For residential structures, these requirements typically mean raising the living area of the building to the base flood elevation.

The City's substantial improvement requirements are enforced through the development and building permitting process. Applicants for remodeling or repair of "nonconforming" structures (i.e. buildings, which are not elevated to or above the base flood elevation) are required to submit a cost estimate of the improvement and, if necessary, an appraised value of the existing structure, to determine if the work constitutes a substantial improvement. With these requirements, the City ensures that over time more of the older nonconforming structures on the Island will be elevated too above the base flood elevation, and protected from potential food damage.

Sanibel's permitting review process may seem cumbersome at times, but is necessary to allow the City to participate in the NFIP, making flood insurance available to any Island residents who wish to protect their property from flood damage. Development that occurs without City permits threatens the City's continued participation in the NFIP and the ability for residents to obtain flood insurance. If you see development occurring without permits, protect your rights and contact the City immediately.

Are You Insured?

For many people, their home and its contents represent their greatest investment. Property losses due to flooding are not covered under most standard homeowner insurance policies. You can protect your home and its contents with flood insurance through the National Flood Insurance Program (NFIP).

The NFIP is a federal program established by Congress in 1968 which enables property owners to buy flood insurance at reasonable rates in participating communities. In return, participating communities carry out flood management measures designed to protect life and property from future flooding.

The NFIP is administered by the Federal Emergency Management Agency through its Federal Insurance Administration. The City of Sanibel has participated in the NFIP since 1979.

Flood insurance is required on Sanibel for any federally backed mortgage. The amounts of flood insurance that are available through the NFIP as of March 1, 1995 are as follows:

Building Types	Amount Available
Single family	\$ 250,000
All other residential	\$ 250,000
Non-residential	\$ 500,000

Contents	
Residential	\$ 100,000
Non-residential	\$ 500,000

To find out more about flood insurance for your property and its contents, contact your insurance agent. There is usually a waiting period before a flood insurance policy takes effect, so don't wait until a storm threatens before you secure the flood insurance you need. The effective date of your policy after the 30 day waiting period may be obtained from the insurance producer who writes your policy.

Other additional information may be obtained at:
<http://www.fema.gov/nfip/>

Floodplain Management

In their undisturbed and natural state, Sanibel's interior wetlands provide many beneficial functions and resources on Sanibel, including floodplain management, wildlife habitat, and recreational opportunities. Since the late 1980's, the City has been working toward the preservation and restoration of the Island's Interior Wetlands System to

protect these functions and resources for future generations. Through the City's Land Acquisition Program, and the land acquisition efforts of the State of Florida and the Sanibel-Captiva Conservation Foundation, the majority of the interior wetlands is in public ownership, and protected for conservation purposes in perpetuity. Public ownership will ensure the continued provision and protection of open space, passive recreational opportunities, wildlife breeding and feeding grounds, and habitat for some of Sanibel's rare and endangered species.

In addition to land acquisition, the City has completed implementation of the Surface Water Management Plan. With surface water management in place, the City, has been able to reduce flood peaks and duration on the Island, provide additional flood storage when needed, and improve and maintain surface and ground water quality. The system will also have environmental benefits by restoring and enhancing wildlife habitat, and maintaining the diversity and integrity of this unique wetlands system.

Drainage System Maintenance

Over time the City has improved and maintained a stormwater management system on the Island which has significantly reduced the road and yard flooding that used to be commonplace during the summer rainy season. Every year the City budgets funds for the inspection and maintenance of the drainage ditches, catch basins, and culverts that comprise the stormwater drainage system on Sanibel. All facets of the Island's drainage system are inspected and maintained on an annual basis to insure this system will function when heavy rains occur. The City has also adopted regulations which make it illegal to dump any garbage, refuse, or vegetative debris in any stream, canal, or other water body on the Island to further protect the integrity of Sanibel's vital drainage system. If you experience any localized drainage problems, please notify the City's Public Works Department at 472-6397 so that the problem can be corrected. If you wish to report a violation of the City's stream dumping regulations, contact the Sanibel Police Department at 472-3111.

Assistance is Available

One of the reasons Sanibel is recognized for its good floodplain management policies is that the City provides public information regarding flood hazards, flood insurance, and flood protection and mitigation measures designed to correct existing deficiencies in flood-prone construction. Note: Elevation Certificates are on record for structures built after the City entered NFIP. Some of the information and assistance available to Island residents is outlined below.

Flood Insurance Rate Maps

The Sanibel Building Department is the community's primary source of information regarding Flood Insurance Rate Maps. Since all of Sanibel is in a Special Flood Hazard Area, it is important to know the base flood elevation of any property and the flood insurance purchase requirements, if applicable. Call 472-4555, write, or stop by the Sanibel Building Department at City Hall if you have any questions regarding Flood Insurance Rate Maps. You may access FEMA Flood Maps online through the City's web-site at www.mysanibel.com. You can look up your specific home address.

Flood Protection and Mitigation

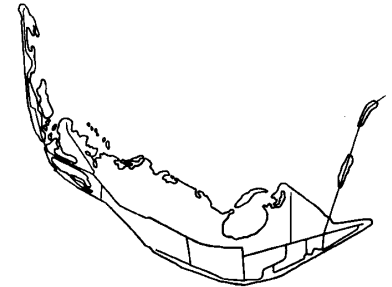
The City's Building Official Harold Law is available to answer public inquiries regarding floor elevations of existing properties, names of contractors knowledgeable in flood retrofitting techniques, advice on how to select a qualified contractor, review of retrofitting plans, and on-site visits to advise owners of appropriate protection measures. FEMA does offer financial aid programs to mitigate repetitive flood loss properties. The City's Engineer, Gates Castle, is also available to answer questions regarding historical flooding problems and the potential flood threat in any given neighborhood.

Flood Reference Library

The Sanibel Public Library, 770 Dunlop Road, provides flood protection reference material to the general public. Reference material includes Flood Insurance Rate Maps, state and federal publications covering a variety of subjects, and a list of agencies and individuals to contact for more information. Residents are urged to take advantage of this flood information resource.

SANIBEL FLOOD FACTS

IMPORTANT INFORMATION FOR ALL RESIDENTS AND PROPERTY OWNERS REGARDING THE RISK OF FLOODS ON SANIBEL ISLAND



Did You Know?

Due to Sanibel's low land elevations and proximity to the Gulf of Mexico, the entire island is considered a *special flood hazard area* by the (F.E.M.A.) Federal Emergency Management Agency. This means that all property on Sanibel is in a floodplain, and is at risk of flooding.

**Prepared by:
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