#### Your property is in or near the flood hazard area as mapped by the Federal Emergency Management Agency (FEMA). A map of the 100year and 500-year floodplains within the City of Myrtle Beach is provided in this brochure for your reference. A larger flood map showing lot-by-lot detail of flood zones and required elevations can be viewed in the Construction Services Department, located in the City Services Building at 921 Oak Street.

Certified Floodplain Managers are available in the Construction Services Department to assist you with maps and flood protection information and provide advice on retrofitting techniques for structures in the

floodplain. There are also certified professionals available to provide on-site visit regarding flooding advice. Also available for review are current and past FEMA Flood Insurance Rate Maps (FIRM), and topographical maps that show elevations of property within the city. FEMA FIRM maps, reference materials, pamphlets and videos are also available at Chapin Library.

#### *Most flooding* in Myrtle

Beach is caused by ocean water and rain that are driven landward by storms, such as tropical storms and hurricanes. Occasionally, heavy rains will cause localized flooding. Major flooding can occur along the beachfront and inland along the swashes. Flood waters along the beachfront can rise to heights of 15 to 20 feet above mean sea level, with destructive waves reaching even higher. Most of the land east of Ocean Boulevard/Beach Drive is in this floodplain. Low land near Midway, Withers, Deephead, Cane Patch and Bear Branch Swashes also is prone to flooding.

Major storms affecting the Myrtle Beach area in recent years include Hurricane Hugo (1989), Hurricane Bertha (1996), Hurricane Fran (1996), and Hurricane Floyd (1999). Not only do hurricanes create floods, but they may cause erosion which increases the likelihood of severity of oceanfront flooding during subsequent storms.

Your home and its contents represent your greatest investment, but your homeowner's or renter's insurance policy will not cover losses due to flooding. Myrtle Beach participates in the National Flood Insurance Program, which makes flood insurance available to everyone in the city. Just because your home has not flooded in the recent past does not mean that you are safe. You should carefully consider buying flood insurance to protect yourself from losses due to flooding.

Property owners can insure their buildings and contents, and renters can insure their possessions. You do not have to live in the floodplain to qualify for flood insurance. Information about flood

insurance is available from your insurance agent.

Since 1991, the city has participated in the National Flood Insurance Program's Community Rating System, which means premiums for flood insurance in Myrtle Beach are lower than they otherwise would be. The city's participation in the CRS program includes the

Construction Services to answer questions (on-site or off) about flooding, building requirements that are more stringent than federal minimum standards, regulations for stormwater management in new construction, publications in Chapin Library, and public outreach projects, like this brochure. For more information, contact Construction Services (918-1111).

The City of Myrtle Beach requires that all new residential structures be elevated no less than three feet above the base flood elevation. It may be possible to retrofit existing structures by various floodproofing techniques. Of course, the most effective and permanent means of protecting your structure is to locate it out of the floodplain

The Department of Construction Services can discuss emergency, temporary and permanent alternatives with you and help you obtain the necessary permits. Information about possible financial assistance to assist with pre and post flood property protection is also available. Chapin Library has reference information available for review regarding temporary and permanent property protection, retrofitting and floodproofing structures. Additional protection measures include:

- Keep materials like sandbags, plywood, plastic sheeting and lumber handy for emergencies.
- Check with a plumber regarding a valve to prevent sewer backups.
- Make sure that drainage ditches are clear of debris and functioning properly.
- If you know that a flood is coming, move valuable contents upstairs or to a safe location.

**Residents** of hazard areas can take the following actions to decrease the risk of injury due to flooding.

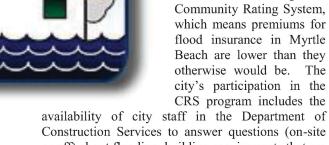
- Do not walk through flowing water. In standing water, use a pole or stick to determine depth.
- Do not drive through flooded areas and do not drive around road barriers. Roads or bridges may be washed out.
- Stay away from power lines and electrical wires. • Report downed power lines to the power company.
- Turn off all electrical circuits at the panel or disconnect all electrical appliances.
- Watch for animals, including snakes. Small animals that have been flooded out of their homes may seek shelter in yours.
- Look before you step. After a flood, the ground and floors may be covered with debris, including glass and nails. Floors and stairs that are covered with mud can be very slippery.
- Turn off the gas and be alert for gas leaks. Use a flashlight to inspect for damage. Do not smoke or use candles, lanterns, or open flames unless you know that the gas has been turned off and the area has been ventilated.

# A Guide To Regulatory Floodplains and **Flood Protection**



# *Provided by*

# Myrtle Beach Construction Services Department





# **Floodplain Benefits**

Floodplains serve many useful purposes, and those that are preserved in their natural or nearly natural state provide a wide range of benefits. For example, floodplains and primary swash areas hold, filter, convey and disperse floodwaters. Without preservation of these natural floodplains, floodwaters would inundate developed areas.

Five main swash areas exist within the City of Myrtle Beach: Midway Swash, Withers Swash, Deephead Swash, Cane Patch Swash and Bear Creek Swash. These serve as natural drainage basins and provide flood storage for stormwater runoff in their immediate area. They also provide a valuable service by filtering impurities from runoff.

The city owns approximately 11 acres of Withers Swash, which it preserves as a passive park area with a nature trail and picnic shelters. This swash provides wildlife habitats, breeding and feeding grounds for fish, and a high rate of plant growth.

# **Maintaining Drainage**

Debris in drainage ditches, streams and pipes can cause localized flooding when it rains. City code requires all owners or occupants of property to remove obstructions from the drainage system on their property. Further, it is unlawful for any person to throw or deposit any refuse, trash or debris in any drainage ditch, stream or body of water. For questions, or to report obstructions or violations, call the Public Works Department at 918-2000.

#### Flood Warning System

The city coordinates with the Horry County Emergency Management Office and the National Weather Service in issuing public warnings concerning expected floods and storms. Local television and radio stations announce weather advisories issued by the National Weather Service. These stations also provide local weather information and advisories.

National Weather Service advisories indicate all warnings which are in effect, including a description of the threat and its potential impact. Watches and warnings are issued for gales (winds of 39 to 54 miles per hour), tropical storms (55 to 73 m.p.h.), and hurricanes (74 m.p.h. or more), as well as for flash floods, coastal flooding, and heavy rains.

A hurricane watch indicates that a hurricane poses a possible threat within 48 hours. A hurricane warning means that hurricane conditions are expected within 36 hours. You should prepare to take action.

Hurricanes can cause heavy rains, flash flooding, coastal inundation and abnormally high tides. Often the greatest threat during a hurricane is from flooding. Also remember that heavy rains not associated with tropical systems can cause dangerous flooding. Pay close attention to weather advisories when a storm is expected. A link to NOAA real-time flood gages can be found on the City's website.

The governor may issue an evacuation order. An evacuation order means that you should leave. You should know your evacuation route. The evacuation routes from the Myrtle Beach area to inland destinations are U.S. 501, Veterans Highway (S.C. 22), S.C. 544, and U.S. 17/S.C. 9. For more information about evacuation routes or flood warnings, call the National Weather Services office in Charleston (843-744-0303) or Horry County Emergency Management (843-915-5150).

Additionally, information is available via the web at <u>http://www.cityofmyrtlebeach.com/flood.html</u>.

# Permits Required for Floodplain Development

The city's zoning ordinance identifies portions of the city as being within the 100-year floodplain. In other words, there is a one percent chance of flooding in a given year. The zoning ordinance and building codes have special provisions regulating construction and other development within those floodplains. Without those provisions, flood insurance through the National Flood Insurance Program would not be available to property owners and renters in Myrtle Beach. Among the requirements are elevation certificates, copies of which are available for viewing in the Department of Construction Services.

Before you build, fill, or otherwise develop in a floodplain, contact the Department of Construction Services (918-1111, 921 Oak Street) to discuss city regulations. Any development in the floodplain without a permit should be reported to the Director of Construction Services.

### **Repairing Flood Damage**

A permit issued by Construction Services is required to make any repairs to flood-damaged buildings. Buildings with damage amounting to 50% or more of the building's value must be removed or brought into full compliance with the floodplain regulations. Buildings existing in a flood plain that do not meet the current regulations may only be improved to less than 50% of the building's value.

The requirements of the zoning ordinance and building codes are minimum standards that all development must meet. To increase the safety of your property and reduce insurance premiums, you should consider building to higher standards. Of course, the safest way to develop your property is to locate improvements outside of the floodplain.