Understanding your flood map

To identify a community’s flood risk, the Federal Emergency Management Agency (FEMA) conducts a Flood Insurance Study. The study includes information on canal and stream flows, storm tides, hydrologic/hydraulic analyses, and rainfall and topographic surveys. FEMA uses this data to create the flood hazard maps—the Digital Flood Insurance Rate Maps (DFIRMs) that outline your community’s different flood risk areas. FEMA periodically updates those maps and it is currently updating the map for Miami-Dade County. Below are the definitions for all the flood zone designations shown in Miami-Dade County’s DFIRMs.

- **ZONE AE (Moderate to High Flooding Risk)**
  This is the flood insurance rate zone that corresponds with flood depths greater than three feet. Mandatory flood insurance purchase requirements apply.

- **ZONE AH (Moderate to High Flooding Risk)**
  This is the flood insurance rate zone that corresponds to areas of shallow flooding with average depths between one and three feet. Mandatory flood insurance purchase requirements apply.

- **ZONE VE (High Flooding Risk)**
  This is the flood insurance rate zone that corresponds to coastal areas that have additional hazards associated with storm waves. There is at least a one-in-four chance of flooding during a 30-year mortgage. Mandatory flood insurance requirements apply.

- **Zone A (unnumbered) (High Flooding Risk)**
  Because detailed analyses are not performed for such areas, no depths or base flood elevations are shown within these areas. There is at least a one-in-four chance of flooding during a 30-year mortgage. Mandatory flood insurance requirements also apply.

- **Zone D Areas with possible but undetermined flood hazards.**
  No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk. In Miami-Dade County, most of these areas fall within Everglades National Park.

In moderate-to-low-risk areas, the chance of being flooded is reduced but not completely removed. These areas submit more than 20 percent of the NFIP claims and receive one-third of all NFIP claims and receive one-third of all NFIP claims. Mandatory flood insurance requirements apply. 

**Wetlands are our friends**

Did you know that rainfall is an important part of the ecology of South Florida? Rainfall drains into floodplains such as the Everglades and our many wetlands, filters through these areas, and is eventually stored underground. Underwater water is in the source of drinking and domestic water supply in South Florida. It is important that we protect and maintain these drainages areas; the quality of our drinking water depends on it!

**The Water Cycle**

Precipitation falls from clouds to the earth as rain, snow, or ice. An average of 52 inches of rain falls on South Florida each year. Excess water, called runoff, flows from land into ponds, lakes, or canals. In South Florida, the water also flows into wetlands, marshes or estuaries and into the Atlantic Ocean or Gulf of Mexico.

Some rainfall slowly seeps, or percolates, into the ground to recharge, or refill, the underground layer of sand, gravel or rock. These layers, called aquifers, hold water. In South Florida, wells are drilled into some aquifers to pump out water needed for people, businesses and farms. Water can also flow through aquifers to refill lakes and rivers and sometimes bubble out of the ground as freshwater springs.

The sun heats up the earth’s surface, causing water to turn to vapor as it evaporates. Plants release water through transpiration. Together, all the water rising into the air is called evapotranspiration. The warm vapor continues to rise until it reaches cooler air; it condenses into very small droplets or ice crystals, forming clouds.

**It is all connected**

Make sure that only rain gets into the drainage system by correctly disposing of trash and landscape debris. It is ILLEGAL to throw away or discharge anything into the rivers, canals, lakes, bays or any waters in Miami-Dade County. By law, nothing but wastewater can be discharged into the storm drains. If you witness dumping of any liquid or material in our storm drains, please call 305-372-6899, or Miami-Dade Crime Stoppers at 305-471-TIPS (8477).
Why do floods occur? Because Miami-Dade County is located in a unique geographical area, it is particularly susceptible to flooding from major rain events and storm surge. The County is surrounded by major water bodies, the Atlantic Ocean, Biscayne Bay, and many rivers, lakes, and canals. Miami-Dade County lies close to sea level and its underground water supply is just below the ground surface. Therefore, major rain events sometimes leave rainfall nowhere to drain, causing occasional flooding in some areas of the County.

Get an Elevation Certificate Once you have determined that your house lies in a flood zone, an Elevation Certificate can tell you then how high your house was built in relation to that flood zone. This Certificate is required for all new construction, as well as for construction projects that involve making substantial improvements to a structure. An Elevation Certificate is an important document that every homeowner should have, and in case of a disaster, would demonstrate to County authorities that your house is at or above the required elevation. If the Certificate shows that your house is lower than the required elevation, then the so-called “50% rule” would apply to your house. This rule means if your house is in a flood zone and is damaged and/or improved to an amount greater than 50% of its market value, it will have to be raised to meet the current elevation requirement. Miami-Dade County has kept records of these Certificates on file since the County began participating in the Community Rating System (CRS). For more information about the 50% rule or Elevation Certificates, please call Miami-Dade County’s 311 Contact Center or the Flood Zone Hotline at 305-372-6466.

Insure your house Flood insurance is required for any federally backed mortgage in a Special Flood Hazard Area. PLEASE NOTE: when purchasing flood insurance, the policy does not go into effect until 90 days after purchase. Please visit www.floodsmart.gov for the most current information on flood insurance premiums and to locate a flood insurance agent in your area.

Because of Miami-Dade County’s rating under the National Flood Insurance Program’s (NFIP) Community Rating System, Miami-Dade County policy holders who live in a flood zone have enjoyed a 25% discount on their flood insurance premiums since October 1, 2002. A 10% discount on flood insurance is also available for those who live outside of flood zones, except on preferred risk policies.

Protect your home There are things you can do to minimize or eliminate property damage before a flood event occurs. Grading your property, elevating and securing electrical appliances, placing all low-lying electrical fixtures on separate electrical circuits, and using flood-resistant materials on exterior surfaces are some ways you can help yourself. Under emergency conditions, sand bags can be used to protect structures from flood waters, elevating or covering furniture and valuables can help minimize damage.

Retrofitting your home All construction in Miami-Dade County requires the issuance of building permits prior to construction. Building permits are obtained upon submission and approval of building plans. An important part of the review process is the requirement that structures be built high enough and use proper design to protect against flood damage. If you plan to construct an addition to your house, build a new house, or do any other type of development, call Miami-Dade County’s Department of Regulatory and Economic Resources (RER) at 786-315-2500 for information on how to obtain the necessary permits. If you see construction taking place in Miami-Dade County without the proper permits, please call Miami-Dade County’s 311 Contact Center or the Code Enforcement Office at 786-315-2424 to report it. To obtain information on how to select a contractor to repair your home after a flood or other natural disaster, or to conduct a search to find out if a complaint has been filed on a contractor working in Miami-Dade County, please visit www.miamidade.gov/building/contractors.asp.

If you live in a condo, in a condominium, private community with an association, or if your place of business is located in a commercial property such as a warehouse or office building, then you should become familiar with the drainage system in your private community and/or place of business. Specifically, you should avoid the potential for flooding by understanding the operation of the on-site drainage system that your homeowner’s association or place of business is responsible for maintaining. It is also a good idea to develop a list of important contact persons/phone numbers associated with the maintenance of the drainage system BEFORE an emergency arises.

Be aware When an Emergency Flood Warning Notice is issued for your area:

● Do not drive or walk through flowing or standing water. Unseen obstructions or hazards may harm you or your vehicle. Also, sewage from overflowing sewer lines may be present in the water.

● Avoid downed power lines and electrical wires. These lines can cause shock and electrocution.

● Turn off the power in your house. This should include electrical power as well as all propane gas tanks and lines.

● Watch your step in flood areas. Slip- and fall-acidents are common in wet, slippery areas.

● Be alert for small animals that are flushed out by flooding conditions. Under stress, animals may react by biting when disturbed.

● Be aware of gas leaks in the house. Do not smoke, nor use candles or open flames, until you are sure no gas has vented. Ventilate enclosed areas if you think gas is present.

For more information, please visit the Red Cross website at www.redcross.org/prepared/disaster/flood.

Repetitive losses A Repetitive Loss (RL) property is any insurable building for which two or more claims of more than $1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978. A RL property may or may not be currently insured by the NFIP. Currently there are over 122,000 RL properties nationwide. To find out more about repetitive loss properties, visit our website at: www.miamidade.gov/environment/repetitive-losses.asp.

Weather warnings / watches. The National Weather Service monitors local weather conditions. If flooding from rains is anticipated, the Service will broadcast Flood Warning Notices through television, radio and wire services. If critical services are impacted you are urged to call your local emergency service or visit www.floodsmart.gov for alerts and notifications.

Your opinion counts Miami-Dade County is constantly updating its Floodplain Management Plan. To reduce flood affecting, the County’s Stormwater Utility is in the process of identifying, prioritizing and implementing those projects that will reduce flood events. We would like to hear from you to see how we are meeting your needs. Please use the following question to verify by calling 305-372-6466 or visit our website at: www.miamidade.gov/environment/repetitive-losses.asp.