



City of Vero Beach - Flood Facts

The City of Vero Beach (www.covb.org) participates in the National Flood Insurance Program (NFIP) Community Rating System (CRS). This program is beneficial in reducing your insurance rates. The estimated insurance premium discounts received by most NFIP policyholders in the city are 15% (in SFHAs) and 5% (outside SFHAs) for an annual total savings of approximately \$250,000. This newsletter was prepared using FEMA (Federal Emergency Management Agency) tips and provides links to local, state and national flood information.

LOCAL FLOOD HAZARD

Flooding in Vero Beach may be caused by heavy rainfall that occurs in short periods of time, as is common during seasonal storms. Tidal surges that accompany coastal storms, tropical storms and hurricanes can also cause flooding not just along the coastline but inland as well. The most serious threat of general flooding is during the hurricane season (June through November) as experienced with the impacts of previous storms. Due to the City's lowland elevations and proximity to the Indian River and Atlantic Ocean the flood threat exists. Even relatively minor storms can result in coastal and inland flooding and property damage.

FLOOD SERVICES INFORMATION

Know Your Flood Risk: The **Flood Insurance Rate Map (FIRM)** sets forth areas within the City that are located within Special Flood Hazard Areas (SFHAs). If you are unsure of the flood risks at your location, the city can provide information from the FIRM given your property address. The City can provide the Base Flood Elevation for your specific property. The Base Flood Elevation, or BFE, is the elevation that flood waters are anticipated to rise given a storm with a 1% annual chance of occurring. To get a general idea if your property is located within a SFHA the map found on page 4 of this document can help. The map shows the general area shaded in color as the overall boundary of the FIRM Special Flood Hazard Area. Note the areas shaded in grey are outside the SFHA.

Contact Us for Specific Information: If you know the address of a particular property and need to know more specific information, you may contact the Planning & Development Department at 772-978-4550 for information. Residents and property owners may also contact the City of Vero Beach Public Works/Engineering Department at 772-978-4870 to request a written FIRM determination document. The FIRM maps are available for review at City Hall in the Public Works/Engineering and Planning and Development Departments. Also you may access the flood maps on-line at the FEMA Map Service Center www.msc.fema.gov and the Indian River County website

www.irccgov.com/flood. Flood maps are also available for review at the Indian River County Main Public Library and flood protection information can be found on-line at www.irclibrary.org and the City's website www.covb.org.

FLOOD SAFETY

Follow evacuation orders: Be ready to move quickly if an evacuation order or advisory is issued by the authorities for your area.

Do not walk through moving water: Drowning is the number one cause of flood deaths, mostly during flash floods. Currents can be deceptive; six inches of moving water can make you fall. If you have to walk in water, walk where the water is not moving.

Do not drive in flooded areas: Almost half of all flash flood fatalities occur in vehicles. If you come upon a barricaded or flooded road, turn around.

Stay away from power lines and electrical wires: Electrical current can travel through water. Report downed power lines to the power company.

Turn off your utilities: Turn off utilities at the main switches or valves if instructed to do so. Disconnect electrical appliances. Do not touch electrical equipment if you are wet or standing in water.

Look out for animals, especially snakes: Small animals that have been flooded out of their homes may seek shelter in yours. Use a long handle device or pole to turn things over and check for hazards.

Look before you step: After a flood, the ground and floors are covered with debris including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.

Be alert for gas leaks: Use a flashlight to inspect for damage. Don't smoke, use candles, lanterns or open flames unless you know the gas has been turned off and the area has been ventilated.

FLOOD WARNING SYSTEM

Flood warnings are forecasts of impending storms and are broadcast to the public by the NOAA Weather Radio, various media outlets and through local emergency agencies. These warnings are intended to provide individuals in threatened areas with the opportunities to prepare, protect and lessen their exposure to damage from flooding by establishing time frames and levels of expected flooding. The most serious threat of general flooding is during the hurricane season (June through November). Hurricane tidal surges can cause flooding up to 24 hours before the eye of the

storm reaches the coast. *Flood watches* (when conditions are right for flooding) and *flood warnings* (flooding is imminent) are issued by the National Weather Service.

**RESIDENTS CAN TUNE
TO NOAA WEATHER RADIO
(CHANNELS 2 or 7)
WQCS 88.9 FM/WSCF 91.9 FM
FOR WEATHER BROADCASTS
AND BE ALERT TO SPECIAL
ADVISORIES**

WEATHER RADIOS SAVE LIVES... A weather radio provides National Weather Service

warnings, watches, forecasts and other non-weather related hazard information specific for our area 24 hours a day. During an emergency, the weather service forecasters interrupt routine broadcasts and send a special tone activating local weather radios. Weather radios equipped with a special alarm tone feature sound an alert to give you immediate information about a life-threatening situation. The frequency used in our area is located on **channel 2 or channel 7** on the weather radio.

FLOODPLAIN PROTECTION

Natural and Beneficial Functions:

In their undisturbed and natural state, the City's wetlands provide many beneficial functions and resources, including floodplain management, wildlife habitat, and recreational opportunities. In recent years, steps have been taken to preserve wetlands and open space within the City limits. A portion of the lands and islands along the northwest section of the Indian River Lagoon are preserved in their natural state. When portions of the floodplains are preserved in

their natural state, they provide many benefits to both human and natural systems. These benefits range from providing aesthetic pleasure to reducing the number and severity of floods, helping handle storm water runoff and minimizing non-point water pollution. For example, by allowing floodwater to slow down, sediments settle out, thus maintaining water quality. The natural vegetation filters out impurities and uses excess nutrients.

The City has adopted regulations that require a storm water drainage plan for new construction. The intent of the requirements is to reduce flood peaks and duration, provide additional flood storage when needed and improve and maintain surface and ground water quality. These plans will also have environmental benefits from restoring and enhancing wildlife habitat, and maintaining the diversity and integrity of the unique wetlands system.

FLOOD INSURANCE

Are you insured? Flooding is America's most common disaster. Yet it is not covered by most homeowner's insurance. Since the City participates in the National Flood Insurance Program, you can purchase a separate flood insurance policy at a discounted rate. This type of insurance is backed by the Federal government and is available to everyone, even for properties that have previously experienced flooding. If you don't have flood insurance talk to your insurance agent today, or call 1-800-427-4661 or visit

www.floodsmart.gov. If you have a mortgage or a home improvement loan you may have purchased flood insurance already as a requirement from the lending institutions.

Don't wait for the next flood to buy insurance protection. There is a 30-day waiting period before National Flood Insurance Program coverage takes effect. Contact your insurance agent for more information on rates and coverage.

Usually these policies cover only the structure and not the contents.

Most of the time there is more damage to the furniture and contents than to the structure itself.

If you are covered by a flood policy double check with your insurance agent to be sure the coverage is adequate, and make sure your contents are covered. Remember, even if you have never been affected by flooding, it still could occur. There is a 26% chance of experiencing a flood during the life of a 30-year mortgage. Check with your insurance agent for more information.

PROPERTY PROTECTION MEASURES

There are different reasons a community may flood; storm surge, river flooding or heavy rainfall. Low-lying or poorly drained areas can also increase a community's flood risk. Due to the relatively flat terrain across much of Florida, it can be complicated to drain accumulated water. Consider these tips to help safeguard your property:

- If you are in a floodplain elevate and reinforce your home.
- Elevate or relocate electric panel boxes, furnaces, water heaters and washer/dryers if susceptible to flooding.
- Install "check valves" in sewer traps to prevent floodwater from backing up into drains.
- Construct barriers (levees, berms, floodwalls) to stop floodwater from entering the building.

- Create floodway openings in non-habitable areas, such as garages.
- Seal off sewer lines to prevent the backflow of sewer water.
- Install storm shutters and reinforce garage doors.
- Elevate furniture and valuables above the flood protection level.
- Use sand bags to reduce erosion and prevent floodwaters from encroaching into structures.

Preparing now for an emergency will allow time to react safely and in a well thought-out manner. It is always best to have a plan written in advanced to make sure you don't forget anything after you hear a flood warning.

Additional Information is Available - Flood Reference Library: The Indian River County Main Public Library provides flood protection reference material to the general public. Reference materials include 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 encouraged to take advantage of this flood information source. The flood protection information can be found at the main library located at 1600 21st Street and on-line at www.irclibrary.org. The State also provides information on-line at www.floridadisaster.org.

FLOODPLAIN DEVELOPMENT PERMIT REQUIREMENTS

Every lot was originally designed so water would flow away from the building and along property lines to the street, storm sewer or ditch. Fences, railroad ties, landscaping and re-grading of property can block the natural flow of water. Through Vero Beach's participation in the National Flood Insurance Program (NFIP), we administer flood management regulations and measures designed to minimize the potential of flood losses. All development (not just construction of buildings) in the floodplain and other areas need local permits. Through this process, the City insures development is taking place according to flood regulations. Regulations include required elevations of living floor areas, flood proofing of certain construction, limitations on placement of fill and prohibitions of certain

substantial improvements, additions or reconstruction. Development that occurs without permits threatens our continued participation in the NFIP and the ability for residents to obtain flood insurance.

Remember you should always check with the Planning and Development Department before you build on, fill, alter or re-grade your property. A permit is needed to insure that such projects do not cause problems on you or your neighbors' property. Contact the Planning and Development Department to report any illegal floodplain development at 772-978-4550.

SUBSTANTIAL IMPROVEMENT/DAMAGE REQUIREMENTS

In accordance with NFIP standards, the City requires that if the cost of 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 or substantial damage. The existing building is then required to meet the same standards as a new building. For residential structures, these requirements typically mean raising 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 non-conforming 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. These regulations are designed to protect you and your neighbors and help to insure that over time, more of the old non-conforming structures located in Vero Beach will be elevated to the base flood elevation and protected from potential flood damage.

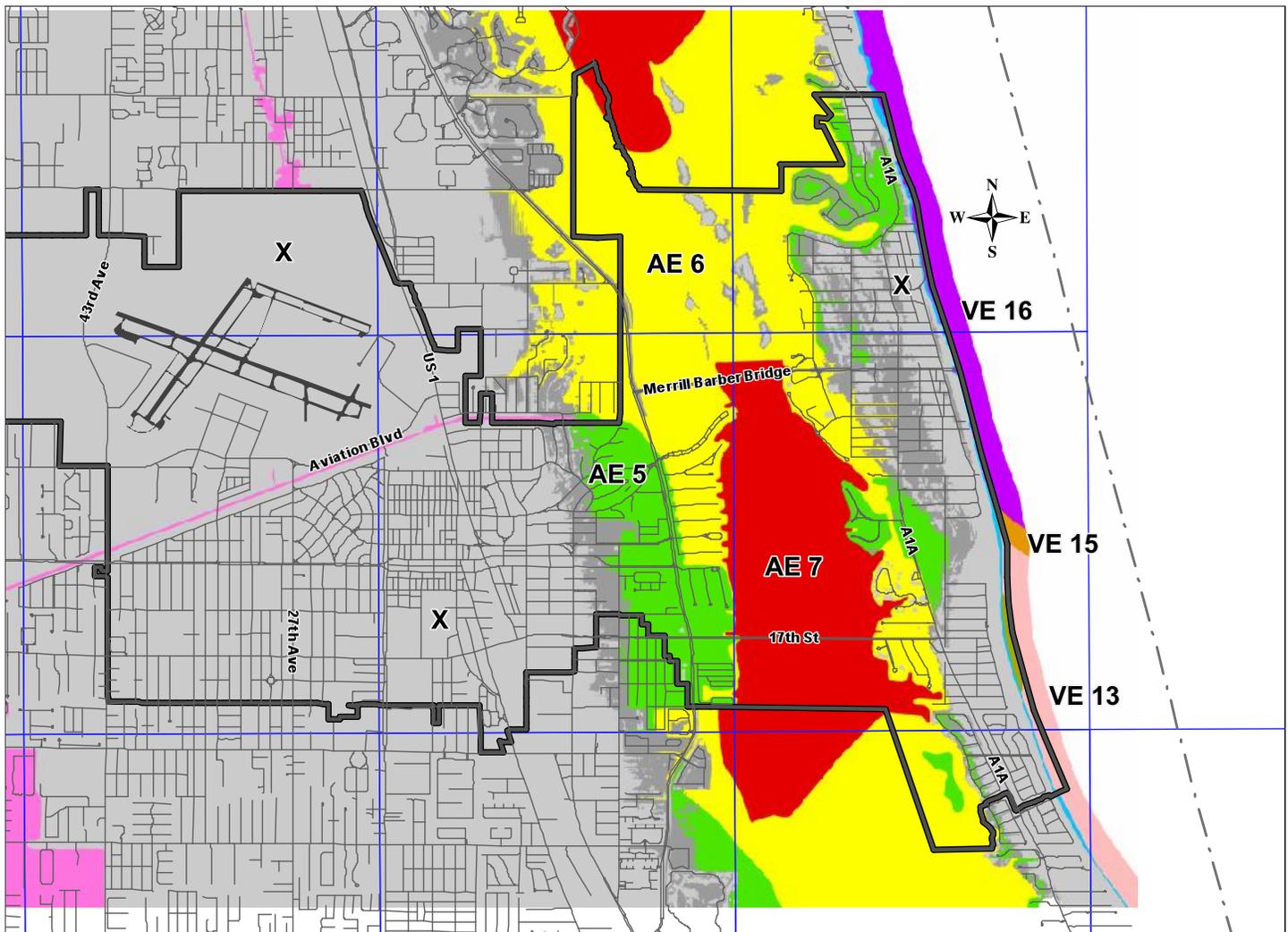
DRAINAGE SYSTEM MAINTENANCE

Over time, the City has improved and maintained a storm water management system which has reduced road and yard flooding during the rainy season. Every year the City performs inspection and maintenance of the drainage ditches, catch basins, and culverts that comprise the storm water drainage system. Routine cleaning reduces the amount of pollutants, trash, and debris both in the storm drain system and in receiving waters. All facets of the City's drainage system are periodically inspected and maintained to allow the system to function properly when rains occur.

You can do your part to help keep the storm drains free of debris and pollutants. Keep everything out of storm drains except for rainwater runoff. To report a clogged storm drain call Public Works at 772-978-4870 or dumping in drainage facilities call Code Enforcement at 772-978-4600.

GENERAL LOCATION OF FLOOD ZONES – VERO BEACH (effective 12-4-12)

The Federal Emergency Management Agency (FEMA) has identified portions of the eastern section of Vero Beach as a Special Flood Hazard Area (SFHA) on the Flood Insurance Rate Map (FIRM). This area is designated as an area subject to flooding by the 1% annual chance flood and includes mostly the AE and V Zones (generally highlighted in color on the map below – note the numbers indicate the Base Flood Elevation in feet). Note the areas shaded in grey are outside the SFHA and the dark bold black line outlines the city limits boundary. For specific information by property address contact us - see first page of this document for contact information.



Map prepared by: Department of Public Works (source-FEMA FIRM dated 12-4-12).

MAP DISCLAIMER: The City of Vero Beach makes no warranties, express or implied, and assumes no responsibility for the use of this material by agencies or individuals other than the City of Vero Beach. Any use of this material is strictly at the risk of the user.

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