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Flood Protection Information

Your Property is in or Near a Special Flood Hazard Area (SFHA)

This flood protection information newsletter is sent annually to residents who own or lease structures that are in or near areas subject to flooding. To determine if a property is in a SFHA, visit www.fairfaxcounty.gov/gisapps/myneighborhood/default.aspx or www.fema.gov/floodplain-management/flood-insurance-rate-map-firm or call FEMA at 1-877-FEMA-MAP (1-877-336-2627), or call the Stormwater Planning Division, Department of Public Works and Environmental Services, Fairfax County, at 703-324-5500, TTY 711. The Federal Emergency Management Agency (FEMA) defines SFHAs as land areas that are at high risk for flooding. These areas are indicated on Flood Insurance Rate Maps (FIRMs) and on Digital Flood Insurance Rate Maps (DFIRMs).

Know Your Flood Hazard

Flooding may occur at any time, with little or no warning. There are four main sources of local flood hazards: floodplains; rivers and streams during heavy storms; inadequate overland relief during heavy storms; and tidal surcharges in the lower Potomac River caused by hurricanes, tropical storms and earthquakes.

Properties in a floodplain or in a SFHA may flood at any time. Several areas of flood hazards are identified on the new DFIRMs.

In general, the SFHAs are labeled as Zone A or Zone AE.

Zone A in a SFHA is subject to inundation by the one-percent-annual-chance flood event generally determined by using approximate methodologies. More information about Zone A is available at www.fema.gov/floodplain-management/zone .

Zone AE is the area subject to inundation by the one-percent-annual-chance flood event determined by detailed methodologies. Base Flood Elevations (BFEs) are shown on the FIRMs. More details about Zone AE are available at www.fema.gov/floodplain-management/zone-ae-and-a1-30 .

New updates to the FEMA website are made frequently. If residents encounter difficulty accessing FEMA links, please call the Fairfax County Stormwater Planning Division at 703-324-5500, TTY 711, for assistance.

Build Responsibility: Floodplain Development and Permit Requirements

Construction in a floodplain is not allowed under most circumstances:

- Before building, filling or excavating in a floodplain, or near any natural or man-made watercourse, call Fairfax County Land Development Services at 703-324-1720, TTY 711, to determine if the proposed activity is allowed and what types of permits are required.
- Any construction or land disturbance within or adjacent to a natural or man-made watercourse may require a wetland permit from the U.S. Army Corps of Engineers and the State of Virginia.
- An addition to an existing building that is located in a floodplain may be allowed if the building was constructed prior to Aug. 14, 1978, and the cost of the addition is less than 50 percent of the market value of the existing building, not including the value of the land.
- New dwellings and additions constructed adjacent to a floodplain must be elevated 18 inches above the 100 year flood level and set back 15 feet from the edge of the floodplain.
- Existing buildings in floodplains that have been damaged by flood, fire or other casualty loss may be reconstructed.
- A dwelling damaged to the extent that the cost of repairs equals or exceeds 50 percent of the building's market value before it was damaged must meet the same requirements as a new building.
- In addition to county approval, construction or filling are generally not allowed in a floodplain.

For more information call Land Development Services at 703-324-1720, TTY 711; or visit www.fairfaxcounty.gov/living/landuse/.

Protect Your Property from Flood Hazards

FEMA recommends several ways to protect a building from flood and wind damage:

- Re-grade the lot to drain water away from the building. This works best on large lots, if flood waters are not too deep and if changes will not affect other properties.
- Waterproof walls and install watertight closures over entrance ways. This is not recommended for houses with basements or if flood waters will exceed two feet.
- Raise the house above flood levels. Flood waters may pass under the house, causing less damage.
- Protect buildings from high winds during tropical storms and hurricanes by installing storm shutters and reinforced garage doors.

Any alteration to a building or land, including re-grading, filling or modifying a sewer line, requires a permit. For information regarding building and site regulations, call Land Development Services at 703-324-1720, TTY 711. Some houses, including those that are not in a floodplain may have sanitary sewers that back up into the basement during heavy rain. A plug for the basement floor drain or shower drain, or standpipes for these drains, may stop a backup. Plugs are available at many hardware and plumbing supply stores. A plumber should be consulted when installing a plug, overhead sewer or back-flow valves. More information about flood proofing is available at www.ready.gov/floods . Visit Fairfax County information at www.fairfaxcounty.gov/dpwes/stormwater/floodinformation.htm

Protect Yourself from Flood Hazards “Turn Around. Don’t Drown”

Flooding occurs in virtually every community, including Fairfax County. Two years ago, people died when they walked or drove into flooded areas. Flash floods are the most dangerous and may occur within a few minutes of excessive rainfall, a dam failure, or a sudden release of water held by an ice jam. Flash floods often have a dangerous wall of roaring water that carries rocks, mud and other debris. Overland flooding, the most common type, occurs when rivers and streams overflow their banks, and when rain and snowmelt exceed the capacity of stormdrains designed to carry flood water away from neighborhoods. Fairfax County fire and rescue personnel performed more than 100 swift water rescues during the September 2011 storm. To protect yourself and your property, visit the website at www.fairfaxcounty.gov/dpwes/stormwater/floodinformation.htm

Flood Safety - Do Not Walk or Drive Through Flooded Areas

Eighteen percent of flood fatalities in the U.S. in 2012 occurred when people walked into flooded areas. Forty percent of flood-related deaths occurred when people drove their vehicles into flooded areas or on flooded streets.

It takes only six inches of water to knock over an adult and cause loss of control of a vehicle. A foot of water will float many vehicles and only two feet of water will carry away a vehicle including pickup trucks and sport utility vehicles. Once a vehicle starts to float, it may flip over and trap the occupants inside.

The ground under the water may have collapsed or manhole covers have been washed out. In August 2010, in Springfield, Ill., a 23-year-old woman fell into an uncovered manhole and drowned.

- People who walk or drive in flooded areas may be electrocuted.
- Flood waters may carry disease-causing bacteria.
- To stay safe before, during and after a flood, visit www.ready.gov/floods .
- September is National Preparedness Month <http://community.fema.gov/connect.ti/readynpm>

Natural and Beneficial Functions of Floodplains

Dyke Marsh, with 485 acres of tidal marsh, floodplain and swamp forest, is located on the west bank of the Potomac River, about 95 miles from the Chesapeake Bay.

The marsh is an example of a functioning floodplain and is one of the largest remaining fresh-water tidal wetlands in the area.

There are parks, bike paths, boardwalks, open spaces and wildlife conservation areas for the public to enjoy.

A floodplain is the area adjacent to a stream that is periodically inundated by floodwaters.

Floodplains absorb flood waters and prevent erosion with natural features that provide water storage and conveyance, reduce flood velocities and peaks, and sedimentation in stream channels.

Natural controls of flooding and erosion help maintain water quality, filter pollutants from runoff, process organic wastes and moderate water temperatures.

These natural controls recharge groundwater supplies and refresh aquifers.

Water, organisms and other materials interact within these natural systems and maintain stream flow and natural habitats.

Physical, Chemical and Biological Processes

Floodplains are defined by the physical, chemical and biological processes that shape them. They function as dynamic ecosystems and are self-sustaining when functionally intact.

Floodplains in Fairfax County are essential for vegetation and wildlife.

Periodic flooding of floodplains provides sediment and nutrients to sustain plant communities and critical habitat for the creatures that live there.

Riparian buffers are the vegetated areas adjacent to streams, lakes, rivers and marshes. Buffers stabilize shorelines and stream banks, prevent erosion, filter pollutants from stormwater runoff and provide habitat for wildlife.

Riparian buffers reduce downstream flooding by slowing and absorbing water during rain storms. These functions protect water quality and support stream vitality.

The Human Perspective

Floodplains provide open areas, restore and enhance forest lands, provide recreation spaces and areas for scientific study and education.

Floodplains are assets in Fairfax County and improve the overall quality of life.

How to protect and enhance local floodplains

- Establish natural areas with native vegetation to enhance the natural function of the floodplain.
- Protect existing vegetation and topography within a floodplain.
- Plant trees in the floodplain.
- Manage stormwater on-site
- Reserve the floodplain for passive recreation activity use only.
- Do not build in a floodplain.*

*Pennsylvania Department of Conservation and Natural Resources

Flood Warning System in Fairfax County

The Community Emergency Alert Network (CEAN) provides emergency information to county residents. CEAN delivers emergency alerts and information during a crisis and provides daily notices about weather and traffic. Messages are delivered to all devices registered and may include email, cellphones, text pagers, satellite phones and wireless devices. Register for emergency alerts from Fairfax County at www.fairfaxcounty.gov/cean. Fairfax County also has these methods to update residents about flooding and other emergencies:

- Emergency Information Blog: www.fairfaxcounty.gov/emergency/blog is the official Fairfax County Government emergency preparedness, response and recovery website.
- Social Media Sites such as Facebook: (www.facebook.com/fairfaxcounty), Twitter (www.twitter.com/fairfaxcounty), YouTube (www.youtube.com/fairfaxcounty.gov) and Flickr (www.flickr.com/photos/fairfaxcounty).
- NewsWire: www.fairfaxcounty.gov/news is a comprehensive news website that provides information of all types and topics in multiple ways. All county news is on one web page, or receives updates by email, Twitter or RSS.
- The County Website: www.FairfaxCounty.gov and a mobile version, www.fairfaxcounty.gov/news/mobile/ is convenient for residents on the go.
- Emergency Information Line: 703-817-7771, TTY 711, provides updates via recorded phone messages during times of crisis or emergencies.
- Fairfax County Government Channel 16: online at www.fairfaxcounty.gov/cable/channel16/asx/live_stream.asx or www.fairfaxcounty.gov/cable/

- 703-FAIRFAX (703-324-7329): day-to-day information and referrals, staffed during normal business hours, 8:00 a.m. to 4:30 p.m., Monday through Friday.
- Really Simple Syndication (RSS) feeds: a quick way to sign up to receive news feeds through RSS readers at www.fairfaxcounty.gov/rssfeeds/.
- Door-to-Door Contact: public safety personnel deliver critical life, safety and property protection messages throughout neighborhoods on an as-needed basis.
- Community Meetings: inform residents of the latest news for their area.
- Reverse 9-1-1: telephone calls to residents.
- More flood protection information is available at: www.fairfaxcounty.gov/dpwes/stormwater/floodinformation.htm .
- Be Prepared - Receive Emergency Alerts
- Individuals and business owners are encouraged to sign up for the Fairfax County Community Emergency Alert Network (CEAN).
- Traffic, severe weather alerts and flood warnings, among other emergency notices, are sent to the electronic device of your choice.
- New users may register their pager, email, BlackBerry, cell phone, smartphone and telephone with voice mail (home or business) at: www.fairfaxcounty.gov/CEAN
- Residents may update their information at the same link.

Protect the Drainage System and Natural Floodplain Function

Residents of Fairfax County can help prevent flooding in their neighborhoods by recycling their trash properly and by keeping storm drains clear.

Anything that is thrown from a vehicle, dropped on a parking lot or dumped into a storm drain is carried by rain or melting snow through the storm drainage system and then to streams and lakes, not to a wastewater treatment plant. Litter blocks storm drains, which may cause street and yard flooding, traffic delays and property damage.

Cigarette butts, plastic and glass bottles, food containers, cans, plastic shopping bags and anything else that is not disposed of properly can flow to the Potomac River and ultimately to the Chesapeake Bay.

Trash is unsightly; it degrades residential and commercial property values; harms the fish and other wildlife; damages wetlands; and pollutes streams and rivers, some of which are a source of

drinking water for many Fairfax County residents.

Please Do Not Litter

It is illegal to deposit anything into a storm drain. Fertilizer, motor oil, pesticides, pet waste and paint are hazardous to the environment and pollute streams and the Potomac River.

The Fairfax County Code, chapters 105 and 106, contain provisions that address illicit discharges to state waters and the county's storm drainage system.

To report hazardous materials that have been discarded into a storm drain or stream, call the Fairfax County Stormwater Planning Division at 703-324-5500, TTY 711.

Flood Protection Information is Available at the Fairfax County Public Library

Printed information about flood protection for people, their property and their personal possessions is available at the Fairfax County Public Library. Visit www.fairfaxcounty.gov/library. Topics include:

- Above the Flood: Elevating Your Flood Prone House
- Answers to Questions about the National Flood Insurance Program
- Elevated Residential Structures
- Protecting Manufactured Homes from Floods and Other Hazards
- Protecting Building Utilities from Flood Damage
- Protecting Floodplain Resources
- Reducing Damage from Localized flooding
- More flood information is available at:
www.fairfaxcounty.gov/emergency/prepare/floodsafety.htm

Acquiring Flood Insurance is Recommended

The county participates in the National Flood Insurance Program (NFIP) Community Rating System (CRS) sponsored by FEMA.

Participation in the CRS is a service for county residents and provides an opportunity for property owners to purchase flood insurance for their buildings and contents at discounted rates.

Residents in Fairfax County may qualify for a Preferred Risk Policy (PRP).

A PRP offers multiple coverage combinations for buildings and contents or contents-only coverage for renters, who are located in moderate to low risk areas. PRPs are available for residential and commercial buildings located in these areas that meet eligibility requirements based on the flood loss history of the building.

Flood insurance is mandatory for properties located in a SFHA that are financed with federally backed mortgages. This includes all loans from banking institutions with deposits guaranteed by the Federal Deposit Insurance Corporation.

The average annual flood insurance premium for structures in a SFHA is \$865. Fairfax County residents save roughly \$153 per policy, per year. Participation in the CRS program saves county residents approximately \$252,754 annually in flood insurance premiums.

Flooding is the most common natural disaster in Virginia. Repairs are expensive. One inch of water in a home or office may cause significant damage.

Many homeowners' insurance policies do not cover losses from flooding. Property owners and residents are encouraged to contact their insurance agent to determine the extent of their policy coverage.

Flooding can occur at any time of year.

- After applying for flood insurance, typically there is a 30-day waiting period before coverage begins.
- Renters can buy flood insurance for personal belongings or business inventory.
- Coverage may include cleanup expenses and repair or replacement of such items as furnaces, water heaters, washers, dryers, air conditioners and freezers.
- Flood insurance benefits do not have to be repaid.
- Flood-related claims may be covered even if a disaster was not declared.
- Flood insurance may cover homes and businesses and protect the property owner's financial security.

Insure your property for your flood risk:

- Learn your flood hazard
- Renters may purchase a 'contents-only' policy
- You may qualify for a lower cost, preferred risk policy (PRP)
- Visit www.floodsmart.gov

Floodplain Management Regulations and Substantial Improvement Requirements

Land use and development in Fairfax County is governed by the Comprehensive Plan, the Public Facilities Manual, the County Code and the Virginia Uniform Statewide Building Code. Fairfax County reviews all subdivision, site and grading plans and building permit applications to determine if the land is located in a floodplain.

The goal of floodplain-related requirements is to prevent loss of life and property damage; promote flood safety; preserve wildlife habitats; maintain the natural integrity of streams; protect water quality; and increase groundwater recharge.

The county participates in the National Flood Insurance Program (NFIP). NFIP rules state that if the cost of reconstruction, rehabilitation, additions or other improvements to a building equals or exceeds 50 percent of its market value, then the building must meet the same construction requirements as a new building. If a residence in a floodplain is damaged to the extent that the cost of repairs equals or exceeds 50 percent of the building's market value (exclusive of the land) before it was damaged, the building must be elevated 18 inches above the base flood elevation.

More flood protection information is available at:

www.fairfaxcounty.gov/dpwes/stormwater/floodinformation.htm