

Flood Protection Information



SFHA	1
Local Hazard	1
Permits	2
Flood Proofing	2
Safety	3
Erosion	3
Floodplains	4
Flood Warning	5
Drainage	6
Litter	6
Library	6
Insurance	7
Improvements	8



The Stormwater Management Program, Department of Public Works and Environmental Services, Fairfax County, Virginia
703-324-5500

TTY 711

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 the Web site at www.fairfaxcounty.gov/dpwes/stormwater/floodmaps.htm or <http://tinyurl.com/omswsz4> 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 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: 1. floodplains; 2. rivers and streams during heavy storms; 3. inadequate overland relief during heavy storms; and 4. 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 2010 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.

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 information about Zones A and AE may be seen at www.fema.gov/flood-zones.

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

Build Responsibly: 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 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 August 14, 1978, and the cost of the addition is less than 50 percent of the market value of the existing building, not including 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, no building or filling is allowed in a floodplain without an engineering analysis to ensure the project will not increase flood damage elsewhere.

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.
- Waterproof walls and install watertight enclosures over entrance ways. This is not recommended for houses with basements or if flood waters may 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 sewers that back up into the basement occasionally during heavy rain. A plug for the basement floor drain, shower drain, or standpipes for these drains, may reduce or eliminate back ups. 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.floodsmart.gov/floodsmart/pages/preparation_recovery/before_a_flood.jsp or

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. 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 flow of water that may carry with it rocks, mud, tree limbs and other debris. Overland flooding occurs when rivers and streams overflow their banks. Occasionally, the capacity of stormdrains that are designed to carry stormwater away from streets and yards, is exceeded.

To protect yourself, your family and your property, see the link at
www.fairfaxcounty.gov/dpwes/stormwater/floodinformation.htm

Driving or Walking, Save Your Life. When You See Flood Waters, “Turn Around— Don’t Drown.”

Flash and river flooding are the leading causes of weather-related deaths in the United States.

According to the National Oceanic and Atmospheric Administration (NOAA),* “In 2015 flash and river floods claimed 176 lives, up dramatically from 38 in 2014. The 2015 flood casualty total is well above the 10 - year average of 82 deaths. Of the 176 deaths, 112 or 64 percent were killed in a vehicle, likely trying to cross a flooded road. Males accounted for 114 deaths (65%) and females, 60 (34%).”

The majority of people who died in floods made one common and fatal mistake; they drove their vehicles, including pickup trucks, vans and sport utility vehicles, into flood waters.

Walking through flood waters is dangerous, too. Flooding may cause manhole covers to dislodge, leaving a hole in the street into which people may fall and become injured or drown.

*www.nws.noaa.gov/om/hazstats/flood15.pdf

**To stay safe before, during and
after a flood, visit
www.ready.gov/floods.**



Flooding at Royal Lake. Fairfax County Photo

Solving Drainage and Erosion Problems

Staff of the Northern Virginia Soil and Water Conservation District (NVSWCD) and of the Stormwater Management Program provide information and advice on private drainage and erosion problems. A free guidebook, “Solving Drainage and Erosion Problems: A Guide for Homeowners,” may be downloaded from www.fairfaxcounty.gov/nvswcd/drainageproblem.

Call NVSWCD at 703-324-1460, TTY 711, visit www.fairfaxcounty.gov/nvswcd or email conservationdistrict@fairfaxcounty.gov, or call the Stormwater Management Program at 703-324-5500, TTY 711, visit www.fairfaxcounty.gov/dpwes/stormwater or email SWPDMail@fairfaxcounty.gov.

Natural and Beneficial Functions of Floodplains

Restored freshwater wetlands at Huntley Meadows Park, in the Alexandria section of Fairfax County, provide a necessary environmental function to filter pollutants and control the destructive power of floods.

Emergent marshes, like those in Huntley Meadows, are shallow wetlands of about 50 percent open water and 50 percent vegetated water.

Many rare wildlife species are attracted to the park and thrive in its wetlands.



Huntley Meadows Park.
Fairfax County Photo.

Nearby Dyke Marsh is an example of a functioning floodplain and one of the largest remaining freshwater tidal wetlands in the area.

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 reduce flood velocities and peak flows, and provide water storage.

Natural controls of flooding and erosion help maintain water quality, filter pollutants from runoff and process organic waste. These natural controls also recharge groundwater supplies and refresh aquifers.

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

The Human Perspective

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

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

Huntley Meadows Park and the Dyke Marsh Wildlife Preserve have biking, walking and running trails, boardwalks, open spaces and wildlife conservation areas for the public to enjoy.

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 inundation of floodplains provides nutrients to sustain plant communities and habitat for the animals 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.



Fairfax County
Photo.

More information about Huntley Meadows Park may be seen at www.fairfaxcounty.gov/parks/huntley-meadows-park/ or call 703-768-2525, TTY 711.

How to protect and enhance local floodplains

- Do not build in a floodplain.
- Establish 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 recreational activity only.

The Fairfax County Emergency Alert System

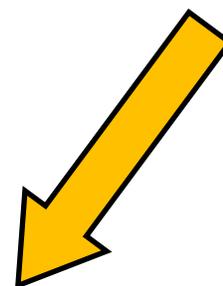
Fairfax County changed the Community Emergency Alert Network (CEAN) to a different notification system known as *Fairfax Alerts*.

The *Fairfax Alerts* system provides timely emergency information and features additional benefits. *Fairfax Alerts* delivers emergency information during a crisis and provides daily notices about weather and traffic. Messages are delivered to registered devices that may include email accounts, cellphones, text pagers, satellite phones and other wireless devices. Register for emergency alerts from Fairfax County at www.fairfaxcounty.gov/alerts/.

Residents may:

- Choose weather, traffic and public safety notices.
- Take advantage of the “do not disturb” feature.
- Customize alerts relevant to home, school, day care and work.
- Choose up to ten delivery methods.
- Manage alerts by downloading the iPhone or Android app.

Those who were registered with CEAN, please check to see if your information migrated to the new system. If not, please register with Fairfax Alerts at www.fairfaxcounty.gov/alerts/.



Be Prepared - Receive Emergency Alerts

Everyone is encouraged to sign up for *Fairfax Alerts*.

Flood warnings, severe weather and major traffic congestion and other emergency notices are sent to electronic devices that are registered.

New users may register their pager, email, BlackBerry, cellphone, smartphone and telephone with voice mail (home or business) at:

www.fairfaxcounty.gov/alerts

Please update your information at the link above.



Protect the Drainage System and Natural Floodplain Function

Please help improve water quality by recycling trash and keeping storm drains clear.

Anything that is thrown from a vehicle, dropped on a parking lot or deposited into a storm drain is carried by rain or melting snow through the storm drainage system to streams, rivers and lakes; not to a wastewater treatment plant. This includes swimming pool water. Please do not drain pool water into a stream, manhole or storm drain. For more information about draining swimming pools, call 703-324-5500, TTY 711.

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 may flow to and pollute the Potomac River and ultimately the Chesapeake Bay.

Trash is unsightly. It degrades residential and commercial property values, harms the fish and other wildlife, and damages wetlands.

Please Do Not Litter

It is illegal to deposit anything into a storm drain. Fertilizer, pesticides, motor oil, pet waste, paint and paint-related products are hazardous to the environment and pollute the Potomac River, a source of drinking water for many Fairfax County residents.

The Fairfax County Municipal Code, chapters 124-1-1 through 124-1-13, contains provisions that address illicit discharges to state waters and the county's storm drainage system.

Call 9-1-1 to report hazardous materials, such as those listed above, that have been discarded into a storm drain or stream.



Litter in Pohick Creek was recently picked up by Noman Cole Pollution Control Plant employees.

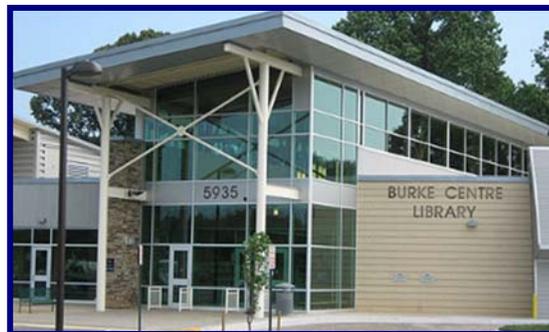
Flood Protection Information Available at Fairfax County Libraries

Printed information about flood protection for people, their property and their personal possessions is available at Fairfax County public libraries, most likely in the reference section.

Visit www.fairfaxcounty.gov/library.

Topics include:

- Elevated Residential Structures.
- Protecting Floodplain Resources.
- Reducing Damage from Localized Flooding.
- Protecting Building Utilities from Flood Damage.
- Above the Flood: Elevating Your Flood Prone House.
- Protecting Manufactured Homes from Floods and Other Hazards.
- Answers to Questions About the National Flood Insurance Program.



Burke Centre Library
5935 Freds Oak Rd.
Burke, VA 22015

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.

Fairfax County maintains a Class 6 CRS Rating which results in flood insurance premium discounts for county residents who save roughly \$200 per policy, per year.

Participation in the CRS program saves county residents approximately \$361,000 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 may occur at any time of the year.
- After applying for flood insurance, typically there is a 30-day waiting period before coverage begins.
- Renters may 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.



NATIONAL FLOOD
INSURANCE PROGRAM

Call toll free
1-888-379-9531

www.FloodSmart.gov

Insure your property for your flood risk:

- Learn your flood hazard.
- Some residents may qualify for a lower cost, preferred risk policy (PRP).
- Renters may purchase a 'contents-only' policy.



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(DPWES)**

**The Stormwater
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fairfaxcounty.gov

www.fairfaxcounty.gov/

dpwes/stormwater/

floodinformation.htm

www.fairfaxcounty.gov/

dpwes/stormwater

Thank you.

**To request this
information in an
alternate format, call
703-324-5500, TTY 711.**



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 and 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.

It is important to note that an approved Letter of Map Amendment (LOMA) does not revise the FEMA or county floodplains.