

Stormwater Management

Residential Drainage

What is Stormwater?

Impervious surfaces (rooftops, driveways & roads) prevent water from being absorbed into the ground. The water that is not absorbed into the ground is referred to as **stormwater runoff**. Stormwater runoff goes untreated, picking up pollutants such as trash, fertilizer, pesticides, oils, etc., and can negatively impact our local water quality.

What is Stormwater Management?

Stormwater Management is a mechanism for controlling stormwater runoff. The practices are incorporated into residential subdivisions to mitigate any impacts to downstream properties, as well as creeks, streams, rivers and other water bodies.

How is stormwater management and the storm drainage system related?

During a runoff-producing event, the storm drainage system conveys stormwater to a creek, stream, river or water body. Stormwater is conveyed by means of swales, channels, ditches, pipes, etc. and often times, is collected into a stormwater management facility, or **BMP**. Maintenance of the storm drainage system, and subsequent BMP, is essential for proper operation and structural integrity.



Who maintains the storm drainage system?

Typically, the Virginia Department of Transportation (VDOT) maintains the storm drainage system *within the public street right-of-way*. The remainder of the storm drainage system, and any stormwater facilities, are privately maintained by property owners or property owners' associations.

What do I do if I notice a drainage problem within the right-of-way?

Any drainage issues within the right-of-way become the responsibility of VDOT. If you are experiencing any drainage-related issues within the right-of-way, visit the VDOT website at www.virginiadot.org, or call 1-800-FOR-ROAD (367-7623).

Who maintains the ditch in the front of my property?

Normally, the ditch in the front of your property that runs parallel to any public road is within the VDOT right-of-way. VDOT maintains all public roads, along with any ditches, swales and pipe culverts within the right-of-way.

What can I do to prevent drainage problems on my property?

Many factors may contribute to the drainage issues you are experiencing. Remember, property owners or property owners' associations may be responsible for maintaining the storm drainage system. Consider the following:

- Ensure that storm drainage systems are kept free of yard waste (grass clippings, tree trimmings, leaves) or other obstructions that may block the flow of water.
- Remove trees, shrubs and other growth that could be negatively impacting the drainage pattern.
- Garages, sheds, decks, patios, pools should be kept outside of the storm drainage system.
- Ensure fences do not impede the flow of stormwater. DO NOT install fencing "at-grade," or flush, with the ground, and provide enough clearance. If possible, install fencing that allows for positive flow of stormwater (pictured right).



Who can I contact for additional information?

If you have a concern about drainage, contact the Stafford County Department of Public Works (Environmental Division) at (540) 658-8830 and request a site visit. Staff will assist by identifying the problem, determine the entity responsible for maintenance, and provide technical assistance.

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Common Problems and Potential Solutions

Increased Runoff

Runoff from roads and neighboring properties (rooftops, driveways, patios, downspouts, etc.) can quickly increase during heavy storms, causing your property to be inundated for a short period of time. Keep any drainage swales, channels, and pipe culverts free of obstructions to prevent localized flooding.



Foundation Moisture

Areas along the foundation that appear damp, or have spots of standing water, can be a sign of poor drainage. Ensure that your gutters are properly-sized and free of debris, and that downspouts and sump pumps direct water away from the foundation. If possible, use downspout extensions to further direct stormwater away from the foundation.



Yard Erosion

Yard erosion occurs when soil is washed away by runoff. Yard erosion leaves behind bare spots, gullies, invites scouring, and leaves behind sediment on driveways, sidewalks or flat areas. If possible, establish a stand of grass to prevent any future yard erosion issues.



Saturated Yard

Standing water, or a soggy back yard, can occur following a rain event. Wet conditions can be found in isolated areas, or encompass a large portion of your yard. Consider installing a small, underground drain, dry well or other similar drainage improvements to address these areas.



Sinkholes or Depressions

Depressions can occur in unexpected areas. Surprisingly, however, these can usually be repaired by the property owner. Remove any loose material from the depression, and back-fill with topsoil. Compact and grade the area so that water will not stagnate. Install sod or establish a stand of grass to prevent any future depressions.



NOTE: Contact Stafford County for technical assistance regarding larger sinkholes or any sinkholes in the vicinity of storm drainage structures.



For More Information, visit:

www.staffordcountyva.gov/stormwater

or CALL (540) 658-8830