

STORMWATER MANAGEMENT FOR RESIDENTIAL DRAINAGE

What is stormwater?

Impervious surfaces (rooftops, driveways & roads) prevent water from being absorbed into the ground. The water not absorbed into the ground is called runoff. Stormwater runoff collects pollutants as it makes its way to local waterways, like trash, fertilizer, pesticides, oils, etc., and these can negatively impact our local water quality. Stormwater management is a way to control stormwater runoff.

How is stormwater management and the storm drainage system related?

During a runoff-producing event, the storm drainage system conveys stormwater to creeks, streams, & rivers. Stormwater can be conveyed by swales, channels, pipes, ditches 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 (ROW). The remainder of the storm drainage system, and any stormwater facilities, are privately maintained by property owners or property owners' associations.

Who maintains the ditch in the front of my property?

If the ditch in front of your property runs parallel to any public road, it is within the VDOT ROW. VDOT maintains all public roads, along with any ditches, swales and pipe culverts within the ROW. If you are experiencing drainage-related issues within the ROW, visit VDOT's website at www.virginiadot.org, or call 1-800-FOR-ROAD (367-7623).

Who can I contact for additional information?

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

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

Different factors can cause drainage issues. 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 drainage system.
- Ensure fences do not impede the flow of storm water. 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 storm water.

STORMWATER MANAGEMENT

COMMON PROBLEMS & 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.



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.

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 water will not pool. Install sod or establish grass cover to prevent erosion and future depressions.



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.

Saturated Yard

Standing water, or a soggy yard, can occur after a rain event. Wet conditions can be found in isolated areas, or encompass a large portion of your yard. Consider speaking with a professional about your site conditions and drainage improvement options.

