

FAQ: Flooding Issues on Private Property

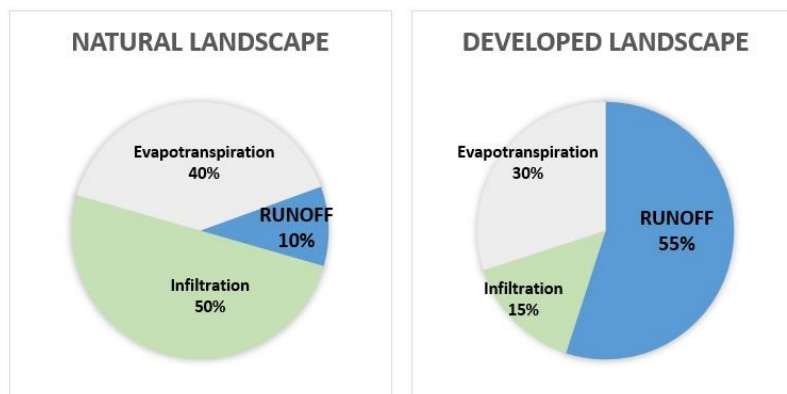
Why is my property flooding?

Flooding can occur anywhere and stormwater runoff is usually the culprit. When it rains, a stormwater collection system consisting of inlets, storm drains, pipes and ditches typically carries runoff to local water bodies where the water can move safely downstream. The stormwater collection system is designed to handle normal rainfall events for the area and its components are usually maintained by a local government, NCDOT and/or private citizens depending upon location.

Areas that are frequently subject to flooding usually lie within a designated floodplain and are cooperatively regulated by the Federal Emergency Management Agency (FEMA) and local governments. However, flooding can occur outside of the designated floodplain and other normally flood-prone areas. You can research your flood risk at <https://flood.nc.gov>.

Localized or regional flooding can result from impacts to the stormwater collection system and/or local water bodies. Those impacts are usually because too much water is trying to get into the system or something is preventing the water from flowing freely through the system. Rainfall amounts (total inches) and intensities (inches per hour) are highly variable, and atypical storm events can temporarily overwhelm any stormwater collection system. Blockages, obstructions and clogs in the stormwater collection system and/or local streams can also reduce the ability of the system to carry runoff. This can cause water to back up even during normal storm events.

Development can also contribute to flooding because surfaces covered by pavement and rooftops result in more runoff than undeveloped natural areas do. Natural areas allow runoff to infiltrate into the ground and can result in as little as 10% runoff from a storm. Development includes impervious surfaces (roofs, streets, etc.) that prevent infiltration, so more rainfall runs off and at a faster speed. High density development can result in as much as 55% of the rainfall running off.



Ref. EPA.gov SWMM

What can I do to prevent flooding on my property?

Flooding is a challenging problem to manage, but there are a few things you can do to prevent flooding:

- Avoid building alongside water bodies, in the flood plain, and in other flood-prone areas where structural damage is likely to occur.
- Maintain any privately owned stormwater collection system components on your property to keep them free-flowing.

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- Immediately report publicly owned stormwater collection system issues to your local government.
- Collect litter, yard waste, debris, grass clippings and leaves so they do not enter and obstruct the stormwater collection system or local streams.
- Disconnect roof drains from paved areas or install rain gardens to infiltrate runoff into the soil.
- Install rain barrels to capture and use runoff.

What can the Department of Environmental Quality (DEQ) do about flooding?

The DEQ has statutory authority to manage the state's water resources to maintain, protect and enhance water quality [Ref. N.C.G.S. Article 21, Chapter 143]. DEQ does not have statutory authority to regulate or remedy water quantity (flooding) issues.

DEQ has a number of stormwater permitting programs for water quality, which are designed to protect surface waters and aquatic resources from pollutants in runoff that come from development. Many people mistakenly believe these programs control the amount of runoff/flooding and do not realize that they only address pollutants in runoff. Additional information on the DEQ water quality permitting programs is provided below.

Some cities and towns are required to obtain a National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit. The MS4 permit requires implementation of a comprehensive suite of stormwater management programs that protect and improve the water quality coming out of the public storm sewer system. If you pay a stormwater utility fee, your local government likely has an NPDES MS4 Permit from DEQ. In addition, new development and redevelopment projects of 1-acre or more are required to obtain a post-construction stormwater management permit and manage the quality of stormwater leaving the project site. Post-construction permits are issued by either DEQ or a local government.

Post-construction permits often require treatment devices to remove pollutants before stormwater runoff is discharged from the site. These devices include wet ponds, wetlands, bioretention cells, infiltration systems, etc. While they may provide some localized flood reduction benefits, they are water quality treatment devices, not water quantity control devices.

Stormwater treatment devices are designed to treat the volume of the "first flush" of runoff which typically carries, or flushes, the majority of pollutants that have accumulated on impervious surfaces to local water bodies. The runoff in excess of the first flush typically bypasses treatment device(s) in order to maintain pollutant removal capacity in the device. In some cases, stormwater treatment devices may also be required to draw down, or discharge, the treated stormwater over a period of time to provide adequate treatment. This can result in continuous flows from some stormwater treatment devices for 3 to 5 days following each storm event.

If you have a water quality complaint involving a post-construction permitted project, you can determine the appropriate permitting authority to contact by using the [Stormwater Permitting Interactive Map](#) on the DEQ Stormwater Program web page at <https://deq.nc.gov/sw>. Please note that the project must comply with the issued water quality permit. The permitting agency does not have the legal authority to require additional measures to address flooding issues.

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Who should I contact for help with flooding issues?

Typically, the property owner is legally responsible for maintenance of the drainage system located on their property. This can include ditches, stream banks, and even buried pipes. The public stormwater collection system is located in the public street/right-of-way, on property owned by the local government, or in a dedicated public drainage easement that should appear on your property map.

The first point of contact for flooding issues should always be your local government. They can provide technical assistance with water quantity issues involving the public stormwater collection system, FEMA-designated floodplains and other flood-prone areas. Questions they will likely ask you include:

- Does flooding occur during abnormally heavy rains or almost every time it rains?
- Has something upstream of your property changed the drainage or runoff pattern?
- Have you maintained the stormwater collection system on your property?
- Do you live in a FEMA floodplain?

For flooding or drainage issues on state-owned streets and rights-of-way, you should contact the N.C. Department of Transportation State Road Maintenance Division at 919-733-2191. If you are unsure whether a public street is state-owned, your local government can assist you.

What other options do I have?

Flooding is a challenging issue. Upstream property owners are legally allowed to improve their property, including the redirection or increase of stormwater runoff, as long as the owner uses reasonable care to avoid causing unnecessary harm to others. A court ruling, commonly known as *Pendergrast versus Aiken* [Ref. Supreme Court of North Carolina, 236 S.E.2d 787, 293 N.C. 201, Filed August 23, 1977], establishes the rights and limitations to water runoff redirection by adopting a “reasonable use rule”. This rule generally means that landowners are allowed to make reasonable use of their lands without liability. However, reasonableness is a question of fact, determined in a civil action weighing the gravity of harm to the plaintiff (the injured landowner) against the utility of the defendant; which is determined by a judge on a case-by-case basis. Therefore, you may need to file a private nuisance action (civil action) in order to receive any remedy for harm resulting from flooding caused by an upstream property owner.