

Stormwater: True or False

Rain, rain, and more rain. Since approximately 2017, we've been getting much more of it than we used



to, and in larger chunks, and more than most of us want. As a result, the Township has been hearing many things regarding stormwater runoff from residents that are not completely accurate. Regardless of what may be causing this phenomenon, higher rainfall appears to be something that we need to adjust to and understand the concepts and related laws.

In upcoming newsletters, the Township Engineer will be presenting a series of articles based on misconceptions heard from our residents regarding stormwater. In each article, a statement will be presented, along with an explanation of why each statement is a misunderstanding of the concept of stormwater management, drainage

conveyance, and other related topics regarding stormwater.

Statement: Stormwater flowing from my neighbor's property onto mine is not legal and something must be done about it.

Analysis: Mostly false.

Stormwater flows naturally from upslope areas to downslope areas by virtue of gravity. Therefore, if your property is downslope from the top of a hill, stormwater is going to flow from the top of the hill to your property. In larger storms, more runoff will flow to your property than smaller storms. While it is true that increases in stormwater runoff caused by additional development on an upslope property must be managed to levels prior to the construction of the project, the amount of runoff flowing from those areas to your property can remain what it was prior to the project. That amount does not have to be reduced

to zero. This also applies to your property and lands down slope of you. In other words, when you purchase a property, you are also purchasing the right to discharge the amount of stormwater coming from that property onto your downslope neighbor in any storm nature dishes out. What you (or your upslope neighbor) cannot do is alter the property in such a way that increases the amount of runoff coming from it or alter the lot topography to redirect drainage from one area of your property to another. This typically happens when owners make improvements to their property, such as construction of an addition, pool, etc., which is why most of those require a certain level of stormwater management as part of the project. If nothing upslope has been altered, the runoff to down slope areas is what it is, whether the storm causing it is one inch of rainfall or 50 inches of rainfall and regardless of the damage runoff from a large storm may cause. ●

One Little Thing...

Keeping stormwater grates clear is extremely important for the proper functioning of any storm drainage system. If a grate is clogged, stormwater designed to enter it bypasses the clog and flows to the next inlet downslope. If that inlet grate is clogged, the flows continue to build up and travel to the next downslope inlet, creating a classic "snowball effect." Ultimately, the inlet at the low point in the system will not be able to intercept flows from several upslope inlets and will be overwhelmed by stormwater, particularly if it is also clogged. The stormwater will eventually bypass the entire drainage system, scouring roadway shoulders, yard areas, woodlands and any other areas susceptible to erosion, carrying sediment and pollutants to the closest stream and polluting our water.

One little thing you can do to help the Township storm drainage system

function properly is to clean the leaves and debris from any stormwater grates that may be located in the roadway in front of your house. While the Township is ultimately responsible for cleaning inlets, there are over 1,500 inlets within our boundaries, and we are responsible for the maintenance of approximately 1,200 of them. With seven employees in the Public Works Department, that works out to around 200 for each worker, who also have a plethora of other duties. As such, cleaning all of them several times a year is not feasible. We also understand that not everyone is capable of clearing a grate. If that is the case, there are still steps you can take to help. First, contact the Township if a grate in front of your house is particularly susceptible to clogging. We keep an inventory



of those types of inlets and prioritize them when we start the cleaning process. Second, avoid having leaves or cut grass blown into the street during routine lawn maintenance. Not only does this clog the grates faster and more frequently, but it also presents a road hazard for both motorized and non-motorized vehicles, particularly when they get wet. It also introduces pollutants contained in the grasses from fertilization, insecticides, and herbicides to our streams. ●