

“A Conversation with Greenable Woodbridge”... Impervious Surfaces and Stormwater

When working with a watershed, there are two primary types of pollution that occurs: point source pollution, and non-point source pollution. Fortunately for once, the definitions for those terms are exactly what you might expect. Point source pollution is pollution that comes from a single identifiable point that goes into the water. Point source pollution is relatively easy to deal with. The discharge is tested to determine what contaminants it contains, and if it meets certain EPA/DEP standards, a permit is issued allowing the discharge. If it doesn't meet those standards, the discharge must be stopped. Non-point source pollution is everything that's not point source pollution. Namely, this means that it does not come from a single identifiable source, which makes dealing with it much trickier. Addressing non-point source pollution in our watershed is where stormwater and impervious surfaces make a big difference.

Stormwater is a primary vector for non-point source pollution, meaning it is how pollution moves through our environment. As the stormwater runs off through the environment, it picks up all sorts of little contaminants from the ground, whether chemical or some kind of particulate matter. In undeveloped areas stormwater infiltrates into the ground much more quickly, and doesn't have as much time to pick up pollution. However we all know that Woodbridge Township, and most of the state of New Jersey, cannot fairly be described as “undeveloped”. The urban development that we live in creates a whole series of issues in terms of how we deal with stormwater, all because of impervious surfaces.

Impervious surfaces are areas where water cannot infiltrate into the ground. In terms of developed impervious surfaces, generally this refers to roads, buildings, parking lots, etc. Any place where we have covered the ground with something water can't get through. This means that water will run off instead of going into the ground. As the water travels farther, it has a greater opportunity to pick up pollution from the environment, and there is always ample pollution in urban areas for the water to accumulate. This can mean fertilizers that are still on our lawns, oil or other mechanical fluids that have leaked from our vehicles, soap from carwash water (which is why you should always take your car to a car wash that recycles its water!), litter, etc. All of this can get picked up by stormwater as it runs off. While it may not seem like a lot of pollution from where it gets picked up at, as the water moves through the watershed and drains into a single area, the pollution accumulates and can have a real impact on the local ecology.

To see how the Township addresses these issues, review the Stormwater Pollution Prevention Plan, which is available on the Township's website at this link:

<http://www.twp.woodbridge.nj.us/LinkClick.aspx?fileticket=2Yzp4z%2fpO6o%3d&tabid=2323>

For more general information regarding pollution in the watershed, go to the NJ DEP's website:

<http://www.nj.gov/dep/watershedrestoration/info.html>