

# Stormwater Management

## Stormwater Management

Whenever precipitation falls from the sky, there are three options to what happens to that water. It either soaks up into the soil or roots of trees and vegetation, evaporates into the atmosphere, or runs off into drainage basins which flow into creeks and streams. Stormwater is any water from rainfall or snowfall that runs off into bodies of water. Chadds Ford Township is located in the picturesque Brandywine Valley. Most of the Township's stormwater eventually flows into the Brandywine Creek. It is crucial that stormwater is monitored, so that pollutants are not introduced into the Brandywine Watershed. Proper management of stormwater directly relates to the quality of our water. This is especially important in Chadds Ford Township because the vast majority of residents obtain their water from private wells. Water quality is not just important for wildlife, but directly affects our own health.

## Illicit Discharge

An illicit discharge is any water or liquid that contains pollutants which flow into a stormwater system. **There are three types of illicit discharges:**

- Illegal Connections
- Illegal Dumping
- Runoff
- Hazardous pollutants would include but not limited to the following: detergents, grease, solvents, acids, petroleum based liquids, ammonia, hydroxides, sediments, heavy metals, and products containing chlorine.

## Stormwater Complaints

Pennsylvania's Department of Environmental Protection requires Chadds Ford to investigate illicit discharges into streams. Promptly report any of the events listed on the [Who Are You Going To Call](#) water quality hotline document by either calling the appropriate telephone number or contacting the Township office.

Below is an Illicit Discharge Complaint Form. Fill one out and send to the township if you know of any illicit discharges. The definition of an illicit discharge is explained above.

- [Illicit Discharge Complaint Form](#)

## **Pennsylvania's DEP Municipal Separate Storm Sewer Program (MS4)**

The federal Clean Water Act (CWA) makes it illegal for the discharge of pollutants into stormwater systems without the appropriate permits. The MS4 Program is a program created by Pennsylvania's Department of Environmental Protection that satisfies the federal run-off related requirements of the Clean Water Act. The implementation of the MS4 Program occurs at the municipal level, due to zoning ordinances and subdivision and land development regulations.

For information concerning the MS4 Program, click [HERE](#).

---

## **What Residents Can Do to Protect the Waterways**

### **Dispose of hazardous materials properly**

- Do not pour hazardous liquids down the storm drain, since storm drains are typically connected to local creeks and streams.
- Make sure that sewage and other waste is prevented from flowing into the storm water system.
- Illicit discharge of hazardous materials would include the following: **oil, grease, gasoline, chemicals, sediments, detergents, and products containing chlorine.**

### **Limit use of fertilizers and pesticides**

- Make sure to not use fertilizer when heavy rain is forecast in the near future.
- Conduct soil test to see if fertilizer is necessary for your yard.
- Look for natural alternatives to pesticides.

### **Properly dispose of yard waste**

- Keep grass clippings and leaves out of storm drains and culverts.
  - Grass clippings and leaves can be used as compost.
  - Use mulching lawn mowers to cut your yard, which recycle grass clippings and leaves into the yard.
- 

## **Chadds Ford Township Stormwater Management Ordinances**

The Pennsylvania legislature enacted the Storm Water Management Act (No. 167) in 1978 which authorizes, among other things, the local implementation and enforcement of stormwater

## Swimming Pool Requirements

Chadds Ford Township would like to remind pool owners of their responsibilities concerning the discharge of pool water. The Pennsylvania Clean Streams Law and the Chadds Ford Township NPDES MS4 permit prohibits the discharge of non-stormwater, such as pool water, into the municipal storm sewer system. Every year, there are incidents of fish kills relating to either the discharge of pool water at the end of the season, at the beginning of the season, or the running of tap water or pool water hoses into storm sewers. Pool water discharged with residual chlorine at even the low level found in tap water has had adverse impacts on nearby creeks and ponds. Pool owners/operators can be liable for any damage to aquatic life or the stream that occurs as a result of their pool discharge(s).

Discharge of pool water to either sanitary sewers or storm sewers is prohibited by our municipality's ordinances. Pool water should not be discharged to storm drains, or streets that run to storm drains, but rather over a grassy area at a rate that optimizes infiltration and aeration and will not cause erosion. According to the DEP guidelines, pool water should have zero chlorine residual, and be within the acceptable ranges for temperature and pH as specified. For swimming pool water guidelines, please refer to the [DEP Swimming Pool Water Fact Sheet](#).

Single family residences with pools should also not be draining pool water directly to streams, storm sewers, or streets. Discharges should be over a grassy area at a rate that allows the water to soak into the ground. It is not permitted to discharge filter backwash water to storm sewers or streams; this water must also be infiltrated to the ground.

Should you have any questions regarding your responsibilities under the PA Clean Streams Law, please contact the Township or the Pennsylvania Department of Environmental Protection, Southeast Regional Office, Bureau of Water Management, 484-250-5970.

Thank you for your cooperation in keeping our streams healthy!

---

## Mowing Tips

Set your lawn mower blade to its highest setting. A high cut (3") encourages deeper roots. Increasing the grass height only 1/8 of an inch results in about 300 square feet more leaf surface for each 1,000 square feet of lawn. More leaf surface enables grass to generate more energy for healthy growth, especially of roots. Taller grass shades out weeds, limits moisture

evaporation from soil and harbors beneficial insects which control pests. Cut the lawn often enough so that you remove no more than 1/3 of the blade at one time. This means more frequent mowings in the spring, fewer in the heat of summer.

Leave your grass clippings as you mow. Clippings provide nutrition for your lawn. They are comprised of water, organic matter, nitrogen, and a small amount of phosphorus--all things your grass needs. Because clippings supply up to 50% of a lawn's nitrogen needs over the season, you will not need as much fertilizer. Clippings from regular mowings will NOT cause thatch build up and will not hurt the grass.

Do not dump yard waste (clippings, branches, or leaves) in the street where it can wash into storm drains, or in parks, along streams, or piled at the base of trees. [Click here for more mowing tips.](#)

---

## Stormwater Management Links

[DEP Stormwater Information](#)

[EPA Nonpoint Source Toolbox](#)

[Delaware County Conservation District](#)

[Center for Watershed Protection - Stormwater Manager's Resource Center](#)

[PA DEP Southeast Regional Office Contact Info](#)

FEMA UPDATE: Recently, the Federal Emergency Management Agency (FEMA) revised the Flood Insurance Rate Maps (FIRM) for those communities located in the Brandywine-Christina Watershed, which includes revisions for residents of Chadds Ford Township.

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) has issued a Preliminary Flood Insurance Rate Map (FIRM), and where applicable, Flood Insurance Study (FIS) report, reflecting proposed flood hazard determinations for Chadds Ford Township. These flood hazard determinations may include the addition or modification of Base Flood Elevations, base flood depths, Special Flood Hazard Area boundaries or zone designations, or the regulatory floodway. Technical information or comments are solicited on the proposed flood hazard determinations shown on the preliminary FIRM and/or FIS report for Chadds Ford Township. These flood hazard determinations are the basis for the floodplain management measures that your community is required to either adopt or show evidence of being already in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program. However, before these determinations are effective for floodplain management purposes, you will be provided an opportunity to appeal the proposed information. For information on the statutory 90-day period provided for appeals, as well as a complete listing of the communities affected and the locations where copies of the FIRM are available for review, please visit FEMA's website at [www.fema.gov/plan/prevent/fhm/bfe](http://www.fema.gov/plan/prevent/fhm/bfe) or call the FEMA Map Information exchange (FMIX) toll free at (877) FEMA MAP (1-877-336-2627).