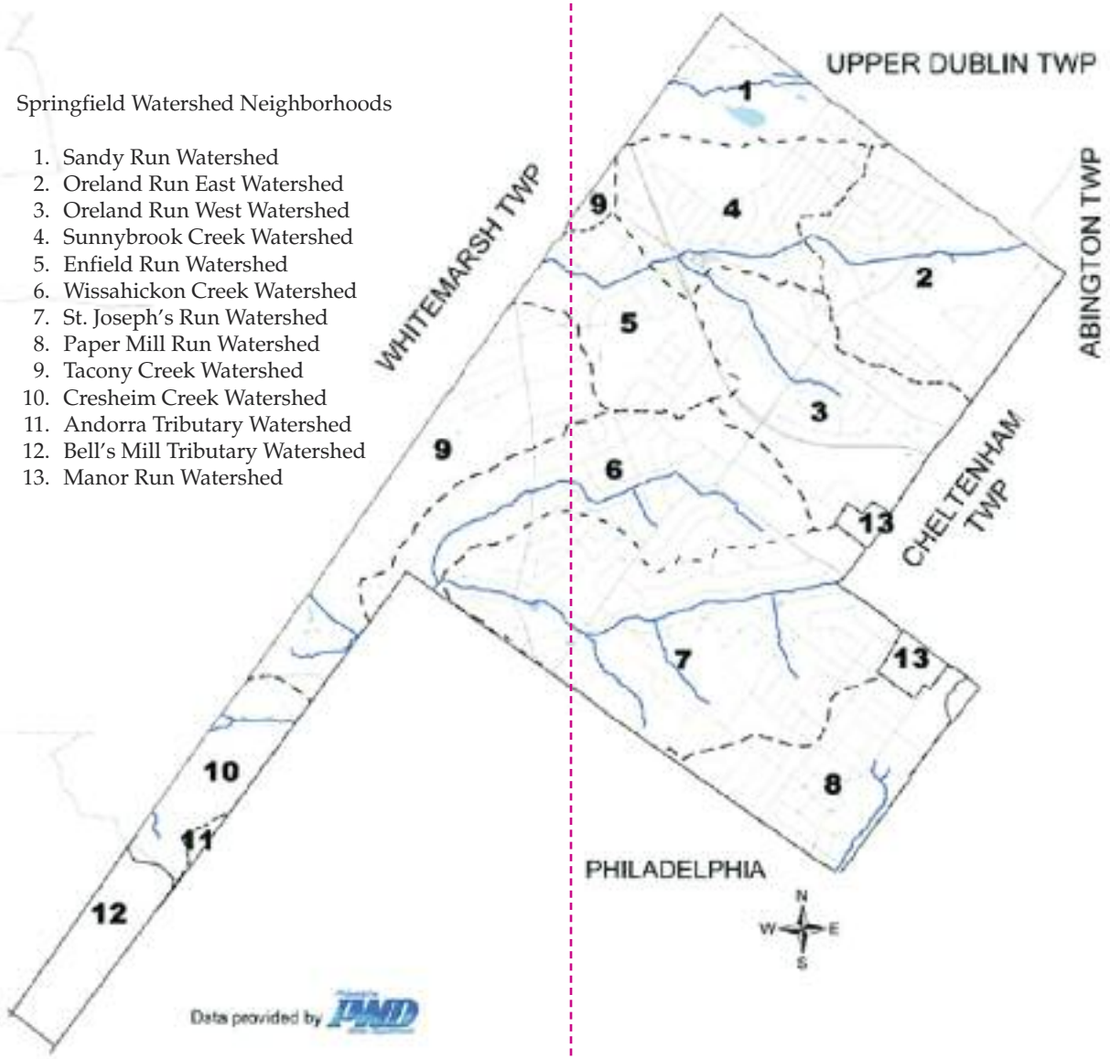
Springfield Watershed Neighborhoods

1. Sandy Run Watershed
2. Oreland Run East Watershed
3. Oreland Run West Watershed
4. Sunnybrook Creek Watershed
5. Enfield Run Watershed
6. Wissahickon Creek Watershed
7. St. Joseph's Run Watershed
8. Paper Mill Run Watershed
9. Tacony Creek Watershed
10. Cresheim Creek Watershed
11. Andorra Tributary Watershed
12. Bell's Mill Tributary Watershed
13. Manor Run Watershed



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Springfield Township Watersheds

Springfield Township is rich in water resources. More than ten linear miles of streams make their way through the 6.6 square miles of our Township.

Springfield's Environmental Advisory Commission has defined thirteen watershed neighborhoods within the Township. All but two contain a stream that drains to the Wissahickon Creek. The Wissahickon watershed extends well beyond our Township. It includes heavily used park and recreational areas, a rich variety of plants and wildlife, and a trout stocked fishery. It is also a source of drinking water for the City of Philadelphia.

Many of the stream corridors throughout Springfield Township are no longer healthy, stable systems. Certain patterns of development and landscape maintenance practices have weakened our waterways. The EAC has prepared this guide to help residents identify conditions common to Township waterways, and to understand basic property management measures that can help preserve water resources for you, your neighbors, and future generations.

Healthy Streams

The banks of a healthy stream are planted with trees, shrubs, perennials and grasses which stabilize channel banks, filter runoff from adjacent property, and provide shade. A healthy stream supports aquatic life.

- Healthy streams have stable channels which resist erosion. Eroding banks change the size, shape and direction of a stream, and can have a dramatic impact on the stability of adjoining property.
- Healthy streams with stable banks maintain a generally consistent capacity for conveying water. Deposits of eroded sediment from unstable banks fill in available volume within a stream channel and may contribute to flooding.
- Healthy stream systems support a rich system of plant and animal life, including fish and birds which are natural predators of mosquitoes and other pests.

Unstabilized Banks

Unplanted stream banks are highly vulnerable to the effects of erosion from heavy rainfall and the force of flowing water. Stones and vegetation dislodged from unstabilized banks can block stream channels and lead to erosion, deposition of sediment, and flooding

Erosion and Deposition

Because it changes the size and shape of a stream corridor, erosion and the deposition of eroded sediment can cause a stream to shift its course. Eroded streambanks can result in damage to adjacent property and infrastructure. Deposits of eroded sediment can contribute to flooding by reducing a stream's capacity for carrying water. When a stream deposits eroded sediment, it can also bury natural habitat.

Turf Edge

Stormwater runoff passes easily through low-cut grass. Low-cut grass at the edge of a stream is a poor filter for contaminants such as chemicals used in lawn and garden care which may be contained in stormwater runoff. Pesticides and herbicides can kill aquatic life.

The root systems of turf grass are generally weaker and shallower than the root systems of trees and shrubs, making turf grass a poor choice for stabilizing stream banks vulnerable to erosion.

Lack of shade

Where trees do not provide shade, algae blooms can occur within stream channels. Algae blooms result in a decrease in dissolved oxygen, which weakens the health of the stream and kills aquatic life

Adjacent Paving

Stormwater flowing over paved surfaces and directly into a stream carries unfiltered contaminants which reduce water quality.

Piping

When it is released at high volume in a single location, stormwater piped directly into streams can quickly weaken a stable channel.