The Little Neshaminy River and Bradford Lake, has been cited by the Pennsylvania DEP as polluted according to the Clean Water Act. According to a report the major sources of impairment are caused by nonpoint source pollution (NPS) problems such as pollutant runoff and siltation in Warrington Township, Bucks County, Pennsylvania.

Pollutant runoff and siltation are NPS problems that are directly related to the land development within the region. When storm water is not allowed to naturally percolate into the ground, it runs off into rivers carrying sediment and pollution from its impervious surfaces along with it. Pollutants typically associated with pollutant runoff include pesticides, oil, fertilizers, trace metals and pet wastes.

Increases in impervious surfaces within Warrington have contributed to poor water quality within the Little Neshaminy River and Bradford Lake. From 1992 to 2000, construction in Warrington increased by 20 percent and impervious surfaces in the area made up 49.9 percent of the land. These land developments are currently responsible for more than half of the NPS pollutant and sediment loadings entering into Bradford Lake.

The high NPS loadings of pollutants and sediments have impaired Bradford Lake over time by degrading its dense stands of rooted aquatic plants as well as degrading the habitat of bottom-dwelling macro invertebrates. This waterbody also has massive algal blooms during summer seasons. Algal blooms caused by the increased loadings entering into Bradford Lake deplete the water of much of its dissolved oxygen (DO). Low DO supplies can threaten most aquatic life during such events.

The Warrington Environmental Advisory Council (EAC) is actively working on restoring the impaired water quality of the Little Neshaminy River and Bradford Lake. In 2006 the EAC coordinated a community effort to install a large rain garden at Igoe, Porter Wellings Park. Currently the EAC is developing plans to naturalize three detention basins throughout the Township. Additional efforts include providing Healthy Yard Evaluations for Homeowners, coordinating volunteers to assemble rain barrels for residents, labeling storm drains, conducting presentations and promoting Clean Energy.

The Healthy Yards effort has been partially funded by the League of Women Voters of Pennsylvania Citizen Education Fund through a Section 319 Federal Clean Water Act grant from the US Environmental Protection Agency administered by Pennsylvania Department of Environmental Protection and naturalization of the detention basins has been funded through a Growing Greener grant by the Pennsylvania DEP.

To find out how to become a volunteer or what water conserving techniques you can practice in your yards please contact the EAC @ eac.warrington@gmail.com