

Sweetwater Farm

Feasterville, PA (2003)

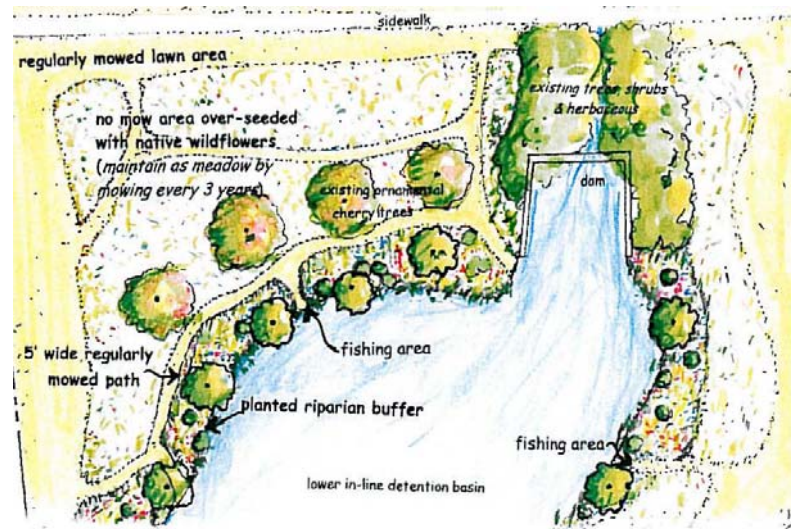
Background:

The Sweetwater Farm project began when residents of the Sweetwater Farm residential development, located in Lower Southampton, approached the township to inquire if they could help with the geese population problem along Turkey Run Creek, behind their homes, where there was a large, maintained turf grass area covering the open space between property lines and the Turkey Run Creek. In order to adequately address this problem the stormwater management system for the subwatershed was examined. It was discovered that farther downstream, an outdated detention basin aided in the bank erosion of the Neshaminy Creek at nearby Playwicki Park, which caused severe flooding at the township's premier open space park. Three dams located on 11 acres of county property were part of the existing technology that serviced the basin. They trapped stormwater, which was polluted with household runoff, and acted as an attractant to the geese population. The presence of the geese further polluted the water in the holding basin.



Monitoring:

Using a \$40,000 grant from PADEP, the landscape architect hired by the township purchased native plant species to replace the grass vegetative cover surrounding the 3 dams. With help from some community members the native plants returned the dams to a more natural setting and attracted a wide diversity of wildlife that quickly repopulated the area. This return to natural conditions served to make the area inhospitable to the geese and though still present, they are in much smaller numbers.



Conclusions:

By 2005, the Neshaminy Creek banks were stabilized and wildflowers and other native plants were thriving and increasing the biodiversity of the entire stormwater management area. In 2006 after a heavy rain event, the landscape architect visited the site and noted that no flooding and no erosion of the banks had occurred since the native species were planted around the 3 dams. Lower Southampton's commitment to proper stormwater management and the site serve as a good model to other communities.

Although this is a good example of how simple and inexpensive it can be to improve the efficiency of an existing stormwater management system, there is no actual data, only ancillary information, that this site is now working as effectively as it was intended.