

# STORMWATER RUNOFF

## Brookside Country Club



BEFORE



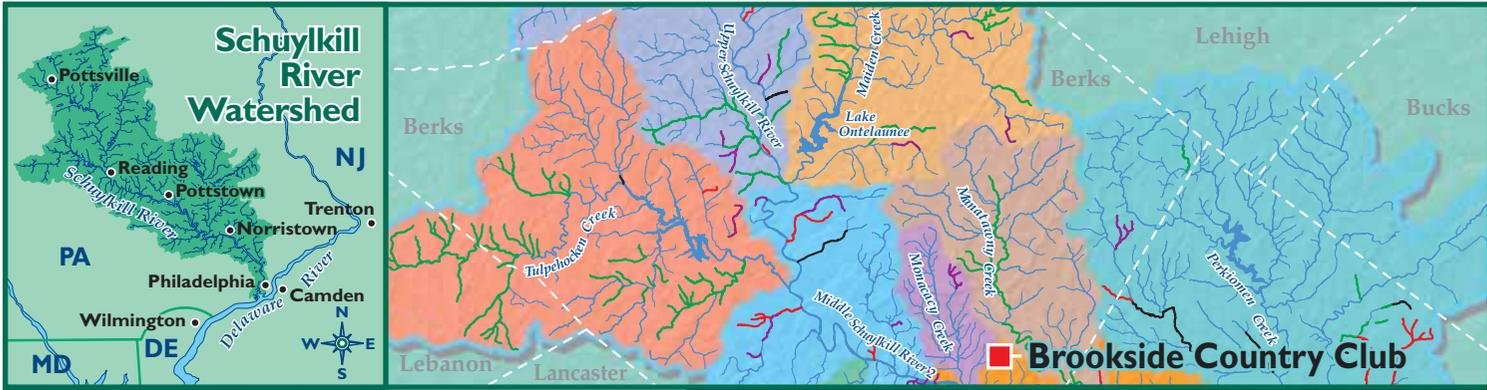
AFTER

Sprogels Run, a tributary of the Schuylkill River, meanders through the Brookside Country Club in Pottstown. A few years ago, the golf course supervisor realized that the fish in the little stream were in trouble and blocked from upstream passage by an old dam. Unsure of how to help them, he reached out to the Montgomery County Conservation District and the Delaware Riverkeeper Network. Soon, this little tributary in the Schuylkill River Watershed was receiving a helping hand from the Delaware Riverkeeper Network thanks to funds provided by the Schuylkill Watershed Initiative Grant.

To more fully assess the conditions of the stream and its needs, students from local middle and high-schools participated in pebble counting (to study stream substrate) and water quality monitoring. The Philadelphia Water Department (PWD) also conducted fish assessments above and below the dam both before and after the project completion. After a lengthy permitting process, the Delaware Riverkeeper Network worked with golf course staff to remove the dam and slow stormwater by installing log and stone vanes. The vanes reduce stream bank erosion, provide calmer water in storm events, and create deeper, shaded pools for resident suckers and bass in the heat of summer. Removing the dam also enabled the fish to swim upstream to a smaller tributary.

*Log and stone vanes were installed along banks to reduce stream bank erosion, provide calmer water in storm events, and create deeper, shaded pools for resident suckers and bass in the heat of the summer*





True to the “golf course look,” stream banks in the Brookside Country Club were traditionally mown to the water’s edge. With no significant root structures in place to stabilize the banks and filter and absorb stormwater runoff, pollution from the golf course and neighboring properties flowed directly into Srogels Run. After re-grading the stream banks, a 20- to 100-foot “no-mow” zone was established, totaling almost ¾ of an acre. Students, club members, and local watershed organization volunteers planted seeds, 30 trees, 40 shrubs, and 100 live stakes to create a living buffer that will absorb and slow stormwater runoff, and filter out pollutants before they can enter the stream.

In the Schuylkill River Watershed, there are 79 golf courses covering almost 12,000 acres, with more than 21 miles of stream running through them. The stormwater Best Management Practices (BMPs) at the Brookside Country Club shine under a public spotlight, serving as a model of what can be accomplished on these large land parcels. Brookside is one of a number of golf courses in the region that are integrating environmentally-friendly practices in their management. Since 2003, the PWD has offered a golf course certification program using the model of the Audubon Cooperative Sanctuary Program (ACSP). In 2005, Brookside hosted a workshop and participated in this program. Feature speaker Peter Bronski from the ACSP led workshop attendees to discover the importance of incorporating water quality concerns into environmentally sound land management, with an emphasis on the proper use of fertilizers and pesticides. Approximately 45 golf course managers have participated in this program since its inception.



*The Schuylkill Watershed Initiative Grant is a targeted watershed grant awarded by the U.S. Environmental Protection Agency for the completion of a suite of water quality improvement demonstration projects in the Schuylkill River Watershed. The Brookside Country Club project is one of more than 40 projects that received funding from this source, in addition to other funds and/or support. The grant is administered by the Partnership for the Delaware Estuary and the Philadelphia Water Department.*