

# AGRICULTURE



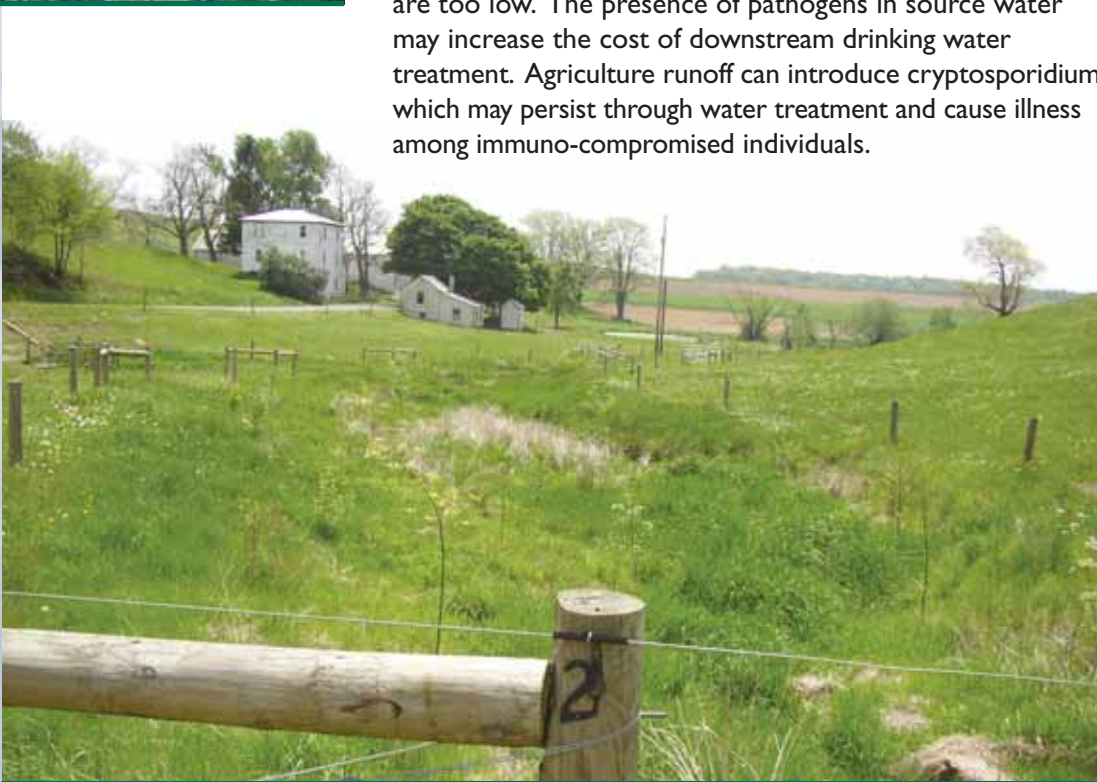
## *Seidel Farms*

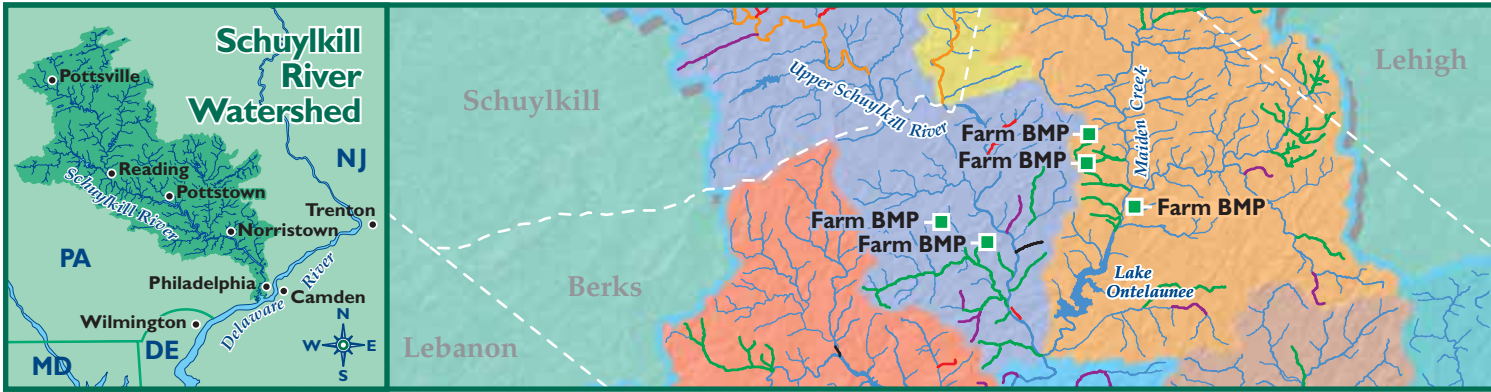
Commonly grouped in clusters, family farms are ideal sites for agricultural Best Management Practice (BMP) installations. In Berks County, three separate farms owned and operated by Seidel family members span over 300 contiguous acres of land. Two springs on the farms bubble up from the ground, giving birth to streams that form the headwaters of Maiden Creek.



Primarily, the Seidel farms are dairy operations with dozens of cows. Without BMPs in place, the livestock had unrestricted access to all of the stream and wetland areas on the property. The animal's manure entered the waterways, loading nutrient and bacterial pollution into Maiden Creek, a drinking water source for Reading, Pennsylvania.

With Schuylkill Watershed Initiative Grant funding, the Berks County Conservancy protected over seven acres of wetland areas with livestock exclusionary fencing, as well as over 10,000 feet of stream bank. Fencing keeps animals and their manure away from the water. High in nutrients and bacteria, manure in the water contributes to excessive plant growth and algae blooms in the waterways, depleting the water of dissolved oxygen as the plants die. Fish and other aquatic creatures cannot survive if dissolved oxygen levels are too low. The presence of pathogens in source water may increase the cost of downstream drinking water treatment. Agriculture runoff can introduce cryptosporidium, which may persist through water treatment and cause illness among immuno-compromised individuals.





The Seidel farms are protected in the Agricultural Conservation Easement (ACE) Program implemented by the Berks County Agricultural Land Preservation Board. ACE farms require a Conservation Plan which calls for or recommends implementation of agricultural BMPs. With the farmland protected in perpetuity, there is little chance of future residential or commercial development. Preserved in clusters, ACE farmlands help ensure the continuation of agriculture (the county's top industry), while maintaining the rural landscape of Berks County. These large land areas provide for stormwater infiltration that could otherwise become runoff from paved, developed surfaces.



The Seidel farms were the first of 15 priority farms to receive stream bank fencing, buffers, and crossings through the Schuylkill Watershed Initiative. They served as a critical demonstration project in the community, illustrating the effects of BMP installations for protecting water quality.

**BEFORE**



**AFTER**



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 Seidel Farm projects are included in 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.