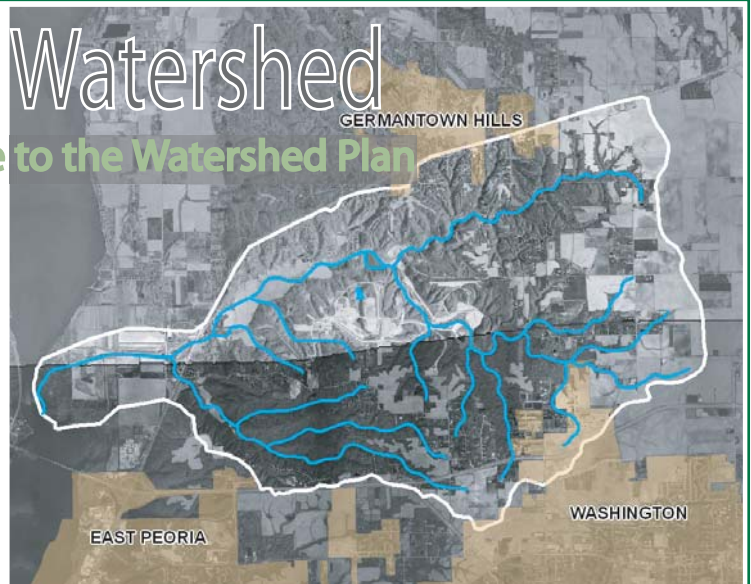


Tenmile Creek Watershed

A Farmer's Guide to the Watershed Plan

Citizens of the Tenmile Creek Watershed face extensive challenges with erosion and water quality degradation. Soil eroding from forested bluffs, construction sites, agriculture fields, and stream channels fill isolated lakes and contribute an estimated 23,500 tons of sediment to Peoria Lakes each year. This document summarizes the Tenmile Creek Watershed Restoration Plan and outlines specific practices that farmers can implement to reduce the risk of soil erosion and improve quality.



About Tenmile Creek



Tenmile Creek Watershed is rural in nature but is urbanizing as a bedroom community with single family homes dominating new development. Watershed management is important in this 11,027 acre drainage area to protect existing farm fields and infrastructure and from eroding ravines and streambanks and to slow the sedimentation of Peoria Lake.

Watershed Statistics:

- Tenmile Creek is, in fact, ten miles long.
- This watershed contains some of the most productive soils in the nation.
- Including tributaries, the watershed contains 44 miles of streams.
- 43% of the watershed is forest, **24% agricultural fields**, and 21% grassland.
- Tenmile Creek drops a total of 370 feet in ten miles.

The Mission of the Watershed Planning Committee

The mission of the Tenmile Creek Watershed Planning Committee [composed of landowners, local government staff, engineers, and natural resource professionals] is to develop and promote, through education, the implementation of the Tenmile Creek Watershed Plan. We seek to reduce erosion and sediment load to the Illinois River, protect natural resources in the watershed and identify funding sources for implementation.

Agricultural Watershed Challenges

- An estimated 4,000 tons of soil is lost from farm fields of the Tenmile Creek Watershed each year due to erosion.
- Prime agricultural land is rapidly being lost to urban development.
- Farmland is lost annually due to streambank erosion.

Scenic Tenmile Creek Watershed



Soil and Watershed Stewardship for the Farmers of the Tenmile Creek Watershed

Below is a summary of action items recommended in the *Tenmile Creek Watershed Restoration Plan*. More information is available at the Tazewell and Woodford County Natural Resource Conservation Service Offices.

Conserving Soils

There are many practices identified by the United States Department of Agriculture that will benefit farmers by reducing soil loss. These practices include:

Conservation Tillage is a system of crop production with little, if any, tillage. By leaving crop residue undisturbed for as long as possible, microbial and other biological activity in the soil feeds on the stalks, leaves and other crop residues. This increases organic matter, improves soil tilth and, ultimately increases soil productivity. Soil erosion can be reduced by 90% (compared to intensive tillage). While we have long thought of soil erosion as reducing top soil, we now know it's one of the top 'pollutants' in America's waters.



Young soybean plants thrive in the residue of a wheat crop. This form of no till farming provides good protection for the soil from erosion and helps retain moisture for the new crop.

Improving Water Quality

Conservation Buffers are small areas or strips of land in native vegetation, designed to slow and filter stormwater runoff and stabilize areas near streams. Strategically placed in the agricultural landscape, buffers can effectively mitigate the movement of sediment, nutrients, and pesticides within farm fields. Buffers include: contour buffer strips, field borders, filter strips, wind-breaks, and wetlands. A small amount of land in buffers can assist producers in meeting both economic and environmental goals. Buffers can:

- Reduce up to 80% of sediment
 - Reduce 40% (on average) of phosphorous
 - Remove a significant amount of nitrate; store it in plant material
 - Remove up to 60% of pathogens
- Provide a source of food, nesting cover and shelter for wildlife.



Buffer strips in the foreground and grassed waterway in the distance protect the natural resources on this farm northwest of Peoria, Illinois. The buffer strip reduces soil erosion and keeps the nearby Illinois River flowing with cleaner water.

Wetland Restoration in hydric (wet) soils where possible.

The wetness of hydric soils delays planting or interferes with harvesting in row crop agriculture. Often these sites require drain tiles for adequate crop production. If feasible, a farmer should consider restoring wetland habitat to these areas for the following benefits:

- Improve water quality
- Reduce severity of floods downstream
- Protect stream banks and shore lines from erosion
- Recharge groundwater
- Provide fish and wildlife—including numerous rare and endangered species—food habitat, breeding grounds, and resting areas.
- Increase opportunities for recreation—bird watching, waterfowl hunting, photography—and outdoor education.



Wetlands can be seasonally or permanently saturated. Wetlands absorb floodwaters and are the "kidneys" of the watershed by acting as a filter for pollutants.

Wetland banking is a system where landowners are paid by private developers to restore wetlands as a compensation for a loss of wetlands on a development site. For more information visit www.epa.gov/wetlandsmitigation