

Partridge Creek Watershed

A Farmer's Guide to the Watershed Plan

Citizens of the Partridge 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 26,700 tons of sediment to Peoria Lakes each year. This document summarizes the Partridge Creek Watershed Restoration Plan and outlines specific practices that farmers can implement to reduce the risk of soil erosion and improve quality.



About Partridge Creek



Partridge Creek Watershed is a 17,842 acre drainage area of Woodford County. This rural area is located in Worth, Partridge, Cazenovia, and Metamora Townships.

Watershed Statistics:

- Partridge Creek drops 360 feet in elevation over its 12-mile course.
- Including tributaries, the Partridge Creek Watershed drains 73.5 miles of streams.
- The watershed contains approximately 64 ponds and 2 lakes, the Izaak Walton and Wild Wind Lake.

- 49% of the watershed is agriculture, 27% is forested, 20% is rural grassland and 4% is urban.
- Although only 2/3 the size of the neighboring Richland Creek Watershed, Partridge delivers 1.5 times as much sediment to Peoria Lake.

Creating the Watershed Plan

In 2004 the Partridge Creek Watershed Planning Committee completed the *Partridge Creek Watershed Restoration Plan* with the intent to “develop and encourage the funding and implementation of a long-range watershed management plan... to reduce soil erosion, improve water quality, preserve natural habitats, protect farmland and encourage stewardship of the watershed.” **Planning committee members include elected officials, residents, farmers, environmental interest group members, and natural resource professionals.**

Agricultural Watershed Challenges

- An estimated **30,000 tons of soil is lost** from farm fields of the Partridge 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 Partridge Creek Watershed



Soil and Watershed Stewardship

for the Farmers of the Partridge Creek Watershed

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

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.

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.



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.



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