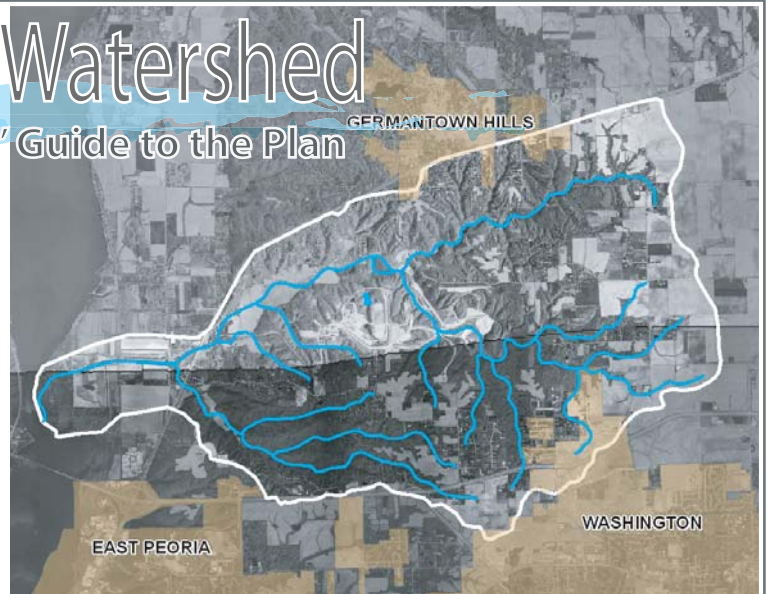


# Tenmile Creek Watershed

## The Elected Officials' Guide to the Plan

**Citizens of the Tenmile Creek Watershed face extensive challenges with erosion and water quality.** Soil eroding from construction sites, agricultural fields, and stream channels fill isolated lakes and contribute an estimated 23,500 tons of sediment to Upper Peoria Lake each year. This document summarizes the Tenmile Creek Watershed Restoration Plan and outlines specific policy recommendations that would benefit citizens by reducing risk of soil erosion and protecting valuable natural resources on public and private property.



## 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 infrastructure and slow the sedimentation of Peoria Lake.

### Watershed Statistics:

- Tenmile Creek is, in fact, ten miles long.
- Including tributaries, the watershed contains 44 miles of streams.
- The watershed contains 30 lakes and ponds.

- 43% of the watershed is forest, 24% agricultural fields, and 21% grassland.
- Tenmile Creek drops a total of 370 feet in ten miles.

## Creating the Watershed Plan

In 2004 the Tenmile Creek Watershed Planning Committee completed the Tenmile Creek Watershed Restoration Plan with the mission to “promote the implementation of a flexible [watershed plan] that will protect natural resources, minimize erosion for improved water quality, enhance the quality of life for ourselves and future generations, and promote a balance between economic and environmental sustainability”. **Planning committee members included elected officials, residents, farmers, environmental interest group members, and natural resource professionals.**



Extensive disturbed areas with no erosion control lends to massive sedimentation of Tenmile Creek.

## Watershed Challenges

- Urban development has increased stormwater runoff rates and volumes resulting in streambank erosion and sedimentation.
- EPA stormwater regulations are mandating watershed protection by local units of government.
- Development on or near steep slopes is threatened with ravine and stream-bank erosion.
- Exposed soil from farm fields and construction sites contaminate waterways.
- Community members can play a part in watershed restoration with the appropriate education.



Streambank erosion in Tenmile Creek is a major source of sediment for Peoria Lakes.

# Watershed Management Options

## For Local Units of Government

Below is a summary of action items recommended in the *Tenmile Creek Watershed Restoration Plan*. For more detailed information contact Tri-County Regional Planning Commission for a copy of the watershed plan or visit [www.tricountyrpc.org](http://www.tricountyrpc.org)

### Update Development Ordinances

Local units of government will have the greatest impact on water quality by updating regulations on erosion, stormwater control, and the protection of sensitive, erodible areas. The following model ordinances are available and are recommended for consideration:

- **Tri-County Unified Stormwater Ordinance.** The Tenmile Creek Watershed Technical Committee drafted this ordinance specifically for the tri-county area. The ordinance fulfills requirements of the Environmental Protection Agency's Phase II stormwater regulations. This model also provides options to developers beyond the traditional detention basins.
- **Ravine Overlay District.** Development along ravines and steep slopes contributes to mass erosion that threatens water quality and the infrastructure of the development. The ordinance encourages development away from erodible areas by requesting geological surveys for construction activity on steep slopes.
- **Stream Buffer Ordinance.** The City of Peoria recently developed and adopted a stream buffer ordinance to encourage development away from streams. This protects homeowners from eroding channels and provides the City access to the drainage system for necessary maintenance.

### Integrate Low-Impact Development

Principals of low-impact development aim to facilitate development while maintaining the most valuable natural features and functions of the site. The goal is to create high value areas with **no overall loss of buildable units**. Low-impact design encourages:

1. Flexibility in site design and lot size
2. Thoughtful protection and management of natural areas
3. Reduction of impervious surfaces
4. Sustainable stormwater management

See TCRPC for a copy of model low impact development policy.

### Encourage Citizen Stewardship

Property owners can limit stormwater pollution by adopting stormwater best management practices. Such practices include, but are not limited to: establishing rain gardens, using rain barrels, redirecting downspouts from pavement to the grass, and clearing hard surfaces of dirt and/or household chemicals.

Local units of government can encourage these practices with a public award system, or stormwater credits in a stormwater user fee system.



Engineered swales such as those suggested in the *Unified Stormwater Ordinance* filter and infiltrate stormwater (above).



In a conventional subdivision layout, the entire site is converted to roads and building lots (above). Below is the same area with the same number of building lots using low-impact design. (Conservation Design Forum 2003)

