



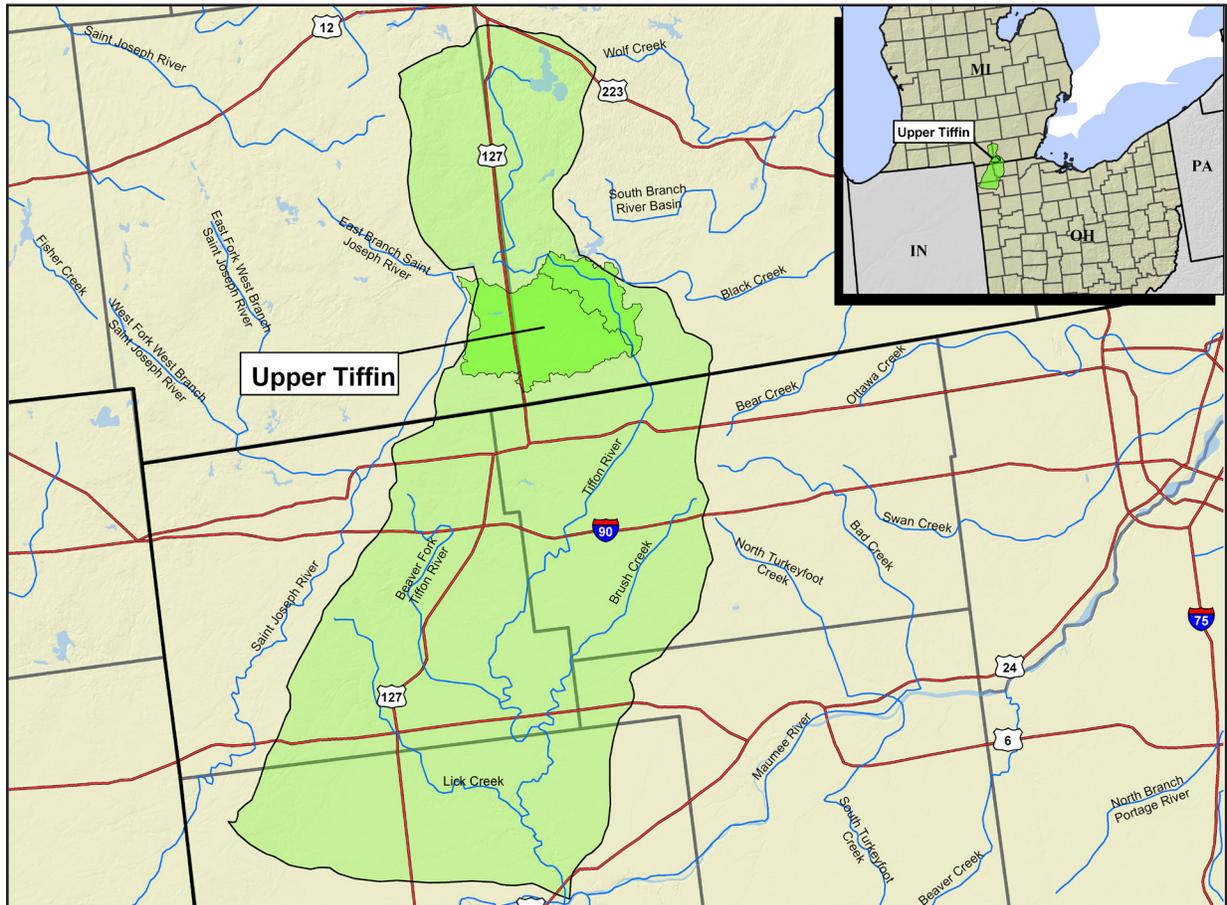
United States Department of Agriculture

Conservation Effects Assessment Project (CEAP)

Watershed Fact Sheet

Upper Tiffin Watershed, Michigan: 2004-2007

An NRCS* Special Emphasis Watershed, one of 24 CEAP watershed projects.



CEAP Assessment

Evaluate effects of management and conservation practices on movement of manure and nutrients from tile-drained farm fields.

Issues: Manure and nutrient loading from large livestock farms polluting waterways.

Watershed Description

- Representative of intensively drained watersheds in the Great Lakes region.
- 91% farmland (Lime Creek); 75% farmland (Bean Creek)
- A Total Maximum Daily Load (TMDL) has been established for pathogens.

*Natural Resources Conservation



Manure spreader in background.



Bean Creek with Sean Duffey (NRCS Water Resources Coordinator/Geologist) and Jason Firster (Lenawee Conservation District Watershed Technician) evaluating stream morphology.

Approach

Water Sampling: Pathogens, nutrients

Watershed Models: AnnAGNPS (Annualized Agricultural Non-Point Source)

Field Trials: Various manure management and drainage practice combinations will be compared to determine best ways to reduce movement of manure via underground drainage tiles.

Communicating Results

Three annual progress reports planned, covering effects of conservation practices on manure contamination of drain outflow in small and large area studies. A risk assessment tool will be developed.

Collaborators

- USDA Natural Resources Conservation Service, Ohio
- USDA Natural Resources Conservation Service, Michigan
- U.S. Geological Survey
- Lenawee Conservation District
- Michigan Department of Environmental Quality
- Michigan Agriculture Environmental Assurance Program

Contacts

Kevin Wickey, State CEAP Coordinator
(kevin.wickey@mi.usda.gov)

Ruth Shaffer, Watershed Leader
(ruth.shaffer@mi.usda.gov)

NRCS State Conservationist

John A. Bricker

The U.S. Department of Agriculture is an equal opportunity provider and employer.

March 2006

<http://www.nrcs.usda.gov/technical/nri/ceap/>