United States Department of Agriculture

Conservation Effects Assessment Project (CEAP)

Rock Creek Watershed, Ohio: 2004-2007

A CSREES* Competitive Grant Watershed, one of 24 CEAP watershed projects.

Evaluate agricultural land use and water quality trends; model alternative management scenarios to optimize water quality.

**Watershed Description**
- 22,000 acres
- 82% crop land, 16% forest
- Listed by Ohio EPA as impaired for aquatic life.

**Issues:** Sediment and nutrient losses from an agricultural watershed, suburban development, fish and aquatic habitat, wildlife habitat.

**Collaborators**
- Heidelberg College
- University of Toledo
- Ohio State University
- USDA, Natural Resources Conservation Service
- USDA, Farm Service Agency
- Seneca County Soil and Water Conservation District
- Local farmers and ranchers and stakeholders

**Approach**
- **Water sampling:** Flow, sediment, phosphorus, nitrogen, ammonia, silica, sulfate, chloride, fluoride, pesticides, and metals
- **Watershed models:** AnnAGNPS (Annualized Agricultural Nonpoint Source)
- **Assess practices:** Placement and timing of conservation practices, optimal mix of practices, lag times in water quality responses.

**Communicating Results**
- Project reports, professional meetings, one or more peer-reviewed papers in professional journals.

**Timeline**
- **2003**
  - Initial funding
- **2004**
  - August: CEAP bibliographies
- **2005**
  - May: Wetlands peer review
  - July: Wildlife literature review (program-based)
  - October: Cropland literature reviews
- **2006**
  - February: Preliminary habitat quality models—Prairie Pothole wetland region
  - March: Preliminary National Assessment Report
  - Fall: National Assessment Final Report
- **2007**
  - November: Wetlands Work Plan
  - December: Draft findings—Prairie Pothole region
- **2008**
  - January: CSREES Watershed final reports

**Contacts**
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*Cooperative State Research, Education, and Extension Service

Native grasses and trees in a conservation buffer.

Conservation tillage leaves at least 30 percent of the soil covered after planting with last year’s crop residue. Residue adequately controls erosion by both wind and water on this soil type.

Collaborators: Heidelberg College, University of Toledo, Ohio State University, USDA, Natural Resources Conservation Service, USDA, Farm Service Agency, Seneca County Soil and Water Conservation District, Local farmers and ranchers and stakeholders.

Celebrate the land we use and care for it. Native grasses and trees in a conservation buffer. Leaving a few rows of unharvested corn or other grains near good wildlife cover adds to habitat for a number of species of wildlife.

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www.nrcs.usda.gov/technical/nri/ceap/