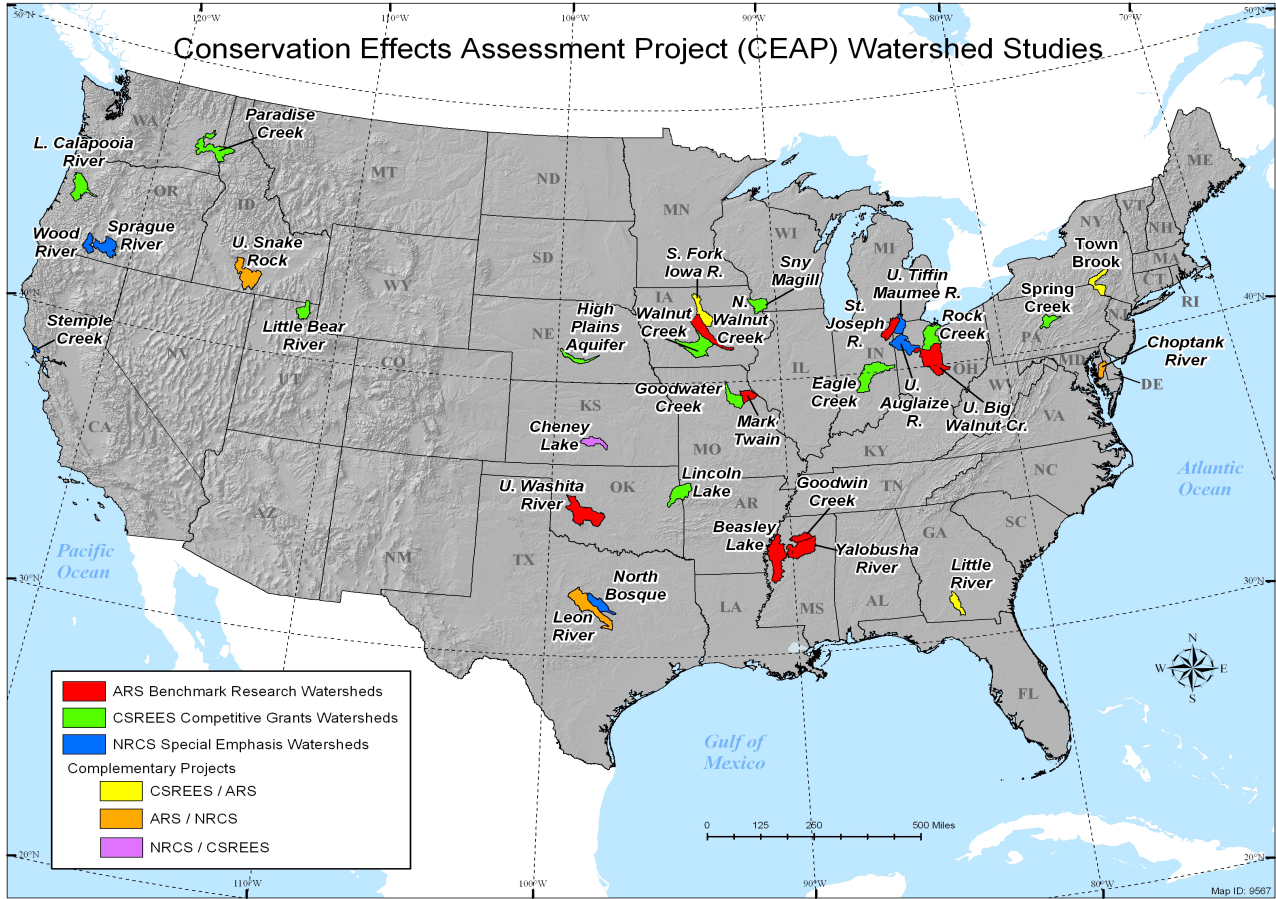




United States Department of Agriculture

# Conservation Effects Assessment Project (CEAP)

CEAP is an effort by the USDA to quantify environmental effects of conservation practices. The results will be used to manage agricultural landscapes for environmental quality. CEAP has two main components—a national assessment and watershed assessments.



## National Assessment

### Cropland

Sampling and modeling approach using data from representative crop fields from the National Resources Inventory and farmer surveys to estimate impacts of conservation practices on:

- water quality, water quantity, and soil quality.

### Wetlands

Conduct collaborative regional assessments to develop models for ecosystem services:

- carbon storage, sediment and nutrient reduction, flood water storage, wildlife habitat, and biological sustainability.

Initial assessments--Prairie Potholes; Mississippi Alluvial Valley; Central Valley, California; High Plains; Gulf-Atlantic Coastal Plain

### Wildlife

Cooperative effort with wildlife conservation community.

- Regional work groups developing approaches to assessing wildlife effects.
- Coordinating with on-going wildlife studies.

### Grazing Lands

Regional approach using range and pasture modeling and results from watershed studies.



## 37 Watershed Assessments

- **14 Agricultural Research Service (ARS) Benchmark Research Watersheds:**  
Long-term, coordinated research across a variety of hydrologic and agronomic settings to improve models for the National Assessment and develop policy planning tools.
- **10 Natural Resources Conservation Service (NRCS) Special Emphasis Watersheds:**  
Focus on livestock, poultry, irrigation and drainage management.
- **13 Cooperative State Research, Education, and Extension Service (CSREES) Watersheds:**  
Evaluate interactions among practices and hydrology in the landscape, factors affecting farmer adoption of practices, outreach.

### Partnerships

- USDA: NRCS, ARS, CSREES, National Agricultural Statistics Service, Farm Service Agency, and National Agricultural Library
- Other Federal Agencies: U.S. Geological Survey, U.S. Environmental Protection Agency, and U.S. Fish and Wildlife Service
- Local: Conservation districts, local governments, drinking water suppliers, agricultural and environmental organizations, universities, Cooperative Extension, State agencies, and producers.

### Literature Reviews

- Summarize existing state of knowledge of effects of cropland conservation practices on soil and water quality, water quantity, and wildlife resources. Identify gaps in science.
- **Wildlife, Cropland** - 2007  
**Wetlands** - 2008  
**Grazing Lands** - 2009

### Bibliographies

- Environmental Effects of USDA Conservation Programs
- Implementing Agricultural Conservation Practices: Barriers and Incentives
- Data and Modeling for Environmental Credit Trading
- Agricultural Conservation Practices and Related Issues: Reviews of the State of the Art and Research Needs
- Environmental Effects of Conservation Practices on Grazing Lands
- Wetlands in Agricultural Landscapes

### Impetus for CEAP

- Need to scientifically quantify natural resources effects of conservation practices.
- Substantial increases in funding for USDA 2002 Farm Bill conservation programs.
- Greater government-wide emphasis on performance outcome measures.

### Future CEAP Assessments

- Air quality, confined livestock

December 2006

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

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