# Conservation Effects Assessment Project (CEAP)
# ARS Watershed Assessment Study

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# The ARS Watershed Assessment Study

Purpose

Support the National Assessment by:

- Providing detailed research findings for a few intensively studied watersheds.
- Evaluate and improve models for use in the National Assessment.

# The ARS Watershed Assessment Study

Anticipated Products:

1. Water, soil, management, and economic data system.
2. Quantification of effects of conservation practices on environmental quality.
3. Validation of models and quantification of uncertainties of model predictions.

# The ARS Watershed Assessment Study

Anticipated Products:

4. Evaluation of cost effectiveness of selection and placement of conservation practices.
5. Development of new software tools for quantifying environmental outcomes in major agricultural regions.

# The ARS Watershed Assessment Study

Project Plan:

- Scientific description of the project.
- Contains a Project Management Plan.
- Has received scientific peer review.

# The ARS Watershed Assessment Study

Objectives:

1. Develop and implement a data system.
2. Measure effects of conservation practices at the watershed scale.
3. Validate models and quantify uncertainty of model predictions.
4. Develop policy-planning tools to optimize profits and program efficiency.
5. Develop regional watershed models.

# The ARS Watershed Assessment Study

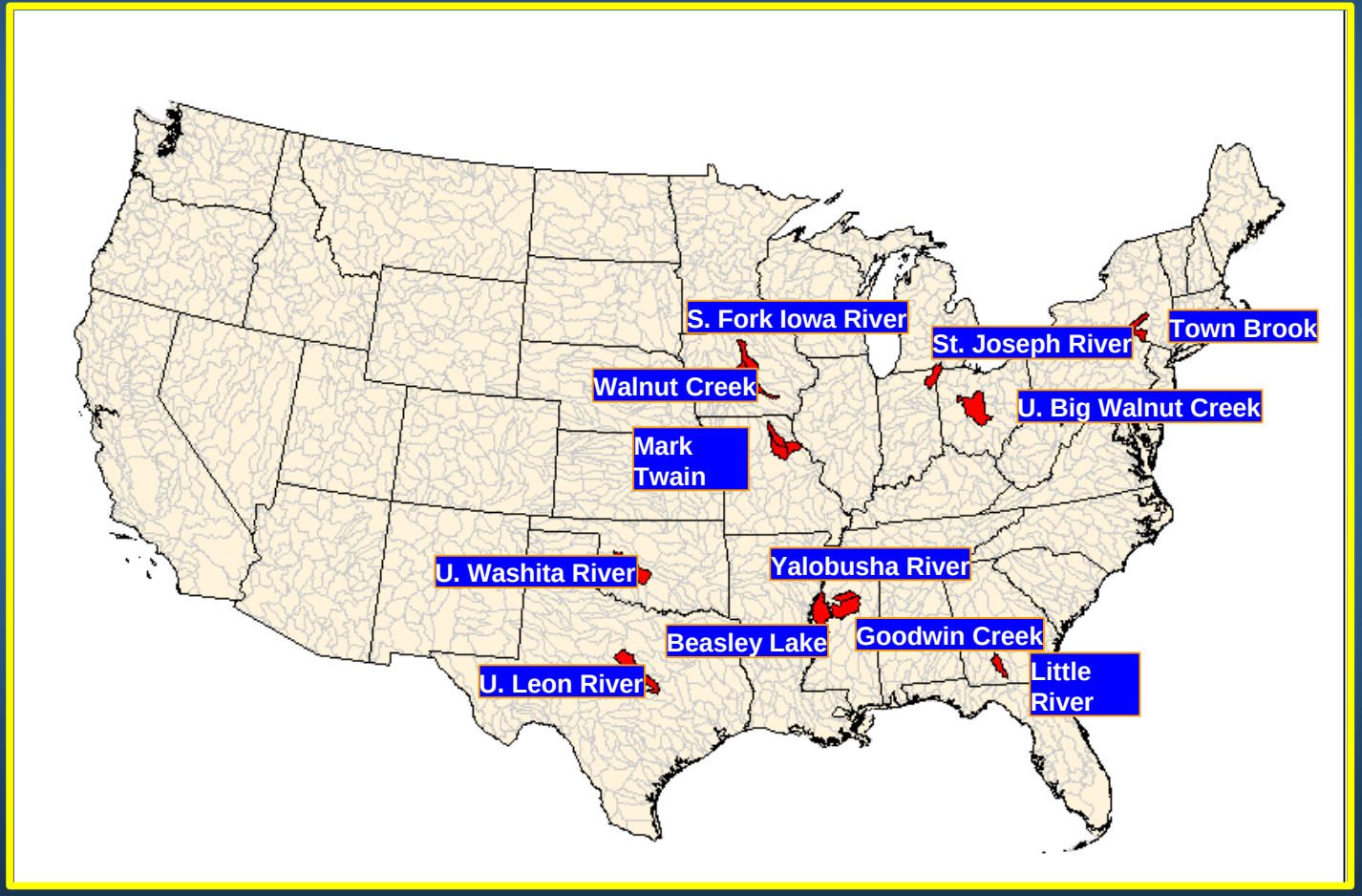
Approach:

- 12 ARS Benchmark Watersheds
- Six multi-location teams
- Collaborative research will be the centerpiece of the CEAP assessment activities.

# The ARS Watershed Assessment Study

- Scope
  - 60 ARS Scientists (~38 SYs)
  - 15 Research Units
  - 12 Locations
- Funding
  - $16.3 million/yr ARS
  - $1.1 million/yr NRCS

# The ARS Watershed Assessment Study



# The ARS Watershed Assessment Study

Research Teams:

1. Data Management

   Leaders: Jean Steiner, John Sadler

2. Watershed Design for Determining Environmental Effects

   Leaders: Mike Burkart, Martin Locke

3. Model Validation, Evaluation and Uncertainty Analysis

   Leaders: Jeff Arnold, Ron Bingner, Tim Strickland

# The ARS Watershed Assessment Study

Research Teams:

4. Economic Analysis

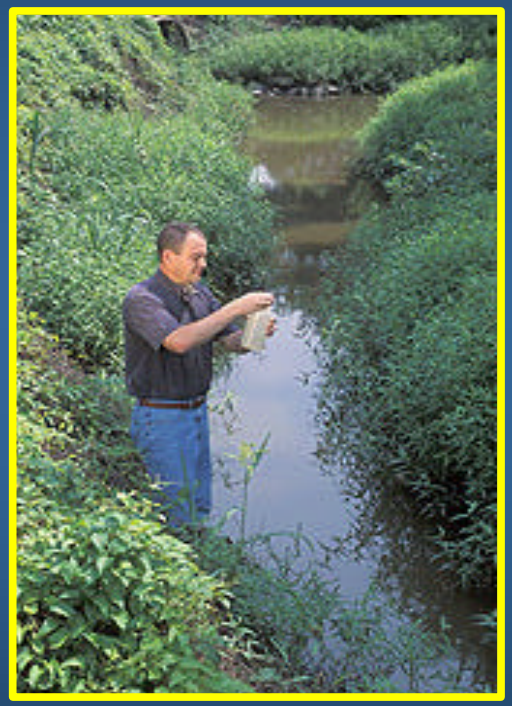
   Leader: Gerald Whittaker, Chi Hua Huang

5. Model Development and Regionalization

   Leaders: Laj Ahuja, Matt Romkens

6. Data Quality and Assurance

   Leaders: Norman Fausey, Ray Bryant



# The ARS Watershed Assessment Study

Summary:

- ARS Watershed Assessment Study is a multi-location project designed to support the National Assessment.
- Study is conducted on 12 ARS Benchmark Watersheds.
- Study is conducted by 6 research teams involving 60 scientists.
- Project Plan has been reviewed to ensure scientific quality.
- Project Management Plan will guide management of the project.