

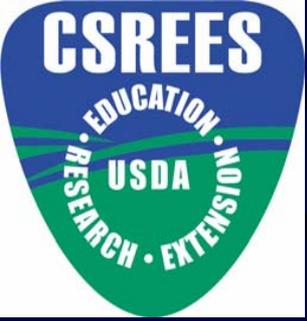
CEAP Synthesis

USDA-CSREES 2008 Water Conference
CEAP 4: Synthesis and Future Directions

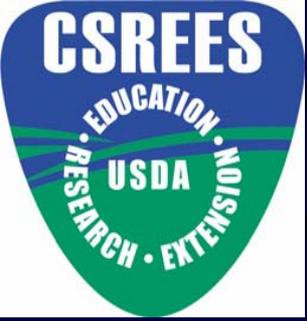
D.L Osmond¹, Mazdak Arabi², Dana Hoag², Greg Jennings¹,
Dan Line¹, Al Luloff³, Mark McFarland⁴, Don Meals⁵,
Andrew Sharpley⁶, Jean Spooner¹



¹NC State University, ²Colorado State University,
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⁵IceNine, ⁶University of Arkansas



Synthesizing and Extending
Lessons Learned from the 13
CSREES-CEAP Watershed
Projects: The Project Team



Synthesizing and Extending
Lessons Learned from the 13
CSREES-CEAP Watershed
Projects:

**13 CSREES CEAP
Project Personnel**

Criteria for Team Selection

- Experience
- Diverse skill sets
- Complementary skill sets
- Geographically diverse
- Independent

The Team: Mazdak Arabi



- Hydrologist and Civil Engineer
- Colorado State University
- Modeling expertise, including spatial and temporal effects, optimization (economic)
- Modeling support

The Team: Dana Hoag



- Economist
- Colorado State University
- Natural resource production and policy issues related to water quality
- Economic support

The Team: Greg Jennings



- Biological and Agricultural Engineer
- NC State University
- Member USDA-CSREES Committee for Shared Leadership
- Watershed projects
- Land treatment and water quality support
- CSL Liaison

The Team: Dan Line



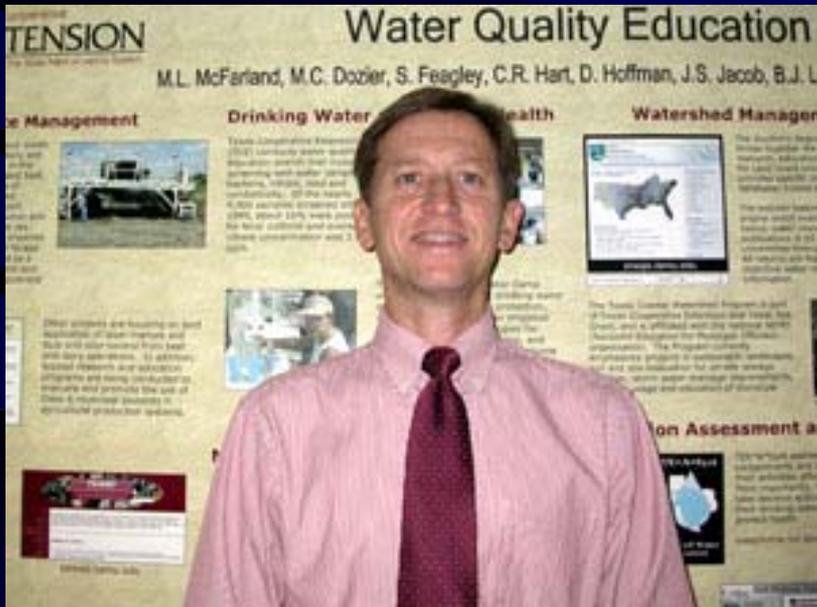
- Biological and Agricultural Engineer
- NC State University
- Monitoring and BMP effectiveness studies
- Review team for RCWP and 319 National Monitoring Program projects
- Land treatment and water quality monitoring support

The Team: Al Luloff



- Sociologist
- Penn State University
- Changes in land cover
- Rural development policy
- Sociology support

The Team: Mark McFarland



- Agronomist
- Texas A&M University
- Soil fertility, water quality and evaluation of conservation practices
- Outreach support and CSL liaison

The Team: Don Meals



- Watershed Management
- Private consultant
- Land treatment effects
- Water quality monitoring and analysis
- Analyzed HUA, Demo, and 319 National Monitoring Program projects
- Multiple support

The Team: Deanna Osmond



- Agronomist & Soil Scientist
- NC State University
- BMP effectiveness
- Analyzed RCWP and 319 National Monitoring Program projects
- Project leadership and outreach support

The Team: Andrew Sharpley

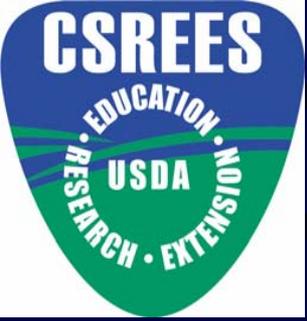


- Soil Scientist
- University of Arkansas (formerly ARS)
- Cycling of P in soil-plant-water systems
- Co-developed tools used by NRCS & EPA
- Land treatment and water quality support

The Team: Jean Spooner

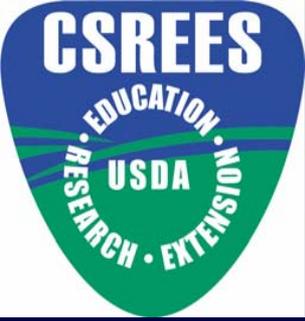


- Soil Scientist & Statistician
- NC State University
- Statistically valid water quality monitoring designs
- Evaluated RCWP and 319 National Monitoring Program projects
- Water quality and statistics support



Synthesizing and Extending Lessons Learned from the 13 CSREES-CEAP Watershed Projects: Objectives

- Summarize and describe the science-based information and lessons learned from CEAP CSREES projects
- Deliver knowledge to policy makers within key organizations



Synthesizing and Extending Lessons Learned from the 13 CSREES-CEAP Watershed Projects: Method

- Develop framework for collection and organization of information (template)
- Pilot framework
- Refine framework
- Collect information
- Summarize lessons learned

Develop Framework

- Reviewed approaches and structures for collecting and organizing information from previous projects (RCWP, 319 National Monitoring Program)
- Developed preliminary framework (template) that address:
 - Watershed Characterization
 - Water Quality Information
 - Land Treatment
 - Modeling and economic analysis
 - Water Quality Response
 - Outreach and Socio-economic Analysis
 - Project Management, Evaluation and Reporting

Develop Framework (continue)

- Framework
 - Reviewed by project team
 - Reviewed with CSREES CEAP project principal investigators
 - Review by CEAP steering committee
 - Review and discussion at Water Conference

Information for Template

- Information collection
 - All reports, publications, web pages, media reports, surveys, informal documents, power points (hard copy), proposal
- Template filled out by NC team
- Tentative report reviewed by projects
- Phone interviews
- Site visits (NC team)
 - Water quality and land treatment
 - Economics and Sociology
 - Modeling
 - Outreach

Site Visits

- Project overview
- Watershed tour
- Discussions by topics:
 - Modeling, water quality data, land use data
- Key informant interview
 - Project personnel
 - Agency personnel
- Facilitated group discussion (dinner meeting)
 - Producers
 - Community leaders

Site Visits: Timing

Spring /
Summer 2008

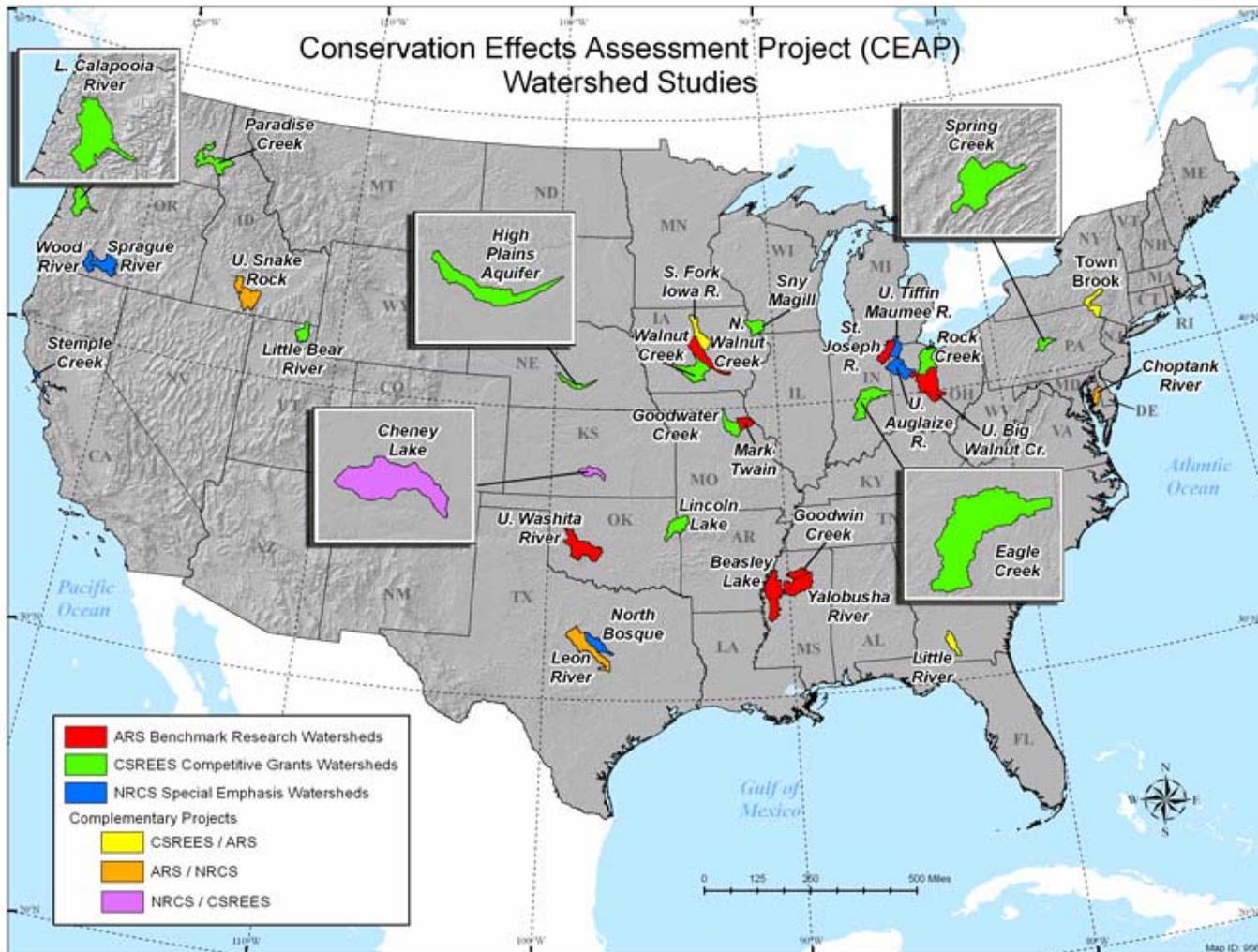
- IA
- ID
- OH
- UT

Fall 2008/
Winter 2009

- AR
- GA
- MO
- NY

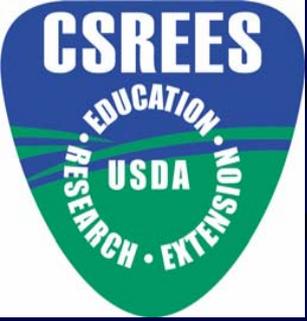
Fall 2009

- IN
- KS
- NE
- OR
- PA



Summarize Lessons Learned

- Summarize lessons learned
 - Groupings
 - Pollutant
 - Hydrologic and/or geomorphic
 - Comparison by conservation practices
- Final report
 - Project descriptions (all project PIs coauthors)
 - Lessons learned



Synthesizing and Extending Lessons Learned from the 13 CSREES-CEAP Watershed Projects: Outreach

- CEAP projects: outreach comparison
- CEAP synthesis outreach

Outreach Assessments of CEAP Projects

- Identify outreach techniques most effective at communicating information to different audiences
- Identify outreach techniques most effective for achieving conservation practice adoption
- Identify outreach techniques most effective for improving management and/or maintenance of conservation practices

CEAP Synthesis Outreach: Project End

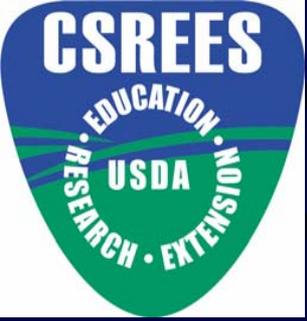
- Final report (hard copies and web version)
 - Congress
 - Lead administrators USDA-NRCS, -ARS, -FSA
 - Commodity organizations
 - Farm and environmental organizations
- Fact sheets (web versions)
- Power point presentations
 - Lessons learned distributed to CSREES-CEAP PDs
- Promotional brochures

CEAP Synthesis Outreach: Project Duration

- Journal articles
- Conferences
 - Water Conferences
 - National Monitoring Conferences (co-sponsor)
 - Soil and Water Conferences
 - Tri-society Conferences

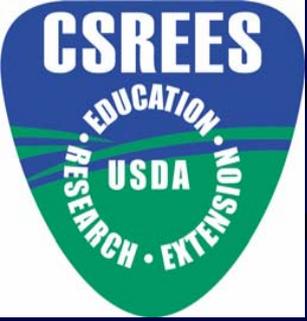
CEAP Synthesis Outreach: Presentations

- Presentations
 - National Integrated Water Quality, Committee for Shared Leadership
 - updated quarterly
 - 2-hour presentation (2X)
 - Government Agency
 - Policy-level personnel (USDA-NRCS, -ARS, -CSREES, -FSA and USEPA)
 - Agricultural community annual meetings
- Evaluation of knowledge transfer



Synthesizing and Extending Lessons Learned from the 13 CSREES-CEAP Watershed Projects: Management

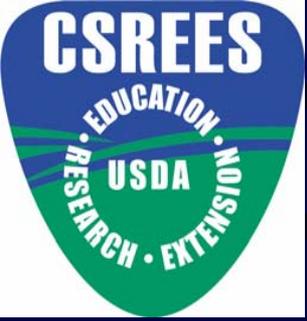
- Developed quarterly report for CEAP Steering Committee
- Yearly meeting with CEAP Steering Committee
- Bi-yearly report to USDA-NRCS



Synthesizing and Extending Lessons Learned from the 13 CSREES-CEAP Watershed Projects:

We Value Our Partnership

THANKS TO ALL CSREES-CEAP PERSONNEL



Synthesizing and Extending Lessons Learned from the 13 CSREES-CEAP Watershed Projects:

Thanks for the Funding

- USDA-CSREES
- USDA-NRCS