



A Partnership of  
USDA CSREES and  
Land Grant Colleges  
and Universities

### Program Goals

The CSREES National Water Program is working through a coordinated regional structure to:

- Provide leadership for the development and implementation of outcome-based water resource programs.
- Link state and regional projects and their network of research, extension and education professionals to facilitate information and resource exchange regionally and nationally.
- Integrate water research, education and extension efforts to solve water resource problems at the home, farm, community and watershed level.
- Improve public understanding and involvement in community decision-making regarding water resource issues.
- Develop and strengthen important partnerships.

### Framework

AREERA Section 406 established a competitive grants process for USDA-CSREES water program funding, and is composed of three major funding categories:

- National Coordination Projects are managed by State Water Quality Coordinators to solve water resource problems by promoting regional collaboration, enhance delivery of successful programs and encourage multi-state and multi-region efforts to protect and restore water resources in 10 regions.



- Watershed Scale Projects
  - > Integrated Research, Extension, and Education Projects
  - > Extension Projects
  - > Education Projects
- National Water Resource Projects

### Organization

The Committee for Shared Leadership for Water Quality (CSL) is an internal working group created to foster development of the National Water Program. Members include:

- Representatives from the regional projects (10)
- 1990 and 1994 Institution representatives (2)
- CSREES National Program Staff (4)

Subcommittees and Special Teams target key issues related to communication, policy, partnerships, marketing and program evaluation.

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# CSREES National Integrated Water Program

Applying knowledge to improve water quality

The  
Land Grant  
University  
System



The CSREES Integrated Water Quality Grants Program (AREERA Section 406) enables the formation and linkage of 8 Regional Water Coordination Projects which serve as the foundation of a National Water Program. **Key accomplishments of this program include:**

## REGIONAL/NATIONAL COORDINATION

### Water Resource Themes

The CSREES National Water Program improves water resources through projects addressing eight water resource themes:

- > Animal Waste Management
- > Drinking Water and Human Health
- > Watershed Restoration
- > Water Policy and Economics
- > Water Conservation and Agricultural Water Management
- > Nutrient and Pesticide Management
- > Pollution Assessment and Prevention
- > Watershed Management

### National and Regional Water Conferences

- Annual National Water Conferences enable strategic planning and national program coordination organized around the eight themes.
 

San Antonio, TX – 2001	San Antonio, TX – 2006
Belle, MI – 2002	Savannah, GA – 2007
Tucson, AZ – 2003	Sparks, NV – 2008
Clearwater, FL – 2004	St. Louis, MO – 2009
La Jolla, CA – 2005	Hilton Head, SC – 2010
- Regional Water Program coordination meetings and conferences facilitate resource sharing and technology transfer.

### National and Regional Websites

- Direct links to each of the regional water program information databases.
- Access to local and regional programs, publications and management tools.
- National and regional publications providing contact information and regional water resource summaries.
- Links to partners involved in water resource management at both state and federal levels.

### National and Regional Publications

National and regional publications provide water resource summaries and contact information. A few examples are:



## SELECTED NATIONAL WATER PROGRAM THEME OUTCOMES

### Nutrient and Pesticide Management

- The **Northeast States and Caribbean Islands Regional Water Program** assisted participants in the annual Regional Inservice Training for Ag Service Providers and Certified Crop Advisors in implementing pesticide management on 53,000 acres. Farmers saved \$6 to \$50 per acre implementing recommended practices for savings of \$300,000 to \$2.6 million.
- The **Livestock and Poultry Environmental Learning Center National Water Resource Project** hosted webcast seminars through the efforts of 58 experts from 19 universities in 2008. Audience members knowledge of emerging technologies, improved resource utilization, policy development and recommendations to producers improved by 49-59%. Participants on average interact with 198 producers annually.
- The **Amish and Anabaptist Education on Water Quality, Nutrient Management and BMPs** Extension Education project adapted educational programs to teach Amish clientele about water quality issues and BMPs. Resulting adoption rates for rotational grazing, well testing and remediation and soil testing improved to 75-90%.

### Watershed Restoration

- The **Southern Regional Water Program** has implemented demonstration projects on 24,000 wetland acres and 120 stream miles. Team members have coordinated the training of more than 2,400 natural resource professionals through delivery of 32 workshops at 18 locations in eight southern region states.
- The **Northern Plains and Mountains Regional Water Program** has used stream monitoring techniques to provide non-point source pollution and watershed function educational programs to 12,000 youth and 1,500 teachers. The regional has leveraged more than \$1.7 million to develop online watershed information and outreach programs, research changes in water quality and sediment transport, develop environmental observatory tools, and enhance water quality Extension efforts.
- The **Landscape Scale Disturbances in an Agroecosystem: Impacts on Aquatic and Riparian Environments in the Sugar Creek Watershed, Ohio** Integrated Research, Extension, and Education Project concluded that degree of fragmentation can be more critical than local habitat in improving water quality. Restoration should focus more on connecting high quality habitat patches than on site-specific restoration of local habitat.

### Watershed Management

- The **Great Lakes Regional Water Program** focused on helping resource managers understand and address factors that influence individual decisions affecting critical areas in watersheds. *The Social Indicator Planning and Evaluation System (SIPES) for Nonpoint Source Management* explains social indicators and their application to watershed management projects. The handbook and related materials are available at <http://www.uwex.edu/Ces/regionalwaterquality/Flagships/Indicators.htm>.
- The **Southwest States and Pacific Islands Regional Water Program** supported investigations yielding some of the first data to characterize the water quality impacts of feral pigs in the region. Results of the study apply directly to all Pacific Islands in the region and are of interest wherever feral pigs are distributed.
- The **Pacific Northwest Regional Water Program** develops and delivers a regional watershed issues conference to support watershed groups. More than 1,000 people view each conference on a live basis. In addition, several thousand people have viewed the archived materials.
- A **New Approach to Sediment TMDL Watersheds** is an Integrated Research, Education and Extension project which investigates a new approach to sediment TMDL development by incorporating geomorphic analysis of fluvial systems, sediment fingerprinting and long term sediment loads instead of concentrations for determining viable load-reductions.

### Water Policy and Economics

- The **Heartland Regional Water Coordination Initiative** conducted a regional survey of citizens' views of water resource issues and needs. Legislative findings for the Iowa Surface Water Protection Act of 2008 were derived in part from the Heartland Iowa Survey.
- The **Mid-Atlantic Water Program** prepared partner organizations to engage and educate the agricultural community to address high levels of *Cryptosporidium* source-tracked to cattle. Training participants increased their level of understanding by 64% regarding financial and political pressures that drive operational decision-making.
- The **Nonpoint Education for Municipal Officials (NEMO)** National Water Resource Project is a confederation of programs throughout the country that educate local land use decision makers about the relationship of land use to water resource protection. The project has conducted more than 100 scoping workshops through its 32-program NEMO Network to assist multi-organizational collaborations in participating states adapt NEMO to their natural resource and land use challenges.
- The **Wetland Enhancement Decision-Making Tools and Training for Landowners and Technical Service Providers** Extension Education project delivered educational materials, presentations and decision-making tools resulting in the establishment of 42 wetlands on 6,750 hectares in wet-season surface area. The new wetlands dramatically reduce the amount of phosphorus entering Lake Okechobee, Florida.

