

CSREES Administrator's Report to the Partnership

Summer 2006

Advancing Knowledge for the
Food and Agricultural System



MESSAGE FROM THE CSREES ADMINISTRATOR

I frequently remind people that the first word of CSREES is "Cooperative." Our staff has actively built partnerships to create cooperative ventures over the past few years, almost literally geometrically expanding our formal and informal relationships with other Federal agencies, national organizations, and international programs. We do this to achieve our broad mission of advancing knowledge for agriculture, the environment, human health and well-being, and communities. These joint activities help bring agricultural and related sciences into the mainstream of publicly supported discovery and technology development and application. When universities work together, we clearly demonstrate the national value of our system. When agencies work together, we demonstrate our commitment to efficiently and effectively achieving national goals.

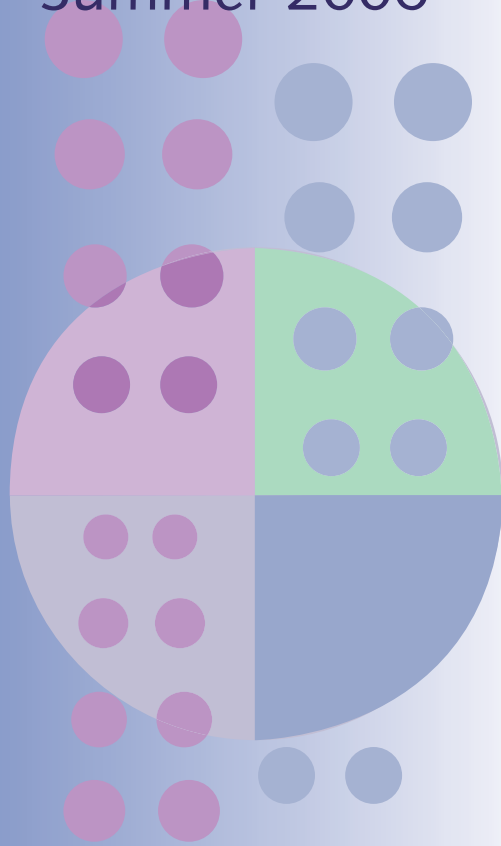
Interestingly, perhaps ironically, some of our most effective areas of collaboration are through our competitive programs. One of CSREES' longest standing interagency grants programs in the area of metabolic engineering was established in 1998 as a collaboration among the Department of Energy (DOE), National Science Foundation (NSF), Environmental Protection Agency (EPA), Department of Commerce (DOC), Department of Defense (DOD), National Institutes of Health (NIH), National Aeronautics and Space Administration (NASA), and USDA/CSREES. Similarly, an ongoing collaboration among CSREES, NSF, NASA, the United States Geological Survey (USGS), and the National Oceanic and Atmospheric Administration (NOAA), supports the Climate Change Program which addresses impacts of climate change on land-based systems and the global carbon cycle. The Interagency Microbial Genome Sequencing Program has been a highly successful CSREES/NSF collaboration, resulting in more than 75 genomes sequenced to date.

Interagency collaborations also involve direct support of missions shared by CSREES and our partners in other Federal agencies, notably the DOD family support programs. For more than a decade, the U.S. Army has worked with CSREES and land-grant universities to assure that 4-H programs are available at U.S. military posts worldwide.

Collaborations within USDA evidence extraordinary supporting activities and include conservation programs with the Natural Resources Conservation Service (NRCS), plant and animal disease diagnostics and response with the Animal and Plant Health Inspection Service (APHIS) and the Agricultural Research Service (ARS), risk management education with the Risk Management Agency (RMA), and nutrition education with the Food and Nutrition Service (FNS).

What is more exciting than today's extensive efforts are the possibilities for future collaborative and cooperative work. The breadth and depth of expertise at land-grant universities and other institutions is a treasure to be nourished, celebrated, and most importantly, used. CSREES is committed to exploring and expanding opportunities to serve citizens here and around the world through collaboration.

Colien Hefferan, Administrator



The mission of the Cooperative State Research, Education, and Extension Service (CSREES) is to advance knowledge for agriculture, the environment, human health and well-being, and communities.

CSREES' First Nationwide Customer Service

Satisfaction Survey: CSREES carried out its first nationwide customer service satisfaction survey in 2005. More than 1,300 administrators, business officers, and grant applicants/recipients responded, highlighting strengths of the Agency and surfacing a wide array of challenges to enhance services to better meet the needs of CSREES customers. Three implementation teams are analyzing responses and proposing strategies for the Agency to meet those challenges. Each team is focused on a specific customer group – administrators, business officers, or grant applicants/recipients.

The Administrators' Implementation Team, primarily deans and directors from land-grant and non-land-grant universities, minority-serving schools, and forestry, veterinary medicine, and other organizations, convened in March 2006. Work groups addressed a wide array of topics in a structured manner. Some of the team's high-priority recommendations called for immediate action or were already underway. They include:

- broadening the membership and role of the Partnership Working Group (universities and CSREES) with special emphasis on promulgating a shared value system between CSREES and its university partners;
- expanding accountability measures, especially with regard to illustrating the benefits delivered to citizens via base funding;
- affording increased opportunities for collaborative discussion and priority setting; and
- launching the Agency's new University Liaisons Program whereby CSREES national program leaders can broaden/update their knowledge of the university system via on-campus experiential learning. The team's recommendations will be an agenda item at the July 2006 meeting of the Partnership Working Group. The Agency plans to issue a report in the summer of 2006 committing it to action on specific recommendations.

The Agency gained invaluable input on enhancing services to business officers at the 2006 CSREES Administrative Officers' Meeting, and continues to act on suggestions surfacing from the Business Officers' Implementation Team's (BOIT's) monthly conference calls. These forums facilitate communication between state participants responsible for budget, finance, and grants management at universities and CSREES' Office of Extramural Programs (OEP) staff. BOIT monthly calls resulted in the development of the following guiding principles for OEP's interaction with business officers:

- OEP should disseminate clear, current policies in a timely manner;
- OEP should, to the greatest extent possible, invite participation/input in the formulation of grant policies;
- OEP should provide quarterly status reports on BOIT-originated projects;
- OEP should work to more quickly notify awardees and authorize funds through electronic processes; and
- OEP should continue to use its Administrative Officers' Meeting and other forums to discuss Federal assistance programs/policies.

While some of these may be long-term projects, OEP is undertaking the following actions based on BOIT recommendations:

- holding a "Day with CSREES" information sharing session in November 2006;
- posting an online toolkit with information pertinent to business officers;
- drafting a grants manual;
- periodically publishing grants administration and formula fund bulletins;
- making award documents available electronically; and
- revising the administrative manuals for extension and research formula programs.

The Grant Applicants/Recipients Team continues to meet and anticipates providing its recommendations this summer. Contact: Erin Daily, USDA/CSREES - edaly@csrees.usda.gov.

CSREES Grants.gov Update: CSREES will implement several changes to its grants application process starting with the FY 2007 (October 1, 2006-September 30, 2007) grants cycle.

Foremost, all applicants will be required to use new research and related (R&R) application forms. The R&R form family is the new government-wide form set adopted by all Federal research and related (e.g., education and extension) grant-making agencies. The R&R forms replace numerous agency forms and provide common application requirements across the Federal government.

Grants.gov developed R&R into an application forms package for electronic submission. Applicants applying to CSREES programs electronically or on paper will use these new R&R forms and the related CSREES-specific forms.

Some programs, including the Small Business Innovation Research (SBIR) grants initiative and the National Research Initiative (NRI) competitive grants program, require electronic submission. Other programs will accept either electronic or paper applications. All CSREES programs accept applications through Grants.gov, although programs providing the paper option are still to be determined. Up-to-date information on these decisions is available on the FY 2007 Grant Application Submission Formats table on the CSREES website at <http://www.csrees.usda.gov/funding/fy07changes.html>.

Applicants must register their institution with **Grants.gov** before submitting an electronic application. This process can take up to a month to complete; however, it is a one-time process. CSREES recommends that applicants register early in order to prevent not being able to register in time for a funding opportunity closing date. Find registering information on the CSREES Web site at: <http://www.grants.gov/GetStarted>.

Applicants need to download Pure Edge Viewer software to complete and submit application packages via **Grants.gov**. Instructions about how to do this are on the CSREES website at <http://www.grants.gov/DownloadViewer>. Special instructions are available for Macintosh users. These instructions are on the CSREES Web site at <http://grants.gov/MacSupport>.

All of the following **MUST** be used to prepare an electronic application:

- the relevant Request for Applications (RFA) which can be downloaded from the CSREES Web site at <http://www.csrees.usda.gov/fo/funding.cfm>;
- the CSREES Grants.gov Application Guide, on the CSREES website at http://www.csrees.usda.gov/funding/grant?forms/electronic_app_guide.pdf, and;
- the electronic SF-424 R&R application package (available through a link on the relevant CSREES Funding Opportunity page on the CSREES Web site at <http://www.csrees.usda.gov/fo/funding.cfm>).

All attachments **MUST** be submitted in portable document format (PDF). Files not in PDF will not be reviewed.

Grants.gov Customer Support

If help is needed with the **Grants.gov** registration process for the applicant organization, downloading or navigating PureEdge forms, using PureEdge with a Macintosh computer, or with the technical aspects of submitting to the **Grants.gov** system, check the resources available on the **Grants.gov** Web site first (<http://grants.gov/>).

Grants.gov customer support

Toll Free: 1-800-518-4726

Business Hours: M-F 7 a.m. – 9 p.m. eastern standard time

E-mail: support@grants.gov

CSREES Electronic Submission Help

If, after reviewing the CSREES Grants.gov Application Guide, Resources for Applying Electronically, and program RFA, help is still needed for preparing application forms content, contact:

- E-mail: electronic@csrees.usda.gov
- Phone: 202-401-5048, 7 a.m. – 5 p.m. eastern standard time
- Business hours are M-F, 7 a.m. – 5 p.m. eastern standard time, excluding Federal holidays.

CSREES Paper Submission with New Forms Help

If, after reviewing the CSREES Paper-based Application Guide, Resources for Applying by Paper, and program RFA, help is still needed for preparing application forms content, contact:

- E-mail: paper@csrees.usda.gov
- Phone: 202-401-5048, 7 a.m. – 5 p.m. eastern standard time
- Business hours are M-F, 7 a.m. – 5 p.m. eastern standard time, excluding Federal holidays.

CSREES Program Related Help

Questions about a specific funding program should be directed to the contact person listed in the program's RFA.

CSREES has developed a Frequently Asked Questions (FAQ) for Submitting Through Grants.gov page for the electronic application process to assist applicants. This can be accessed on the CSREES Web site at <http://www.csrees.usda.gov/funding/pdf>. Contact: Jason Hitchcock, USDA-CSREES, jhitchcock@csrees.usda.gov.

One Solution: One Step at a Time: The One Solution initiative will centralize and standardize reporting to CSREES through a Web-based "one-stop shop" for report submission and internal staff review and synthesis.

This CSREES Information System (CIS) will retain information collected over the years. CIS implementation will begin with the development of a project plan during the summer of 2006 and should be operational within 2-3 years. The project plan organizes tasks underneath discrete milestones through three phases. Completed Phase I tasks include:

- launching an online plan of work (POW) system;
- publishing and utilizing version 2.0 of knowledge area (KA) taxonomy that includes education, extension, and research;
- developing and posting the business case; and
- launching the One Solution communications web page.

One Solution requires Extension 3(d) and other extension programs, as classified in the budget, to report into a Current Research Information System (CRIS)-like system beginning in FY 2007 with the goal of fully populating CIS with all Agency investments and outcomes. This kind of information is the foundation for Office of Management and Budget's budget performance integration process, answering congressional questions, and reporting the outcomes of CSREES investments to the public.

Accenture, a global management consulting and technology services company, helped CSREES write the CIS project plan by hosting nine workshops for internal staff and four teleconference calls with partnership. The project plan, report from the workshops, teleconference calls, and other resources are available on the new One Solution Web site: www.csrees.usda.gov/onesolution.

CIS will take a number of short-term actions during the summer and fall of 2006 as part of Phase I. Those actions include:

- forming a governance structure that includes representation from the land-grant universities and colleges, and other grantees;
- building a database of outcomes to address the program analysis rating tool (PART) process. This database will be aligned with funding from the 2005 POW annual reports;
- developing the standardized progress, annual, and termination report framework for research, education, and extension, using the Office of Science and Technology Policy's Research Business Model as the template;
- forming an information collection board to review all data collections across the Agency;
- examining different search capabilities to query databases for POW annual report outcomes and CRIS reports; and
- securing a "program management dashboard" to better utilize Research, Education, and Economics Information System (REEIS) data using the KAs and other leadership criteria. Contact: Greg Crosby, USDA/CSREES - gcrosby@csrees.usda.gov.

EDEN and Preparedness Research Update: The Extension Disaster Education Network (EDEN) is a collaborative, multi-state effort by the extension services of the land-grant institutions across the country to improve the delivery of services to citizens affected by natural and manmade disasters. A USDA report cited EDEN as a valuable program that worked effectively during and following hurricanes Katrina and Rita.

EDEN partnered with the Farm Foundation, Rural Sociological Society, Southern Rural Development Center, and CSREES to sponsor a meeting on the long-term rural development challenges facing hurricane-impacted areas in the South. Forty land-grant university specialists, USDA agency officials from CSREES, Rural Development, and Forest Service, foundation leaders, and other university faculty shared "on the ground" perspectives and identified long-term responses to support sustainable community development in hurricane-impacted areas. Participants concluded that the South is in an "increased catastrophe cycle" that will last many years; affected communities need solid land use planning models; EDEN needs to address longer term issues and challenges of community rebuilding; and Federal, state, and local government responses to victims need to incorporate social justice issues. The Southern Rural Development Center is assembling a team of land-grant researchers and partners to conduct long-term assessments of the critical elements associated with the community rebuilding process in hurricane-impacted areas. Extension educational

products designed to address components associated with long-term community rebuilding will be developed for inclusion in the Extension Disaster Education Network, <http://www.eden.lsu.edu/>. Contact Joseph L. Wysocki, CSREES, at jwysocki@csrees.usda.gov, for more information.

Biobased Research and Development: Policy makers and the public consider agriculture to be a solution to rising gasoline prices, concerns about national security, and dependence on imported oil. The Energy Policy Act of 2005 (EPA) mandates a renewable fuels standard with an annual usage rate of 7.5 billion gallons by 2012, including 250 million gallons of cellulosic ethanol by 2013. The President's Advanced Energy Initiative further emphasizes the need to reduce reliance on imported oil. CSREES and its partners are in position to play a significant role in agriculture's contribution to developing and adopting alternative technologies that increase energy independence and national energy security.

CSREES participates on USDA's Biobased Products Bioenergy Coordination Council (BBCC), officially chaired by the Under Secretary for Research, Education, and Economics. The Secretary of Agriculture established the BBCC in 1995 to coordinate activities across the Department and to provide advice. Visit the BBCC Web site, www.ars.usda.gov/bbcc/, for a list of council members.

The BBCC serves as the working arm of the Secretary's newly formed Energy Council, chaired by the Under Secretary for Rural Development. The Energy Council's goal is to accelerate and expand the Department's activities in renewable energy. CSREES collaborates with other Federal agencies, including DOE Offices of Science and Biomass, to develop programs and evaluate progress in key topic areas, including sequencing the soybean genome to optimize biodiesel production.

Most of the CSREES-supported bioenergy projects address biomass conversion technologies for the efficient processing of agricultural and forestry materials into energy and products. Research is supported through programs that emphasize different phases of the R&D continuum. For instance:

- Basic and early applied research is funded through the NRI 71.2 topic, Biobased Products Bioenergy Production Research, with a focus on development of biocatalysts capable of converting lignocellulosic materials economically with low environmental impact and adding value to the coproducts of biomass processing.

- Applied and developmental research projects are supported through formula and other funding mechanisms and include linking biomass gasification and bioconversion technologies to produce ethanol and chemicals, developing aviation fuels, and optimizing various technologies to convert animal manure to energy.
- Pre-commercialization projects are supported through the Small Business Innovative Research (SBIR) program, and an increasing number of successful proposals address bioenergy and biobased products.
- Academic training is supported through a Science and Education Resource Development (SERD) Challenge Grants Program that identified biobased products as a focus topic in the 2006 solicitation. The Biodiesel Fuel Education Program has played a significant role in educating the public about the benefits of biodiesel use. Visit the National Biodiesel Board's Web site, www.biodiesel.org, for more information.

Extension programs in bioenergy are expanding and providing outreach and formal training to encourage the development and implementation of biobased technologies (e.g., energy crop production, uses for forest fuel loading, energy efficiency and conservation practices, and biofuels production and use). EPA offers many opportunities for outreach and extension and for defining new roles for agricultural extension at land-grant universities.

The current focus for bioenergy is on liquid transportation fuels, ethanol, and biodiesel, but biobased industrial products can also contribute to reducing reliance on petroleum and improving returns to the farmer and the local community. The 2002 Farm Bill, Energy Title IX, Section 9002, Federal Procurement of Biobased Products, created a tremendous market pull for new products through the purchasing power of the Federal government. USDA has designated the first of many biobased items that will be given first preference for purchase by Federal agencies (www.oce.usda.gov). Biobased products will allow agencies to meet their environmental goals and open new markets for agriculture. This program also creates new opportunities for research and extension to meet the expanding market for cost-competitive biobased products that meet performance requirements.

The investment in R&D to provide biofuels, power, and products from renewable agricultural and forestry resources must include the social sciences to ensure that the new technologies incorporate economic, environmental and social considerations.

The portfolio of CSREES programs provides opportunities for new technologies and products to enter and flow through the technology pipeline. The Federal-state partnership of the land-grant system can be brought to bear on the need to effectively research, develop, and transfer technologies to the marketplace to reduce our dependence on petroleum and imports of other critical materials, and to promote sustainable rural economies. Contact: Carmela Bailey, CSREES/USDA – cbailey@csrees.usda.gov.

CSREES Integrated Programs Solve Today's Problems:

CSREES Integrated Programs are those that bring together the three components of the agricultural knowledge system—research, extension, and education—to tackle the most critical issues and problems facing the food and agriculture system today. CSREES is working in partnership with the Land-Grant University System to create solutions to address a number of complex issues and problems through an integrated, multi-functional, interdisciplinary approach involving stakeholders and teams of experts. CSREES provides competitively awarded grants for integrated work through the Integrated Research, Education, and Extension (IREE) competitive grants program and the National Research Initiative (NRI) competitive grants program.

The IREE program has supported integrated research, education, and extension in food safety, water quality, integrated pest management, methyl bromide transition, and organic transition since 2000. This program funds dozens of projects each year that conduct mission-focused research to fill gaps in knowledge, deliver science-based extension and outreach to help citizens make better decisions, and develop academic programs to train the next generation of citizens and scientists. For example, scientists from Colorado State University, the Ohio State University, and Washington State University are collaborating on a project to address food safety for people with suppressed or compromised immune systems. The project has developed a number of educational materials to train patients and health care providers on methods to avoid food-borne illness.

NRI also supports integrated work in a number of important problem areas, including air quality, human nutrition and obesity, profitability of small farms, animal and plant biosecurity, weedy and invasive species, and others. Congress has directed since FY 2003 that the program use a portion of its funds (up to 22 percent in FY 2006) to support integrated research, education and extension directed at critical agricultural and rural issues. NRI currently supports integrated projects within 15 program areas. Contact: Deborah Sheely, USDA/CSREES – dsheely@csrees.usda.gov.

CSREES-Funded Obesity Research Update: The Centers for Disease Prevention and Control said an estimated 66 percent of American adults were overweight or obese in 2003-2004, along with 17 percent of children and adolescents. The total annual cost of obesity was an estimated \$117 billion in 2000, yet we know little about how psychosocial, lifestyle, educational, and economic factors influence the development of obesity.

The NRI Human Nutrition and Obesity Program funds innovative projects that integrate research, education, and extension to address critical factors related to obesity prevention, and then apply that knowledge to the development and evaluation of effective interventions. Projects address some aspect of food (e.g., production, processing, packaging, marketing, purchasing, preparation, or consumption) as it relates to obesity.

Two FY 2003 projects are already beginning to see results:

- Faculty at the University of Wisconsin is testing the feasibility of a high-vegetable diet for weight loss, long-term weight loss maintenance, and improved health. They are conducting a clinical trial in which the control group follows a “traditional” weight loss diet (reduction of calorie intake by 500 calories per day and no more than 20 percent of calories from fat). The intervention group is increasing its consumption of vegetables to eight servings per day, and fruit to two-three servings per day. After 18 months, both groups have lost weight. Although the control group lost more weight than the intervention group, the fact that the intervention group lost weight merely by adding fruits and vegetables to their diet is significant.
- Faculty from Purdue University, Southern Illinois University, the University of Arizona, New Mexico State University, and USDA Agricultural Research Service's Western Human Nutrition Research Center are studying the effectiveness of a student-tailored Web-based learning community to promote healthy weight in 11- and 12-year-old children. The program, called “Eat, Move, Learn,” is innovative because the learning modules meet many of the National Science Education Standards developed by the National Research Council of the National Academy of Sciences. Students learn to work in groups as anthropologists, physiologists, or nutritionists to develop and test hypotheses, make conclusions about why Americans are out of shape, and develop and test an experimental design to change the eating and movement behaviors of the Nation. Contact: Deborah Sheely, USDA-CSREES – dsheely@csrees.usda.gov.

CSREES IR-4 Project Accomplishments for FY 2005:

The IR-4 Project obtained 991 clearances for specialty crops related to food use and conducted more than 1,200 ornamental horticulture research trials to support registrations in the greenhouse, nursery, landscape, and Christmas tree and forestry industries. One new label registration, Endorse (polyoxin D), was granted for use on ornamental horticulture crops from data generated through the IR-4 Ornamental Horticulture Program.

Four biopesticide petitions, amendments, or data packages were submitted to the Environmental Protection Agency (EPA) in 2005. Additionally, IR-4 data supported 39 new biopesticide uses for 8 products. The Crop Grouping Project, currently underway with EPA, will increase the current 500 commodities to more than 1,000 specialty crops to the regulatory process.

The IR-4/ EPA Technical Working Group has taken a leadership role with CSREES to explore initiatives to facilitate specialty crop registrations. One example is electronic petition submissions, which IR-4 plans to utilize for all of its petition submissions in 2006. Using electronic submissions could reduce the EPA's resources for reviewing IR-4 data by 35 percent.

North America Free Trade Agreement (NAFTA) cooperation involves IR-4 support of more than 4,450 new uses that were registered in the United States in the past 6 years, but only a few of those uses were available to growers in Canada. Cooperative projects allow both the EPA and Canada's Pest Management Regulatory Agency to review submissions for use in the United States and Canada.

More than 150 researchers, commodity representatives, and industry personnel participated in a February 2005 strategic planning conference to discuss their needs and share inputs to help IR-4 consider its strategic direction. Recommendations from this conference played a major role in helping the IR-4 Project Management Committee put together a strategic plan for 2006-2008. The plan includes initiatives for seed technology and a global specialty crop program. IR-4 is uniquely positioned, with its expertise in both specialty crops and partnerships, to manage a Global Specialty Crop Initiative.

This initiative could also play a major role in assisting with international reviews for a Joint Meeting on Pesticide Residuals or by participating more actively on Codex Alimentarius (CODEX), a collection of standards, practice codes, guidelines and other recommendations, specifically those dealing with a food or food group or the operation and management of production processes or government regulatory systems for food safety and consumer protection, and Organisation for Economic Co-Operation and Development (OECD) committees.

This global initiative would enhance global registrations and reduce trade barriers, while at the same time further promote the use of new, safer pest control products.

The IR-4 pilot efficacy programs identified solutions for thrips management on onions, selected to work on solutions for *Phytophthora capsici* and found some promising solutions for managing this disease on cucumbers and peppers, and identified potential non-phytotoxic herbicides for leafy vegetables. IR-4 sponsored a *Phytophthora capsici* workshop in 2005 that brought together scientists who represented industry, university extension, research, and the USDA/Agricultural Research Service to identify trial strategies to fight this disease. Contact: Monte P. Johnson, USDA/CSREES – mpjohnson@csrees.usda.gov.

CSREES Water Quality Integrated Program A Success

Story: CSREES has provided approximately \$73 million in financial assistance since the fall of 2000 to universities and colleges to support research, education, and extension activities that protect and improve the quality of the Nation's water resources. These competitive grants, awarded through the CSREES National Integrated Water Quality Program (NIWQP), fund critical new research, education, and outreach-extension efforts across the United States and its associated territories. CSREES assisted more than 90 watershed-scale projects that address specific, locally defined water quality concerns. These projects develop and deliver the best available science and education to address these critical water issues.

CSREES supports a network of regional projects that connects state and territory water quality coordinators to build and sustain a national network of water resource leaders. Research findings and successful educational curricula from watershed-based studies are disseminated across the Nation. CSREES also addresses multi-regional and national scale water resource issues through a set of National Facilitation projects that build and extend successful research and extension activities focused on water resources.

NIWQP has provided funding since 2000 to improve the quality of our Nation's surface water and groundwater by integrating volunteer monitoring into research, education, and extension activities, especially in rural and agriculture watersheds. The project is a collaborative effort of the University of Rhode Island Cooperative Extension and the University of Wisconsin Extension. Integration improves through increased communication between NIWQP regional committees and new and existing extension volunteer monitoring programs, and by providing resource materials to the extension volunteer monitoring programs.

Science's roles in managing microbial contamination of water resources are at the forefront of water policy discussions across the

country. CSREES funded an Environmental Pathogens Information Network (EPINet) to develop and transfer knowledge of how microbial pathogens enter into, and then function in, watersheds so we can properly manage and prevent the spread of microorganisms and the diseases they cause. Information will be shared via workshops, Web-based publications, and smaller homeowner-friendly extension materials.

Capacity Building National Facilitation Projects include a 2004 competitive grant to a 1994 land-grant institution -- Salish Kootenai College -- to build a Tribal College and University Water Resources Coalition using a nationwide collaboration of Tribal College and University Extension, Education, and Research departments. This coalition will cooperate and participate with the CSREES network of regional water coordination projects to address critical water resource issues, increase Tribal communities' understanding of water resource issues affecting their rural communities, increase participation and involvement in managing water quality issues, planning water utilization practices, and implementing water management projects.

Tennessee State University used a national facilitation grant in 2005 to address key water resource concerns to minority and underserved audiences. A coalition of 1890 land-grant institutions will use the grant to:

- link the 1890 institutions with CSREES water quality programs;
- conduct strategic planning;
- evaluate water quality programs at 1890 institutions;
- develop collaborative strategies with 1862 and 1994 land-grant universities to address water resource issues through research, education, and/or extension activities;
- identify 1890 institutions that will develop a water quality and quantity curriculum for county agents to educate families and implement a mini-grant awards program to address water resource issues.

The project also will develop a water resource Web-based database to be housed at one of the 1890 institutions to serve as the communication portal for the 1890s' water resource education, extension, and research activities. The database will highlight successful water resource programs at 1890 institutions and quantitative impacts of the water resource activities to their communities and the Nation. The information will be posted on the Web site. Contact Mike O'Neill, CSREES, at moneill@usda.csrees.gov for more information.

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