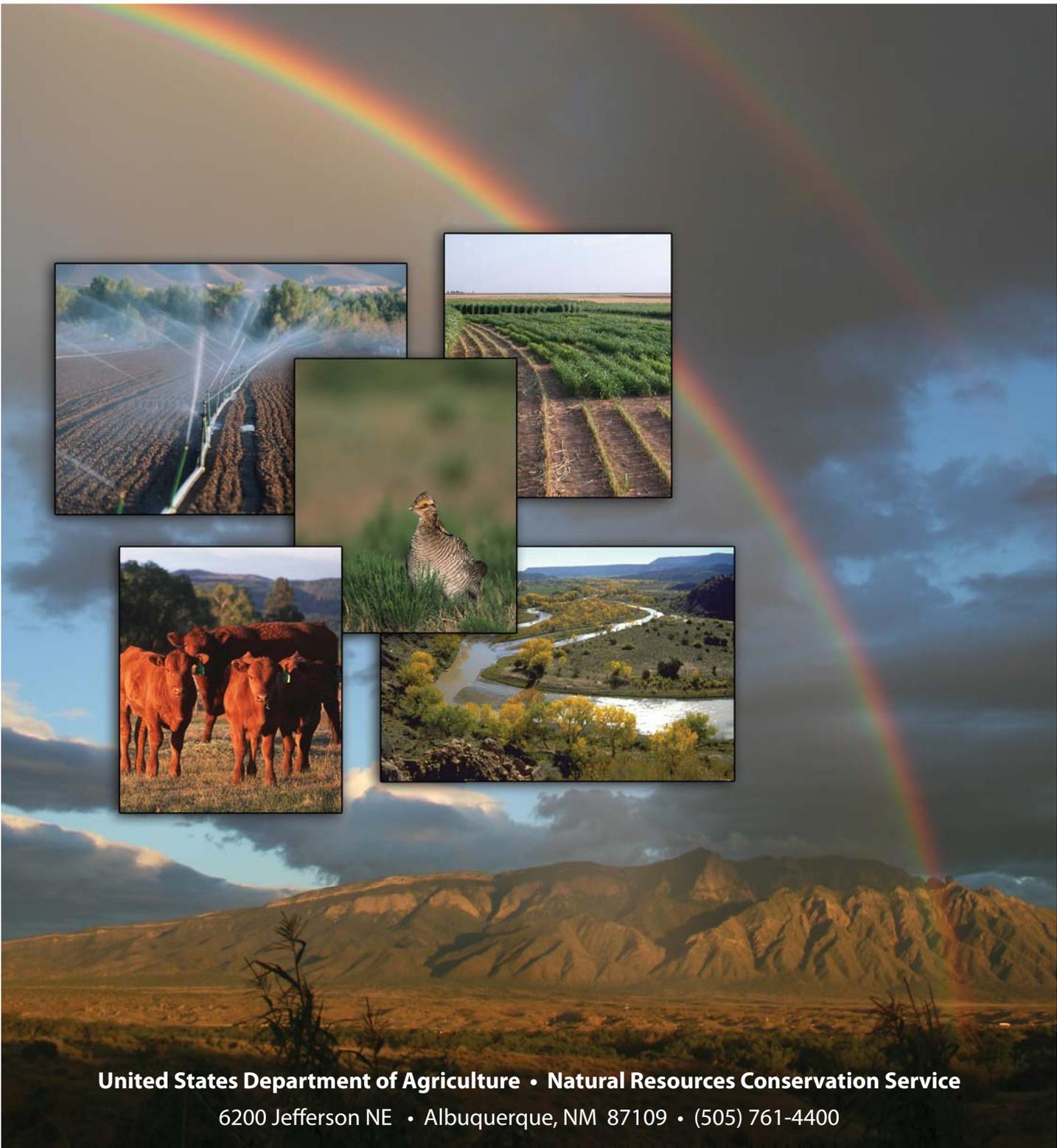




2009

NRCS New Mexico Activities Report



United States Department of Agriculture • Natural Resources Conservation Service
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Quick Facts

Voluntary Private Lands Conservation Assistance in New Mexico

With the mission of “Helping People Help the Land,” the Natural Resources Conservation Service (NRCS) delivers voluntary programs, products and services that help local people protect and improve natural resources on non-federal lands.

Our locally based NRCS staffs work directly with farmers, ranchers and others to provide technical and financial conservation assistance suited to each client’s specific needs. We provide technical information and guidance, plan conservation systems and practices, and offer financial assistance for conservation activities through the programs of the 2008 Farm Bill.

These voluntary programs help local people improve land stewardship on working cropland and rangeland, conserve water supplies, enhance wildlife habitat, preserve high-quality farmland, protect native plants and animals, and improve stream conditions. NRCS programs also provide upstream flood prevention, emergency watershed protection, urban conservation, and assistance for local community projects designed to improve social, economic and environmental conditions. As a result of our voluntary technical and financial assistance, land managers and communities take a comprehensive approach to the use and protection of natural resources in rural, urban and developing areas.

More information about the USDA Natural Resources Conservation Service in New Mexico is available at: www.nm.nrcs.usda.gov.

New Mexico NRCS Fiscal Year 2009 Accomplishments

- ✓ 3,887,000 acres of conservation planning completed
- ✓ 32 watershed plans developed
- ✓ 200,400 acres of cropland conservation applied
- ✓ 3,110,000 acres of conservation applied to improve water quality
- ✓ 94,000 acres of irrigation improvements
- ✓ 4,845,000 acres of grazing land and forest land conservation
- ✓ 2,192,000 acres of conservation applied to improve fish and wildlife habitat
- ✓ Over \$26 million in financial assistance to New Mexico producers and landowners



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2009 Farm Bill & Other Program Funding

The conservation provisions in the Food, Conservation, and Energy Act of 2008 (2008 Farm Bill) are providing conservation opportunities for farmers, ranchers, private landowners and communities for years to come. The 2008 Farm Bill builds on the conservation gains made through the 1985, 1996 and 2002 Farm Bills. It simplifies existing programs and creates new programs to address high priority environmental goals.

A summary of Fiscal Year (FY) 2009 funding provided through some important Farm Bill programs in New Mexico is shown below.

FY 09 Financial Assistance Expenditures by Program by Congressional District				
Congressional District*	1	2	3	Total
Environmental Quality Incentives Program (EQIP)	A voluntary program that provides technical, educational, and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns on working agricultural lands.			
	\$2,573,945	\$10,316,133	\$8,431,153	\$21,579,606
Programs funded through EQIP:				
Agricultural Water Enhancement Program (AWEP)	A partnership program to leverage EQIP assistance against the funding, staff or other resources of project partners to conserve ground and surface water or improve water quality on agricultural lands.			
	\$169,208	\$2,826,326	\$35,123	\$3,630,657
Cooperative Conservation Partnership Initiative (CCPI)	A partnership program to leverage funding through EQIP, WHIP and the Conservation Stewardship Program (CSP) against the resources of project partners to address a high-priority natural resource concern.			
		\$1,300,000	\$131,471	\$1,431,471
Conservation Security Program (2002 Farm Bill)	A voluntary stewardship program of the 2002 Farm Bill that promotes ongoing conservation on agricultural lands. No new contracts are being written, and NRCS is making payments to fulfill existing contracts.			
	\$10,826	\$421,029	\$769,882	\$1,201,737
Farm & Ranchland Protection Program (FRPP)	A voluntary program that helps landowners keep their productive land in agriculture through conservation easements limiting conversion of property to non-agricultural uses.			
			\$600,000	\$600,000
Federal/Private Cooperative Conservation	Part of EQIP that is voluntary and facilitates conservation on an entire ranching operation where sections of the operation's grazed land are federally owned.			
		\$233,427	\$113,072	\$346,499
Grassland Reserve Program (GRP)	A voluntary program to help farmers and ranchers protect their grazing land from conversion to other uses.			
			\$2,350,000	\$2,350,000
Wildlife Habitat Incentives Program (WHIP)	A voluntary program that encourages creation of high quality wildlife habitat that support wildlife populations of national, state, tribal, and local significance.			
	\$61,615	\$289,009	\$516,081	\$866,706
Watershed Rehabilitation	A voluntary program that offers assistance to local sponsors in evaluating and updating as necessary dams constructed with certain types of federal assistance.			
		\$279,000	\$276,000	\$555,000



Conservation Technical Assistance

NRCS provides data, information and technical expertise that helps people collect and analyze information to identify natural resource problems and opportunities, clarify their objectives, and formulate and evaluate alternatives. *Conservation plans* reflect a customer’s decisions about the management of natural resources for a specific area, which may be a farm or ranch operating unit, a group of units, a community, or a landscape feature such as a watershed. *Technical consultations and planning assistance* provide professional advice that helps customers make decisions about natural resource management.

In 2009, NRCS New Mexico worked with private landowners and producers to plan conservation strategies on nearly 3.9 million acres.

Conservation Planning Assistance to Improve Acequias

1st Congressional District

Many of New Mexico’s acequias that carry irrigation water to farm fields were constructed hundreds of years ago. There are approximately 800 community acequia and ditch associations in the state, and many of these groups seek technical assistance and engineering services, as well as funding for improvements, to keep these important structures functioning.

In December 2009, Acequia Arriba de El Valle in El Valle, New Mexico, finished construction of a concrete-capped gabion diversion on the Rio de Las Trampas (Las Trampas River). NRCS conservation professionals provided engineering services to design the new structure through the NRCS Conservation Technical Assistance program.

The structure replaces a very old timber weir of unknown age. In the past, the acequia association used hay bales to divert water into an earthen ditch. There was no control gate at the inlet, and the group was unable to control the quantity of water entering the ditch. The system allowed excess water to be wasted and required frequent maintenance.

The project benefits approximately 22 irrigators farming 81 acres of land and allows them to conserve the water not needed for agriculture.





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Environmental Quality Incentives Program (EQIP)



EQIP is helping to protect fragile playa lakes, improve groundwater recharge and provide critical wildlife habitat in eastern New Mexico.



EQIP is a voluntary program that helps producers install measures to protect the soil, water, air, and other resources while ensuring sustainable production on farms, ranches and working forest lands.

Through EQIP, NRCS provides funding and technical expertise to help farmers and ranchers and others to address natural resource concerns on their land in an environmentally beneficial and cost-effective manner. It promotes agricultural production and environmental quality as compatible goals and supports activities such as: *manure management practices, pest management treatments, efficient irrigation upgrades, forest stewardship plans and management practices, erosion control and buffers, range and pasture planting, fencing and stockwater, and a number of other practices.*

Grazing Management Protects Playa Lakes

3rd Congressional District

Eastern New Mexico's playa lakes provide critical habitat for declining species of birds and other wildlife in the otherwise semiarid, short grass prairie and agricultural landscape. These ephemeral wetland areas represent keystone ecosystems of biodiversity in an arid environment. They are also important zones of recharge for the rapidly declining High Plains (Ogallala) Aquifer, which supplies all agriculture and domestic water in the area.

In 2009, Stan and Cathy Fury applied for EQIP assistance to treat the effects of overgrazing around playa lakes, which can critically reduce cover and shelter for birds and increase the potential for sediment and contaminants reaching the fragile water source and compromising its natural functions.

Through EQIP, the producers will receive a payment for three years to defer livestock grazing in the sensitive playa bottom and on 320 acres of surrounding upland range. As the project matures, grass species will recover and provide cover and shelter for bird species. In addition, the additional grass cover filters sediment and potential pollutants before it reaches these important playa lakes.



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Wildlife Habitat Incentives Program (WHIP)

WHIP helps landowners improve and protect wildlife habitat on private and tribal lands. Program priorities for fiscal year 2009 were to:

- Promote restoration of declining or important native habitats;
- Protect, restore, develop or enhance habitat for at-risk species;
- Reduce the impacts of invasive species on wildlife habitats; and
- Protect, restore or enhance declining or important aquatic habitats.

FY 2009 was a record-setting year for the program, with the most WHIP funding ever provided to improve habitat in New Mexico. New Mexico. These projects have improved habitat on private land for elk, turkey, bear, grouse, bighorn sheep, endangered willow flycatchers and other species. These projects have emphasized the development of water supplies for wildlife, establishment of permanent flood plains, and fencing cattle out of creeks and ponds.

WHIP Promotes Healthy Grasslands for Livestock & Wildlife 2nd Congressional District

In 2009, William West applied for WHIP conservation assistance to improve wildlife habitat, control invasive brush species, prevent soil erosion and improve grazing conditions on his eastern New Mexico ranch.

Through WHIP, Mr. West will expand grazing distribution with the installation of a pipeline and a watering facility, which will have escape ramps to prevent various wildlife species from drowning. A diversion will also be installed to reduce soil erosion and loss of vegetative cover.

In addition, brush management activities will reduce the encroachment of mesquite to improve grass stands for improved food and shelter for wildlife and increased forage production for livestock and wildlife. Treatment will reduce the canopy cover of mesquite from 14 percent to five percent on the area.

The improved wildlife habitat will benefit pronghorn antelope and scaled quail, a declining species dependent on healthy grassland habitat.



*Nearly \$900,000 in FY
 2009 WHIP funding helped
 landowners protect and
 improve conditions for
 wildlife in New Mexico.*



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Conservation Stewardship Program (CSP)



New Mexico producers account for a large amount of the 2009 CSP acres enrolled in the nation. Their program participation will increase the conservation funding brought to local communities.

The Conservation Stewardship Program (CSP) encourages land stewards to improve their conservation performance by installing and adopting additional activities, and improving, maintaining, and managing existing activities on agricultural land and nonindustrial private forest land.

Newly authorized in the 2008 Farm Bill, CSP is available for agricultural landowners across the nation and replaces the former Conservation Security Program.

New Mexico Producers Fare Well in First Statewide Signup

The first signup for the new CSP ended on September 30, 2009. New Mexico producers showed a great deal of interest in the program and submitted applications for more acres than almost any other state in the nation.

NRCS anticipates entering into 90 CSP contracts to help producers improve and enhance conservation activities across the state. Because of the high level of interest here, NRCS has exceeded the initial New Mexico signup allocation of 500,000 acres and plans, instead, to enroll more than 650,000 acres of rangeland, cropland and forest lands into the program.

Program payments will be based on individual contract details and will help producers install additional conservation measures while benefitting local economies.

Partnership Programs

NRCS partners with state and local governments, tribes, pueblos, American Indian nations, agricultural groups, non-profits and others to focus conservation assistance on local projects. Groups that work to address natural resource issues in New Mexico may be able to partner with NRCS to leverage dollars and expertise through the following programs:

- Agricultural Water Enhancement Program (AWEP)
- Cooperative Conservation Partnership Initiative (CCPI)
- Conservation Innovation Grants (CIG)
- Small Watershed Program
- NRCS Assistance for Acequia Associations

These programs allow NRCS to leverage funding with the funding, or other resources of partners to address high-priority concerns, improve conditions on a landscape scale, and/or develop innovative approaches.

Groups Partner with NRCS Deliver Solutions to Local Growers 2nd Congressional District

In 2009, the Black Range Resource Conservation & Development (RC&D) and the Deming Soil and Water Conservation District (SWCD) submitted a request to direct federal resources to help local growers address issues with irrigation water availability, soil health and rising costs to maintain well depth. NRCS entered into a partnership agreement with these groups through the Agricultural Water Enhancement Program (AWEP), allowing the agency to dedicate up to \$2.4 million through the Environmental Quality Incentives Program (EQIP) for irrigation system improvements in the project area over four years. The Black Range Resource RC&D and the Deming SWCD agreed to facilitate the submission of applications and provide additional technical assistance to participants.

This partnership gives producers in the AWEP area the opportunity to apply for funding and assistance to convert flood or pivot sprinkler irrigation systems to more efficient drip irrigation, increase system automation and monitoring, and reduce the amount of water pumped onto local fields.

Diaz Farms, Inc., is a local producer participating to install a subsurface drip system. In this area, such systems can potentially reduce irrigation water use approximately 30 to 50 percent. Also, applying fertilizers through the system reduces use of heavy equipment and soil compaction. Finally, the operator will be able to reduce tillage, improving conditions for microbes and worms that improve soil health. Overall, the automated system and reduction in tillage will reduce fuel, labor and fertilizer and farm energy costs.



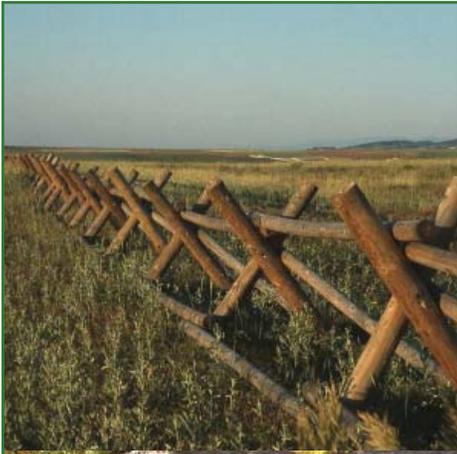
In FY 2009, NRCS directed \$3.7 million in AWEP conservation funding to landscape-scale projects in the Rio Grande Valley, Ft. Sumner and Deming areas.





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Easement & Long-Term Restoration Programs



The voluntary easement programs administered by NRCS offer landowners the opportunity to protect, restore and enhance natural resources on their property and ensure long-term conservation benefits.

- **Farm and Ranchlands Protection Program (FRPP):** helps entities with easement programs work with farmers and ranchers to protect working agricultural land from conversion to non-agricultural uses.
- **Grassland Reserve Program (GRP):** helps farmers and ranchers protect their working grazing land from conversion to other uses through easements or restoration agreements.
- **Wetlands Reserve Program (WRP):** helps landowners restore or protect wetland areas through easements or restoration agreements.

These programs often leverage NRCS with against the resources of partner entities with corresponding goals to protect farm and ranch lands, preserve grasslands, or enhance wetlands.

Wetland Restoration Connects Rio Grande Habitat Areas

1st Congressional District

The Whitfield Conservation Area exemplifies a successful, multiple partner WRP project. The 98-acre property is located south of Albuquerque, New Mexico and adjoins the Rio Grande Bosque, a unique nature preserve with a cool, shady forest of large cottonwood trees, coyote willow, and New Mexico olive that provide habitat for beaver, numerous bird species, turtles, and snakes. The Whitfield WRP adds connectivity to this high-quality habitat and helps to form an increasingly rare stopover and feeding ground for the abundant wildlife that utilize the Rio Grande corridor to move north and south.

Title to the property was donated to the Valencia Soil and Water Conservation District (SWCD), and the district continues to operate and maintain it. The SWCD successfully applied for and received a permanent WRP easement and worked with NRCS to complete restoration activities through the 2009 calendar year.

To enhance the educational and recreational benefit of the project, the SWCD and the State of New Mexico have built a wetlands and wildlife education center on land adjacent to the easement.

With NRCS easement and restoration assistance, partners can leverage their programs and services with those of NRCS to improve conservation outcomes in New Mexico.



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Emergency Watershed Protection Program (EWP)

NRCS administers EWP, which assists local communities responding to emergencies created by natural disasters. EWP provides technical and financial assistance to relieve imminent hazards to life and property caused by floods, fires, windstorms, and other natural occurrences. These threats include, but are not limited to:

- Debris-clogged stream channels,
- Undermined and unstable streambanks,
- Jeopardized water control structures and public infrastructures, and
- Damaged landscapes stripped of protective vegetation by fire or drought.

Ruidoso Flood

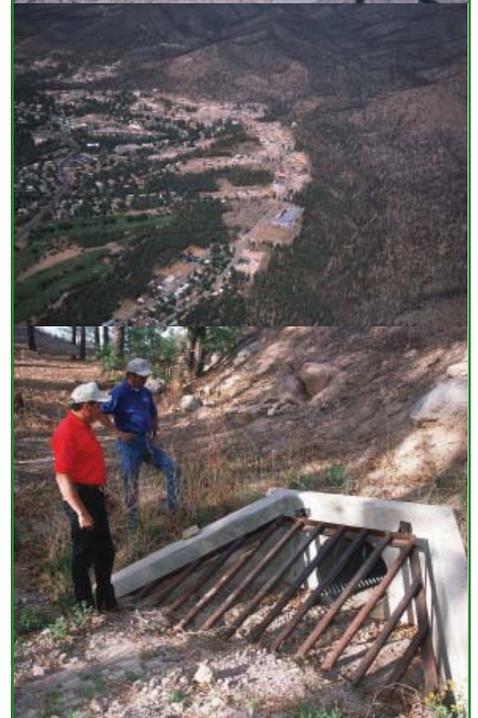
2nd Congressional District

In 2008, the after-effects of Hurricane Dolly brought severe flooding to the Ruidoso area of Lincoln County.

Washed-out homes and bridges, accumulated debris, destabilized streambanks and damaged irrigation diversions presented a number of safety concerns for local residents for the months to follow.

Through EWP, NRCS directed \$9.3 million in financial assistance and another 1.1 million in technical assistance to address urgent needs in the community. These resources were used to design, plan and complete activities to protect property valued at over \$63 million.

In addition to securing land rights and permits, local project sponsors provided an additional \$2.3 million in funding and in-kind services to complete the work. These local sponsors were: Lincoln County, Mescalero Apache Tribe, Upper Hondo Soil and Water Conservation District, Village of Capitan and the Village of Ruidoso.



Ruidoso EWP Funding

FY 2008 Financial Assistance	\$ 3,510,000.00
FY 2009 Financial Assistance	\$ 5,829,000.00
Total:	\$9,339,000

Accomplishments

- 93,500 feet of debris removed**
- 15, 286 feet of streambanks stabilized**
- 3,100 acres of land protected**
- 326 private and 2 public buildings protected**
- 23 county road crossings protected**
- 50 utilities protected**
- 11 irrigation diversions replaced or protected**



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Los Lunas Plant Materials Center



The Los Lunas Plant Materials Center develops, tests and transfers native plant solutions to solve conservation problems.



The purpose of the Plant Material Centers program is to develop native plant solutions to help solve natural resource problems. Beneficial uses for which plant material may be developed include biomass production, carbon sequestration, erosion reduction, riparian restoration, and other special conservation treatment needs.

Scientists at the Los Lunas Plant Materials Center research plants that show promise for meeting identified conservation needs and test their performance. After species are proven, they are released to the private sector for commercial production.

Developing Plant Solutions to Natural Resource Challenges

The local NRCS Field Office, Conservation District, and the Los Lunas Plant Materials (PMC) assisted the National Hispanic Cultural Center with a riparian planting. Eight hundred ‘Longstem Transplants’ of several shrub species of the local native populations were deep planted in September of 2009. This riparian site is very typical of the Southwest in that it no longer floods, which is required for natural vegetation recruitment. The deep planting technique allows for immediate root contact with the capillary fringe of ground water (up to eight feet in depth), so plants do not require surface irrigation yet typically experience a 90 percent survival rate.

To publicize new and effective planting methods, the PMC has developed brochures which are posted on the NRCS New Mexico and National Plant Materials Web sites. Planting methods have also been published in periodicals, such as the Journal of Soil and Water Conservation and the Native Plants Journal.

In another effort with NRCS field offices and conservation districts, the PMC has been working on solutions to control wind erosion on agricultural lands. The PMC has been testing the usefulness and range of adaptability of the grass species sacaton (*Sporobolus wrightii*) by planting across the state including at the Joshua Sanchez farm in Deming, NM. Through plant breeding methods, the PMC has developed a population that can reach 10 feet in height in three years.

NRCS Soil Survey Program



NRCS provides soil surveys of the privately owned lands of the nation. Soil surveys provide an orderly, on-the-ground, scientific inventory of soil resources that includes maps showing the locations and extent of soils, data about the physical and chemical properties of those soils, and information derived from that data about potential uses and problems on each kind of soil. This is done in sufficient detail to meet many needs for farmers, agricultural technicians, community planners, engineers, and scientists in planning for specific land areas.

Improving Soil Health to Sustain Agriculture

In the past year, NRCS has made great strides in developing new tools to help landowners improve natural resource management and long-term sustainability on New Mexico's farms and ranches.

Working with our many partners, NRCS helped to develop the "Soil Change Guide: Procedures for Soil Survey and Resource Inventory." This guide helps conservationists measure the soil qualities that indicate soil health.

In addition, NRCS has developed a number of "Ecological Site Descriptions," or ESDs, which show the potential for specified plant communities to change under various management and climate scenarios.

Healthy soil is the foundation for sustainable farms and ranches. The NRCS Soil Survey program continues to produce new information to help landowners, conservationists and others develop comprehensive, science-based management and conservation plans to ensure productive landscapes.



Soil Survey information and tools help NRCS and other agencies and individuals sustain the long-term productivity of cropland, forests, range, and other lands across New Mexico.



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Snow Survey & Water Supply Forecasting



The SNOTEL system can report numerous climate and snowpack conditions including precipitation, temperature, depth of snow, humidity, and wind speed.



The winter snowpack contributes 50 to 75 percent of the flow in our streams and rivers with melting snow. The Snow Survey Program provides winter snowpack and stream flow forecasts for water users in New Mexico, including reservoir managers, irrigation groups, tribes and pueblos, and municipalities. In addition, NRCS participates in drought forecasting and mitigation in cooperation with other state and federal agencies.

Snow surveyors from NRCS conduct monthly readings of snowpack depth and density at 56 locations throughout mountainous areas of the state. Included in these sites are 22 SNOTEL (snow telemetry) automated stations which report both climate and snowpack conditions.

Snow Survey Activities

In 2009, NRCS developed and released six Water Supply Outlook Reports with snowpack summaries and streamflow forecasts for New Mexico. These reports are developed and released at the beginning of the month from January to June each year. The reports include data and forecasts on the snowpack, reservoir storage, and anticipated water supply (stream flows) based upon the depth, density, water content, and aerial extent of the winter snowpack.

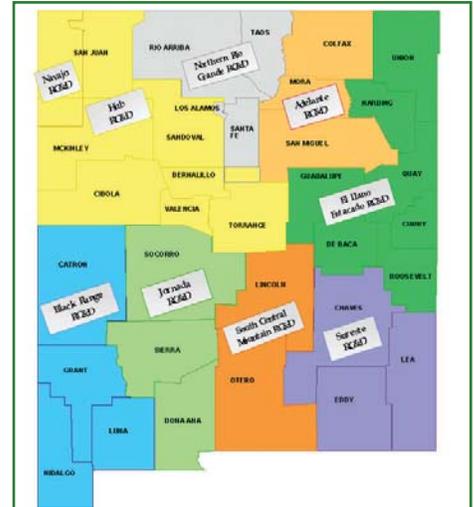
This past year, plans have been developed to expand the New Mexico SNOTEL network with five new sites in the Rio Grande Watershed, upgrades to 12 existing SNOTEL sites, and conversion of four manual snow courses sites with the latest SNOTEL technology.

In addition to providing high-elevation snow and climate information, NRCS also operates a network of automated Soil Climate Analysis Network (SCAN) sites located in lower elevation areas across the nation. This system provides data on soil temperature and soil moisture content at several depths, air temperature, relative humidity, solar radiation, wind, precipitation, barometric pressure, and more. Currently, there are five SCAN sites in New Mexico, with another two scheduled for installation in 2010.

Resource Conservation & Development

The NRCS Resource Conservation and Development (RC&D) program is designed to help local groups and communities foster the conservation, development and utilization of natural resources. RC&D supports improved economic activity and seeks to enhance the environment and standard of living within RC&D Areas. RC&D Areas are locally sponsored areas designated by the Secretary of Agriculture for RC&D technical and financial assistance program funds. There are eight federally authorized RC&D Areas in New Mexico.

Current program objectives focus on improving quality of life through natural resources conservation and community development leading to sustainable communities, prudent development, and management and conservation of natural resources.



Multi-Agency Collaboration for Forest Restoration 3rd Congressional District

The Adelante RC&D Council wrote and participated in writing grant proposals, assisted with monitoring, conducted outreach and/or provided administrative support for five collaborative forest restoration projects. Through the effort, the US Forest Service's Collaborative Forest Restoration Program (CFRP) provided over \$1.5 million for equipment, forest thinning and restoration, economic development and value-added forest products within the Adelante RC&D Area. This program has resulted in business and job creation as well as healthier watersheds in the Adelante RC&D Area.

With coordination and facilitation from the Adelante RC&D Council, a number of partners participated in the effort, including: Adelante RC&D, US Forest Service, Tierra y Montes SWCD, La Jicarita Enterprise Community, Northeastern Contractors, New Mexico Highlands University Watershed Restoration Institute, New Mexico State Forestry, Wild Earth Guardians, Southwest Wood Products, University of New Mexico, New Mexico State University, and others.

2009 New Mexico RC&D Contributions

Congressional District	RC&D Funds (from NRCS)	Leveraged Funds
1	\$ 60,323	\$ 750,000
2	\$ 512,748	\$ 4,869,996
3	\$ 392,102	\$ 2,360,984
NM Total	\$ 965,173	\$ 7,980,980

For every \$1 NRCS invests in the New Mexico RC&D program, partners and other entities contribute \$8.30 for local natural resource and community improvements.



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