## New Mexico

# **Natural Resources Conservation Service**





2002 Report



Pictured: Drip irrigation system for high value crops

### Natural Resources Conservation Service



Dear New Mexicans,

In FY2002, New Mexican farmers and ranchers received the greatest assistance in applying conservation on the ground in this nation's history. Yet, we know that to the apple grower in Espanola, chile farmer in Hatch, and beef rancher in Roy the most important thing may not be history but a better irrigation system, more forage per acre, and a safer way to handle chemicals on the farm. We share their desire to conserve resources and live in harmony with our environment.

The drought we experienced this summer dominated the talk over coffee at the Spic and Span in Las Vegas and across the fence in Reserve. We were all reminded again how vital the conservation plans are that our staff develop in cooperation with farmers

and ranchers. It is through such plans that agriculture can weather drought, and capitalize on wet years.

Our work is gratifying. It is exciting for our staff to see a rancher get fired up about conservation when he or she see the results of cross fencing and rotation systems. We all respond when grouse and turkeys return to an area that was once devoid of wildlife.

These victories by farmers and ranchers in New Mexico inspire us. It is with deep appreciation that we partner with the private landowner, and support farms and ranches that live well with their environment and are sound financially. I invite you to read this report and share in the challenges and successes we realized in 2002.

Sincerely,

Rosendo Trevino III

State Conservationist

#### Rural Fire Fighting Just Got Easier in Northern New Mexico

One of the products of this year's horrific fire season is a growing awareness of defensible space. Even less known, but equally important, is the emerging technology of dry hydrants. A dry hydrant is a steel, iron, or PVC pipe that sticks out of the ground to give tanker trucks a hose connection. The other end of the pipe has an intake strainer section and is submerged in a stream or pond. A pump on the tanker truck provides the suction to draw the

water from the stream or pond into the tanker. Since the success of fighting fire in rural areas, in many cases, depends on the distance tanker trucks must travel for water fill-ups, dry hydrants can be critical.

Because of the Northern Rio Grande Resource Conservation and Development Council (RC&D), many small communities in northern New Mexico are adopting dry hydrant technology. As a result of the RC&D's assistance Taos County has installed 59 dry hydrants, Rio Arriba County 17, and Santa Fe County 14.

Homeowners are frequently convinced about dry hydrants when they understand their insurance rates may decrease. The insurance rates of homeowners in

El Rito, Rio Arriba County decreased because of the installation of a dry hydrant. Dry hydrants are a win-win situation. Rural fire departments and homeowners gain. And the state of New Mexico and RC&D achieve their stated purpose of supporting the development of rural New Mexico.

#### **Success Follows Challenges in 2002**

Parched land, devastating wildfires, the 2002 Farm Bill, endangered species, hericide contamination, and survival of a conservation district made conservation a challenge in New Mexico this past fiscal year.

The year began with early warnings by NRCS *Snow Survey* staff of an impending drought. The Snow Survey and Water Supply Forecasting program directed by NRCS plays a vital role in data collection of snow meltwater runoff. The Western mountain ranges hold snowpack that provides 50 to 80 percent of the year's water supply. New Mexico is dependent on the winter snowpack for irrigation, reservoir operation, domestic water use, fisheries management, recreation, and flood control. With an almost non-existent snowpack forecasters predicted the lowest minimum daily mean flows in the Rio Grande since the 1960s. In the spring persistent winds and unusually warm weather further decimated the scant snowpack.

In March, New Mexico completed the nation's first pilot dam rehabilitation project funded under the *Emergency Watershed Program (EWP)*. The concrete spillway of a dam in the Santa Cruz River watershed had deteriorated due to reactive aggregates.

Also in March, the Mescalero Apache Tribe completed the largest *Great Plains Conservation Program* (*GPCP*) project which included installing livestock and wildlife pipelines and drinking facilities, woodland thinning, fencing, and grade stabilization structures.

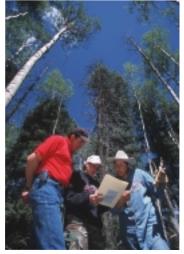
In part because of the drought, New Mexico experienced the worst fire season in memory. Usually its fire season begins in June, however, this year's season began in April with the Ryan Fire near Riudoso. This fire was rapidly followed by a succession of other major fires throughout the state including the Penasco, Borrego, Truchas, and Ponil. The U.S. Department of Agriculture released *Emergency Watershed Program* (*EWP*) funds administered by NRCS to reseed large areas denuded by the fires. The EWP funds were also used for installing jersey barriers, catch basins, and diversion ditches to mitigate the threat to residents of flooding during the monsoon season.

Voters swarmed the polls in June and defeated a proposed mill levy by one of NRCS's partners, the *Ciudad Soil and Water Conservation District*. The media and voters saw the referendum as poorly publi-

cized and managed, and labeled the it as a "stealth" election that only anticipated the turn out of "a few friends". As a consequence, a grassroots group peti-

tioned for a referendum to dissolve the district. Ciudad launched a successful public information campaign about their many activities and benefits to the community, and voters soundly rejected the attempt to dissolve the district in September.

The maturity of the state's *Soil and Water Conservation Districts* was also demonstrated by their management of a



NRCS employees review thinning project near Chama

large, state-funded conservation project. Salt cedar is invading New Mexico's waterways, guzzling water and depleting the flow available to meet the state's obligations to Texas. Rather than the state purchasing agricultural water rights to meet the obligations, the New Mexico Association of Conservation Districts successfully argued for funding to treat the salt cedar. Salt cedar treatment began this summer under the management of the Soil and Water Conservation Districts.

With the advent of summer, came the 2002 Farm Bill. The 2002 Farm Bill increased New Mexico's resources for supporting conservation efforts by farmers and ranchers on private land. *Environmental Quality Incentives Program (EQIP)* funding available in New Mexico increased from a level of about \$5.2 million per year to over \$10 million this year. The cost share with the farmers and ranchers was adjusted to 75 percent NRCS and 25 percent private producers. We received over 1000 applications for conservation projects by farmers and ranchers this year, with the total requests exceeding \$30 million. More than 400 projects were funded.

The *Wildlife Habitat Incentives Program* also entered into eight contracts this year. New Mexico currently has 120 contracts in place for improving

wildlife habitat on private lands. About \$900,000 of federal funds are committed to these projects. New Mexico received \$122,000 in funding for FY 2002. NRCS New Mexico had 26 applications made by landowners and was able to fund eight new projects. The eight new projects will improve habitat on private land for elk, turkey, bear, shorebirds, grouse, desert beghorn sheep, and other species including the endangered willow flycatcher.

The 2002 Farm Bill also contained a special section that allowed for additional water savings funding in the *High Plains Aquifer*. Water savings meant actions that improved irrigation systems, enhanced irrigation efficiencies, and other practices that improved groundwater or surface water conservation. The funds were provided through cost-share, low interest loans, and incentive payments.

As the summer wore on, the drought deepened. This drought brought home the point more than ever that farmers and ranchers need a conservation plan for adapting to drought conditions during dry years, in addition to plans for capitalizing on plentiful moisture during wet years. Most of our farmers and ranchers in their fifties or sixties do this naturally. But we have new people, and NRCS can buy them some experience by providing *technical assistance* and working with them and doing conservation plans.

The drought in New Mexico brought three adversaries to the same raft when the city of Albuquerque offered some of its water to get farmers through the summer and to help protect the silvery minnow, an endangered species. The city leased up to 40,000 acrefeet to the Bureau of Reclamation to give the endan-

gered silvery minnows a flowing river. Additional water was needed, however, as fall came. Federal courts again intervened in the issue.

In August it was reported that the herbicide *tebuthiuron* had destroyed crops on farms in the Malaga area. Tebuthiuron had been applied to rangeland in the area by the Bureau of Land Management and producers who received funding from NRCS under the program to control invasive brush species. The application had been done by air in pellet form based on New Mexico Technical Guide standards.

The *New Mexico Plant Materials Center* continued to research numerous projects including technology that provides for a 98 percent survival rate of transplanted shrubs. Ensuring the survival of shrubs is particularly important along highway medians and rights of ways, windbreaks, and wildlife plantings where conventional irrigation is not available.

The *Soil Survey Program* continued to provide updated soil maps and databases for users in New Mexico. The report manuscripts were developed and maps digitized for publication in traditional hard copy and electronic formats. Digital aerial photograph mosaics were also available for most counties. The soil survey data was incorporated into the new electronic Field Office Technical Guide available on the Internet at http://www.nm.nrcs.usda.gov/.

Through the many events of the year, New Mexico NRCS served as a source of technical and financial assistance as farmers and ranchers sought to husband their land with care. NRCS is proud to be partners in the conservation of New Mexico's natural resources.



A traveling irrigator operates in a small pasture in Espanola