



Hugh Hammond Bennett (right), first Chief of the Soil Conservation Service.

natural resources REPORTER

Published by the New Mexico Natural Resources Conservation Service - U.S. Department of Agriculture

Summer 2004

Watershed Approach Fairest, Most Scientific Option *First Year of Long-Term Conservation Security Program Poised to Launch*

The Conservation Security Program (CSP) is the latest in an arsenal of conservation tools designed to support and encourage voluntary conservation practices by private landowners. CSP is designed to identify and reward those farmers and ranchers who are meeting the highest standards of conservation and environmental management on their operations.

Those following CSP closely know that NRCS has been in the rule-making process, and received an unprecedented number of comments on its recently proposed rules. One area in which the agency received many comments and yet found no fairer or more scientific way to proceed in implementing CSP is the issue of using a staged, watershed approach.

It is anticipated some 3,000 contracts will be possible this first year of the program. Even so, with 1.8 million potentially eligible applicants – and 3,000-plus contracts it is simple arithmetic and common sense that NRCS will need



to focus on CSP. The agency has determined that a watershed approach offers the best option – economically, practically, and administratively. Here's why:

Watersheds are nature's boundaries. They are a common sense way to group together producers working on environmental issues and to measure environmental success – something state or county lines couldn't be expected to do.

Plus, everyone lives in a watershed, and within the next eight years, every farmer and rancher will have an opportunity to participate in the program – so no qualifying producer will be left out.

More funding means more watersheds – or all watersheds. The watershed approach allows NRCS all the flexibility needed to expand the program as Congress makes more funds

(CSP continued page 3)

A Little Water and Sunshine and Hard Work



Rosendo Trevino III
State Conservationist

The rains of the past weeks, greening of our pastures and range-lands, and knowledge that we will have irrigation waters through at least August, sure change our disposition and outlook on the future.

People that make a living working the land are as resilient as nature - a little water and sunshine and hard work and our future is brighter.

This year, here in New Mexico, we received a good increase in funding to help New Mexicans improve their working lands. Farm Bill programs like the Environmental Quality Incentives Program (EQIP) and others will help the stewards of our natural resources add needed improvements to their farms and ranches.

Our employees throughout the country are experiencing greater responsibilities and increased workload. We were able to hire new employees that are being incorporated and trained into our 69-year-old agency that will continue to provide you with the level and quality of service that you are accustomed to.

I ask that you be patient and help us help you as we grow into greater responsibilities and cultivate a new work force.

Thank you.

A handwritten signature in cursive script, appearing to read "Rosendo Trevino".

Natural Resources Reporter

Permission is hereby granted to reprint all or any portion of this publication. Credit to NRCS is requested for any material reprinted. Barbara Garrett, Editor - Albuquerque (505)761-4406

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation or marital or family status. (Not all prohibited basis apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202)720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-2, Whitten Building, 1400 Independence Avenue, SW, Washington D.C. 20250-9410 or call (202)720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

For more information about NRCS conservation services and programs contact your local NRCS Service Center

 Published product contains recycled materials

C S P (continued from page 1)

available. The watershed approach provides the necessary opening or narrowing of the gate as funding rises or falls.

Do it right by doing it in stages. The watershed approach will allow landowners to assess the resources on their farms and ranches and select from a portfolio of USDA conservation programs to make the necessary natural resource

While much of the concern has been focused on the first year, it is important to remember that this is just the first year of a long-term program.

improvements on their operations. The staged implementation will allow agency personnel to reduce the technical assistance costs of processing a large number of applications that cannot be funded.

While much of the concern has been focused on the first year, it is important to remember that this is just the first year of a long-term program. With the level of funding expected, the agency anticipates that it will enroll more than 90,000 contracts into CSP in seven years.

For more information refer to www.nrcs.usda.gov/programs or contact your local NRCS Service Center.

National Commitment Means More Conservation to New Mexico

NRCS will be committing \$21,210,864 in financial assistance to New Mexico farmers and ranchers this fiscal year under the Environmental Quality Incentives Program (EQIP) - up from \$11,445,250 in Fiscal Year 2002 and \$13,771,520 in Fiscal Year 2003. In terms of the number of contracts that NRCS New Mexico has funded under this program, 430 were funded in 2002, 449 in 2003, and it is anticipated between 600 - 650 will be funded this year. This is a tremendous advance in the amount of conservation improvements NRCS can provide through EQIP.

EQIP is a voluntary program that provides assistance to farmers and ranchers who face threats to soil, water, air, and related natural resources on their land. Land eligible for improvements is land on which agricultural commodities or livestock

are produced. This includes cropland, rangeland, grassland, pasture land, private non-industrial forestland, and other land determined to pose a serious threat to soil, air, water, or related resources.

In New Mexico, the majority of EQIP improvements address resource concerns on rangeland and irrigated cropland. Improvement practices include such items as brush management, irrigation system improvements, and prescribed grazing practices.

EQIP was reauthorized in the Farm Security and Rural Investment Act of 2002 (Farm Bill). It has been the cornerstone of the Farm Bill programs. It offers financial and technical assistance to those eligible for structural and management practices on agricultural land.

For more information refer to www.nrcs.usda.gov



Irrigation Water Management Discovery Yields Smarter Farming

While checking on moisture movement through soil profiles during a demonstration project near Las Cruces, NRCS staffers Rudy Garcia and Dave Fischer determined a significant amount of irrigation water was going past the root zones of the field crops. This demonstration in the 1990s is now pointing the way to tremendous water savings through irrigation water management or IWM.

The demonstrations near Las Cruces began in 1990 as the Hydrologic Unit Area Water Quality Project. The purpose of the project was to evaluate existing conservation management practices and their effect on water quality. Numerous practices were evaluated including nutrient management, pest management, waste management, and salinity management (which can be a major problem in the Las Cruces area). One question was how do these management practices in conjunction with irrigation water management affect water quality. The project involved extensive field work and assistance to the producers regarding how to fertilize and make better use of irrigation water.

It was during the Hydrologic Unit Area Water Quality Project that the determination was made that much water was going past the root zones. The results and findings gave birth to the Elephant Butte Irrigation Demonstration Project through the New Mexico State Engineer's Office. The Elephant Butte project focused strictly on irrigation and the many practices that would lead to doing a better job of conserving water.

Approximately 30 farmers were involved in the Elephant Butte Irrigation Demonstration Project, and many others were provided assistance. The demonstration worked on such water saving practices as land leveling, concrete lined ditches, irrigation scheduling, irrigation water measurement, and implementation of the practices demonstrated in the Hydrologic Unit Area Water Quality Project.

The irrigation water management project used the knowledge gained that showed the majority of water uptake by plants occurs in the first 18 inches of the root zone. The knowledge had been gained by observing that soils were wet below 18 inches, and verified by using tensiometers and bucket augers to measure water content. By supplying water for only the plant uptake zone and not extra water, tremendous water savings could be realized.

During the demonstration, water for irrigation was cut back and it was learned that the plants need no more than one inch of water per foot of root depth – and that more was too much water. Even Garcia and Fischer were surprised when they found that two or three inches of water was enough to bring the top two feet of soil in a pecan orchard to the moisture level desired.

Garcia and Fischer realized the importance of knowing the amount of water that was being applied to the field, which led to irrigation scheduling and metering. These steps were in addition to laser leveling, concrete ditch lining, and pipe installation

“NRCS has the ability to deliver the hardware, but to realize complete conservation we need to work one-on-one with producers in the field on irrigation water management,” Fischer said.

The economic valued realized by the demonstration farmers was higher productivity and better quality crops – for when the crop gets the appropriate amount of water, productivity and quality go up.

This summer of 2004 another demonstration is underway in the Albuquerque area which includes 38 small farms and is in parts of Sandoval County, Bernalillo County, north Albuquerque, south Albuquerque, and five pueblos. Most of the farms are 5 - 10 acres are used for cattle and some horses to provide valued extra income to farmers who are semi-retired or have outside jobs.

NRCS will be providing the farmers involved with instruction in IWM techniques and record keeping, and cost sharing land leveling, irrigation pipe, and concrete lined ditches. There will be several workshops on how to do measurements of soil moisture in the field, how long it takes to irrigate a given field, and how to do the record keeping and decision making. NRCS will initially do the analyses, and then train the farmers about how to do the evaluations.

“This year will be the year to gather the baseline data that will help us in coming years,” Garcia said.

The shortage of water in New Mexico, and interest on the part of NRCS staff to do a better job, led to the Las Cruces project pointing the way to promising water savings. It is an exciting avenue that can address in part New Mexico’s reoccurring drought problems.



Albuquerque area farms are awaiting irrigation water management demonstration



Riparian Restoration Interest Growing *Plant Material Center Responds of Many Needs*



Students at the Wingate High School planted cottonwood on Cottonwood Creek in Thoreau, New Mexico

NRCS's Los Lunas Plant Materials Center provides equipment and help for Soil and Water Conservation District plantings on a first call basis. They do about three plantings per year in conjunction with Soil and Water Conservation Districts. These plantings provide district members and others "hands on" experience in planting and exposure to some useful tools making the plantings easy, and more importantly, successful.

As interest in riparian restoration continues to rise, so does demand for assistance from the Plant Materials Center.

In Gallup, the District Conservationist Ed Oliver, invited a biology class from Wingate High School to participate in a planting on Cottonwood Creek in Thoreau, New

Mexico. The McKinley Soil and Water Conservation District would like to re-establish cottonwoods and willow on a 6.5 mile reach of this ephemeral stream. After district members experienced the ease of planting willows using an electric rotary hammer drill, they purchased one for future plantings.

In Belen, there were about 100 School children from Rio Grande Elementary School planting both cottonwood pole cuttings and understory shrubs where the Valencia Soil and Water Conservation District had cleared 10 acres of salt cedar and Russian olive. This project was funded by the State Forestry Division Relief Fund.

In Pueblo, Colorado the Plant Materials Center worked with the District Conservationist Rich Rhodes

and his staff, and a local non-profit organization called "Concerned Parents" to plant 100 cottonwood pole cuttings and 200 tall-pot transplants on the Arkansas River. Pat Davey, the NRCS Plant Material Specialist in Colorado, also participated. In Pilar, the Plant Materials Center worked with the Bureau of Land Management (BLM) to increase the density of willow on the east bank of the Rio Grande near their public campsites. They had hand planted this area previously without much success. The electric rotary hammer drills were able to penetrate the gravel and cobbled banks getting the stems down 30 inches into the subsurface moisture.

In Farmington, the Plant Materials Center staff planted 1,240 cottonwoods and black willow pole cuttings and 9,000 coyote willow pole cuttings. This project was funded by the Army Corps of Engineers Farmers Mutual Acequia Program. Their objective was to create wildlife habitat on a 30 acre BLM parcel on the San Juan River for mitigation of wildlife habitat that was destroyed by new underground conveyance system.

The Plant Materials Center also provided plant materials to 18 Soil and Water Conservation Districts, and supplied 100 free plants including cottonwood and willow pole cuttings upon request to NRCS Field Office for Soil and Water Conservation District members.

Flat Out Enjoying Farming Sparks Career Rudy Garcia Finds Better Ways for Farmers



With a master's degree in agronomy and environmental soil science, Rudy Garcia has brought skill and the love of field work to NRCS and its irrigation water management projects. Garcia was hired as a soil conservationist irrigation specialist and worked as a special projects person for his first 12 years at NRCS. What has followed has been a position as a soil conservationist for the Albuquerque Field Office where he will be applying his special knowledge this summer during the Office's irrigation water management project.

Garcia has expressed excitement about his Albuquerque position because it offers outstanding varied

experience with small scale farms. He also works with five pueblos, each with its own distinct way of looking at agriculture.

"The pueblos express a sense that agricultural stewardship and wise use of water are sacred obligations that they have," Garcia said.

Because he is in the Albuquerque area, he also works in several small towns that have a long history of farming land with traditional and cultural methods. There is a cultural diversity in the area that Garcia appreciates.

"I grew up farming, and I flat out enjoy it. I just enjoy working with the natural resources," Garcia said. "I enjoy the process of demonstrating ag management techniques and enjoy the process of helping farmers do a better job."

The need to conserve water is at the top of his list, when Garcia thinks about his mission, because New Mexico has been in a drought and this continues to be a problem.

"It is one thing to learn from an academic level and conventional farming perspective, and another to learn in the field. There is room for improvement in managing our natural resources. The best farmers are always demonstrating and experimenting themselves. It is a joy working one-on-one with farmers and fine-tuning ag management techniques that lead to more effective farming."

It is staff like Garcia that NRCS brings with pride to New Mexico farmers and ranchers. Best wishes, Rudy, on this summer's project.

It is one thing to learn from an academic level and conventional farming perspective and another to learn in the field. There is room for improvement in managing our natural resources. The best farmers are always demonstrating and experimenting themselves

New Mexico NRCS Area Office Contacts

Norman Vigil

Northwest Area

6200 Jefferson NE
Albuquerque, NM 87109
(505)761-4463

Ken Walker

East Area

918 Parkland Drive
Clovis, NM 88101
(505)762-4769

Hollis Fuchs

Southeast Area

409 Central Avenue
Carrizozo, NM 88301
(505)648-2941

Cliff Sanchez

Southwest Area

406 North 6th Street
Socorro, NM 87801
(505)838-4259

Public Affairs

Natural Resources Conservation Service

6200 Jefferson NE
Albuquerque, NM 87109