



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

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## Farm Bill Puts More Conservation On The Ground



Grassland withstands drought in Rio Arriba county this summer thanks to good conservation practices.

The new Farm Bill is having its impact on conservation in New Mexico as additional projects are funded and cost-share is increased. It is anticipated that additional Environmental Quality Incentives Program (EQIP) projects will be funded as this issue of **Natural Resources Reporter** is going to press. This is in addition to an increase of cost-share to 75% from 50% for existing contracts. All of this means more opportunities for conservation of our natural resources, particularly on the farm and ranch lands throughout the state.

EQIP is the keystone of conservation funds for private lands in New Mexico. New Mexico has approximately 2000 EQIP contracts between NRCS and private producers currently in effect. About \$20 million of federal funds are committed to these contracts.

Typically the state has been receiving about \$5.2 million a year in EQIP monies. The new Farm Bill puts additional monies into the program bringing the money available to New Mexico conservationists to \$10 million this year. This is money for brush control, installation of efficient irrigation systems, erosion control, and other conservation practices.

NRCS is in the process of ranking and funding additional applications for FY2002 as this article is being written. The agency anticipates it will fund 400 contracts this year. It is completing commitments made to 27 special emphasis areas with this year's funding.

The statewide concerns in place for FY2002 have been grazing lands, water resources, and tribal lands. Added to these because of the new Farm Bill have been wildfire impacted lands and livestock manure handling.

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## Leadership Charts Course for NRCS



New Mexico was fortunate to receive visits in August from USDA Assistant Secretary Lou Gallegos and Under-Secretary Mark Rey - both of whom are helping chart the course of NRCS.

Mr. Gallegos attended an Advisory Council on Historical Preservation meeting and addressed how RC&Ds can

assist in New Mexico historical preservation efforts.

Mr. Rey addressed NRCS and U.S. Forest Service and complimented the two agencies on their joint efforts as evidenced by their teamwork in fire rehabilitation. He spoke extensively about the urban encroachment of agricultural land, citing it as the number one environmental problem that is facing the West.


Both leaders shared their enthusiasm for the new Farm Bill and the many opportunities it presents.

With our new opportunities have come challenges which our staff is stepping forward to meet. As always, if you have questions about the Farm Bill, our agency, or our programs call or visit your local USDA-NRCS service center for more information.

### Natural Resources Reporter - Fall 2002

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## Farm Bill - Continued From Page 1

Looking ahead to future years, the new Farm Bill ramps up the amount of funding authorized for EQIP until it reaches a nationwide level of \$1.3 billion in FY2007. An important point to remember is that while the Farm Bill authorizes higher levels of funding, such monies must still be appropriated in the budget.

In FY2003 NRCS anticipates that it will receive about 1000 applications for funding, and the amount requested will total over \$30 million. So while opportunities have increased, there still will be unmet needs.

The new Farm Bill offers many opportunities in addition to the significant expansion of EQIP. Two of these are the Conservation of Private Grazing Land Program and Conservation Security Program.

The Conservation of Private Grazing Land Program will be a new program that helps owners and managers of private grazing land address natural resource concerns. It will enhance the economic and social stability of grazing land enterprises. This will in turn impact the rural communities that depend on the ranches.

The Conservation Security Program provides payment for addressing resource concerns on working land. Resource concerns include water quality and quantity, soil erosion, air quality, plant management, and animal management. The program rewards ongoing stewardship on working lands and helps producers increase their level of conservation treatment. It helps owners and operators of agricultural lands maintain conservation practices and install additional practices.

Responding to the many new changes is both exciting and challenging for NRCS staff. Rules need yet to be drafted, experience gained, and monies secured to know the full ramifications of the new Farm Bill. It is most importantly an exciting time for producers as they see opportunities ahead.

For additional information contact Ken Leiting (505)761-4425.

## NRCS Releases Funds for Wildlife Habitat on Private Lands



Mule deer photo courtesy of U.S. Fish & Wildlife Service

Natural Resources Conservation Service (NRCS) released \$105,725 in August to improve wildlife habitat on private lands in the state under the Wildlife Habitat Incentives Program (WHIP). Seven projects will be funded to improve habitat for elk, turkey, bear, shorebirds, grouse, desert bighorn sheep, and other species including the endangered willow flycatcher.

Three projects will be funded in the Cuba Soil and Water Conservation District, two in the Upper Chama Soil and Water Conservation District, one in the Quemado Soil and Water Conservation District, and one in the Ciudad Soil and Water Conservation District. All projects are on private land with voluntary participation of

the landowner.

The landowners will receive funding for constructing water supplies for wildlife, fencing to exclude livestock from creeks and ponds, and establishing permanent food plots. Solar pumps will be installed, sagebrush removed, trees thinned, and erosion controls installed.

WHIP is a voluntary program that encourages creation of high quality wildlife habitats through cost-share payments for development and protection of upland, wetland, riparian, and aquatic habitat areas.

For more information contact Cliff Sanchez at (505)761-4403.



# Rural Fire Fighting Just Got Easier

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. Together dry hydrants and defensible space are making significant inroads into rural fire safety.

## Dry Hydrants

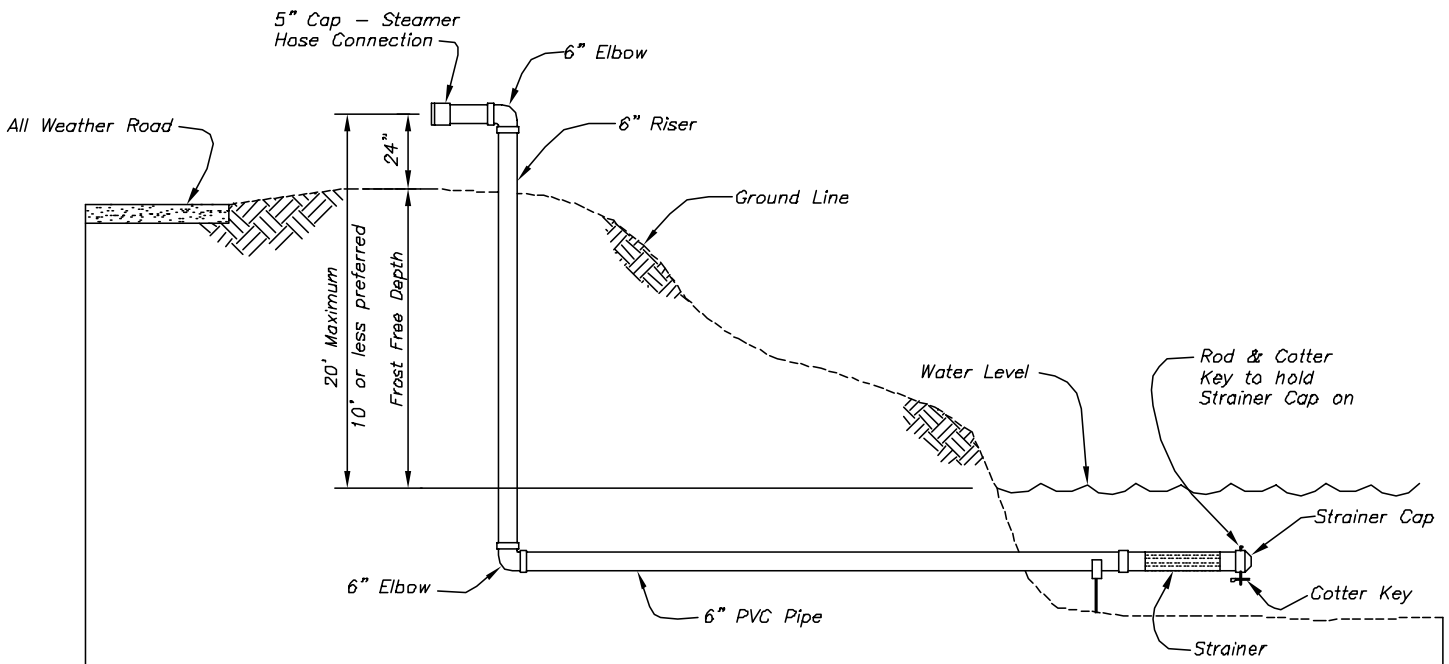
A dry hydrant is a non-pressurized pipe permanently installed in existing lakes, ponds or streams that provide a suction water supply to tank trucks. The success of fighting fire in rural areas, in many cases, hinges on the distance tanker trucks must travel to water fill-up points. Dry hydrants are fill-up points that can economically be placed around a rural area to shorten water-hauling distances in the event of a fire.

In many rural areas, a lack of water mains and domestic fire hydrants can sometimes impair a fire department’s ability to do its job quickly and efficiently. Tanker trucks must be used to carry large amounts of

water to the fire scene. If the tanker fill-up points are a long distance from the fire, the firefighters may be unable to retain an uninterrupted water supply to the scene of the fire.

Dry hydrants can be placed at a variety of sites where there is a water source. Adjacent to a water source such as a stream or pond, dry hydrants use 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 the stream or pond. (See Diagram 1.) A pump on the tanker truck provides the suction to draw the water from the stream into the tanker.

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. The RC&D assisted in securing water rights, easements, and Corps of



Dry Hydrant

Engineers and New Mexico Environment Departments permits. It has worked with the U.S. Forest Service, local volunteer fire departments, State Fire Marshall's Office, county grant administration offices, local contractors, soil and water conservation districts, state legislators, and designers and inspectors. The RC&D is fiscal agent for funds that have been appropriated by the state of New Mexico.

If anyone needs convincing of the value of dry hydrants consider homeowner insurance. The insurance rates of homeowners in El Rito, Rio Arriba County decreased because of the installation of the dry hydrant. Fire insurance premiums depend on an area's Insurance Service Organization (ISO) classification. These classifications rely on the area's ability to fight fires, so as an area's fire-fighting capability increases insurance premiums decrease. With a dry hydrant, insurance rates can decrease 45 to 50 percent.

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.

## **Defensible Space**

Defensible space is a perimeter around your home that you can defend in the event of a wildfire. It means clearing brush away, moving woodpiles and propane tanks away from buildings, installing fire-resistant roofs, and generally depriving any potential fire of fuel near your home.

There are several tips from the Fire Safe Council that you can follow to make your home fire safe:

### *Roof*

Remove dead branches overhanging your roof.  
Remove any branches within 10 feet of your chimney.  
Clean all dead leaves and needles from your roof and gutters.

Install a roof that meets the fire resistance classification of "Class C" or better.

Cover your chimney outlet and stovepipe with nonflammable screen of 1/2 inch or smaller mesh.

### *Construction*

Build your home away from ridge tops, canyons, and areas between high points on a ridge.

Build your home at least 30 feet from your property line.

Use fire resistant building materials.

Enclose underside of balconies and above ground decks with fire resistant materials.

Limit the size and number of windows in your home that face large areas of vegetation.

Install only dual-paned or triple paned windows.

### *Landscape*

Create a defensible space by removing all flammable vegetation at least 30 feet from all structures and replacing it with fire resistant plants.

On steep slopes, remove flammable vegetation out to 100 feet or more.

Space native trees and shrubs at least 10 feet apart.

For trees taller than 18 feet, prune lower branches within six feet of the ground.

Choose ornamental landscaping plants that are fire resistant.

Reduce the number of trees in heavily wooded areas.

Maintain all plants by regularly removing dead branches, leaves, and needles.

This summer's fire season was devastating, yet many lessons were learned that can help rural residents in the future. Dry hydrants and defensible space are two critical steps.

For further information contact David Manzanares, Northern Rio Grande RC&D coordinator, (505)753-6412.

## Tall-Pots and Hydrogel Increase Shrub Survival

How to increase survival of transplanted shrubs with very limited irrigation in the arid Southwest is the topic of an NRCS Plant Materials Center research project currently underway. The Plant Materials Center is successfully using a combination of tall-pots and superabsorbent hydrogel to achieve a survival rate of 98 percent. Ensuring the survival of shrubs is particularly important along highway medians and right-of-ways where conventional irrigation is not available, but there are also other applications.

The Plant Materials Center is testing their methods at three sites. A total of 99 shrubs and trees were planted on a highway median in Milan, New Mexico. At the I-25 and Highway 285 junction 808 native shrubs were planted initially, and later an additional 921 native shrubs were planted. And, on Highway 599 in Santa Fe 199 New Mexico olive, 161 skunkbush sumac, and 119 wavyleaf oak were planted.

Tall-pot containers are being used. A tall-pot is a container that is more than 24 inches high. They encourage deep root growth of seedlings, and have been shown to improve the seedling's survival and growth rates. The tall-pots the Plant Materials Center is using consist of 30-inch tall pieces of 4-inch diameter sewer pipe. These containers have two split seams that run

most of the pipe length to encourage spiraling roots to grow downward. The bottoms of the containers are sealed with a porous fabric coated with copper hydroxide to control root penetration and allow drainage.

The transplanted shrubs are irrigated once per year, generally with superhydrogel that absorbs and retains water hundreds of times its own weight. A two gallon application of superhydrogel is applied in June, once spring moisture is near depletion to sustain the plants for one full year.

The survival rate at the three test sites has averaged 98 percent. Of the 1,346 tall-pot transplants, only 29 plants died by the end of the first growing season. The study suggests that nearly 100 percent survival rate can be achieved by using tall-pots with irrigation tubes to facilitate deep root watering. Either hydrogel may be used or two applications of water. If water is used, one three-gallon water application should be applied when the plants are first transplanted in the fall. A second water application should be applied in June to carry the plant through the droughty period before the monsoon period begins in July.

For more information contact Greg Fenchel, Plant Materials Center Manager, at (505)865-4684.



Shrubs established using tall pots at the Ridge Crest Road exit on Highway 599 in Santa Fe.

## Worthy of the Name Conservationist

Applying conservation is sometimes an art rather than a science according to Art Ariaz, Field Team Civil Engineering Technician.

“The technical guide is just that - a guide,” Ariaz said.



Art Ariaz, Field Team Civil Engineering Tech

“You need to remember the human element that can be so versatile in the planning process. That person can find solutions where there appear to be only challenges.”

Ariaz is experienced in finding solutions and capturing the praise of his supervisors and peers.

“Art has done a lot of design work, especially for acequias,” said Ben Creighton, Northeast Team Leader. “He handles large complex jobs, and is just outstanding.”

A native of the Santa Rosa area, Ariaz grew up on a Puerto De Luna ranch where as a 4-H member he raised lambs. He graduated from Santa Rosa High School and went on to New Mexico State University where he studied mechanical engineering. After graduating from NMSU in 1975 he went to work in Texas as a pumper in the oilfields.

Ariaz joined the Soil Conservation Service under a WAE (while actually employed) appointment in December of 1975 as a soil conservation technician in Santa Rosa. After 10 years in Santa Rosa he became a civil engineering technician. During this period he applied conservation on the ground, designing large irrigation systems on acequias and completing resource conservation plans.

In the mid-80s Ariaz became the NRCS civil engineering technician for the northeast quarter of the state of New Mexico. With this new designation Ariaz assumed office responsibility for quality control of the engineering program.

Ariaz reminds us of the changes during his career that make for better design and a better job done of bringing conservation to the ground.

“The technological advances available to the agency are incredible,” Ariaz said. “What use to take days to accomplish, now seems instantaneous. It use to take time to stake a field or layout a project. Now we go out and conduct design surveys, design it, and the contractor then takes this data and plugs it into his software, and the job gets done.”

“Quality control and assurance is basically my responsibility. It is easier much easier to accomplish because we have better equipment.”

Reflecting back on his career, Ariaz said, “After 28 years of service, I realize that I had no idea what we were doing when I first started. Conservation is something you learn from the people who practice it. You learn about land use and resource management. I get much satisfaction from looking at the positive results of the applied conservation practices that I have been a part of. I can also say that I am proud to have been instrumental in protecting a way of life for many of our clientele in New Mexico. When you are in this field you gain confidence in the work you are doing and start expanding your horizons. I see our rangeland and cropland improving. The Conservation Reserve Program has done a world of good for our state.”

Ariaz is a man who truly earns the name conservationist. In his spare time he volunteers for the Santa Rosa City Parks Committee where he brought to the city council and mayor the idea of seeking a Tree City USA designation

Married to Christine for 25 years, they have two children - Arthur Steven and Erica. And Art and Christine are about to be grandparents for the first time as this issue of **Natural Resources Reporter** goes to press.



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