

de la TIERRA

January 2013 - February 2013

what is an
ACEQUIA
anyway?

LORETTA
SANDOVAL
is **HOME
GROWN**
in so many ways

WESTERN REGIONAL
CONSERVATIONIST
VISITS NEW MEXICO





10 Farmer, student, teacher ... this woman wears many hats in Rio Arriba County.

USDA • Natural Resources Conservation Service
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JANUARY/FEBRUARY 2013

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NATIONAL DAY OF SERVICE

The Roswell field office volunteers its time in the community.

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WESTERN REGIONAL CONSERVATIONIST VISITS NM

Work accomplished by NRCS New Mexico employees and partners impress RAC Astor Boozer.

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Browse through our inventory and reserve a banner for your upcoming event today!

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WHAT IS AN ACEQUIA ANYWAY?

There is a lot of history tied to the hundreds--possibly thousands--of waterways known to New Mexicans as *acequias*.



“Helping People Help the Land”

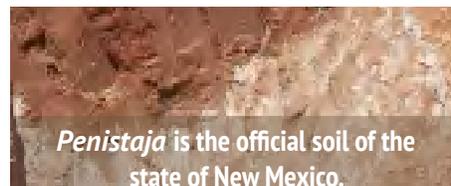
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LETTERS TO THE EDITOR

We welcome your feedback! Email the Editors with your comments or any content and story ideas you would like to see featured in an upcoming issue.



SEND US AN EMAIL OR
CALL US AT (505) 761-4406.

South Area

South Area All-Employees Meeting in Deming

The South Area NRCS team held a meeting in Deming to deliver training opportunities to NRCS employees.

South Area employees, Farm Bill Specialist, Deming Soil and Water Conservation District, NRCS New Mexico State Conservationist, J. Xavier Montoya

and several State Office employees attended the meeting.

Those in attendance received training in Public Affairs, EWP, Civil Rights, CDSI, Agronomy, Engineering and Farm Bill Program updates. The staff also went on an agricultural tour of the Donald-

son Farm to view first hand a vineyard and drip irrigation system which was funded through EQIP. The group toured the St. Clair Winery operations.

Some memorable mentions include the great dinner meal provided by Deming SWCD, which was prepared by

Penny Hooper (NMACD Capacity Building Employee); and Chuck Braden, State Agricultural Engineer reminded everyone that "100 feet of drilling equals one mile of pipe."



Back Row: Wacey Allen (FB), Troy Thompson, Tommy Marshall, Ty Carter, Phil Herrera, Greg Collins, Matt Wiseman, Dean Pritchett, Mike Shivers, Stan Towner, John Hartung, Brandon Bishop, Patrick Fox, Flora Van Tol.

Middle Row: Mary Sanchez, Brad Peterson, Tracy Hughes, J. Xavier Montoya, Alfred Ramos, Rebecca Melendez-Turner (FB), Eddie Foster, Sam Gutierrez, Vickie Ligon (FB), Adrian Tafoya, Mauro Herrera, Shawna Allen, Maureen Murphy.

Front Row: June Carrasco (FB), Brady Laney (FB), John Fajardo, Raquel Montoya, Kristi Justice, Roxann Moore, Yvonne Moncrief, Blake Glover, Shyanne McDonald (FB), Clarice Ford, Amber Riordan, DaRonda Fox, Brenda Reed, Loretta Rael (FB).

Northwest Area



Four Corners Workshop

The Aztec NRCS was represented by (left to right) District Conservationist Chambliss Lantana; Soil Conservationist Hillary Bravenec; and Soil Conservationist Technician Jose Pino.

The workshop provided participants with information on Cover Crops, Soil Health, Rangeland practices, Water Quality and how NRCS assists farmers and ranchers with Best Management Practices.



Under the Lesser Prairie Chicken Initiative (LPCI), NRCS and its conservation partners are helping farmers and ranchers enhance, restore and protect habitat for the sensitive and reclusive bird. Many of the conservation practices that promote healthy grazing lands are also productive for the lesser prairie chicken and other wildlife: prescribed grazing, upland wildlife habitat management, brush management, prescribed burning, range plantings, and restoration and management of rare or declining habitats.

Portales Field Office and Partners Host Three Lesser Prairie Chicken Meetings

The NRCS Portales Field Office participated in interagency meetings in January to discuss the Lesser Prairie Chicken Initiative in New Mexico. Representatives from various state and federal agencies were present to discuss programs that benefit the Lesser Prairie Chicken and to answer questions.

and in Allen Hall of the Grady Baptist Church.

For more details about the Lesser Prairie Chicken, contact Chanda Pettie, NRCS State Wildlife Biologist, at (505) 761-4432.

The meetings were held in the Milnesand Community Center; the Elida Senior Center;

Contact YOUR local Field Office

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Pictured from left to right: Eddie Foster (DC), Patrick Fox (Area CET), Ty Carter (RMS), Sue Freeland, Rebecca Melendez Turner (FBS), and James Freeland.

Roswell Field Employees Volunteer for USDA National Day of Service

Four employees of the Roswell NRCS Field Office showed their support for the USDA National Day of Service. They volunteered at the Loaves and Fishes Food Pantry in Hagerman, New Mexico.

Eddie Foster, District Conservationist (DC), Ty Carter, Rangeland Management Specialist (RMS), Patrick Fox, Area Civil Engineering Technician (Area CET), and Rebecca Melendez-Turner, Farm Bill Specialist (FBS), represented the field office.

The Loaves and Fishes Food Pantry runs on private

monetary donations and donations from the Roadrunner Food Bank of Albuquerque. The volunteers helped stock shelves, repackage bulk food items, and help customers shop for their families.

This is the second year that the NRCS Roswell Field Office has chosen to assist in this project. They find it a worthwhile endeavor and plan to continue offering their assistance in the future.

did you know?

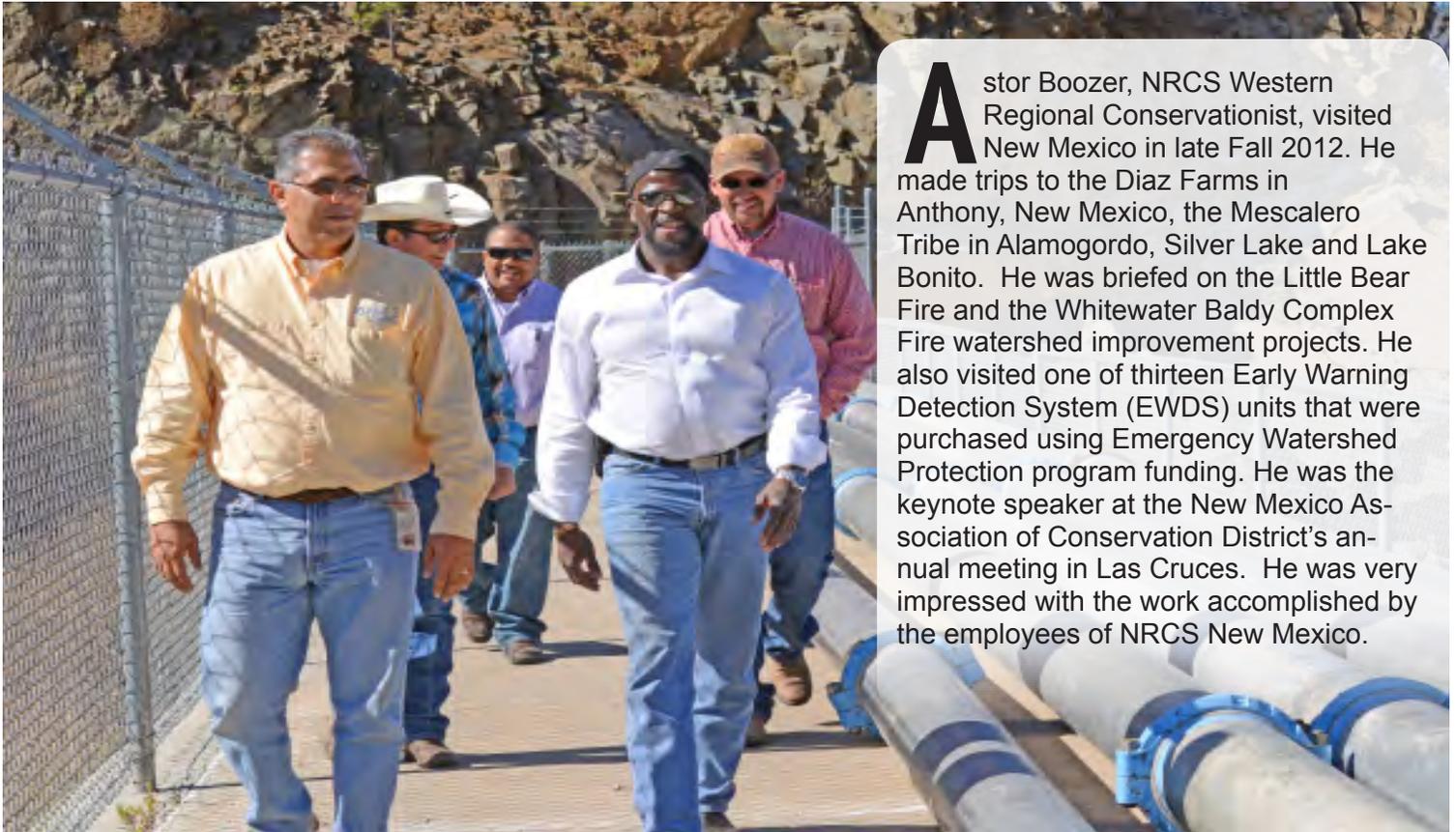
● The National Day of Service is part of "United We Serve," the President's call for Americans to volunteer their services and make an impact in their community.

● The National Day of Service was introduced in 2009 during President Barack Obama's first inauguration, and is meant to coincide with the observance of MLK Day to honor his legacy.

● This year it was moved to January 19th to avoid conflicting with the Presidential inauguration, held January 21st, on MLK Day.

NRCS Western Regional Conservationist Visits New Mexico

Astor Boozer meets employees & tours successful projects



Astor Boozer, NRCS Western Regional Conservationist, visited New Mexico in late Fall 2012. He made trips to the Diaz Farms in Anthony, New Mexico, the Mescalero Tribe in Alamogordo, Silver Lake and Lake Bonito. He was briefed on the Little Bear Fire and the Whitewater Baldy Complex Fire watershed improvement projects. He also visited one of thirteen Early Warning Detection System (EWDS) units that were purchased using Emergency Watershed Protection program funding. He was the keynote speaker at the New Mexico Association of Conservation District's annual meeting in Las Cruces. He was very impressed with the work accomplished by the employees of NRCS New Mexico.

Above:

NRCS State Conservationist J. Xavier Montoya and NRCS Western Regional Conservationist Astor Boozer assess the damage at Lake Bonito caused by Little Bear Fire. Following them are (middle row left to right) Assistant State Conservationist for Operations Norman Vigil; Alamogordo District Conservationist John Hartung; and South Area Conservationist Blake Glover.

Right:

Astor Boozer asks questions about the Little Bear Fire rehab work.





Top right: NRCS State Conservationist J. Xavier Montoya; NMACD President Ken V. Salazar; NMACD Executive Director Debbie Hughes; and NRCS Western Regional Conservationist Astor Boozer pause for a moment before the NMACD annual meeting began.

Top left: Alamogordo District Conservationist John Hartung, briefs NRCS Western Regional Conservationist Astor Boozer on one of the Early Warning Detection System units installed at the Little Bear Fire and Whitewater-Baldy Complex Fire burn areas.

Below: NRCS Western Regional Conservationist Astor Boozer listens to retired NRCS Rangeland Specialist Robert Abercrombie discuss the work done at the Mescalero Reservation.



NRCS Well Represented at Soil and Water Conservation District Day

NRCS

New Mexico joined various agricultural and conservation agencies on February 6th at the State Capitol in Santa Fe to celebrate Soil and Water Conservation District Day. It is observed each year by the New Mexico Legislature as a day to recognize the importance of agriculture to the state. Set-up in the Roundhouse rotunda, NRCS employees and volunteers were on hand to provide information to the public about its mission and its programs. The NRCS State Conservationist J. Xavier Montoya addressed the crowd and spoke of the importance of strong conservation partnerships and how together we are able to better assist New Mexico's agricultural producers.



NRCS State Conservationist J. Xavier Montoya attends Proclamation for Soil and Water Conservation District Day at New Mexico State Capitol



NRCS State Conservationist J. Xavier Montoya, NMACD Executive Director Debbie Hughes, NMDA Secretary/Director Jeff Witte



NRCS Assistant State Conservationist Programs Cliff Sanchez



NRCS State Conservationist J. Xavier Montoya, NRCS Earth Team Volunteer Triston Lovato, NRCS Assistant State Conservationist Operations Norman Vigil



NRCS Earth Team Volunteer Triston Lovato



NRCS State Conservationist J. Xavier Montoya, NMDA Division Director Julie Maitland, NMACD Government Affairs Director/Second Vice President of NACD-Brent Van Dyke

Loretta Sandoval

This New Mexican Farmer Really Knows Her Roots

Story and photos by Kristen Lemoine

Loretta Sandoval left her home in Colorado and has returned to her family roots in Rio Arriba, New Mexico. The former chemist is stepping out of the lab and onto the soil to relive the farming life her family lived years ago.

They say, family roots run deep and in this case, Loretta is proof as she refocuses her life towards conservation as her family once did. For Loretta, driving to the market is often replaced by walking a short distance to her garden and selecting fresh organic vegetables to prepare a home cooked meal.

Loretta's excitement and enthusiasm for conservation is sparked by uncovering the secrets that lie in the soil. She is currently pursuing a Ph.D. in Biology at the University of New Mexico's Department of Sustainable Studies. Her emphasis is on sustainability and agricultural crop production. She earned the status of *USDA Certified Organic Producer*, which is quite an achievement in itself. In order to earn organic certification the agricultural product must meet approved methods that integrate cultural, biological, and mechanical practices. These methods foster cycling of resources while promoting ecological balance. To become certified, you must apply through a USDA-accredited certifying agent.

As an organic farmer Loretta lowers input costs, relies less on nonrenewable resources and relies more on ecologically-based conservation practices that produce more nutritionally-dense foods. She grows an assortment of fresh vegetables including, carrots, tomatoes, garlic, onions, peppers, squash, and peas. She sells the majority of her veggies at the local farmer's market and to local restaurants.

The Espanola NRCS Field Office assists Loretta with technical and financial assistance through the Organic and High Tunnel Initiatives.

She has improved her irrigation delivery system, continually improves pollinator habitat, rotates her crops, and extends her growing season to increase production amounts by using High Tunnels.



Loretta often picks fresh vegetables as part of her meal preparation

"Parts of my farm were very dry, it looked like a desert because water wasn't accessible for nearly 20 years," said Loretta. Within the past few years, Loretta began using NRCS to help bring water to her land. "With the NRCS irrigation improvements, I now know how to use the system more efficiently and now plant cover crops to protect the soil."

As a full-time student and part-time farmer, Loretta finds time in her busy life to teach others about good conservation practices. She demonstrates different techniques for planting. She works with folks in her community interested in becoming organic farmers, but do not know where to start. Loretta makes the process less cumbersome so others have the opportunity to also grow organically.

"Loretta is and has been the voice of local conservation. She practices what she preaches and is always willing to share her knowledge and time with others," said NRCS Española District Conservationist Thomas Gonzales.

She grows local heirloom seeds such as the Landrace Peppers that she distributes back to the Cañoncito community. It is important to her that others experience

the fulfillment that comes from our greatest natural resource—the soil. Loretta presents information on various aspects of Organic Farming at conferences and meetings. She obtained a Western Sustainable Agriculture Research and Education (WSARE) grant to conserve the local landrace pepper and explore and revitalize traditional pepper planting techniques. If you are interested in applying for a SARE grant visit <http://www.sare.org/Grants> for additional information.

Loretta is a dedicated conservationist who never stops in her quest for conservation education.

If you are interested in becoming an organic producer visit our webpage at: www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/programs/?&cid=nrcs143_008224. To learn more about how NRCS can help you visit www.nm.nrcs.usda.gov.



Loretta holds fresh organic carrots from one of her High Tunnels.



Loretta digs for potatoes from her garden to prepare fresh stew.



February is Black History Month

Black History Month has been celebrated every year since President Gerald Ford officially recognized it in 1976. It is a time to recognize the role of African Americans in U.S. history and celebrate their achievements and contributions. This year's theme is "At the Crossroads of Freedom and Equality: The Emancipation Proclamation and the March on Washington." It marks the 150th and 50th anniversaries of two pivotal events in African-American and U.S. history.

Pictured to the left is this year's National Black History poster for NRCS.



The NRCS New Mexico YouTube channel is up and running. **Click on the YouTube logo** to check it out!

What is an **ACEQUIA** Anyway?



Patrick Jaramillo

Former New Mexico Acequia Association Outreach for USDA Programs

What is an acequia?

That word has two definitions. Acequia literally, physically is the irrigation conveyance system, the canal, the whole irrigation infrastructure that delivers water from the river to the irrigation field. The acequia is also the organizational structure and the group or community that is tasked with maintaining and operating the acequia. As an organization it is also a political subdivision of the state of New Mexico; it's a government entity.

How many acequias are there in New Mexico?

There are between 800 and 1,000. The exact number is actually unknown and it's constantly changing.

How old is the concept of the acequia?

When was the first acequia formed in the state?

The concept of the acequia is ancient. It comes from the Middle East, from Syria and in Northern Africa. You see them in the Arab regions. It is a way of managing water in arid states, in arid environments where water is precious. It's a way to equitably distribute water in the most effective way. The Spanish brought the concept to New Mexico in 1598. The first ones were dug in what's the community of "Chamita" now and that was the community of "San Gabriel de Yunque." The first thing settlers did was to dig the acequia and build a church.

Is the term acequia a universal term?

It is. Acequia is actually Arabic. It's an Arabic word that is "as-sāqiya" and it literally means a canal. What makes it universal is based on -- they call it the "Islamic Law of Thirst," which is the doctrine that no living creature should be denied access to water. In the Acequia Association we say "*water is life*," that's our motto. Every living thing needs water to survive and it is not our place to deny life to any creature, any person, or any animal. They came from Valencia, Spain, where you still see the highest number of functioning acequias. They were brought from the Spanish who learned about them from the Moors. They brought the concept of acequia -- even the word "noria" --the word we use for well.

What is the criteria for building an acequia?

It varies by acequia associations. In some of the by-laws they'll describe the requirements for the ditch bottoms. Some...like big ones. Along the Pecos they have 12-foot bottoms. I know one that's about a four-foot [bottom], and it's just a matter of how much water they're going to be running. It's basic engineering -- how much water they're going to be carrying, how much acreage, and how much is available. But also there's a lot that we don't know...how they dug those and how they made those determinations.

One
on
Interview with
an NRCS Partner

Are acequias basically a tributary?

It's an extension -- they're not necessarily tributaries because you're not *adding*, you're actually *taking* water and diverting it upstream and you're extending the riparian area. They would establish the farmland, dig the acequia and as the needs grew you just kept going upstream. That's why in New Mexico it's interesting that the senior water rights are downstream. In most of western water law it's upstream. Upstream is always the senior, but *only* in New Mexico do you hear the term "upstream junior" as far as water rights. Because as families grew, as communities expanded you had to go a lot further and further upstream but those were junior water rights. **(Continued on page 13)**

What is an Acequia Anyway?

continued from page 12

What governing body decides who gets the water?

The state engineer does it. No new acequias have been established recently because all the water has been adjudicated... it's **over** adjudicated. There are more water rights on paper than there is water and so you're not going to see anymore acequias being created. If anything you're going to see a contraction.

What is the structure of how the water moves through all the acequias?

Experience and custom -- custom has always dictated how water is managed and distributed. Every acequia is different -- there's no *one* way, which is why in the State statutes custom trumps everything. There are some governed aspects because they are a political subdivision. As far as the operation and distribution of water it's custom and experience.

It's interesting that the State lets them handle it themselves. I don't know of any other government structure that operates that way.

Acequias were the first democracies in the continental United States because they were run and maintained by the beneficiaries -- the people who irrigate. Nobody's going to clean it, nobody's going to maintain it for them except for them (the benefactors). So they earn that right to govern themselves and to distribute that water, and they elect what's called a "*mayordomo*" or in the Middle Rio Grande district they call it the "*ditch rider*." They elect that person to run the acequia, and the word "*mayordomo*" comes from the English word "*majordomo*" used in the feudal system. The majordomo was the head of the household, the owner had the title but the majordomo was the one who actually ran things.

Is it just an unspoken word of honor that I'm just going to get what I need and move it down to the others down the line? It's not much of a measured science, is it?

No, timing is what it's based on. Time is how it's usually done. What happens is early in the season or year the mayordomos from the various acequias on the watershed get together and use their experience and expertise. NRCS measures the snow pack and shares that information with the acequias. The mayordomos make those decisions and they'll put together a schedule before and they'll announce it at the end of meetings. So it's just a matter of communication and sharing.

How much does it take to run an acequia and who pays for that?

The members, known as *parciantes*, run the acequias. An assessment is made and then it's up to each acequia to choose how to assess those fees.

How has the prolonged drought in NM affected the acequias? It's obvious that everyone would get less water,

but is there any other impact from that?

It's not that dramatic because inherently the way acequias function, they're meant to handle a shortage. So the only change is maybe farmers will plant less or they'll divide their fields and plant less water-intensive crops. The only thing that happens when there's a water shortage is the mayordomo



delivers less water to each person. That's the brilliant thing about acequias -- it's communal in nature and communal in ownership. Once that water gets to your property you're on your own. You still have that individual responsibility.

Are acequias used only in New Mexico? Or is this approach used anywhere else?

In San Antonio, Texas they just reopened one of the acequias that ran through one of its missions. Most of the acequias got destroyed when they built the riverwalk (in the 1960s). But one or two remained and they're actually using that for a community farm. There were acequias anywhere there was Spanish influence because that system of government or management was brought by the Spanish. You also see acequias all over the Middle East and in India, and because so many New Mexicans went to Hawaii to establish the cattle business you now will find acequias in Hawaii.



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