

The History of the ACEQUIA

Interview with Patrick Jaramillo, former New Mexico Acequia Association, Outreach for USDA Programs

What is an acequia?

Under that one word it 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 1000. 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 New Mexico?

The concept of the acequia is ancient. It comes from the Middle East, from Syria and in Northern Africa. You see them anywhere there 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.

They got to New Mexico in 1598 via the Spanish and the first ones were dug in what's the community of "Chamita" now and that was the community of "San Gabriel de Yunque." Anytime settlers came into an area the first thing they did was they dug the acequia and built a church.

Is the term acequia a universal term?

It is. Acequia is actually Arabic.

That's what I thought I didn't think it was Spanish.

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 and the acequias have been that in an arid place like this -- in New Mexico.

They came from Valencia, Spain where you still see the highest number of them...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.

Was there a base-line when you built an acequia -- how deep it would be, how wide the channel would be? Or is it all based on geography and topography?

In some of the by-laws they'll describe... they do set out requirements for the ditch bottoms. Some...like big ones out 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.

"Acequias are the backbone of agriculture in New Mexico. It is what has allowed farming on the scale that we know, because farming existed before, but it allowed farming to the degree that we know."

— Patrick Jaramillo, NM Acequia Association, Outreach for USDA Programs

So acequias are basically a tributary that you've created.

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, where as 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.

What state body determines how much water flows into the acequias and who gets how much water? How do you determine that?

The state engineer does it. There haven't been any new acequias established because all the water has been adjudicated... it's over adjudicated. There's more paper water rights than wet 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 things because they are a political subdivision but as far as the operation and distribution of water it's custom and experience.

The state stays away and lets them handle it themselves. That's interesting. I don't know of any other structure in any other form of government, in any other state or country that operates that way.

Acequias were the first democracies in the continental United States because they were ran, 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. 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 word "majordomo" in English under the feudal system...the majordomo was the head of the household, the owner had the title but the majordomo was the one that actually ran things.

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

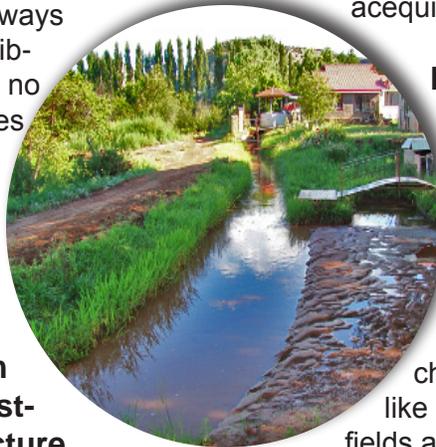
No it's usually broken down by time. Time is how it's usually done and what happens is early in the season or

year the mayordomos from the various acequias on the watershed get together and through experience they apply that expertise, and now with the help of NRCS measuring the snow pack they 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, they're called **parciantes**.

There is an assessment, and that is up to each acequia how they choose 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, like maybe less alfalfa 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, and that's the brilliant thing about acequias, it's communal in nature, it's communal in ownership, but 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 in Arizona, Texas, anywhere else?

In San Antonio they just reopened one of the acequias that ran through one of the missions. Most of the acequias got destroyed when they did the river walk but there was one or two left 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, but then 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 there's acequias in Hawaii.