

Where Development and Acequias Meet in Taos

By Miguel Santistevan

The Green Fire Times, 5/8/2018



Abandoned irrigation structures stand as monuments to past generations –

Photo by Miguel Santistevan

Dozens of acequias inscribe and extend the riparian areas along the six rivers of the Taos Valley. These earthen-lined, gravity-fed ditches were a requirement for the establishment of a merced, or land grant, along with the construction of a church in a defensible plaza. As one travels along roads in Taos, many small plazas with little chapels are the surviving monuments of Taos Valley's history of settlement. Many dedicated community members maintain these structures and the associated traditions that bind the community together through collective history, community cohesion and spirituality.



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It is amazing to think of the history of the process that led to the construction of all the acequias, plazas and chapels in the valley. Each one needed permission from the government of New Spain and needed experts within the fledgling community to plan, design and implement the acequia systems. An adequate area within the river channel had to be identified that could accommodate a presa, or dam, and that area had to have sufficient water to allow for irrigation while allowing for most of the water to continue downstream to areas that might also need to divert water into an acequia farther down the valley.

Over time a complicated and intricate network of irrigation ditches crisscrossed the valley, with some acequias using others as drains, or desagües, to supplement water needs for downstream communities. As the dicho, or saying, goes: "El agua que no has de beber, déjalo correr." (Let the water flow that you are not going to use.)

The acequias provided for the food needs of a growing population by intensifying the use of land and water for agriculture in the irrigable lands of the valley. The upper watershed was managed as the commons for use by the community and provided additional food through gathering, hunting and grazing, along with other uses such as providing firewood and construction materials. Seasonal activities defined the subsistence pattern of the community, which relied on a barter system and communal labor exchange.

As time went on, ongoing political and economic changes became a process that started to alter the fabric of communities in northern New Mexico. Administrative powers shifted from Spain to México and eventually to the United States of America. The coming of the U.S. into northern New Mexico was a violent process, with military action seeking revenge for the murder of the newly installed governor of the territory, Charles Bent. People hid in canyons in freezing January temperatures to avoid soldiers marching northward who were destroying houses, burning food and seed supplies, and killing livestock. Eventually the soldiers made it to Taos and killed about 150 people who had taken refuge in the church.

When the region was subjugated by the powers of the United States, many people from the U.S. came west to seek their fortunes and establish livelihoods. Activities such as trapping, mining and distilling supported population growth in the Taos Valley. Throughout all of these political, social and economic changes, much of the local culture persisted, with people maintaining their agricultural lands and livestock, and participating in local governance of the acequias. But mostly unbeknownst to the local populations in northern New Mexico, territorial codes and laws were

being made in Washington D.C. that would affect the options for sustainable growth in the region.

Locals aspired to have things that many of the U.S. population enjoyed, such as cash, electricity, cars and a college education. Just before this time, groups like the Santa Fe Ring were able to take advantage of new laws. The local people did not understand the language or process that was about to take over the common lands of the merced. Newcomers came to establish art colonies in Taos, and with the coming of World War II, many locals took on jobs created by the war effort. Changes happened very fast with the influx of radio, television and Montgomery Ward catalogues.

The coming of the world wars increased locals' exposure to resources in other parts of the world. Many came back from tours of duty with new ideas of livelihood and opportunity. As modernization's influence grew, locals were able to acquire jobs while maintaining agricultural traditions with the help of technology such as tractors. Alongside this shift from animal power to mechanized power, attention to other cultural obligations also shifted. The void and distraction created by the shift in livelihoods precipitated further changes.

A steady pace of development ensured that once-isolated plazas in the valley became more connected by roads, buildings and businesses. People started to develop areas in the upper watershed with impacts that included logging for the railway industry and ski areas for recreation. As Taos Valley's population continued to grow, many of the age-old traditions at Taos Pueblo and surrounding communities continued in a modified way, as people adapted to the imposition and convenience of a more modern world.

At some point it became apparent that the population growth and associated demands on water would create issues that needed to be addressed. In the 1980s, the Abeyta Water Settlement identified future demands of water and who could make claims to the limited supply. Negotiations and terms for the water future of Taos Valley ensued over a period of 20 years.

The foundation (and flaw) of the Abeyta Water Settlement lies in the Territorial Water Code of 1907. This treats water as a property right separate from the land to which it is attached. This policy allows for the transferring of water rights for other uses, the commodification of water, and creates an economy that does not honor the actual water in its place of origin. It attempts to impose a budget for uses and extractions in different areas that may not historically have had access to volumes of water.

We are beginning to see problems in the Taos Valley, and indeed across the state (if not the world) where water supplies do not meet the demand. Instead of honoring the limits to our supplies and cultivating restraint, we continue a "business as usual" approach to future development. Developers, real estate and other industries continue a "Wild West" approach to making fortunes and taking advantage of a local resource base for their economic gain. The political structure often touts visionary policy but ultimately facilitates the steady progress of development.

It is known that rivers recharge the shallow aquifer, which is a necessary function when much domestic water comes from underground. In many river systems in New Mexico, we are finding

that river flows diminish or disappear as the water is lost to the subsurface for groundwater recharge. As experience and hydrologic models show, diminished water in river channels negatively affects an acequia's ability to divert water consistently from the channel. To account for this loss, the Abeyta Water Settlement outlines a provision of "mitigation wells" drilled into the deep aquifer to supplement losses that may be experienced by the acequias due to future groundwater depletions. This provision is short-sighted in that it created dependency by the acequias on technology, expense and expertise. In addition, it is not clear what kind of effect using deep groundwater and its associated elemental composition will have on agricultural production and soils.

Despite this ongoing process of adjudication, development continues at an alarming rate in Taos. The town is heavily promoting a tourist industry that includes the ski area and other forms of mountain recreation. Traffic is heavy and lodging is short at certain times of the year, so the town is promoting bigger hotels while building an airport to accommodate larger airplanes. Taos is also promoting acequia conservation with a restoration effort underway to reestablish the flows of a couple of acequias that have been severely affected by development. As innovative and noteworthy as these projects seem, it is important not to forget the ongoing and consistent force of development that ultimately can lead to the demise of other acequias in the valley.

It has been said that those who do not learn from history are doomed to repeat it. An examination of history and the contemporary challenges of water supplies lead one to be concerned about the future of our water supply. The fact that the City of Albuquerque relies on water from the San Juan-Chama diversion hundreds of miles away should be of central consideration when expansive developments like Santolina are considered. The fact that Santa Fe was irrigated by over 20 acequias that are all but gone should also be an example for Taos to consider as it nurtures the tourist and art economy. The airport that Taos is constructing will likely set off a development frenzy that will be uncontrollable. Given that all development requires water, and given that there are no additional water rights being created, future development will invariably be at the expense of acequia water rights, local agriculture and open space.

With all that said, what is the alternative? Are we doomed to follow policies that have a track record of removing people from the land and their local resource base in pursuit of gross receipts taxes? What kind of policies would adequately address the challenges we are likely to face?

For starters, we need to make the best use of the water we do have and actualize water resources that we may have not considered. Grey water and water harvesting from rooftops would augment our supplies. We have to be critical of the impact of new development and incentivize developments that seek to infill existing properties and come from local contractors and entrepreneurs that hire local people. Optimization and augmentation of local resources should be the basis of economic development rather than a dependence on resources outside the community. A moratorium on new developments that don't meet strict requirements would allow time to develop sound policy that could prepare us for an uncertain future. And ultimately, we have to challenge our need to process sewage using freshwater while looking at the

appropriateness of industries that use exorbitant amounts of water in water-limited areas. The solutions are available to us if we can think outside of the box and challenge the “business as usual” approach.

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