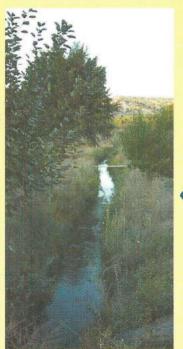


# Acequia Waters

by Ernest Atencio



cequia waters have a sound distinct from the waters of a river, different than a concrete-lined irrigation canal or corrugated culvert. It is the sound of water moving slowly, playing on the gravel bed of the ditch, flowing along its dirt banks and the roots of willows. That sound is heard throughout the world today, linking ancient irrigation traditions that reach from the other side of the planet to northern New Mexico. An adaptation for farming arid lands, Pueblo Indians in New Mexico had already developed a similar system before the Spanish arrived over 400 years ago. Modern acequias are still a thriving institution, symbolizing the blending of cultures in this region. Today they are part of what make our local communities and the local landscape so incomparably unique.

Acequias, which refers to both irrigation ditches and the community of farmers organized around them, have been called the lifeblood of northern New Mexico. Acequia waters flow gently across the land, working with the simple force of gravity, to nourish communities and fields like the blood that flows through our bodies. Predecessors of acequias, developed thousands of years ago in the Indus Valley of South Asia, were based on the human circulatory system. Larger arteries split into smaller vessels and eventually into capillary flows to water every corner of farmland.

# Acequia Legacy

The word "acequia" is of Arabic origin, brought to Spain by the Moors of North Africa. The tradition had made its way from India through Persia and north Africa, filling an important niche for arid-land farming communities. Spanish settlers brought the tradition to New Mexico in 1598, inspired in part by techniques that Pueblo Indians had developed.

By the time the first Hispano acequia was constructed near the confluence of the Río Chama and the Río Grande, it represented centuries of intermingling cultures, spiritual traditions, and adaptations.

The technology and the cultural traditions surrounding it continue today as part of the

treasury of human experience found in northern New Mexico.

Today there are 1,000 to 1,200 working acequias throughout New Mexico. Still vital systems for sustainable agriculture, they are also part of the social glue that holds together traditional rural communities. As a living institution with centuries of continuity, acequias today are a part of the rural Hispano cultural identity, as important as corn to the Pueblo Indians,

or buffalo to the plains tribes. The annual ditch cleaning—a cooperative community effort that has taken place every spring for four centuries—is a right of passage ceremony for the youth of the community. To finish a long day of hard labor is a sign of adulthood, and young people acquire a stronger sense of place and belonging and traditional knowledge of natural systems.

As a friend once said about traditional farming at a Hopi village, "It's not just about growing food, it's also about growing kids."



## A land-Based Environmental Ethic

Acequia systems work within basic geographical and ecological limits of watersheds. Following contours of the land, a traditional acequia will water a variety of locally-adapted crops (including organic farms), support the biodiversity of riparian vegetation, birds, and other wildlife and recharge local groundwater and natural streamflow. There is no more



water for irrigation than what comes from the mountain snowpack, and over many generations of living on and learning from the land, skilled acequia farmers know how to use the water with great care. This a strong incentive for maintaining healthy watersheds, from the top of the mountain to the forests, to the last ditch in the village.

Rooted in local knowledge, long practice and a deep respect for the land, acequia culture represents a sustainable environmental ethic that works with nature rather than against it.

## Today and the Future

Acequias are both irrigation systems and democratic social institutions, and formed the basis of the earliest cooperative community government in Hispano communities. They continue today and hopefully into the future as models of sustainable agriculture and of democratic community cooperation. But threats against this old and adaptive institution are mounting every day.

Acequias are communally managed through traditions that harken back to old Spanish and Mexican legal systems. Water is a community resource, a basic element like the air we breathe, but shared within a village. This view goes counter to the modern idea of water as a mere commodity, goods to be bought and sold like so much paper on the stock exchange. It also sometimes goes against the narrow grain of modern legalities. Genuine custom and tradition, if agreed upon by all irrigators, are officially recognized by both state and federal governments. But the basic doctrine of prior appropriation—meaning those who used the water first have priority rights—also holds true between one village and the next.

Acequias water rights are a form of wealth in poor rural communities and the incentive to sell can be strong. But transferring one or two water rights out of an acequia can negatively impact the entire system. Sprawling downstream cities and water-guzzling industries, look to village acequias to quench their growing thirst. A complex legal process called adjudication adds another expensive burden, forcing parciantes to defend ancestral water rights.

In the modern world of water right transfers, interstate water compacts, and pumping water from one side of the continental divide to the other, we forget about the simple value of keeping water connected to the land and local watersheds, where it belongs. What will happen to the ancient legacy of the acequia tradition, the distinctive village culture it nourishes and our rural communities if we sell our water rights down the river?

The acequia tradition also helps sustain the environment. Healthy rural communities and healthy ecosystems go hand and hand. "You cannot save the land apart from the people or the people apart from the land," says Wendell Berry. "To save either, you must save both." Today acequia waters serve a vital role for both communities and ecosystems.

# Acequia Glossary

Acequia—Of Arabic origin, referring to both the irrigation ditch and the organization of parciantes who use ditch.

Acequia Madre—The "mother ditch," or main irrigation canal diverting water from a stream.

Brazal—From the Spanish word brazo, or arm, the brazal is a small ditch that branches from the acequia madre.

Compuerta—The headgate which is opened to release water from a stream into the upper end of the acequia madre, or from the acequia madre into smaller lateral ditches.

Desague A small channel or outlet that drains excess water or returns it to the stream.

Mayordomo—The official ditch boss elected by the parciantes, responsible for day-to-day management.

Parciante—A member or shareholder of an acequia, responsible for a share of ditch maintenance proportionate to his or her irrigated acreage.

Sacar la Acequia—Communal effort "to clean out the ditch" each spring before irrigation season.

Sangría—Translated as "bloodletting," this refers to a ditch cut perpendicular from the acequia madre to irrigate individual plots of land; holding to the circulatory metaphor, also called vena, or vein.

## Selected Readings

F. Lee Brown and Helen M. Ingram. Water and Poverty in the Southwest. The University of Arizona Press, 1987.

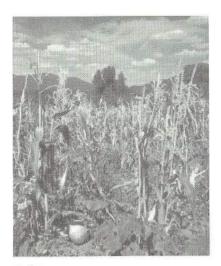
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Michael C. Meyer. Water in the Hispanic Southwest: A Social and Legal History, 1550-1850. The University of Arizona Press, 1984.

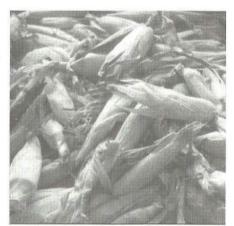
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Acequia Timeline

Thousands of years ago—Farmers in the arid Indus Valley of South Asia develop a simple, gravity-driven irrigation system based on the human circulatory system.

711-1492—The Moors of north Africa conquer and occupy Spain and Portugal, bringing with them the Indus irrigation system they now refer to by the Arabic word as-saquiya.

1000-1500—Pueblo Indians in arid New Mexico develop elaborate irrigation systems at Chaco Canyon, Zuni and throughout the Río Grande Valley.

1598—Irrigation traditions from South Asia and North America converge when settlers from the Juan de Oñate expedition build the first Hispano acequia near the confluence of the Río Chama and Río Grande.

1610—As the town of Santa Fe is founded, acequias retain their autonomy as local governments distinct from municipalities.

1848—US conquest takes the region from Mexico; occupation force preserves the acequia system and the Treaty of Guadalupe Hidalgo protects property rights of Mexican citizens, including acequia water rights.

1851—New Mexico territorial government enacts water laws that preserve acequia water-sharing customs and management practices.

1891 — Water rights granted by Spain and Mexico survive the Court of Private Land Grant Claims, but 94 percent of Hispano land grants are lost.

1898—Territorial Water Commission concludes that the acequia system is "just and progressive and simple" and should not be changed.

1907—The Territorial Water Code recognizes acequias as a distinct class of water rights protected by the Treaty of Guadalupe Hidalgo and governed according to Spanish and Mexican water law and local custom.

1912—The New Mexico State Constitution confirms all pre-existing water rights.

1956-1990s—State of New Mexico files a series of acequia adjudication suits, threatening the validity of existing water rights and continuity of the acequia system.

Today—Open your compuerta on the day you are assigned by the mayordomo and acequia waters flow into your field to nourish your crops.

### For more information or assistance

### Acequia organizations

New Mexico Acequia Association ~ (statewide advocacy and education organization governed by the Congreso de las Acequias, including most of the regional associations listed below)

PO Box 1229 - Santa Cruz, NM 87567

email: nmaa@nmacequias.org ~ website: www.nmacequias.org

### Regional Acequia Associations (contact through NM Acequia Association):

Acequias Norteñas de Río Arriba	Tierra Amarilla
Asociacion de las Acequias de Vallecitos, Tusas y Ojo Caliente	Ojo Caliente
Association of Community Ditches of Río San José	San Mateo
Association of Santa Fe Acequias	Santa Fe
Embudo Valley Acequia Association	Embudo
Gallina/Capulín Acequia Association	Gallina
Questa/Cerro Acequia Association	Questa
Río de Chama Acequia Association	Española
Río Costilla Acequia Assocation	Costilla
Río de las Gallinas Acequia Association	Las Vegas
Río Mimbres Acequia Association	Mimbres
Río Pojoaque Acequia and Well Water Association	Pojoaque
Río Quemado, Río en Medio, Río Frijoles,	
Río Santa Cruz Acequia Association	Santa Cruz
Río de Tesuque Association	Tesuque
El Rito Acequia Association	El Rito
Taos Valley Acequia Association	Taos



### Government agencies and other assistance

Center for the Education & Study of Diverse Population (Acequia Education Materials) website: www.cesdp.nmhu.edu

(505) 426-2204

### Community and Indian Legal Services of Northern New Mexico

(legal assistance on traditional water and land right issues)

PO Box 5175 Santa Fe, NM 87502

(800) 373-9881

(505) 982-9886

New Mexico Acequia Commission

(funding for water rights adjudication and official liaison

between acequias and state government)

PO Box 190

Velarde, NM 87582

(505) 852-2600

New Mexico Office of the State Engineer &

Interstate Stream Commission

(administers all NM water rights and provides funding for

acequia improvements)

PO Box 25102

Santa Fe, NM 87504

website: www.seo.state.nm.us

505-827-6175

USDA Natural Resources Conservation Service

(technical assistance in rehabilitating acequia structures)

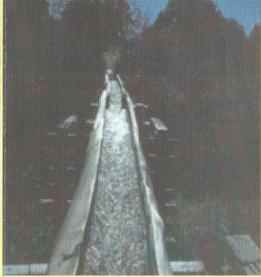
6200 Jefferson NE

Albuquerque, NM 87109

(800) 410-2067

website: www.nm.nrcs.usda.gov







# New Mexico's Acequias: <u>Sustainable Water Use That Nourishes Both People and The Land</u>