

Impact of the U.S.-Mexico War on New Mexico History And Albuquerque's South Valley *Acequia* Culture

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Rio Grande High School is located in the South Valley in the southwest quadrant of Albuquerque, New Mexico. Rio Grande High School's enrollment is approximately 2,200 students. The ethnic makeup is around 11.2% Anglo, 2% Black, 83.2% Hispanic, 3.5% Native American, 0.1% Asian and 0.1% "Other," with 791 students in the Bilingual Program. The attendance rate is approximately 87.4%. Rio Grande High School's dropout rate is close to 50%. The entire Rio Grande Cluster serves mainly an Hispanic population. Three-quarters of the students are eligible for free or reduced lunches; the majority of the schools in the cluster report poverty levels of 75% to 95%. There is also a high rate of Limited English Proficiency (Fassino and Leddick 9-10).

This unit on the U.S-Mexico War is designed for a high school World or U.S. History class. It could also be adapted for use in a middle school classroom. My goal in developing this unit stemmed from a vacuum I see in social studies textbooks currently in use at middle school and high school levels. I see a misrepresentation of Hispanics during this historical period mainly through the absence of their heroes and by the absence of their stories of resistance to the abuses of the dominant regime. I fully agree with Robert J. Rosenbaum in his response to why he wrote *Mexicano Resistance in the Southwest*:

I did not write this work to glorify violence. However...I believe now, that to omit the efforts to resist --violent or otherwise-- from a people's history not only skews the record of their experience but does them serious harm in terms of how they are seen and how they see themselves...The easiest way to perpetuate a myth of happiness is to erase all evidence to the contrary from the historical record. Once the evidence has been erased those of the dominant group can bask in the smug belief that they are the beneficiaries of a natural (or divine) order of the universe... I wanted to grab non-Hispanic readers and show them that establishing Anglo hegemony in the Southwest wasn't that easy

and that it was accomplished through actions... that are nothing to be proud of (Rosenbaum 238).

The U.S.-Mexico War

"We do not want the people of Mexico, either as citizens or subjects. All we want is a portion of territory...with a population which would recede, or identify itself with ours..." Senator Lewis Cass, 1846

Interpretations of the U.S.-Mexico War (1846-1848) are diverse. There is the traditional belief that slave states in the South promoted this war to advance their cause and created an imbalance of power that would later lead to the Civil War. Then, there is the extreme view that claims Mexico wanted this war in order to recover Texas and to obtain the intervention of European states to check the United States expansionist policies. Other views see the war as the result of Western landholders who were hungry for more land; another view is that New England commercial interests were very much eager to obtain harbors on the Pacific Coast to increase their trading with China and other countries in the East. Somewhere in all these interpretations Manifest Destiny (imperialist expansion) plays a large role, especially in the case of Western interests. President Polk was a strong supporter of these interests and many historians believe he manufactured the conditions for the war to ensue (Ruiz 6).

Land Grants History

During the Spanish colonial period and the Mexican period, settlers petitioned for land grants or *mercedes*. They received plots of land which could be irrigated since the basis of the agricultural and pastoral economy depended on water access. Some of the land was granted for farming and some was granted communally for pasturage and forage.

The Spanish settlers who came to northern New Spain following Don Juan de Onate's incursion in 1598, brought with them the traditions of the Old World. These values included a conservation ethic along with a sound environmental system of distribution of resources. As the population increased and the resources dwindled, the settlers would frequently request from the authorities new lands to settle. (The Ancient Romans did something similar. When their colonial cities grew too large and taxed the resource base, they simply moved to build a new city.) The settling of new land had to obey the *Laws of the Indies* which in Title Five of Book Four stipulated:

The lands for settlement must be healthy, good for planting and foraging, the sky of good and joyful constellation, clean and benign, with pure and sweet air, without impediments or alterations, and with good grazing for livestock, forests and trees for firewood and building materials, and a plentiful supply of good waters for drinking and irrigation (Rivera 29).

Even prior to the *Laws of the Indies*, Spanish environmental laws forbade the pollution of ditches. The *cequier* had to impose fines on those who wasted or polluted waters. The washing of clothes, dyeing of wool, and wasting of water were the most common cases for imposing fines in Medieval Spain (29-30).

In the New World, Spanish colonial law demanded that settlers obey a rotation schedule of irrigation. In this manner, all irrigators could share the water equally. After the Independence of Mexico from Spain (1821), local *alcaldes* (mayors) imposed a one *peso* fine on irrigators who wasted water by not closing off their ditches when their fields overflowed. The *mayordomo* allocated water not only based on the size of field to be irrigated, but he also took in consideration the type of crops planted (36-37).

During the Territorial Period (1851-1912) the *mayordomo* followed the tradition of collecting fines from those who, by bathing or allowing farm animals into the ditches, polluted the water. With time, the fines became steeper. If convicted, one had to pay up to one hundred dollars and/or sixty days in jail (31).

Spanish colonial and Mexican water litigation shows that the system controlling *acequias* was flexible and responsive to community needs:

Both Spaniards and Mexicans developed a system of sharing designed to avoid costly litigation. Absolute water rights were inconsistent with Spanish thinking and inappropriate to the New Mexican environment (Ebright 9).

From digging the *acequia* to rotating the irrigation, the level of a community's cooperation could determine its viability and survival. This was especially true in northern New Spain where the country's aridity made water one of the most precious

resources (32).

Given the harshness of life in the borderlands, survival depended on community support and water sharing was the only viable option. Water allocation was mainly granted based on need, rather than on prior use. Litigation settlement was based on local customs rather than on written Spanish law (32-33).

Albuquerque was established in 1706 by Governor Cuervo y Valdez who hoped this to be the main settlement of Rio Abajo, but Kuber says that by 1754, the population of Albuquerque dwindled. People had settled on private *haciendas* where the land was more fertile. Some of them moved to a town settlement called *Atrisco*, across the river to the west. Others moved to *Los Padillas* and *Pajarito* to the south. Other settlers moved Rio Abajo to Tome and Belen (Espinosa 35). Other grants in this area were Armijo and Los Sanchez (Gonzales, M 8).

There were three other smaller land grants in this region. They were the *Bosque de los Pinos* land grant, now Bosque Farms. The Otero family claimed this grant. There was also the *Ojo de Cabra* land grant now known as Goat Springs. Manuel A. *Otero* claimed this grant as part of a family grant. *Lo de Padilla* Grant was located southeast of Isleta. Some of the descendants of this grant still possess some of the remaining area (Espinosa 65).

Currently, environmental biologists are studying the benefits of *acequia* irrigation. Two benefits of this system are that it allows for the maintenance of biodiversity and the replenishing of the aquifer. The ditches, when they are not lined with concrete, sustain corridors of wildlife and native flora. The uniqueness of this system promotes what Rivera calls "keystone communities." By protecting these unique communities from the "water market" and the danger of water transfers, the preservation of the traditional *parciantes'* way of life and the ecology of the area would be assured. An additional benefit to the preservation of the *acequia* network is that it promotes tourism and perpetuates traditional crafts and food production. The sale of these goods generates income for the residents (Rivera 199-201).

The Treaty of Guadalupe-Hidalgo (February 2, 1848)

The Treaty of Guadalupe-Hidalgo treaty ended the conflict between the United States and Mexico. On February 2, 1848, the Mexican government agreed to the Guadalupe-Hidalgo terms that established the border for Texas as the Rio Grande, and the loss of the present-day states of New Mexico, Arizona, California, Utah, Nevada and parts of Colorado in exchange for fifteen million dollars. Out of concern for

the Mexican citizens left behind the new border, the Mexican government wrote provisions in the treaty for the protection of their rights and property in articles VIII and IX. Article IX guaranteed "the free enjoyment of their liberty and property, and secured the free exercise of their religion without restriction." Chicano scholars have argued that property rights were guaranteed but not protected. An organized takeover of the land grants followed the war.

European-Americans from the East moved into New Mexico to enjoy the spoils of conquest. They came to exploit the territory's resources. They controlled the territory's government, changed and wrote new laws to further their political and economic interests. They accomplished their land acquisition by legal and illegal means. One way was by requiring Mexican landowners to register their lands by a certain deadline, and when Mexicans failed to do this by the deadline, their lands were taken. Frequently, these requirements and deadlines were not posted in visible places (Acuna 61).

Another way the land was taken over was by raising the taxes on Mexican owned land. When the Mexican owner could not pay the high taxes, the land was auctioned. After the auction, the land taxes were lowered. Sometimes the Mexican landowner, being short on capital, obtained a loan from the American owned bank. These loans came with high-interest rates, and when the landowner fell behind on his/her payments the land was foreclosed (61).

Speculators wanted fast and easy money. Those who obtained pasture land frequently over-grazed the land. Those who owned timberland cut the timber until unnatural runoffs developed. These erosion processes made the small farmer's labor more difficult. Production yields were lower, and eventually farming became unproductive (62).

The U.S. government created reclamation projects. The beneficiaries of these projects were not the small farmers, but large scale agriculture enterprises. The mechanization of agriculture made it more difficult for the small farmer to compete because they did not have the capital to buy expensive agricultural machinery. These large projects required great amounts of water. The government built dams that reduced the amount of water in some areas and created flooding in others. Elephant Butte Dam, built in 1919, is an example of a reclamation project gone awry. The dam raised the water level in the Middle Valley, and during the rainy season the town of San Marcial was totally flooded in 1930. The small farmers' plots became swamps unfit for cultivation (63).

Northern New Mexicans feared the arrival of the railroad because they knew it would bring more speculators and would create more loss of

land. They were correct. More lawyers came to litigate land grant issues. Some of them forced the land grant owners to sell part of the grant in order to pay the court fees. In addition, some of the land was taken as payment and later resold for more money. This forced sale was legal since the Territorial Legislature passed the Partition Statute. This statute could require that the land grant be sold in order to pay attorneys and other legal fees. Standard attorney fees for confirmation of a land grant was one-fourth or one-third of the land. This statute is contrary to the Treaty of Guadalupe-Hidalgo. The Treaty stipulated that land grants could not be sold and property rights would be protected. For example, at Las Trampas, a suit was filed by Alois B. Renehan to stop the sale of this land grant because the buyer, H.E. Raynolds, was the partner of their lawyer, Alonzo McMillan. They accused these two of conspiring to buy the land for eighteen cents per acre, because they could resell it for \$1.50 per acre. In addition, the Referee (Judge) Johnson accepted a bribe to support their plot (Salaz 326).

In 1904, the 200,000 acres Cebolleta Land Grant was partitioned. Judge Crumpacker partitions the land as follows:

A. I. Richardson, et al.:	51,518 acres
Raynolds and McMillan, et al.:	51,116 acres
B. S. Rodey:	3,714 acres
E. W. Clancy, et al.:	23,064 acres
L. B. Prince, et al.:	20,201 acres
Land to be sold for court costs:	15,000 acres
Cebolleta people and township:	20,533 acres (Salaz 346)

This table illustrates that the people of Cebolleta received a little over 10% of their original land grant.

Another way of taking the land from the Mexican owners was through irregular surveying. Henry Atkinson was the Surveyor General. During his office tenure, "irregularities in surveys were prolific and brought repercussions while he was still in office." (346). Las Trampas land grant when first surveyed was 46,000 acres. In 1885 in a second survey, working under Atkinson, William Spark's holding is only 28,000 acres (346).

A decision about the Anton Chico land grant was being made. The question to be resolved was whether this was a community land grant or an individual land grant. Surveyor General Atkinson decides that

Anton Chico was an individual land grant given to Manuel Rivera and 36 other people. Atkinson "bought out" these people's right to the land, and became the sole owner of the Anton Chico land grant. He passed it on to the New Mexico Land Livestock Company, of which he was president. After several legal suits, the town of Anton Chico managed to regain the land grant (347).

The Atrisco Land Grant, according to Dr. Joseph Sanchez, historian and director of the Spanish Colonial Research Center, was given to Fernando Duran y Chavez in 1692. This is before the settlement of Albuquerque in 1706. Much of the South Valley still sits on the land grant, which became Westland Development Corporation in 1968. Westland is made up of shareholders, and only those who are heirs to the land grant can be shareholders (South Valley Vertical Files SWRC).

Emma Gonzales tells how her husband's family lost the land where now Kirtland Air Force Base is now located:

Our house was built down in the valley, on property given to us by his mother. My husband's mother had land that had been deeded to her grandfather by the King of Spain. Her family also owned a lot of land where Kirtland Air Force Base is now located, and some in the Manzano Base area –this land also was deeded to their grandfather by the King of Spain. However, the government said they needed this land to build the base, and they condemned it. My husband's uncle hired attorneys and tried everything to keep their land, but they lost out. They were offered less than a \$100,000 dollars for the land. Now that land is priceless (Elsasser 54).

Another event that hurt Mexicano land ownership was the destruction of the New Mexico archives in 1870 in Santa Fe. Basically, the story is that Governor Pike needed more office space. He ordered the secretary to clean up an area in which land grant papers were stored. Supposedly, she sold some of the papers for wrapping, and others she threw away as trash. These documents could have proven Mexicano ownership of the land. Some people believe this was an honest mistake. Others believe that Pike was part of the Santa Fe Ring, and this action was not a stupid mistake but a convenient way to help in the land theft (Acuna 63).

The Santa Fe Ring and The Lincoln County War

The Santa Fe Ring was a small group of lawyers, speculators and politicians. The two most powerful people were Thomas B. Catron and Stephen B. Elkins. These two lawyers accrued their wealth by litigating land grants. By 1883, Catron was considered to be one of the largest landowners in the U.S. They controlled New Mexican political life during the Territorial Period to benefit their own self-serving interests. They worked with some Mexicano leaders who, by association with this group, aimed to retain their influence. From land grant speculation, they moved on to other enterprises such as dealing in livestock. By 1870 Lawrence Gustave Murphy, another member of the Ring, had a profitable contract with the U. S. Army in Fort Stanton and the Mescalero reservation as a provider of produce and beef. Neither Murphy nor Rosenthal, Murphy's partner, owned a great deal of cattle. They encouraged much lawlessness by hiring cattle rustlers for their beef-supply business. In 1873, the Harrell group of outlaws rode into Lincoln and began harassing the townspeople. The Constable Juan Martinez tried to stop them, and a battle followed. Three of the Harrell men and Constable Martinez were killed. The outlaws later retaliated by firing on a group of people attending a dance. Four Mexicans were killed. Ultimately, the Harrell outlaws were driven out of town. On their way out, they killed Jose Haskell because he had married a Mexican woman. One of the outlaws, Ben Turner, was shot at an ambush. In retaliation, the gang killed five more innocent Mexican people (70).

John Chisum, another wealthy cattle rancher, challenged Murphy's exclusive right to sell to the U.S. government. This struggle between Chisum and Murphy started the Lincoln County War. Murphy had control of Republican politics, and Chisum was a Democrat. Most Mexicans sided with Chisum because he was less of a threat to them than Murphy who promoted lawlessness and abuse. Also, James Dolan, a very violent man, became the leader of the Murphy faction (71).

Juan Patron became a leader of the Mexican people in Lincoln County. He had grown up in the area and had graduated from the University of Notre Dame in Indiana. He was spoken of as "honest, studious, and industrious." (Fullton 406). In 1878, he was a delegate to the State House of Representatives where he was picked to be the Speaker of the House. He also was Lincoln's only schoolteacher. He did this gratuitously. The Harrell gang had killed his father. He attained distinction as a clerk of the probate court when he intervened against John Copeland and John Riley (a Murphy gang member) in behalf of two Mexicans who were accused of stealing from the two

Americanos. Copeland and Riley chased after the Mexicans who had run away. They killed one and captured the other one. They said they were going to take the captured man to Fort Stanton, seven miles away. They claimed that on the way to the fort, the unarmed Mexican man had tried to run away and they shot him. Juan Patron looked into the crime and figured the Mexican man was shot at their ranch not on the road. Patron asked for a grand jury investigation. This was denied. So as a probate clerk, he signed a warrant for the arrests of Copeland and Riley. He found them and questioned them. He determined the two Mexican men had been killed in cold blood. The posse with Patron wanted to shoot Copeland and Riley, but he dissuaded them of this. Riley, through a friend, had asked for help from Fort Stanton. When the troops from Fort Stanton arrived, they released the two Americanos. Riley went home and got a gun. He shot Juan Patron in the back, and the army arrested the Mexican posse. Juan Patron was taken prisoner and placed in a hospital where he was in critical condition. Riley demanded Patron be indicted, and he was; however, he was not put on trial. Later on, he recovered, sided with John Chisum and led the Mexicans against the Murphy gang in the Lincoln County War (71).

Governor Samuel B. Axtell never took action to control the Murphy gang led by Dolan. There were, however, two murders of prominent people who were outspoken against the Santa Fe Ring and the Murphy gang. These two people were Reverend Tolby in Colfax County, who was outspoken against the Ring; it is believed the Ring had him murdered. The other murder victim was John H. Tunstall, an Englishman. Tunstall was an associate of Chisum. He opened a mercantile store in competition against Murphy's business. Chisum and Tunstall also started a bank that competed against the First National Bank controlled by Stephen B. Elkins and Thomas B. Catron. Dolan's men killed Tunstall in the early months of 1877. This was the start of the Lincoln County War. His death made world news. President Rutherford B. Hayes wanted the Lincoln County War to end. Axtell had proven inefficient, and the word was that he was part of the Santa Fe Ring. Ignoring the protests of Elkins and Catron, President Hayes appointed Lew Wallace as the new Territorial Governor on September 4, 1878. Wallace came with a mission from the President to clean up Lincoln County. He set up a militia and appointed Juan Patron to lead it. The upheaval ended in 1879 (72).

James Dolan was still very influential. Chisum abandoned his original enterprise and moved out of Lincoln. Juan Patron suffered a great deal of threats and abuse and eventually moved to Puerto de Luna. There in a bar, a cowboy named Mitch Maney shot him. Suspicions ran high

that Dolan had hired this penniless cowboy as an assassin. Adding fuel to these suspicions was the fact that Maney had some of the most expensive attorneys representing him. The prosecutor was none other than Thomas B. Catron. Manley walked free because of a hung jury and the case was never retried (72).

Because of this ruthless violence against the Mexican people and lack of protection by the authorities, a resistance movement was difficult to organize. However, in Las Vegas, San Miguel County, a group of Mexican men organized themselves into a militant resistance organization called *Las Gorras Blancas*, The White Caps. In order to protect their identities, they wore white cowled masks. They fought against the takeover of their community lands in Las Vegas. They cut fences on lands taken over by speculators. They destroyed railroad bridges, buildings, crops, etc... Juan Jose Herrera and his brothers Pablo and Nicanor Herrera were part of their leadership. On November of 1889, some of their members were arrested. The day of the trial 63 *Gorras Blancas* rode into Las Vegas and surrounded the courthouse. Then they went to the home of Miguel Salazar, the Attorney General, and finally rode to the jail where their friends were held. On March of 1890, 300 *Gorras Blancas* rode into Las Vegas and distributed *Nuestra Plataforma*, Our Platform (Salaz 366-367) (See Appendix.)

I have just scratched the surface of what is available for research. The value of this material is that you can parallel what was happening then, to what is happening now. Because this deals with what has happened here and has directly affected some of our students' parents and grandparents, it validates who they are as a people. Angela G. Acosta provides a vision of how things are the same when she talks about the disconnection that exists between the planning process (wherein people have a token participation) and the implementation process (where *politicos*, developers and bankers, derail the process initiated by the people in order to "exert their agendas"). Moises Gonzales echoes Acosta's words when he reiterates, "The official zoning map, and the Southwest Area Plan (1985) have not been used as guidelines to protect the rural character of the area...because commission (CPC) members make vital land use decisions for other communities in the county in which they do not live." (Gonzales 56).

Standards and Benchmarks

This unit would be most appropriate after the study of Pre-Columbian civilizations in the Americas and the Spanish Conquest. It addresses the New Mexico State Department of Education new Social Studies Content Standards and Benchmarks currently in the process of

adoption.

Standard H-A – 9-12

Students will identify important people and events to analyze significant patterns, relationships, themes, ideas, beliefs, and turning points in New Mexico, United States, and World History in order to interpret and understand the complexity of the human experience in New Mexico, the U.S. and, the World over time.

Benchmark - New Mexico

Students will analyze how people and events of New Mexico have contributed and influenced U.S. and World History since statehood.

Performance Standards

- Analyze the geographic, economic, social and political factors of New Mexico that impacted U.S. and World History:
- land grant and treaty issues unresolved to present day and that impact relations between citizens, state, and federal government.
- role of water issues as they relate to development of industry, population growth, historical issues, and current acequia organization.
- growth of urban development.
- role of the federal government, including military bases, national laboratories, national parks, Indian reservations, transportation systems, and water projects.

Implementation

Lesson One – Agree or Disagree

On four pieces of cardboard write numbers 1, 2, 3, 4. Write only one number for each piece. Place each piece of cardboard on a desk near each corner of the classroom. Explain that on an overhead transparency, they will read a statement. If they agree with the statement, they should move near the desk that has the number 1 card on it. If they somewhat agree, they should go to the desk with the number 2. If they somewhat disagree, they should move to the desk with number 3, and if they totally disagree with this statement, they

should move to the desk with number 4 on it. You may want to write the numbers and what they represent on the board for a visual reinforcement. Place a typed copy of this statement on the overhead:

On this spot on August 13, 1521, the Aztec forces, bravely led by Cuauhtemoc, fell to the power of Hernan Cortes and the Spanish army.

It was neither a defeat nor a victory, but rather the painful birth of the mestizo people who are Mexico. (Jimenez 71)

Allow students to move to their selected corners. Tell them to discuss with the people in their corner why they all picked this view. Give them about five minutes, or less if the talking dwindles. Ask them to pick a spokesperson to represent their views. Then ask each spokesperson why they picked this view. You may want to ask other people in the same corner if you sense they also want to share. After you have questioned all four groups, allow them to defend their views interacting with the other groups. If a productive discussion ensues, sometimes this exercise may take half a class period. Sometimes this may take altogether about 15 minutes. Tell students that this was written on a wall in the *Plaza de las Tres Culturas* (Plaza of Three Cultures) at Tlatelolco, in Mexico City (Jimenez 71).

Our school has a class set of *Mexican American Heritage* by Carlos Jimenez. Assign students to read pages 72-77 from *Mexican American Heritage*. This reading explains issues of identity and life during the Colonial Period. If you do not have access to Jimenez's book, you may want to look at *The Americans* by McDougal Littell, pp. 38-43.

Assessment:

In a paragraph, describe the Spanish elements of Mestizo culture. Then in another paragraph, describe the Native American elements of Mestizo culture. Include the role of religion in your answer. (Jimenez 82)

Lesson Two – Field Journal

Tell students they will create a field journal. This journal will be an ongoing assignment. They may choose to have a writing pad, or they may buy a journal in a stationery or art supply store, or they may be original and buy some special paper and put together their own journal. Creativity is encouraged. If they like to draw, suggest they buy a small sketch pad. They will also need a magnifying glass and a

small ruler. The cheapest magnifying lens at office supplies stores sells for a little over a dollar, and 8" plastic rulers are 25 cents. You may want to make arrangements to order in bulk with an office supply store.

Write directions on the board, or on an overhead:

You are a Spanish settler coming into one of the land grants in the South Valley: Atrisco, Armijo, Pajarito, Lo de Padilla, Los Sanchez, Bosque de los Pinos (Bosque Farms), etc. The year is 1692. This is the year when the Atrisco Land Grant was made to Fernando Duran y Chavez. It is Sunday, and you are taking a break from working on the *acequias*. You write in your journal the draft of a one-page letter to one of your parents, brother, sister, or best friend. You tell him/her about your experiences, the work, the landscape, the soil, the vegetation, the food and the Native American people who live in the area. In addition, tell him/her about your hopes and future plans in this area. Use in context the following vocabulary: land grant, *acequia*, Rio del Norte, floods or flooding, *bosque*, adobe, *quelite* (lamb's quarter) and *alamo(s) de hoja redonda* (cottonwood(s)). You may add other Spanish vocabulary words.

Students will need to record data at least once a week at their spot. They will write the date and time of day. Assignments will consist of informal observations, reflections, and drawings of plants and insects. Their field journal will be essential to record data for lessons 4-6. This will be the tool of assessment for this unit.

Lesson Three – Acequia Biodiversity – Set up

Biodiversity is a measure of the health and stability of a community. Various factors, including temperature range, annual rainfall, and soil quality contribute to the number of species that can successfully survive in a given community. Areas of highest moisture and temperature typically support a greater number of plant and animal species and are relatively more stable than areas of low temperature and/or low available water. The loss of individual species within any community can have far-reaching effects on the community as a

whole, though more complex, stable communities are better able to absorb such a loss. Human activity such as farming, ranching and building construction typically has a negative effect on the stability and health of a biological community. Altering community factors (biotic and abiotic) disrupts its natural balance and contributes to the invasion and success of non-native species. Many of these invaders possess undesirable characteristics; and due to the lack of natural controls they reproduce exceptionally well (Mason).

This lesson will attempt to compare the biodiversity surrounding a dirt-bottom *acequia* (minimal interference) to that surrounding a cement-lined *acequia* (radical interference). Also, if a biology class can be recruited to do a more in depth study of the sample plants, a comparison of native to invader species will also be undertaken.

Acequia Biodiversity - Plant Community

Sample plots will be set up along two different acequias in the South Valley. One *acequia* will be the traditional dirt-bottom type typical of the early settlers of the middle Rio Grande valley. The other will be cement-lined. Since expertise in plant identification will not be available, comparison between the two communities will consist of the number of species and the density of individual plants. The number of species present at any given time is one indicator of biodiversity. The number of individuals from each species present contributes further to the diversity picture (Mason).

Procedure:

1. Set up five sample plots ten meters apart along the two different *acequias*. The first plot shall be ten meters from the nearest access road and preferably in the same geographic direction (north, south, etc....) from the road. Open areas are preferable to avoid influence of nearby trees or buildings.
2. Each plot will be one square meter in size and will be marked off by stakes and string. Each plot will be two meters horizontal distance from the current water edge of the *acequia*. The starting point for outlining each plot will be the corner closest to the *acequia* and the access road.
3. All the grasses and forbs that have their stems within or partially within the defined area of plot one will be removed (if the number of plants is very small removal will not be necessary). All the plants of the same species will be grouped

together. The most common species will be designated species number one. The next most common would be species two, and so on. The number of plants of each type (species) will be counted and recorded in a table. A sample of each species will be saved for reference. Ideally these samples will be pressed.

4. The procedure will be repeated in the additional plots. Plants new to the study will be numbered consecutively from the last plant recorded in the prior plot.
5. If time permits an additional five plots will be set up on the opposite side of the *acequia* midway between the existing plots (the last one five meters beyond).
6. Upon examination of the data various graphs will be plotted to examine possible differences within (plots along same *acequia*) and between (cement versus dirt-lined). Most likely these will consist of histograms for individual plots as well as combined results comparing dirt bottom to cement-lined *acequias*.
7. The graphs will be discussed and inferences made concerning how the technology of lining *acequias* has affected the biodiversity of surrounding plant communities. (Mason)

Lesson Four – Acequia Biodiversity – Animal Community

The small animal community that lives on the ground in any location is made up primarily of arthropods (animals with jointed legs including insects, spiders, centipedes and millipedes). Pitfall traps catch a representative sample of this group. Small reptiles (lizards and snakes) also can be captured this way. A simple pitfall trap can be constructed by digging a hole slightly bigger than a large plastic cup and placing the cup within the hole so its mouth is below ground level. A second cup of the same size is then placed in the first cup and dirt and detritus is smoothed out over the area to produce a near-level surface. A branch or small wooden board should be placed over the top of the mouth to shade the hole. For best results the trap should be "set" one day and checked the next day at approximately the same time. When no study is to be done the mouth of the trap should be elevated above ground level or covered in some way that no animals fall in. (Mason)

Procedure:

1. Five pitfall traps will be set up midway between the vegetation plots (ten meters apart and extending five meters beyond the last plot). Each trap will be in the center of a one-meter-square plot located in the same manner as the vegetation plots. Five additional traps will be set up on the opposite side of the two *acequias* where they should be located even if the vegetation plots are not used on that side.
 2. The following day the traps will be inspected and the number of each group will be counted. The likely groups to be found are ants, beetles, cockroaches, spiders, centipedes, and isopods (rolly-pollies). Millipedes and small reptiles are also possible. If large numbers of animals are captured they will be placed in a shoe box to allow them to spread out and facilitate counting.
 3. A standardized data table will be designed based on the results of the first three traps. When new groups are sampled they will be added to the right.
 4. Trapping will be done for a minimum of three weeks and histograms constructed comparing changes over time within individual sites, comparing sites along each *acequia*, and comparing the dirt bottom *acequia* to the cement-lined *acequia*. If possible a separate study will be done in the fall and again in the spring.
 5. Graphs will be discussed and inferences made concerning how the technology of lining ditches has affected the biodiversity of the surrounding arthropod community.
(Mason)
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Lesson Five – Native Versus Alien Species

If a biology class can be recruited to join the study, sample plants collected will be identified using taxonomic keys and field guides. The plant data collected will be grouped into the categories of Native Plants and Alien Plants for the construction of more histograms and further comparison between the cement-lined ditches and dirt bottom ditches. (Mason)

Lesson Six – Map of Land Grants

This focusing activity will be over several days. The task will start as soon as students walk into the classroom. Students will receive a

blank, 8 ½" x 11," outline map of New Mexico. On an overhead, there will be a map of land grants that they will need to mark on their blank maps of New Mexico. Every day for one week, there will be a different map on the overhead projector.

The maps are:

1. The Maxwell Land Grant (found in Robert Rosenbaum's *Mexicano Resistance in the Southwest*, p. 69 and p.79)
2. The San Miguel County Land Grants (ibid. p. 100)
3. The Taos Valley Acequias Map which includes land grants in the Taos area (found in Jose Rivera's *Acequia Culture*, p. 166)
4. Map of Albuquerque area land grants from Santo Domingo to Sevilleta (found in Joseph P. Sanchez's *The Rio Abajo Frontier 1540-1692*, p.100)
5. Map of Indian Land Grants – Zuni, Laguna and frontera (frontier) with the *Cumanchis* (Comanches) and Map of Rio Abajo (found in Gilberto Espinosa's *Rio Abajo* at the beginning of the book).

The rest of the class period, students will read pp. 55-77 from Acuna's *Occupied America*.

Assessment for the maps will be based on a completed map with land grant information. Assessment for the reading material will be based on group presentations. Each group will select an event from this reading to dramatize for the class. Dramatizations will be based on accurate information, participation of each individual student, props and creativity. Events to dramatize could be:

1. Kearny's entrance into New Mexico, the Diego Archuleta Revolt, Pablo Montoya Revolt, and Governor's Bent death
2. The life of Padre Martinez of Taos. Students will need to look at additional sources besides Acuna such as Fray Angelico Chavez's books on Padre Martinez. They will need

to include the struggle between Padre Martinez and Bishop Lamy.

3. The different ways Mexican people lost their lands. A dramatization of five to seven "families" or heads of household explaining how they lost their land.
4. The Maxwell Land Grant history – main role players throughout its history, role of the Santa Fe Ring
5. The Lincoln County War with emphasis on the role of Juan Patron and the Murphy gang, role of Catron and others in the Santa Fe Ring
6. Las Gorras Blancas – role Juan Jose Herrera and his two brothers Nicanor and Pablo, Gov. Prince, the Knights of Labor

Appendix

Not wishing to be misunderstood, we hereby make this our declaration.

Our purpose is to protect the rights and interests of the people, in general, especially those of the helpless classes.

We want the Las Vegas Grant settled to the benefit of all concerned, and this we hold is the entire community

within the grant.
We want no "land grabbers" or obstructionists of any sort to interfere. We will watch them.

We are not down on lawyers as a class, but the usual knavery and unfair treatment of the people must be stopped.

Our judiciary hereafter must understand that we will sustain it only when "justice" is its watchword.

The practice of "double-dealing" must cease.

There is a wide difference between New Mexico's "law" and "justice." And justice is God's law, and that we must have at all hazards.

We are down on race issues, and will watch race agitators. We are all human brethren, under the same glorious flag.

We favor irrigation enterprises, but will fight any scheme that tends to monopolize the

supply of
watercourses to
the detriment of
residents living on
lands watered by
the same streams.

We favor all
enterprises, but
object to corrupt
methods to further
the same.

We do not care
how much you get
as long as you do
it fairly and
honestly.

The People are
suffering from the
effects of
"bossism" and
these bosses had
better quietly hold
their peace. The
people have been
persecuted and
hacked about in
every which way
to satisfy their
caprice. If they
persist in their
usual methods
retribution will be
their reward.

We are watching
"political
informers."

We have no
grudge against any
person in
particular, but we
are the enemies of
bulldozers and
tyrants.

We must have a
free ballot and a

fair count, and the
will of the
majority shall be
respected.
Intimidation and
the "indictment"
plan have no
further fear for us.
If the old system
should continue,
death would be a
relief to our
suffering. And for
our rights our lives
are the least we
can pledge.
If the fact that we
are law-abiding
citizens is
questioned, come
to our homes and
see the hunger and
desolation we are
suffering; and
"this" is the result
of the deceitful
and corrupt
methods of
"bossism."
Be fair and just
and we are with
you, do otherwise
and take the
consequences.
The White Caps,
1500 Strong and
Growing Daily
(Rosenbaum 166)

Student and Teacher Bibliography

Acosta, Angela G. *Planning in the South Valley: Previous Planning Efforts, Obstacles, and Plan Implementation Strategies – A Guide for the Rio Grande Community Development Corporation*. Albuquerque, Community and Regional Planning

Program, School of Architecture and Planning.
University of New Mexico, 1996.

Acosta presented excellent data analysis of the South Valley and recommends that the voices of the residents be listened to, rather than ignored when it comes time to implement plans that affect the people in the Valley.

Acuna, Rodolfo. *Occupied America: The Chicano's Struggle Toward Liberation*. San Francisco: Canfield Press, 1972.

This is an excellent source of reference. It is very readable and will sustain students' interest. It starts with the Spanish Conquest and ends with the Chicano Movement of the 1970's.

Atrisco Oral History Project – November 1998. Southwest Research Center, Zimmerman Library, University of New Mexico 2001.

This is a collection of interviews with people from the Atrisco area. People express concern about how the South Valley is presented on the media. Some believe the media focuses too much on crime in the South Valley.

Chavez, John R. *The Lost Land, the Chicano Struggle of the Southwest*. Albuquerque: UNM Press, 1984.

This is an excellent source for studying issues of identity and the loss of land after the signing of the Treaty of Guadalupe-Hidalgo.

Coles, Robert *The Old Ones of New Mexico*, Albuquerque: UNM Press, 1984.

Beautiful photographs of elderly people in Northern New Mexico. It's a good source of stories about life style and tradition of the elderly.

Danzer, Gerald A. et al. *The Americans*. Evanston, Illinois: McDougal Littell, 1998.

This is one of the better U.S. History high

school textbooks.

Duffus, R.L. *The Santa Fe Trail*. Albuquerque: UNM Press, 1930.

This is a classic. It is very detailed about social life, Indian attacks on the trail and much more.

Ebright, Malcolm. *Sharing the Shortages: Water Litigation and Regulation in Hispanic New Mexico, 1600-1850*. New Mexico Historical Review, v. 76 No. 1, January 2001: 3 - 45.

Elsasser, Nan, et al *Las Mujeres: Conversations from a Hispanic Community*. Old Westbury, NY: The Feminist Press, 1980.

This is an excellent record of cultural heritage. It has many interviews with Hispanic women of diverse backgrounds.

Espinosa, Gilberto, et al. *El Rio Abajo*.

Excellent documentation: copies of land grant petitions and names of residents on the land grants. It would be good reading for students.

Fassino, Doris and Susan Leddick. *Baseline Review: Albuquerque Public Schools, Rio Grande Cluster April-May 1999*. Bozeman, MT: PKR, Inc., 1999.

This is a 44-page study of the Rio Grande Cluster Schools. It looks at mobility and stability rates, attendance rates, drop out rates, and presents recommendations for improvement.

Forrest, Suzanne. *The Preservation of the Village: New Mexico Hispanics and the New Deal* Albuquerque: UNM Press, 1989.

Explains how land-based Hispanics dealt with the Great Depression and has many interviews with people about how they dealt with the New Deal.

Garcia, Nasario, ed. *Comadres: Hispanic women of the Rio Puerco Valley*, Albuquerque: UNM Press, 1997.

Excellent stories by women on how they lived and contributed to the running of their "ranchos," from fetching wood to plastering

and taking care of goats, and how they helped on the fields.

Gonzales, Moises. *Methods, Strategies, and Implementation of Agricultural Preservation in the South Valley – A Guide for the County of Bernalillo, South West Area Plan*. Albuquerque: Community and Regional Planning Program, School of Architecture, UNM, 1997.

This work provides several arguments in support of protecting the rural character of the South Valley. It also has recommendations on how to improve the effectiveness of the County Planning Commission.

Gonzalez, Nancie L. *The Spanish-Americans of New Mexico: A Heritage of Pride*. Albuquerque: UNM Press, 1967.

A wide-ranging work that describes the social system of Hispanics and the effects of urbanization on youth, education, changes in religious behavior and intermarriage.

Griswold del Castillo. *Richard North to Aztlan: a History of Mexican-Americans in the United States*. NY: Twayne Publishers, 1996.

Excellent coverage of the labor struggles of the Mexican-American people.

Horsman, Reginald. *Race and Manifest Destiny: the Origins of American Racial Anglo-Saxonism*. Cambridge: Harvard University Press, 1981.

Horsman has excellent documentation and analysis of the origins of racial Anglo-Saxonism.

Jackson, John Brinckerhoff. *A Sense of Place, A Sense of Time*. New Haven: Yale University Press, 1994.

Jackson writes about urban culture and about the diversity of dwellings in New Mexico. He believes New Mexico has the most diverse types of dwellings. He also looks at social mobility and its effect on lifestyle.

Jimenez, Carlos M. *The Mexican-American Heritage.*, Berkeley: TQS Publications, 1994.

Student textbook with many colorful plates of Aztec and Maya pyramids and Chicano murals in California. It is easy to read and has assignments and assessment material designed for students at different levels.

Mason, James J. Oral interview on comparing benefits of unlined *acequias* versus concrete lined *acequias*. Albuquerque: July 2001.

McWilliams, Carey. *North from Mexico*. NY: Praeger Publishers, 1948.

This is a classic work. Mr. McWilliams was a journalist at the time of the zoot suit riots in Los Angeles, and he does an excellent work documenting this specific period (and likewise with the rest of the book). This is a must have.

Mirande, Alfredo. *Gringo Justice*. Notre Dame: University of Notre Dame Press, 1987.

Mirande analyzes the relationship between the legal system and Chicanos. He looks at how the legal system was an arm of the taking over of Chicano land.

Rivera, Jose A. *Acequia Culture: Water, Land and Community in the Southwest*. Albuquerque: UNM Press, 1998.

This is a very insightful work dealing with water use issues and provides many strong arguments in favor of the preservation of the *acequia* system.

Rosenbaum, Robert J. *Mexicano Resistance in the Southwest*. Dallas: Southern Methodist University Press, 1981.

This is the best story of Mexicano resistance to the takeover of their land. It could be used at the high school level.

Ruiz, Ramon Eduardo, ed. *The Mexican War: Was It Manifest Destiny?* American Problem Studies Series. NY: Holt, Rinehart and Winston, 1963.

This is a collection of essays from differing perspectives about the causes of the U.S.-Mexico War.

Salaz Marquez, Ruben. *New Mexico: A Brief Multihistory*. Alameda, NM: Cosmic House, 1999.

This book is organized in a timeline format from 12,000BC to AD1998. It is very readable. It has short biographies of New Mexico's heroes and heroines and many little known facts. It is very comprehensive.

Sanchez, Joseph. *The Rio Abajo Frontier 1540-1692: A History of Early Colonial New Mexico*. Albuquerque: The Albuquerque Museum, 1987.

Dr. Sanchez is Director of the Spanish Colonial Research Center, and he also works for the Park Service. The book has excellent coverage on the Abo Mission and the Salinas Pueblo area.

Simmons, Marc. *Albuquerque, a Narrative History*, Albuquerque: UNM Press, 1982.

This is a very hard book to find. It is very readable and very comprehensive in its coverage.

South Valley Oral History Project 1995-1996. Southwest Research Center, Zimmerman Library, University of New Mexico, 2001.

This is a collection of interviews with 31 individuals from the South Valley. Interviews are in English and Spanish. There are tape summaries and transcripts for each interview.

South Valley Vertical Files. Southwest Research Center, Zimmerman Library, University of New Mexico, 2001.

This is a collection of clippings and articles from different sources. Some of them have dates, others do not.

Weber, David J. *The Spanish Frontier in North America*. New Haven: Yale University Press, 1992.

This is an excellent reference for teachers or advanced high-school students. The documentation is superb. It has almost 200 pages on notes alone. It is very comprehensive and has plenty of maps and other illustrations. The Spanish exploration of Florida is especially detailed.