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## THE DEVELOPERS: CONTROLLING THE LOWER RIO GRANDE 1890-1980

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A water developer in the broadest term is a speculator, a gambler of sorts. It is someone who takes a piece of property—by law, water in New Mexico is considered property—and uses it in order to make a profit. Simply, then, a water developer is a water user with a purpose. To put a face on these water developers is to understand the evolving history of water resources in the Lower Rio Grande Valley over the past century.

The story actually begins on February 1, 1843, when the Mexican government granted 33 men the right to settle the Doña Ana Bend Colony just north of present day Las Cruces. The colonists, all farmers, set a pattern that water developers would follow and modify over the next century and a half. They came, as would others, seeking to improve their livelihood.

They put water as top priority by immediately constructing an irrigation ditch. And they did it with government help.

By April of that year only a ragged band of 14 settlers remained to work the land. They appealed to the governor for troops to protect them from the Indians, help in completing the irrigation ditch, and exemptions from both military service and taxes. The governor rushed a detachment of seven men and an arsenal of eleven muskets to the beleaguered colonists. He exempted the farmers from service, but could not, he said, provide extra workers or exempt them from taxes. But it was help enough. Within a year, the colony had grown to 261 inhabitants, including 47 families (Bowden 1971; pp. 68-70).

Over the next decade, the broad valley bordering the Rio Grande in what is now Doña Ana County would be settled under individual and civil colony grants from Mexico. The exception was the 36 square-mile tract of land known as the Santa Teresa Grant, which the Spanish government had awarded in 1790 to Francisco Garcia, the military commandant of El Paso del Norte (Milton n.d.; "Santa Teresa").

Early water developers in the Rio Grande Valley between San Marcial and the future site of Elephant Butte Dam had to make do with a terrain much less suited to farming. Along that stretch, the river folded upon itself like ribbon candy, its loops confined to a valley only half a mile wide. Its farmers cultivated the fertile river bends, irrigating their crops from ditches dug to the Rio Grande (Wilson 1985; p. 80). They also irrigated with flood waters, throwing up earthen and sand dams across the river channel to capture the receding waters. However, the unending process of rebuilding the ditches and coping with a changing river course took its toll. By 1908 many of the riverbend farms had been abandoned (Wilson 1985; p. 81).

Other parts of the Lower Rio Grande Valley were so narrow, "broken and wild" (Wilson 1985; p. 79) that the land was unfit even for the meagerest of farms. H.M.T. Powell later described a narrowed valley below Paraje (an old campsite later inundated by Elephant Butte Reservoir) as muddy and treacherous. He brightly added, however, that the area "has but one saving clause about it, it raises good catfish, blue, yellow and white" (Wilson 1985; p. 79).

By 1890 the Lower Rio Grande Valley had taken on a very different look. By then New Mexico had become a U.S. Territory, connected by railroad to American towns in four directions. The railroaders, speculators themselves, bet that if they built the means of transportation, the need for that transportation soon would come. To ensure that end, they sought to fill up the West with people who needed the railroad. By 1890, Doña Ana County, named for its original colony, had a population of 9,191. Las Cruces, in the direct path of the railroad, had become its lead city. In Sierra County, where Elephant Butte Dam one day would span its "broken and wild" valley, the population was 3,630.

Many Anglos who remained in the Mesilla Valley after the Civil War or had come with the railroad

bought choice parcels of Mexican land grant farms. The lands were not only better developed, they also had established community irrigation systems (Schonfeld La Mar 1984; p. 269). Rafaela Barela, for example, sold the family's land in the Santo Tomas de Yturbide Colony Grant, to the Mesilla Valley Irrigation Company in 1895 (Schonfeld La Mar 1984; p. 64).

Other Anglos acquired their farmlands the traditional way—they married into it. John D. Barncastle, a Union soldier with the California Column who came to the Mesilla Valley during the Civil War, married Josefa Melendres. By then, her father, Pablo Melendres, one of the 14 colonists who settled Doña Ana and its first mayor, had accumulated extensive land holdings (Colligan 1995; p. 42). Josefa eventually inherited all of her father's lands (Price 1995; p. 135).

Despite the influx of Anglos, Hispanic farmers still owned most of the land. Their property taxes were low and their farms self-supporting (Schonfeld La Mar 1984; p. 271).

Other farmers as well as ranchers were lured West by promises of land and opportunity. New immigrants encouraged other family members to join them. In 1899 Fate Kaufman, sounding as optimistic as the lead in the musical "Oklahoma," wrote from El Paso to his brother-in-law: "The west is opening up. Of certain, Ben, you can make a fortune drilling water wells for the thirsty ranchers around here" (Jarratt 1977; p. 25).

Arizona booster Sylvester Mowry had high praise for the Mesilla and Mimbres valleys in promoting his wish for a territory of Arizona (which would have included Southern New Mexico). He distributed letters from prominent visitors attesting to the "many rich, beautiful, fertile valleys, capable of producing corn, wheat, rye, oats, and vegetables to subsist a large population" (Clark 1987; p. 46).

By the late-1800s, most of the nation's prime farmlands already had been claimed. The passage of the Homestead Act had spurred settlement of the marginal lands of the West for dryland farming (Clark 1987; p. 45). In 1877 Congress fashioned a new law to fit those lands suitable only for irrigated farming. The Desert Land Act provided 640-acre tracts of lands to farmers for an initial 25-cents-anacre-investment. The land itself had to be incapable

of producing a crop without irrigation, of which the farmer was required to provide within three years of acquiring the land. After that period and proof of irrigation, the farmer gained title to the land for an additional one dollar an acre (Clark 1987; p. 45).

The Department of the Interior's John Wesley Powell, in reports to Congress before and after passage of the Desert Land Act, warned of the inherent limitations in settling the arid lands of the West. He said, in effect, that land without water had no value, that agriculture without irrigation could not survive, and that irrigation without a cooperative effort would not succeed (Clark 1987; p. 56).

As if to illustrate Powell's argument, in 1877 the Colorado Loan and Trust Co. under the Desert Land Act acquired lands in Colorado's San Luis Valley, location of the headwaters of the Rio Grande (Lester 1977; p. 31). By 1880 every piece of irrigable land along the length of the Rio Grande was under development (NM First 1988; p. 38).

Everyone from farmers to ranchers to miners had tapped into the river from Colorado to Mexico. During 1889 the Rio Grande was dry from July until late fall, preventing Mesilla Valley farmers from irrigating nearly two-thirds of their farmland (Schonfeld La Mar 1984; p.77). By the summer of 1902 the riverbed in the southern part of the valley was so dry that people began using it as a road (Granjon 1986; p. 44). Mexico protested to the U.S. Secretary of State claiming that while the United States had been able to sell millions of acres of land irrigated from the Rio Grande, the resulting water shortage has caused a \$35 million loss to Mexico in private and public wealth (Lester 1977; p. 40).

To help alleviate the problem, the El Paso city council, on the advice of Col. Anson Mills, decided to build a dam three miles above El Paso. There, half the flow of the Rio Grande would be diverted to Mexico and half to the United States. Col. Mills said the proposed dam would solve El Paso's flooding and drought problems, and resolve Mexico's claims against the United States for causing water shortages in the Juárez Valley.

Mills had served in the Union Army during the Civil War and had become a respected army engineer. His plan, however, fared poorly in Washington—which was fortunate for the Mesilla Valley (Lester 1977; p. 34). Mill's proposed dam at El Paso

would have created a lake 15 miles long and seven miles wide, destroying 40,000 acres of Mesilla Valley farmland (Clark 1987; pp. 1007, 1017, 1028).

Before long Las Cruces had its own proposal and Dr. Nathan Boyd to promote it. Dr. Boyd was married a woman from Australia whose father was a wealthy engineer and entrepreneur. Boyd joined the family business of sponsoring engineering projects all over the world. But Boyd's wife had tuberculosis, so he headed for the high, dry air of New Mexico. He bought the tubercular retreat, Dripping Springs, in the Organ Mountains and lived on a ranch nearby.

Boyd soon saw the economic potential of a dam on the Rio Grande and formed the Rio Grande Dam and Irrigation Company with the intention of building a dam at Elephant Butte, about 125 miles north of El Paso. Under Boyd's plan, landowners would relinquish one-half their land to the company in return for water rights to the other half. And to receive the water, farmers would then pay a perpetual rent to the company. "In controlling the water," Boyd wrote, "the company will, to a great extent, control the irrigable lands." When he failed to interest enough investors in the United States, he left for England where he convinced British investors to put \$1.6 million into the project (Lester 1977; pp. 51-53). The plan promised to make rich men of them all. In 1895 the Secretary of the Interior approved construction of Elephant Butte Dam, with the stipulation that it be built within five years (Clark 1987; p. 1020).

El Paso protested that a dam at Elephant Butte would make their dam useless and ruin their careful negotiations with Mexico. The El Paso proponents, citing an obscure law on tampering with a navigable river, received a court injunction halting construction at Elephant Butte. The case wound its way through the courts until May 3, 1903, when a judge ruled that the Rio Grande was not a navigable river. However, El Paso's stalling tactic meant failure for Dr. Boyd's great gamble. By missing the construction deadline, he lost the right to build the dam (Lester 1977; pp. 55-64). After two decades of court battles, Boyd died in Washington, D.C., his fortune lost (Scott Boyd personal communication 10/26/95).

Once again, El Paso pushed for its international dam. Residents of the Mesilla Valley fumed that the plan for the dam at El Paso was a "barefaced scheme of public robbery" (Lester 1977; p. 65). In the end, the two factions succeeded only in killing each other off.

And then the government stepped in, creating at that time the world's largest water development project. John Hay, President Roosevelt's Secretary of State, decided that a dam at Elephant Butte was a good idea and would provide enough water for the Mesilla Valley and El Paso, as well as Mexico. Hay persuaded the newly established Bureau of Reclamation to undertake its construction (Lester 1977; p. 74). As soon as the way for the dam was clear, water users in the Mesilla Valley and El Paso put aside their differences and organized to finance their share of the project costs. When the dam was completed in 1916—nearly a decade before Hoover Dam was built—it was the largest dam of its kind in the world and cost an estimated \$14 million (Lester 1977; p. 111). El Paso promoted the dam, saying "There are great opportunities here for home seekers and the El Paso Chamber of Commerce will gladly furnish detailed information on request." Las Cruces, too, championed its newly irrigated lands through the New Mexico Bureau of Immigration (Schonfeld La Mar 1984; p. 92).

The decade following the completion of the dam saw major changes in the Lower Rio Grande Valley. By the mid-1920s the water logging problems associated with the new dam had been solved with a system of drains. Farms were sold and resold, sometimes as many as eight times, as their owners either gave up on the enterprise or saw profit in the sale (Schonfeld La Mar 1984; p. 116). Farms took on a more geometric look as lands were cleared and leveled to better take advantage of the irrigation techniques. Cropping patterns also changed as farmers devoted their lands to cash crops such as cotton.

With the assurance of a steady water supply, farmers by 1926 had increased their irrigated acreage to 142,523, up from the pre-dam total of 38,876 (Lester 1977; p. 92). By 1930 the population of Doña Ana County had reached 27,455, a 40 percent increase in ten years. To the Lower Rio Grande that had been settled by Mexican colonists came a new wave of water developers. Some simply just ventured north from Mexico while others took a longer route.

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The Enriquez family has been farming in the valley since Simón Enriquez settled on the Refugio Civil Colony Grant, six generations ago. Their irrigation ditches followed the contours of the land toward an ever changing river course. Simón Enriquez grew wheat, barley, beans, alfalfa and corn on his farm near La Union and the family bartered for whatever supplies they needed. His son Jesús Enriquez switched to cotton in about 1925 to help pay his share of the new dam's construction costs.

Jesús eventually divided up his 4,000 acres of farmland among his ten daughters and two sons. Much of the land was eventually sold outside the family. Other shares, however, were bought out and combined to make larger farms. Enriquez farmers today grow chile, cotton and alfalfa on family farms south of Las Cruces and in Chamberino (Raymundo G. Enriquez interview 4/24/91).

José Fernandez arrived in the Mesilla Valley from Mexico by way of El Paso and San Miguel. By 1916 he and his brother made a living cutting wood down by the river and hauling it by the wagon load to sell to New Mexico A&MA College at Las Cruces. Fernandez also worked part-time for Hiram Hadley, the college's first president. For \$500 Hadley sold the young man five acres of land directly north of his home along what had once been the Rio Grande's riverbed. There Fernandez grew alfalfa, cantaloupe and later cotton. Eventually he would own six pieces of property along the old river course.

Today, Hiram Hadley's old two-story home, polished and painted, sits on one corner of a busy intersection. All but one of the old Fernandez farm properties has been sold to retail businesses. One section, however, a plowed field across from Las Cruces High School, has been donated by the Fernandez family to New Mexico State University in memory of the patriarch Jose (Eduardo Fernandez interview 4/22/91).

About the time Fernandez bought his first farm, another immigrant, this time from Japan by way of Nebraska, settled on rented land in Doña Ana. By 1925 John Nakayama had saved enough money to buy his own land. But because U.S. law forbade property ownership by foreign-born Orientals, he bought the land in the name of his son Carl who had been born in Nebraska in 1916 (Tod 1994; p. 23).

The Nakayama farm grew from 25 to 105 acres, plus additional leased acreage. Today the Nakayamas still farm in the Mesilla Valley. John Nakayama's younger son Roy, before his death in 1988, was a noted horticulturist at New Mexico State University whose research led to improved strains of chile and pecan varieties.

In 1926 a third family of farmers arrived in the Mesilla Valley whose name would become synonymous with a new crop—pecans. W.J. Stahmann had moved his family from Wisconsin to Texas, settling near Fabens in 1909. There they produced honey, and grew tomatoes and cotton. The enterprise eventually included a tomato canning plant, a cotton gin, and a cotton compress (Hanley 1992; p. 1).

In 1926, W.J. and his son Deane bought 2,900 acres of the Santo Tomas de Yturbide Colony Grant. Ten years later Deane bought another 1,100 acres of the Mesilla Civil Colony Grant. Of the total, only 150 acres had been cultivated; the remainder consisted of sand dunes and bosque. Deane developed a machine called the "hootenanny which used the force of pumped water to level the land (Hanley 1991; p. 2). This combination of ingenuity and organization became a hallmark of Stahmann Farms, and made it at one time, the largest pecan orchard in the world.

In 1922 J.L. Esslinger also began farming in the valley. He had come up from El Paso and settled just north of La Mesa where he went to work clearing the bosque. He was one of the first farmers in the valley to plant cotton. Today his grandson Gary Esslinger is manager of Elephant Butte Irrigation District (Esslinger interview 6/2/76).

By the time World War II was over, New Mexico had been put on the map. The whole world had heard of Los Alamos, of White Sands. People were taking up their lives again, and they were taking them up in the cities. Albuquerque's population alone had grown from 35,000 in 1940 to 175,000 by 1955—a 500 percent increase. In two decades Doña Ana County had doubled its population, reaching the 60,000 mark in 1960.

While population growth did not have an immediate effect on water development, the state's water users began to think in terms of water *reallocation* and water management (NM First 1988; p. 39). Water quality took on increasing importance and recreational users began to promote the value of what has

become known as the "multiple use" of water resources. Municipalities, those cities experiencing the most growth, also began to look for additional sources of water for their residents.

New Mexico state law recognized these newer demands when in 1970 the state supreme court ruled that agriculture was not the only specific ultimate use which constituted a public purpose. Any "beneficial use" of water contributing to the welfare of the state, the court ruled, could be considered as a beneficial use (Clark 1987; p. 672).

By then virtually all of New Mexico's surface water had become fully appropriated, meaning all rights to these waters were already claimed (NM First 1988; p. 29). In addition, about 90 percent of the water use in the state in 1969 was used for agriculture (including reservoir evaporation) (Mach 1978; p. 6).

Still the population grew. In the decade of the 1970s the population of Doña Ana County grew by 10,000 people and by 1980 the total reached 96,340. Speakers at the 1978 New Mexico Water Conference addressed the need for water planning that considered a variety of water users. Darrell Mach, Regional Planning Officer for the Bureau of Reclamation, reported on a joint study by the bureau and the State of New Mexico that assessed the state's future water needs. He said that one of the major assumptions used in the study was that "increased needs for municipal, industrial, and mining uses would be met by retirement of irrigated agriculture" (Mach 1978; p. 8).

At that time, however, irrigated agriculture in the Lower Rio Grande was a major economy. Some 90,000 acres were under irrigation, with irrigated crop income totaling \$40 million. Doña Ana County regularly outproduced other counties in cash receipts for all farm commodities, bringing in some \$115 million in 1980 (NM Ag. Stats. 1991, pp. 65-69). County farms outproduced the rest of the state in growing chile and vegetables, fruits and nuts, as well as Pima cotton (NM Ag. Stats. 1991, pp. 65-69).

And while fish were merely guests sharing Elephant Butte's waters, they too figured respectfully in the state's economy. According to a long-term fishery study by New Mexico State University, sport fishing adds about \$100 million to the state's income each year (*Divining Rod*, Nov. 1983). Elephant Butte State Park generates about \$750,000 a year in user fees alone (Johnson 1995; p. 12).

But in 1980, the biggest challenge in water reallocation in the Lower Rio Grande came not from its own water users, but from its next door neighbor. On September 5, 1980, the City of El Paso filed suit against the state of New Mexico for the right to transport New Mexico groundwater across the state line to El Paso, the nation's 25th largest city.

Often these days, in light of the tug-of-war over land and water, I'm reminded of this exchange in Edward Abbey's Fire on the Mountain:

"Why do they call it Thieves' Mountain," I asked...

"It belongs to the Government," Grandfather said.

"Yes, the Government stole it from the cattlemen," Lee said. "And the cattlemen stole it from the Indians. And the Indians stole it from the—from the eagles? From the lion? And before that—?" (Abbey 1978; p. 39)

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