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“Down to the Gila”: A. J. Chandler’s Desert Land Scheme and the Gila River Indian Reservation, 1891–1911

David H. DeJong

On February 22, 1895, the *Mesa Free Press* (Arizona Territory) reported that the efforts of Dexter M. Ferry and Charles C. Bowen to reclaim more than 18,000 acres “of desert down to the Gila [River] seem[ed] close to realization under Dr. Alexander Chandler’s management.”¹ Ferry, founder and president, and Bowen, secretary, of the D. M. Ferry Seed Company of Detroit, partnered with Alexander John Chandler in a scheme to develop thousands of acres of land south of the small Salt River Valley town of Mesa.² Ferry and Bowen were millionaires who invested in a myriad of territorial enterprises that included newspapers, banks, silver and gold mines, mercantiles, railroads, land, and irrigation canals.³ They also invested in the Hudson Reservoir Company, which not only had the rights to the Tonto (Roosevelt) Dam site, but also included a proposed irrigation canal connecting the Salt River Valley with the Gila River and Casa Grande valleys.

Ferry, Bowen, and Chandler were part of an intricate speculative venture in the Salt River Valley that included millionaire timber tycoons Simon Murphy (uncle of territorial Governor Nathan “Oakes” Murphy and his brother Frank) and Russell Alger, who served as President William McKinley’s secretary of

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war. The venture also included Ferry's son-in-law, Elton Hooker, who was chief engineer for New York State's Public Works.⁴ Ferry was well-connected politically, having served as chairman of the Michigan Republican State Central Committee and a delegate to the Republican National Convention in 1892 and 1904.⁵

Ferry and Bowen were "the financial conduit from Michigan to Mesa" for a scheme devised by A. J. Chandler that resulted in the dubious acquisition of thousands of acres of desert land south of Mesa and adjacent to and north of the Gila River Indian Reservation (see fig. 2).⁶ In an effort to provide water to their southeast Salt River Valley land holdings, Chandler, Ferry, and Bowen engaged in a number of business ventures, including organizing the Consolidated Canal Company, constructing the Consolidated Canal, investing in the Hudson Reservoir Company, and on May 2, 1893, filing for a dam and reservoir site at the Buttes on the Gila River.⁷ For the latter effort, Chandler traveled to Europe seeking to raise capital for the proposed dam located twenty miles above the Gila River Indian Reservation.⁸ Any conveyance system from the dam to Chandler's growing ranch would necessarily cross the Pima Reservation.

In large part because of the economic depression of 1893 to 1897, Chandler's Buttes Dam initiative was unsuccessful. He then turned to the Gila River Indian Reservation in an attempt to indirectly secure the cession of half of the reservation and force the Pima to accept groundwater wells in the east north-central part of the reservation, where the federal government would consolidate the Indians in the Santan district. If successful in relocating the Pima, Chandler stood to gain access to the waters of the Gila River, a situation he endeavored to fully exploit.

Chandler and his Detroit investors were men of persuasion who took advantage of a series of poorly written, loosely interpreted, and badly managed federal laws in the latter nineteenth century and first decade of the twentieth. This manipulation of federal law occurred in an era when tribal nations did not have federally recognized rights to water resources. Prior to 1908, when the US Supreme Court recognized tribal rights to water in its *Winters v. United States* ruling, tribes were unprotected from those who might deprive them of the remaining scarce water resources in the West, and in some cases for decades after. Not until *Winters* did the Supreme Court acknowledge that tribes and the federal government acting on their behalf had implicitly reserved water in sufficient quantities to fulfill the purpose for which tribal people had agreed to reside on reservations—to serve as a permanent homeland.⁹

Chandler initiated a battle in the central Arizona Territory river valleys over control of scarce American Indian land and water resources. His efforts used his connections to high-ranking officials to exploit ambiguous federal

resource policies. In so doing, Chandler and his well-heeled political and speculative partners on the south side of the Salt River Valley pitted themselves against the economic and cultural survival of the Pima and Maricopa people residing on the Gila River Indian Reservation.¹⁰

A. J. Chandler was born in Quebec, Canada, and moved to Detroit after graduating from the Montreal Veterinary College in 1882. There he was employed by the D. M. Ferry Seed Company, which was seeking to develop a drought-resistant alfalfa seed and searching for land in central Arizona Territory. Five years later, Chandler arrived in Prescott as the territorial veterinary surgeon but purportedly employed by the Ferry Seed Company to oversee and manage the acquisition of desert land for “the purpose of raising seed.”¹¹ Ferry and Bowen had invested heavily in the latest railroad scheme in Phoenix, the extension from Prescott of the Santa Fe, Prescott, and Phoenix Railroad, which in 1901 they sold to the Santa Fe Railroad for \$3 million.¹² Within a few months of his arrival in the territory, Chandler was in the Salt River Valley and quietly purchased two quarter sections of desert land: one at the bifurcation of the Mesa Canal and the future Consolidated Canal, and the other at the site of Chandler’s future water power plant, where a bluff along the Salt River dropped thirty-five feet near the Cross Cut Canal’s intersection with the Tempe Canal.¹³

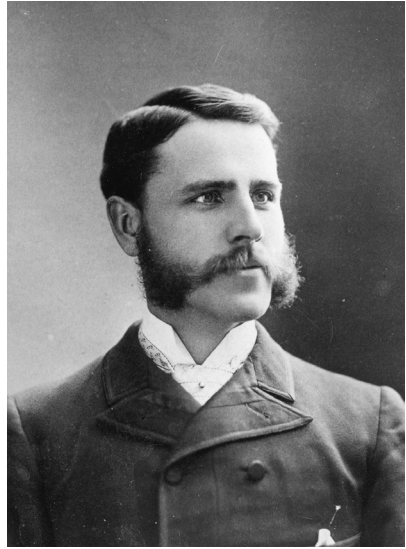


FIGURE 1. A. J. Chandler around the time of joining the D. M. Ferry Seed Company of Detroit, Michigan, ca. 1883. Image courtesy of the City of Chandler, Arizona, photo 01-46-1.

Chandler, Bowen, and Ferry acquired control of a series of south side Salt River Valley canals and, in January 1891, organized them into the Consolidated Canal Company. Chandler’s goal was to consolidate the headworks of all south side canal headings on the Salt River and thereby conserve water that he intended to use on his growing ranch south of Mesa. As an added benefit, he would pass the combined water resources over the bluff to generate hydroelectric power to operate groundwater pumps being installed to serve his ranch.¹⁴ Under the guidance of his personal irrigation engineer William Code, Chandler constructed the Consolidated Canal to convey Salt River water to his ranch, completing the canal in April 1893. Chandler’s land on the Consolidated Canal, however, had junior water rights and, in times of

shortages, he could not be assured of irrigation water since senior appropriators would receive all of their water before he received his.¹⁵ In addition to his canal company, Chandler organized his land venture under the moniker Mesa Improvement Company.

Chandler and his "Southside syndicate," as they came to be known in the 1890s, laid claim to 18,000 acres of land within T1S, R5E and T2S, R5E, constituting what is today the City of Chandler. Following the advice of attorney and one-time receiver of the General Land Office, Daniel H. Wallace, Chandler used hundreds of fraudulent Desert Land Act dummy entries and false affidavits to acquire his ranch, which in time made him and his associates wealthy.¹⁶ Aware that his ranch had little value without water, Chandler, in addition to his Salt River Valley schemes, manipulated federal Indian resource policy in an attempt to gain access to the waters of the Gila River and acquire thousands of acres of land on the Gila River Indian Reservation, which lay south of and adjacent to his ranch.

Chandler's neighbors to the south were the Pima and Maricopa, who were well known for their friendliness and hospitality to sojourners passing through their villages along the Gila River in the eighteenth and nineteenth centuries. The Pima were fine agriculturalists until the first diversion of their water above the reservation in the latter 1860s. The Indians cultivated 15,000 acres in the Gila River Valley by 1860 and were widely considered a wealthy agricultural people.¹⁷ At mid-century, they expanded their irrigation system, cultivating barley, wheat, corn, beans, and melons, supplying California 49ers, military expeditions, and a large part of the territory that extended from the mining districts near Prescott to the upper Santa Cruz River Valley south of Tucson. They were, Pima elder Juan Thomas stated in 1914, "prosperous and independent, getting two crops a year."¹⁸ By the early 1870s, diversions in the Upper Gila Valley villages of Safford, Duncan, and Virden further diminished the river's flow until the Pima were, as elder Havelena lamented, "reduced to poverty and sought aid from the government."¹⁹ Drought between 1875 and 1883 together with additional river diversions negatively impacted Pima growers, whose cultivated lands dropped from 15,000 acres in 1860 to fewer than 5,000 by 1893. This caused great consternation among the Pima, with village chief Chir-Pirke explaining that many Pima were unable "to irrigate [their] farms [and we] were forced to abandon them little by little."²⁰

By the 1890s, water only sporadically flowed across the Pima Reservation, and the years between 1892 and 1904 were a time of severe drought, starvation, and deprivation. Limited irrigation occurred near the Blackwater, Sweetwater, and Gila Crossing districts but only because the underflow of the river rose to the surface through alluvial springs the Pima called *shon*. These areas afforded a few thousand acres of farming with limited results, although

three-quarters of the Pima grew nothing.²¹ By 1900, the once-fertile fields of the Pima “became barren through the loss of their irrigation water.”²²

On July 10, 1900, the *Los Angeles Times* reported that more than 5,000 Pima and Maricopa faced harsh times due to loss of water. “The Pimas and Maricopas have been, until recently, a self-sustaining nation. They raise their crops of grain and corn with a skill equal to that of the whites.” Settlers, however, used the “operation of the desert land act” to “deprive the Indians of their water supply, and for the past five years they have been left on the desert without water for their crops.” Consequently, they were “put in the position of either having to steal, starve or be fed as public wards, and the government has been forced to issue rations to them.”²³ The Pima faced abject poverty.²⁴

In the latter nineteenth century, few American Indians—and no Pima—were US citizens or had rights that economic and political interests were bound to respect. Chandler understood this and, through his political connections, influenced federal bureaucrats and policy makers in the Salt River Valley and in Washington, DC. Chandler and his partners’ scheme for gaining access to the Gila River Indian Reservation was straightforward. Chandler had to convince federal officials that pumping groundwater beneath the reservation was the best means of providing water to the Pima. Then the Indian Service had to induce the Pima into believing there were no other sources of water than groundwater.

Chandler realized the Pima would need irrigation water before the government could subdivide the reservation into Indian-owned private parcels called allotments. Once this occurred, the Indians would be consolidated on the north bank of the Gila River in the Santan district, in an area where William Code proposed that the government construct groundwater wells. Only then could federal officials quietly detach 180,000 acres of allegedly worthless reservation land west of and adjacent to Chandler’s ranch.²⁵ To supplement the groundwater available to his ranch, Chandler looked to Salt River water delivered through the Consolidated Canal and Gila River water conveyed through the construction of a floodwater channel on the reservation, with either source of water increasing the value of his land and his bank stock.²⁶

In 1900 and 1901, the National Irrigation Association under the leadership of California water attorney George Maxwell popularized Pima deprivation and starvation with the hope that using the Indians’ plight would persuade Congress to adopt a national reclamation policy. As a result, members of Congress expected the first federal reclamation project within the territory to be on the Gila River for the benefit of the Indians on the Gila River Indian Reservation. The San Carlos site on the western edge of the San Carlos Apache Reservation was preferred since it would benefit public lands in the Florence-Casa Grande Valleys above and south of the Pima Reservation—an important

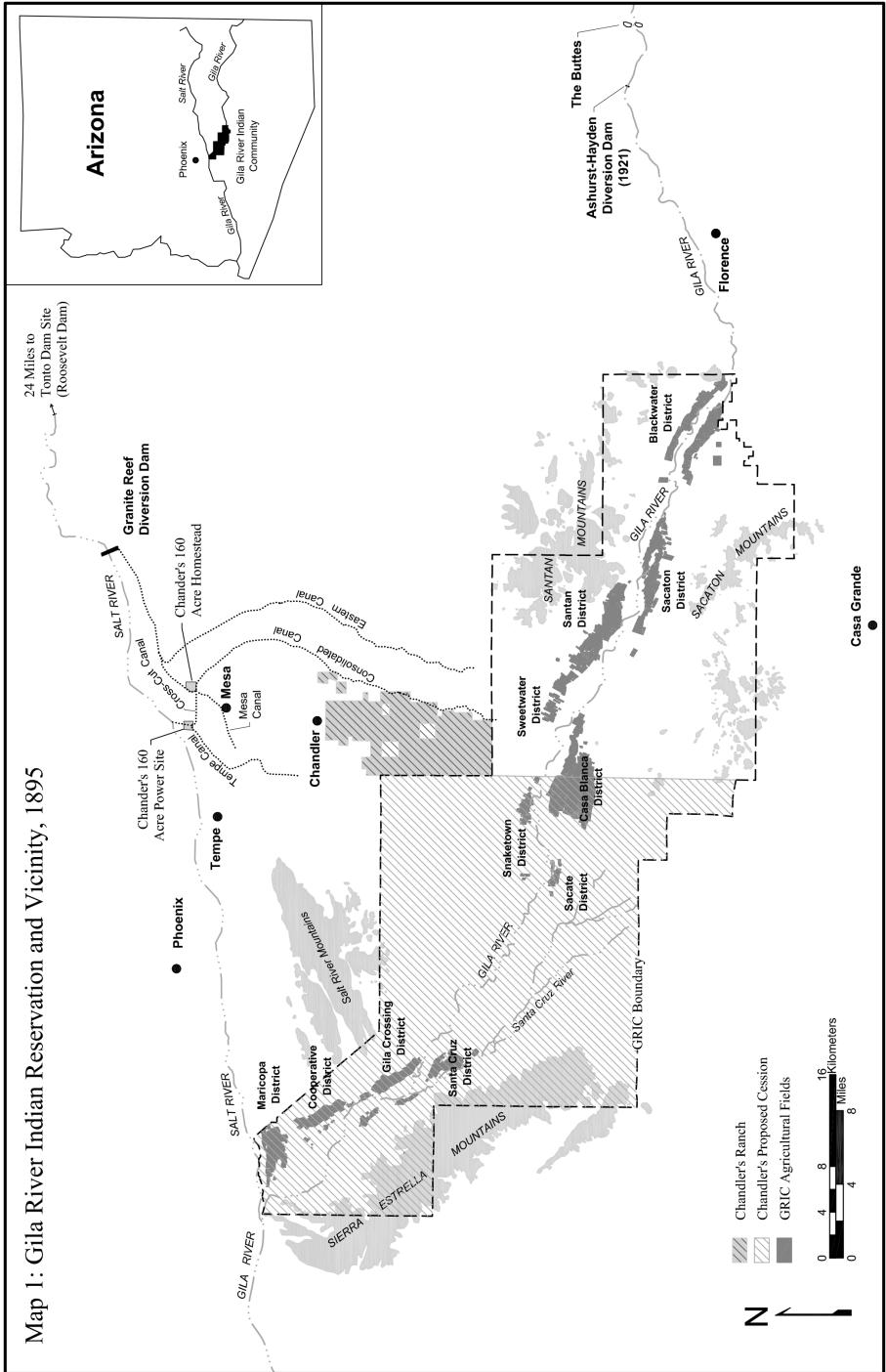


FIGURE 2. Gila River Indian Reservation and Vicinity, 1895.

consideration since the reclamation act required a public benefit. Moreover, the estimated cost of the proposed dam at San Carlos was one-third that of the Tonto Dam on the Salt River. The San Carlos dam site was also accessible by railroad and would correct a widely known and egregious moral wrong perpetrated against the Pima—the theft of their water by upstream settlers in Florence and the upper-valley Mormon towns in the Safford, Duncan, and Virden Valleys.

Speculative interests in the Salt River Valley, however, sidetracked the San Carlos site and persuaded Congress to amend the reclamation act just weeks before its passage to allow privately owned lands to be included in federal reclamation projects. The Salt River Valley Water Users' Association, together with Bowen and Ferry (before his death in 1900) in their roles with the Santa Fe, Prescott, and Phoenix Railroad, hired attorney Maxwell to lobby federal officials to authorize the Salt River project.²⁷ Maxwell was a good friend of conservationist Gifford Pinchot, who in 1900 introduced Maxwell to Theodore Roosevelt, then governor of New York.²⁸ In September 1901, with the assassination of President McKinley and Vice President Roosevelt's ascent to the presidency, Frederick Newell of the soon-to-be-created Reclamation Service and Pinchot became Roosevelt's closest advisers on national resource issues.²⁹

Soon thereafter, rather than fostering the orderly development of yeoman farms, the Reclamation Service went into the hands of land speculators.³⁰ The *Los Angeles Times* condemned the "Phoenix schemers" who convinced federal officials to abandon San Carlos and substitute the Tonto site in its place.³¹ The Pima, "whose water the Interior Department had permitted to be stolen," continued to suffer from deprivation and poverty as they waited "for the Government to keep faith with them."³²

While not alone in deciding the fate of the San Carlos site, Chandler was one of the more influential Salt River Valley citizens, especially when considering that for eleven years, during the time Chandler acquired his ranch, William Code served as Chandler's personal irrigation engineer. Code also oversaw the construction of the Consolidated Canal and was involved in the filing on the Buttes Dam site on the Gila River. Moreover, Code was financially connected with the Ferry Seed Company, of which Chandler was a stockholder, and he was vice president of Chandler's Mesa Bank.³³ His arrival in the summer of 1902 as irrigation engineer at the Pima Agency in Sacaton was no coincidence.

Implementing the Gila River scheme depended upon the division of Indian land in severalty. While allotment was not a new policy, its application on the Gila River Indian Reservation was directed as much towards water as the land. Under the reclamation act, non-Indians developed large-scale irrigation projects that drew—or potentially drew—upon Indian water resources. These



FIGURE 3. A. J. Chandler and William Code remained lifelong friends. Code, left center, and Chandler, center back, at a birthday party held in honor of A.J. Chandler, ca. 1948. Image courtesy of the City of Chandler, photo 01-46-5.

projects included the Salt River project and what would later become known as the San Carlos Irrigation Project, both of which affected the Gila River Indian Reservation. Driven by Chandler's appetite for land and his exigency to provide water to his ranch, allotment at Gila River was transformed into a radically different policy than the original gradualist severalty policy envisioned by its framers in the 1880s. Land ownership was no longer a defining point in the "civilization" of the American Indian; it was now a pawn in the economic integration of Indian resources into the larger polity.

Code left the employ of Chandler in the summer of 1902 and went to work for the US Indian Service, where he was dispatched to the Pima Agency as Indian inspector. Within a year he became the first chief irrigation engineer for the Indian Service with direct access to the commissioner of Indian affairs and other high-ranking Interior Department officials, including Charles Walcott and Arthur P. Davis of the US Geological Survey, Louis C. Hill and Frederick Newell of the Reclamation Service, and lobbyist George Maxwell. Code also happened to be the engineer member of the Salt River Valley Water Users' Association, which met weekly to consider all possible means of securing water for the Salt River Valley.³⁴

Once in the Indian Service, Code “never regarded it as feasible to . . . fight for [Pima] water rights,” believing it was, in his words, “utterly impractical” to defend them.³⁵ Code worked with Newell, Hill, Walcott, and Davis to propose a scheme whereby Congress would provide reimbursable funds to develop groundwater wells in the Santan district of the Pima Reservation and construct a floodwater canal to convey Gila River water to the reservation.³⁶ Code was adamant that groundwater was the only means of restoring water to the Pima and it was at his insistence that the Indian Service no longer advocated the construction of a dam at San Carlos.³⁷ Chandler’s ranch was largely excluded from the Salt River project boundaries due to its inferior rights to Salt River water, and in 1901 just 1,320 acres of Chandler’s ranch received irrigation water from the Salt River under the Consolidated Canal. To make good on his scheme, Chandler needed access to surface water to augment his groundwater. With only junior rights to Salt River water, Chandler looked once again to Gila River water. He also coveted additional land west of his ranch, lands belonging to the Gila River Indian Reservation.³⁸

Code made several irrigation investigations on the reservation and, working with Hill and Newell, proposed groundwater wells for the Pima in place of Gila River water that might be impounded behind the proposed San Carlos reservoir. Using their influence, the three men laid out a scheme that was deleterious to the rights of the Indians. As chief irrigation engineer of the Indian Service, Code met with Arthur Davis of the US Geological Survey to discuss ways to secure water for the Pima short of a San Carlos dam. Code then offered Davis a solution: water could be found for the Pima at the cost of 180,000 acres of land (see fig. 2). If Davis would recommend the scheme to Interior Secretary Ethan Allen Hitchcock, Code promised to see to it that it was approved.³⁹ Already having access and rights to Gila River water at no cost, the Pima now were to be provided with groundwater for which they would be expected to pay all pumping charges. This in turn would free up Gila River surface water for other appropriators.⁴⁰

As Maxwell was well aware, Pima water deprivation was a central feature of the National Irrigation Association’s lobbying for federal reclamation. Nearly every major newspaper in the country featured stories of Pima deprivation. The local and national press supported a Gila River site for the territory’s first reclamation project until late 1902, when Phoenix newspapers began lobbying for the Tonto site. Presbyterian missionary Charles H. Cook, ministering among the Pima at Gila River, was fully cognizant of what was transpiring. The Reclamation Service, Cook opined, went into the hands of “grafters, who I am afraid have the Salt River Water Users’ Association and Mr. W. H. Code to aid them.”⁴¹ Hitchcock was on record as supporting the San Carlos site, but

with the Indian Service no longer advocating construction of the reservoir, federal support quietly transferred to the Tonto site.⁴²

With the passage of the Indian Appropriation Act of 1903, Congress provided \$150,000 for general irrigation works on Indian lands, with the secretary of the interior given authority to administer the funds at his discretion. Using this authority, Code began drilling on-reservation wells. The overall plan was to install ten pumping stations, each capable of providing enough irrigation water for about 1,000 acres of Indian land. The cost of these wells was estimated at \$80,000, with \$460,000 needed to construct a power plant below Tonto Dam in the Salt River Valley, making a total appropriation of \$540,000 necessary. Since these funds were reimbursable, the Pima would be expected to repay the costs after they received fee simple title to their allotments and the land became subject to state and local taxation rather than remaining in federal trust.

Code pushed groundwater wells for several reasons. According to testimony given by Herbert Marten, financial clerk at the Pima Agency, at hearings

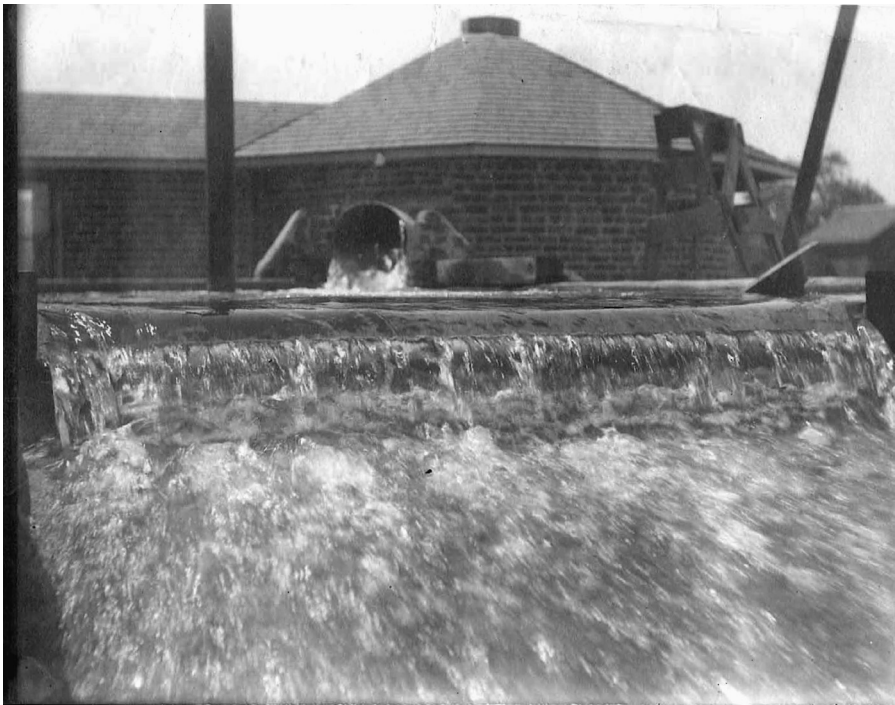


FIGURE 4. William Code pushed a series of groundwater pumping stations such as this one in Sacaton, ca. 1914. Developing groundwater wells in the Santan area allowed Code to justify elimination of San Carlos Dam and Reservoir. Image courtesy of the National Archives and Records Service, Washington, DC.

held by the Senate's Committee on Indian Affairs in 1912, the primary reason for the wells was that the Salt River project "was constructed at an enormous expense, and by selling electricity [the Salt River project] hope[d] to be able to reimburse themselves for that expenditure." Selling power to the Pima reduced the cost of the project and provided water "for idle speculator lands" such as Chandler's ranch.⁴³ Rather than providing the Pima with water from the Tonto reservoir, water to which the Pima had rights (in addition to their Gila River water rights), Code proposed electricity to pump groundwater at an estimated cost of \$4 an acre, leaving speculators such as Chandler with access to Salt River water and, at least for Chandler, access to Gila River water as well. As the 1912 hearings revealed, "Water which should be running over the [Pima] lands . . . is now running on this 18,000 acre tract of speculative land."⁴⁴

Moreover, Code pushed groundwater wells in order to gain access to the floodwaters of the Gila River. If sufficient water from the Salt River project was unavailable, Code and Chandler desired Gila River water to reduce the salinity of the groundwater they pumped from beneath the Chandler ranch. At the same time, reservation lands to the west of Chandler's ranch would constitute lands Code advocated that the Pima sell under the scheme he and Chandler designed.

The Pima did not desire groundwater, believing it caused sickness. Missionary Cook reported the Indians complained such water caused bowel and kidney problems and killed cattle and horses.⁴⁵ In a letter to Interior Secretary Ethan Allen Hitchcock and Commissioner of Indian Affairs Frances Leupp, Pima Chief Antonio Azul requested stored water from the Salt River project that could be transported by extending the Consolidated Canal or the more easterly and parallel Highland (Eastern) Canal to serve 15,000 acres on the reservation, a proposition that was more than feasible.⁴⁶ Pima Agency clerk Herbert Marten produced a map prepared by engineer H. A. Prine in February 1906 to demonstrate to the House Committee on Indian Affairs that the government could secure Salt River water "through the [Consolidated] Canal for the irrigation of a considerable area" on the reservation.⁴⁷ Code, however, did not share Azul's view and did not wish to include Pima land in the Salt River project, as it would interfere with his land scheme by negating the government's construction of a power plant on the Salt River below Tonto Dam to transport electricity to the reservation.

The funds Code requested for ten wells and electrical power paid a substantial portion of the cost of the hydroelectric power plant below Roosevelt Dam. Code was "willing to pay the [Pima's] proportionate part" of the Salt River project using Pima funds, even though the Pima were never consulted on the matter.⁴⁸ Commissioner of Indian Affairs Francis Leupp agreed with Code's scheme since, according to the "beneficial use doctrine," he believed any water

rights the Pima had would be permanently lost if the land was not immediately irrigated. Under this Western legal concept, non-use of water for more than five consecutive years resulted in forfeiture of water rights to other beneficial users; local courts would assert that agricultural, municipal, and industrial uses of water were the only beneficial uses.

The Sacaton Contract, as the power agreement came to be known, spelled potential doom for the Pima. Signed by Interior Secretary James Garfield on behalf of the Pima, and Benjamin Fowler and Frank Parker on behalf of the Salt River Valley Water Users' Association, the contract provided the Association with a significant customer for its electrical power. The success of the Pima—and their utilization of groundwater—was now dependent on the completion of Roosevelt Dam and the generation of electrical power in the Salt River Valley.⁴⁹ As significantly, the power agreement left the door open for Chandler to gain access to the waters of the Gila River as part of a floodwater canal the Reclamation Service would construct for the Pima. Such a canal would convey flood flows from the Gila River north and west of Sacaton, in accord with Chandler's intent to extend the canal and mix such flows with groundwater. The question was whether the water was for on-reservation Pima use or use on Chandler's ranch. Since Congress had already approved the funding for the Sacaton Project, the Indian Service transferred \$100,000 of Pima funds to the Reclamation Service.

Under the contract, 10,000 acres of reservation land in the Santan area would be part of the Salt River project for determining costs, including operation, maintenance, and replacement of the system's canals, power house, and transmission lines, but the Pima would not become members of the Salt River Valley Water Users' Association. The contract included the caveat that once the Pima became owners severally in fee simple—and at the discretion of the secretary of the Interior—their lands could be made part of the Association. Under no circumstances, however, was water to be furnished to the reservation.⁵⁰ Former territorial governor and judge Joseph Kibbey, who drafted the contract, admitted non-Indians would never have entered into such an agreement. Kibbey further admitted he was only concerned with the interests of the Salt River Valley water users and accepted the advice of Code, Newell, and Hill as to the propriety of the contract; indeed, he never asked "to see their credentials" and always assumed "that they represented the Government."⁵¹ When the Interior Department approved the contract, the Indian Service committed itself to a policy that complemented the scheme laid out by Chandler. Once the groundwater project was initiated, the Pima would be unable to pay the costs associated with the construction and operation and maintenance charges of the project, thereby forcing them to sell a portion of their reservation.⁵²

The Pima argued that the groundwater scheme was not only immoral and illegal but also was destined to bankrupt them. Government engineers estimated construction of the San Carlos dam at \$1.038 million and believed it was capable of serving 60,000 acres of Indian land. The annual expenses were estimated at \$1.60 per acre. This annual cost, Marten offered, would be \$96,000, or \$144,000 less than the groundwater scheme.⁵³ Moreover, a study by the University of Arizona projected the life span of the groundwater pumps at just ten years, necessitating an additional annual expense calculated at 20 percent of the initial capital investment.⁵⁴

With the Sacaton contract in hand, the Santan well project provided Code with the means to detach the western half of the reservation and throw it open to speculators. With the completion of the Salt River project, this land just west of and adjacent to the Chandler ranch would be highly valued, as it was susceptible to irrigation from the Salt River. Since the Pima were obligated to repay \$540,000 under the Sacaton Project, Newell now advocated the opening of the western part of the reservation that he believed was not “utilized or occupied by the Indians, [but] which may have some value in the future.”⁵⁵

Davis concurred with Newell’s position that the project would be repaid through the sale of reservation lands. When Leupp was informed, he referred the matter to Code, who, having devised the plan, believed the whole matter “extremely favorable to the Indians.” Code did make two exemptions to the land to be sold. He excluded 5,000 acres around Gila Crossing where there was seepage water available, as well as 1,500 acres at Maricopa Colony, which had Haggard Decree rights to Salt River water under a 1903 territorial court decision that only applied to the Maricopa on the western end of the reservation.⁵⁶ Although Code initially favored allotment for the Pima at Casa Blanca (with 12,000 acres), he later changed his mind and worked to relocate these Indians to the Santan district as well, an area into which the government would also construct the floodwater canal, which Chandler hoped to extend and utilize as well.⁵⁷

To finalize the scheme, Code proposed—without the knowledge of the Pima—irrigating 10,000 acres of reservation land on the north side of the Gila River at Santan, where he anticipated removing all the Pima and Maricopa.⁵⁸ Irrigating 10,000 acres was too few to meet the needs of the Pima, even with exemptions at Maricopa Colony and Gila Crossing. Newell admitted this, but believed that Pima growers only needed an “average of 4 or 5 acres of good irrigated land” to support their families. This was clearly inequitable: in reality the Pima had 200,000 acres of irrigable land that lay fallow due to water limitations and Code’s scheme to consolidate them in Santan, representing “a big financial loss” to the Pima.⁵⁹ Limiting the Pima to four- or five-acre allotments with water was also discriminatory, as under the Desert Land Act non-Indians

could acquire 320 acres and, under the Reclamation Act, water for up to 160 acres. In concluding that it would “not be a very expensive matter to provide such tracts with facilities for water,” Newell acknowledged the limited acreage was designed to keep irrigation costs to a minimum. It would simply require the development of wells near Santan and the removal of the Indians to the “land around the wells.” Such wells, Newell continued, would “supply the needs of the Indians [and] materially extend the cultivated area [of non-Indians] without exhausting the available supply.”⁶⁰

Assuming that there was an adequate source of water for the Pima, Congress appropriated the first funds for the Sacaton Project on March 3, 1905.⁶¹ In January of 1906, John Granville arrived on the reservation to begin a preliminary survey in advance of allotment. With the Sacaton contract in place, work began on constructing an electrical line to the north boundary of the reservation. In April 1908, Congress gave the secretary authority to enter into agreements with the Reclamation Service to construct Indian irrigation projects.⁶² Using this authority, work on the first well for the pumping plant began on April 20, 1908.

The Sacaton Project included water from the ten irrigation pumping plants proposed by Code and the construction of two canals. The larger canal was designed to carry floodwater from the Gila River beginning at a point three and one-half miles east of Sacaton, heading at the site of the future Sacaton Diversion Dam, while the smaller ditch branched off and ran parallel to the larger Santan floodwater canal but carried well water only.⁶³ Construction began on the new Santan floodwater canal in October 1909, ostensibly for the benefit of the Pima. But the Pima questioned the necessity of the canal, as in their view its “intake on the Gila River was at a higher level than necessary for the Indian lands to be irrigated.” The Pima utilized the old Santan Canal (modern Canal 10) to irrigate their land. The elevation of the Santan floodwater canal appeared to the Indians to be what was necessary to convey water to reservation lands west of Chandler ranch, land that Code proposed to sell and Chandler desired to purchase. The canal itself ran along a high ridge in the north-central part of the reservation before dropping through a series of grades. But then it mysteriously bifurcated, with a smaller branch heading toward Santan and the larger fork continuing northwest in the direction of the Chandler ranch. Rumors were rampant that Chandler manipulated the elevation of the floodwater canal in order to convey Gila River water to his ranch.⁶⁴

The Pima learned of the Chandler scheme in 1904 and “it came,” as missionary Cook scolded Leupp, “like a thunder clap out of the clear sky.” At first the Pima refused to believe such a course of action could be true. Then, Cook lamented, the Indians learned “the plot had been laid secretly.” The Pima opposed any scheme to dispossess them of their land, as the tract Code

proposed to sell could “be irrigated from the Tonto Reservoir and the Gila and Salt Rivers,” a fact “well understood by those who advocate the sale of these lands.” This “explain[ed] their haste and secret endeavors,” Cook chided the commissioner.⁶⁵

In July 1906, Hugh Patten, a Pima schoolteacher and tribal citizen, dispatched a letter to Leupp on behalf of Chief Antonio Azul, requesting Gila River water that would nutrient-enrich the land to produce good crops. In response to the proposed cession of land, Azul explained the Pima had “no land to spare as Mr. Code thinks.” The land Code desired, the chief argued, was “the best part” of the reservation.⁶⁶ The following year, Azul wrote Interior Secretary James Garfield, expressing his view that the Pima were “willing to pay our share for good river water.” Nonetheless, the aged chief opined, government engineers had sent in false reports “in order to rob us of our lands.”⁶⁷

In 1908 the Pima stood on a precipice, fearing not only the loss of their land and rights to the waters of the Gila and Salt Rivers, but also their traditional economy and means of farming. The annual estimated cost of irrigating



FIGURE 6. Antonio Azul surrounded by son Antonito (left) and grandson Harry (right), ca. 1900. Chief Antonio led the fight against Chandler and Code until his death in 1911. Antonito continued the fight by enlisting the support of the US Congress and the American public. Image courtesy of National Archives and Records Service, Washington, DC.

10,000 acres in the Santan district with groundwater was \$2.40 per acre plus another \$1.15 per acre for annual operations. Annual maintenance on the floodwater canal was estimated at \$.45 per acre, bringing the total estimated cost per acre to around \$4. Conversely, growers in the Salt River Valley under the Salt River project paid \$1.60 per acre and those outside of the project paid between \$.40 and \$.50 per acre per annum for water and operation and maintenance. This financial burden on the Pima grower would “pauperize and ruin” him.⁶⁸ Having grown increasingly frustrated at the lack of responsiveness on the part of the Indian Service, nine Pima men sent a petition to the Indian Rights Association seeking its “assistance on behalf of our people” in which the men declared their steadfast opposition to being “moved from our homes,” seeking instead to have “water supplied to our farms as they are at present situated.” They also demanded protection of their rights to the “natural low-water mark flow” of the Gila River—or as much “as we were accustomed before it was all stolen from us.” Having no confidence in the wells, the men begged the government to cease all well construction at Santan.⁶⁹

As importantly, the chiefs requested that a representative of the United States government “confer with us . . . to examine the conditions pertaining to land and water on this reservation.” Antonito Azul and Sacaton Flats Chief John Hays complained that to date, “we have had no voice in the matter at all,” having been “continually overreached by Engineer W. H. Code, who has attempted to force a system of irrigation upon us.”⁷⁰ The men clearly understood that the Indian Service had bowed to outside economic and political interests to open the western half of the reservation to sale. They also recognized the Indian Service had capitulated and failed to protect Pima rights to the waters of the Salt and Gila Rivers.

On December 16, 1911, the Pima penned an open letter to every member of the US Congress. “Some 20 years ago and all the time before that date,” Azul began, “we, the Pimas, had all the water needed to irrigate our farms, and we had no difficulty in making our living. Since that time, unless the rainfall was great, we have had to suffer more or less for the necessities of life.”⁷¹ Two weeks later, Azul explained in “An Appeal for Justice . . . to the People of the United States” how Code was appointed Indian irrigation engineer. “We have not the papers to show just what the speculators and politicians of the Salt River Valley had to do with the appointment . . . of Engineer Code, but the events which followed speak loudly.” The appeal then described how some time between August 1902 and July 1903, the Phoenix schemers “decided upon . . . the Salt River Valley instead of the Gila River Valley” for the first reclamation project.⁷²

Despite Congressional beliefs that all the Pima had been or soon would be provided with water, only about 800 Pima had access to water. Nearly 80

percent were yet without a dependable supply of water.⁷³ In November 1911, 444 Pima men signed a petition appealing to the US Senate to restore “our river water.”⁷⁴ Only after these complaints did Congress suspend all irrigation and allotment work on the reservation. Louis Hill immediately informed Chandler to “get busy and reduce your lands to small holdings.”⁷⁵

While the Pima successfully contended Chandler’s scheme to dispossess them of their land, they were unable to stop the economic transformation occurring around them. Lacking irrigation water, hundreds of Pima men cut thousands of acres of mesquite trees to sell as fuel in the Salt River Valley. Many men, Pima leader Lewis Nelson wrote Congressman John Stephens (D-TX), had “lost hope.”⁷⁶ Chandler’s scheme to gain access to Gila River water and Pima land hastened allotment of the reservation, encouraged the consolidation of the Indians in Santan, and secured Pima funds—which eventually totaled \$900,000—for the continued development of the Salt River project.⁷⁷

For the Pima, areas that had been farmed for centuries, such as Sacate and Snaketown, remained without water as the Reclamation Service and, later, the Indian Service, constructed new canals. Families living in these traditional farming areas had little choice but to “go from place to place” looking for work. In 1922 nearly 7,000 acres of cleared allotted land in Santan was without water—and a crop.⁷⁸ In the Snaketown district, more than one hundred families abandoned their traditional farms and found work cutting wood or working for wages to meet their needs. By the 1920s, the amount of land in production on the reservation decreased by 2,600 acres, a great source of discouragement to the Pima.⁷⁹ In 1917 reservation land was leased to non-Indian growers for the first time, further driving a wedge between the Pima and their land.⁸⁰

By the turn of the twentieth century, Congress’ intent that the Pima would retain economic control over land received in severalty was replaced with a policy focused on the economic integration and appropriation of Indian resources. Chandler initiated this shift by exerting influence in the Interior Department via Code. He and his associates manipulated ambiguous federal policies and influenced greedy speculators and government decision-makers to enrich themselves at the expense of the Pima. The diligence of the Pima and their friends exposed his scheme, protecting the integrity of Indian land and Gila River water—at least from Chandler and other Salt River Valley speculators.

Not until 1924 did Congress authorize the San Carlos Irrigation Project and the construction of Coolidge Dam. Completed in 1929, Coolidge Dam and San Carlos Reservoir slowly filled, reaching full capacity for the first time in 1941. In 1935, the federal district court in Tucson issued the Gila Decree, granting half of the Pima’s water to upstream users in Florence and the Upper Valley Mormon settlements. In the decades that followed, the Pima—despite

having water rights to 50,546 acres of decreed land—never irrigated more than 35,000 acres due to lack of water. Their rights to Salt River water continued to lag until 2004, when Congress approved the Arizona Water Settlements Act and President Bush signed it into law, restoring Pima water rights to the Salt River. Under the settlement act, the Pima and Maricopa received statutory rights to 653,500 acre-feet of Gila River, Salt River, and Colorado River surface water, as well as groundwater and water from the cities of Chandler and Mesa.⁸¹

While it is easy to catapult A. J. Chandler into the role of a villain, this founder of the city that bears his name was a product of the social Darwinian philosophies of his day. As a subscriber to the theory of survival of the fittest, Chandler used every means available to his advantage, including manipulating poorly written laws. A century later, the City of Chandler and the Gila River Indian Community remain neighbors and political partners that share common interests. In a twist of irony, the Gila River Indian Community today accepts delivery of Salt River Project water through A. J. Chandler's Consolidated Canal, and the northern branch of the Santan floodwater canal that, a century ago, appeared to carry water to Chandler's ranch, now delivers irrigation water to reservation lands directly west of the former Chandler ranch. In ways A. J. Chandler never could have imagined, water today does indeed flow "down to the Gila."

NOTES

1. *Mesa Free Press*, February 22, 1895, in Sylvia Lee Bender-Lamb, "Chandler, Arizona: Landscape as a Product of Land Speculation" (MA Thesis, Arizona State University, 1983), 23.
2. "D. M. Ferry and Company," *Compendium of History and Biography of the City of Detroit and Wayne County Michigan* (Chicago: Henry Taylor and Company, 1909), 174–76.
3. Robert L. Spude, "The Path Not Taken: The Development Company of America's Hudson Reservoir Project, Arizona Territory, 1898–1902," in *The Bureau of Reclamation: History Essays from the Centennial Symposium, Volumes I and II* (Bureau of Reclamation, US Department of Interior, Denver, CO, 2008), 367.
4. *Ibid.*, 365–67.
5. "Dexter M. Ferry Dead," *New York Times*, November 12, 1907. At the time of his death, Ferry served on twelve boards of directors, owned real estate across Michigan and Arizona, and was one of the organizers of the Wayne County State Bank. *The City of Detroit, Michigan, 1701–1922*, vol. 3 (Detroit: The S. J. Clark Publishing Company, 1922), 8–10.
6. *Phoenix Daily Herald*, January 18, 1892. For a full discussion of Chandler's fraudulent land actions, see Earl Zarbin, "Dr. A. J. Chandler: Practitioner in Land Fraud," *Journal of Arizona History* 36, no. 2 (Summer 1995), 173–88.
7. Earl Zarbin, *Two Sides of the River: Salt River Valley Canals, 1867–1902* (Phoenix: Salt River Project, 1997), 135.
8. *The Taming of the Salt* (Phoenix, AZ: Salt River Project Public Affairs Department, 1979), 55.
9. *Winters v. United States* (207 US 564, 1908). In *Winters*, the United States recognized Indian reserved water rights. Under this doctrine, the court held that when the United States reserved land

for an Indian reservation, it also reserved sufficient water to fulfill the purpose of the reservation. At the turn of the twentieth century, the last remaining unappropriated waters of the West were being put to use under the National Reclamation Act of 1902. The reserved rights doctrine was in conflict with the Western prior appropriation laws. Since Indian reserved water rights date to when the reservation was established, they are generally higher in priority than non-Indian claims under state prior appropriation. The difficulty has always been that tribes have not had the resources to put their legal entitlements to beneficial use without federal assistance, something the federal government was hesitant to do until the 1970s.

10. Dubious land schemes and fraudulent entries were common across the Western United States under the Desert Land Act. See Ray M. Robbins, "The Public Domain in the Era of Exploitation, 1862–1901," *Agricultural History* 13, no. 2 (April 1939): 97–108. In the Salt River Valley, see Earl Zarbin, "William J. Murphy and the Arizona Canal Company," *Journal of Arizona History* 42 (Summer 2001): 155–80.

11. Bender-Lamb, "Chandler, Arizona," 20.

12. Zarbin, "Dr. Chandler," 173; Spude, "The Path Not Taken," 367.

13. The Tempe Canal had senior water rights, ensuring that Chandler's canal would have a good water supply. If Chandler could gain control of the heading and still deliver water to the Tempe Canal, it would enable him to generate hydroelectric power.

14. Chandler also sold power to Mesa and Tempe. See Bender-Lamb, "Chandler, Arizona," 28–29.

15. Unlike the Eastern United States, which followed riparian water law, the western United States developed under a legal system of prior appropriation or, in other words, "first in time, first in line." As a junior water rights holder, Chandler received water only if sufficient water was available from the Salt River. It was for this reason that Chandler pioneered groundwater mining in the south-east Salt River Valley and incorporated the Consolidated Canal Company to, among other purposes, use existing water resources to generate hydroelectric power to operate his groundwater pumps.

16. For details on how Chandler illegally acquired the land, see Zarbin, "Dr. Chandler." For Murphy's scheme in illegally acquiring federal land, which was also aided by Wallace, also see Zarbin, "William J. Murphy," 163.

17. David H. DeJong, "Good Samaritans of the Desert: The Pima-Maricopa Villages as Described in California Emigrant Journals, 1846–1852," *Journal of the Southwest* 47, no. 3 (Autumn 2005): 457–96.

18. David H. DeJong, *Forced to Abandon Our Fields: The 1914 Clay Southworth Gila River Pima Interviews* (University of Utah Press, 2011), 53.

19. Ibid.

20. David H. DeJong, *Stealing the Gila: The Pima Agricultural Economy and Water Deprivation, 1848–1921* (Tucson: University of Arizona Press, 2009), 91.

21. Presbyterian pastors Sheldon Jackson and George L. Spining released a circular letter in 1900 called *Our Red Reconcentrados—Some Facts Concerning the Pima and Papago Indians of Arizona*. "Of 586 families recently visited, of whose number 1,428 are males and 1,425 are females, only 7 families have been able to get a full crop; 17 have raised three-fourths of a crop; 39 have secured about half the regular crop; 91 families have got only one-sixth to one-fourth of a crop, and 432 families of industrious Indians eager to work have not been able to raise any crop at all for lack of water." Printed in *Congressional Record*, 56th Congress, 2nd Session, part 2, 1515.

22. *Hearings before the Committee on Indian Affairs, House of Representatives, on H. R. 330, Authorizing Suspension of Work on Construction of the Irrigation System, Pima Indian Reservation, Arizona, no. 1* (Washington, DC: Government Printing Office, 1911), 3.

23. "What Recent Government Investigations Disclose in Regard to Irrigation Possibilities in Arizona," *Los Angeles Times*, July 10, 1900, reprinted in the *Florence Tribune*, September 1, 1900.

24. David H. DeJong, "Forced to Abandon their Farms: Water Deprivation and Starvation among the Gila River Pima, 1892–1904," *American Indian Culture and Research Journal* 28, no. 3 (2004): 29–56.

25. *Report in the Matter of the Investigation of the Salt and Gila Rivers—Reservations and Reclamation Service*, House Report 1506, 62nd Congress, 3d Session (Washington, DC: Government Printing Office, 1913), 8.

26. *Hearings before the Committee on Expenditures in the Interior Department of the House of Representatives on House Resolution No. 103 to Investigate the Expenditures in the Interior Department*, July 13, 1911, Part 17 (Washington, DC: Government Printing Office, 1911), 670, 672, and 695–96. *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 8.

27. *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 5.

28. Spude, "The Path Not Taken," 369. A side battle in Arizona Territory was whether the federal government should finance reclamation or authorize the Salt River Valley water users to issue bonds for local control and construction of reclamation projects. In May 1902, a bill to authorize bonds was debated by Congress but failed in enactment. Maxwell's efforts paid dividends when the Newlands bill was inserted and became law on June 17, 1902.

29. Donald J. Pisani, "A Tale of Two Commissioners: Frederick Newell and Floyd Dominy," in *The Bureau of Reclamation: History Essays from the Centennial Symposium, Volumes I and II*, 639.

30. *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 7.

31. "Salt River Schemers," *Los Angeles Daily Times*, reprinted in *The Arizona Blade and The Florence Tribune*, July 26, 1902. The *Blade-Tribune* reported on August 2 that "land syndicates and individual speculators" held vast tracts of land "in blocks of from five to sixteen thousand acres." The *Blade-Tribune* referred to Chandler and his associates as simply "the irrigation ring." See *The Arizona Blade and The Florence Tribune*, June 20, 1903.

32. *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 7.

33. *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 175.

34. *Hearings before the Committee on Expenditures in the Interior Department of the House of Representatives on House Resolution No. 103 to Investigate the Expenditures in the Interior Department*, July 8, 1911, Part 16, 662. Code authored several irrigation reports on behalf of the Salt River Valley Water Users' Association and published them through the US Department of Agriculture. These included: "Irrigation in the Salt River Valley," in *Report of Irrigation Investigations for 1900*, no. 2, US Department of Agriculture, Office of Experiment Stations, Bulletin 104 (Washington, DC: Government Printing Office, 1900); and "Irrigation Investigations in Salt River Valley," in *Report of Irrigation Investigations for 1901*, no. 1, US Department of Agriculture, Office of Experiment Stations, Bulletin 119 (Washington, DC: Government Printing Office, 1901).

35. *Hearings before the Committee on Expenditures in the Interior Department of the House of Representatives on House Resolution No. 103 to Investigate the Expenditures in the Interior Department*, Part 17, 655 and 666.

36. *Hearings before the Committee on Expenditures in the Interior Department of the House of Representatives on House Resolution No. 103 to Investigate the Expenditures in the Interior Department*, Part 16, 657 and 659.

37. *Annual Report of the Secretary of the Interior, 1905* (Washington, DC: Government Printing Office, 1905), 15. *Third Annual Report of the Reclamation Service, 1905* (Washington, DC: Government Printing Office, 1905), 50–52. *Hearings before the Committee on Expenditures in the Interior Department of the House of Representatives on House Resolution No. 103 to Investigate the Expenditures in the Interior Department*, Part 16, 654–62. On March 7, 1903, Charles Walcott,

director of the US Geological Survey and the Reclamation Service, recommended the Salt River Project as one of the first federal reclamation projects. One week later Interior Secretary Ethan Allen Hitchcock concurred.

38. Lamb, *Chandler, Arizona*, 34–36.

39. *Hearings before the Committee on Expenditures in the Interior Department of the House of Representatives on House Resolution No. 103 to Investigate the Expenditures in the Interior Department*, Part 16, 662.

40. *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 8–9.

41. *Memorials in Re Investigations of Pima Indians, Arizona*, United States Congress, House of Representatives, Congressional Committee Print, 62-1-11 H3841, 4.

42. “An Irrigation Meeting,” *The Arizona Republican*, July 15, 1902. The chief reason Hitchcock favored the San Carlos site was that it alone would provide “sufficient relief” to the Pima and Maricopa. *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 312–14. Between thirty and forty prominent settlers and speculators in the Salt River Valley joined forces to pressure Hitchcock and Roosevelt to select the Tonto site. This list included, among others, A. J. Chandler, W. M. Dobson, Benjamin Fowler, Dwight B. Heard, J. T. Priest, William Christy, J. C. Adams, Frank Grummell, B. A. Fickus, S. S. Greene, J. H. Wolfe, Joseph Stewart, Joseph Kibbey, and William J. Murphy.

43. *Pima Indian Reservation: Hearings before the Committee on Indian Affairs, U. S. Senate, on H.R. 18244*, 62nd Congress, second session, March 14, 1912 (Washington, DC: Government Printing Office, 1912), 4.

44. *Ibid.*, 13.

45. *Book A, Dr. Cook's First Record Book*, (hereafter *Cook's First Record Book*) Record Group 1, File 13, Charles Cook Collection, Cook College and Theological School, Tempe, Arizona, 103.

46. “Letter from Antonio Azul and Pima Headmen to Secretary Hitchcock and Commissioner of Indian Affairs Francis E. Leupp,” dated March 1, 1906, in *Cook's First Record Book*, 79–80; “A Storage Reservoir,” *The Arizona Republican*, July 15, 1902 and July 25, 1902. The *Republican* expressed its opinion that the Highland and Consolidated canals running south from the Salt River to the northern boundary of the reservation could be extended to convey Salt River project water for “at least 15,000 acres of land on the reservation.”

47. *Hearings before the Committee on Indian Affairs, House of Representatives, on H. R. 330, Authorizing Suspension of Work on Construction of the Irrigation System, Pima Indian Reservation, Arizona, no. 1*, 50–51.

48. *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 358–60. Former Governor Joseph Kibbey acknowledged that he did not know whose suggestion it was that the land of the reservation be liable for a portion of the cost. Code, Kibbey noted, took the initiative on the matter: “I think they were suggested by Mr. Code.” *Hearings before the Committee on Expenditures in the Interior Department of the House of Representatives on House Resolution No. 103 to Investigate the Expenditures in the Interior Department*, Part 17, 673.

49. The contract between the Secretary and the SRVWUA, dated June 3, 1907, is in *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 162–64. The SRVWUA was not to be held liable for the failure to provide power.

50. *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 9–10.

51. *Ibid.*, 359.

52. *Hearings before the Committee on Expenditures in the Interior Department of the House of Representatives on House Resolution No. 103 to Investigate the Expenditures in the Interior Department*, Part 1, June 5, 1911, 117; *Cook's First Record Book*, 105. Cook estimated the potential impacts to the Pima as follows: 180,000 acres of land, \$1,000,000; pumping plants, \$600,000; Reclamation Service work to date, \$50,000; running pumps for five years, \$50,000; damage to the land from the well water,

\$1,000,000; loss to the Indians from lack of water, \$1,000,000; and feeding the Indians who were unable to support themselves, \$100,000. The total was \$3,800,000 over ten years. Cook concluded that, “at the end of ten years they will be poorer than ever.”

53. *Pima Indian Reservation: Hearings before the Committee on Indian Affairs, U. S. Senate, on H.R. 18244*, 4.

54. “Cost of Pumping for Irrigation,” *University of Arizona Bulletin* 49 (Tucson: University of Arizona, 1906), 459–60. Government engineers also estimated the life expectancy of the wells at ten years. See *Pima Indian Reservation: Hearings before the Committee on Indian Affairs, U. S. Senate, on H.R. 18244*, 14.

55. *Indian Appropriation Bill, 1906, Hearings Before the Subcommittee of the Committee on Indian Affairs*, January 20, 1905, Senate Report 4240, 58th Congress, 3rd Session, 56–59.

56. *Annual Report of the Commissioner of Indian Affairs, 1904* (Washington, DC: Government Printing Office, 1905), 20. “[T]hese two settlements [Maricopa Colony and Gila Crossing],” Code wrote Leupp, “both have a certain assured water supply even in the nominally dry season.” *Hearings before the Committee on Expenditures in the Interior Department of the House of Representatives on House Resolution No. 103 to Investigate the Expenditures in the Interior Department*, Part 16, 658.

57. *Hearings before the Committee on Indian Affairs, House of Representatives, on H. R. 330, Authorizing Suspension of Work on Construction of the Irrigation System, Pima Indian Reservation, Arizona, no. 1*, 674.

58. *Hearings before the Committee on Expenditures in the Interior Department of the House of Representatives on House Resolution No. 103 to Investigate the Expenditures in the Interior Department*, Part 17, 672.

59. *Hearings before the Committee on Indian Affairs, House of Representatives, on H. R. 330, Authorizing Suspension of Work on Construction of the Irrigation System, Pima Indian Reservation, Arizona, no. 2*, 37.

60. *Indian Appropriation Bill, 1906*, 58.

61. *Indian Appropriation Act of 1906*, 33 Stat. 1048. This act appropriated \$50,000 to begin the irrigation project. In 1906, Congress appropriated another \$250,000. *Indian Appropriation Act of 1907*, 34 Stat. 325.

62. *Seventh Annual Report of the Reclamation Service, 1907–1908*, 52. 35 Stat. 70.

63. *Ninth Annual Report of the United States Reclamation Service*, 66; see also *Twelfth Annual Report of the United States Reclamation Service, 1912*, 66–67 and *Thirteenth Annual Report of the United States Reclamation Service, 1913*, 49. Surveying the floodwater canal began in May 1909.

64. *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 8. There were many Pima and friends of the Pima who were convinced that there would be no floodwaters if San Carlos Dam were ever built. This supported their assertion that the Reclamation Service and the Indian Service had less than honorable intentions in constructing the Sacaton Project. The Indian Rights Association in particular condemned the actions of the government, seeing a scheme that would benefit non-Indians, not the Pima. See the Report of S. M. Brosius in *Conserving the Rights of the Pima Indians Arizona, Letters and Petitions with Reference to Conserving the Rights of the Pima Indians of Arizona to the Lands of their Reservation and the Necessary Water Supply for Irrigation*, House Document 521, 62nd Congress, 2nd Session (Washington, DC: Government Printing Office, 1912), 32.

65. “Letter to the Honorable F. E. Leupp, Commissioner of Indian Affairs, from C. H. Cook,” dated Washington, DC, July 30, 1906, in *Cook’s First Record Book*, 100–101.

66. “Letter from Antonio Azul and all the Subchiefs, written by Hugh Patten, to the Hon. Commissioner of Indian Affairs F. E. Leupp,” dated Sacaton, July 30, 1906, in *Cook’s First Record Book*, 108.

67. "Letter from Antonio Azul to the Honorable James R. Garfield, dated November 29, 1907," in *Cook's First Record Book*, 109.

68. *Hearings before the Committee on Indian Affairs, House of Representatives, on H. R. 330, Authorizing Suspension of Work on Construction of the Irrigation System, Pima Indian Reservation, Arizona, no. 1, 13–14.*

69. "A Petition Addressed to the Indian Rights Association by the Chiefs of the Pima Tribe of Indians," dated July 31, 1911, in *Conserving the Rights of the Pima*, 10.

70. "A Petition Addressed to the Indian Rights Association by the Chiefs of the Pima Tribe of Indians." The petition is signed by John Hays, Chief of Sacaton Flats Reservation; Antonito Azul, Head Chief of the Pima Nation; Chief Henry Austin; Chief James Tompson; Chief Henry Adams; Chief James Hollen; Chief Thomas; Juan Jackson; and Haveline Enas.

71. Letter of Antonito Azul, Chief of the Pimas, dated December 16, 1911, in "A Petition Addressed to the Indian Rights Association by the Chiefs of the Pima Tribe of Indians," 8–9.

72. "A Petition Addressed to the Indian Rights Association by the Chiefs of the Pima Tribe of Indians," 4–8.

73. *Hearings before the Committee on Indian Affairs, House of Representatives, on H. R. 330, Authorizing Suspension of Work on Construction of the Irrigation System, Pima Indian Reservation, Arizona, no. 1, 15.*

74. "Letter of Kisto Morago, Lewis D. Nelson, Harvey Cawker and Jackson Thomas to the Members of the Committee on Indian Affairs of the Senate and House of Representatives," December 16, 1911, in *Pima Indian Reservation: Hearing Before the Committee on Indian Affairs United States Senate on H.R. 18244*, 16–17. See also "Petition of the Indians of the Pima Tribe of the Gila River, November 21, 1911," *ibid.*, 15.

75. *Report in the Matter of the Investigation of the Salt and Gila Rivers*, 16.

76. *Hearings before the Committee on Indian Affairs, House of Representatives, on H. R. 330, Authorizing Suspension of Work on Construction of the Irrigation System, Pima Indian Reservation, Arizona, no. 2, 25, 27.*

77. *Pima Indian Reservation*, 5.

78. H. C. Russell, *Annual Statistical Report, Narrative Section, Pima Agency, Sacaton, Arizona, November 7, 1910*, Superintendents Annual Narrative and Statistical Reports, 1907–1938, Roll 104–105, Microcopy 1011, Record Group 75, Records of the Bureau of Indian Affairs, 1923, 2, 26.

79. Porter J. Preston and Charles A. Engle, "Irrigation on Indian Reservations," *Indians of the United States: Survey of Conditions of Indians in the United States* (Washington, DC: Government Printing Office, 1929), 2,440 and 2,464.

80. DeJong, *Stealing the Gila*, 130.

81. On December 10, 2004, the Gila River Indian Community concluded its long-standing water rights dispute when President George W. Bush signed into law the Arizona Water Settlements Act, restoring an average annual tribal water budget of 653,500 acre-feet. Three years later, on December 14, 2007, interior secretary Dirk Kempthorne proclaimed the enforcement of the settlement in an historic ceremony at the Colorado River Water User's Association meeting in Las Vegas, Nevada. The settlement set into motion the means by which the Community seeks to restore its economic self-sufficiency. A century after Chandler's failed scheme, the Community has plans to develop 77,000 acres of agricultural land in a region of the country where similar land surrounding the reservation is being displaced by residential subdivisions have been in place since 1985. In 1995, the Community established the Pima-Maricopa Irrigation Project (P-MIP) to construct a state-of-the-art irrigation water delivery system to and throughout the reservation.