GUILLERMO ANDRADE AND LAND DEVELOPMENT ON THE MEXICAN COLORADO RIVER DELTA 1874-1905

by

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PREFACE

The principal objective of this study is an examination of early efforts to develop the land area around the head of the Gulf of California and more particularly the Mexican portion of the Colorado River delta. These efforts began during the latter half of the nineteenth century and to a great degree were directed by Guillermo Andrade, a Mexican entrepreneur, between 1874 and his death in 1905.

Reclamation of the desert lands of the Colorado River delta has been a notable achievement and a good deal has been written about the United States portion of the area and its early development. Andrade played a prominent part in the beginnings of this great project, and yet very little has been written on him or on the early activities on the Mexican side of the delta, especially those concerning Andrade's business relations with Thomas H. Blythe. To a considerable extent, this neglect has been the result of a lack of source material. Some of the records pertaining to

the affairs of Andrade and Blythe were in San Francisco and presumably were lost in the great earthquake and fire, and 36 expedientes relating to Andrade in the Secretaría de Fomento reportedly were destroyed, along with other records, during the Zapatista occupation of the Mexican capital in 1914 and 1915.

During most of the first four decades of the present century, the greater part of the Mexican portion of the delta was the property of the Colorado River Land Company, a Mexican corporation owned by a group of Los Angeles businessmen. Most of the company's lands were acquired, directly or indirectly, from Andrade, who at the turn of the century was the Mexican Consul in Los Angeles. Because several of the company's founders were exceptionally prudent men, an intensive investigation was undertaken to determine previous title to the lands. This work was headed by the company's secretary, David O. Anderson, formerly an attorney with the Title Insurance and Trust Company of Los Angeles. Seven years' time and over $100,000 were spent on the investigation.

Part of the documentary material gathered by the

Colorado River Land Company's investigation, as well as part of the company's own records accumulated over the years, became Mexican property when the government of that country acquired the unexpropriated remnants of the company's holdings in the mid-1940's. The documents and records not transferred to Mexico and still in existence were stored in Los Angeles and Calexico. Through the cooperation and support of the M. H. Sherman Foundation, these papers have been made available and form the basis for this study.

The papers of the Colorado River Land Company are too numerous and disorganized, the company's operations too complex, to have made the complete story the subject of this dissertation. Therefore, my intent is to reserve the history of the Colorado River Land Company as a later work, and by using mainly the records pertaining to prior land titles, to examine earlier ventures in this Mexican frontier area.

To the M. H. Sherman Foundation, and particularly to its president, Mr. Arnold D. Haskell, I wish to express my gratitude for making this study possible; and to the Haynes Foundation my appreciation for a research fellowship during 1964-1965. For various assistance I wish also to thank

Professors Donald Rowland, Manuel Servin, and John Reith, chairman and members, respectively, of my doctoral committee; Professor Arthur Kooker, chairman of the department; Dr. Eugene Chamberlin of San Diego City College; Mr. Glen Dawson of Dawson's Book Shop; Mr. Enrique Cortes of the University of California, Los Angeles; Miss Mary Stuttle of Laguna Beach; Mrs. Sophia White and Miss Patricia Hughes of the Sherman Foundation; and not least, my wife, Gay.

Corona del Mar
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William O. Hendricks

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THE BEGINNING OF AN ENTERPRISE

1874-1877

Less than 100 years ago, northern Baja California had a non-Indian population of only a few hundred persons and was not much further advanced in economic development than when first discovered more than three centuries earlier. Today, the same area has well over one-half million inhabitants and one of the fastest growing and most prosperous local economies in Mexico.[1] While any full-scale explanation of this extraordinary transformation would involve a number of significant factors, probably the most important single factor has been the agricultural development of the Mexican portion of the Colorado River delta, most of which

[1]For a sketch of northern Baja California as it was a century ago, see Florence C. Shipek, ed., Lower California Frontier, Articles from the San Diego Union, 1870 (Los Angeles: Dawson's Book Shop, 1965). For an overview of the state's recent growth and prosperity, see David Allen Henderson, "Agriculture and Livestock Raising in the Evolution of the Economy and Culture of the State of Baja California, Mexico" (unpublished Ph.D. dissertation in Geography, University of California, Los Angeles, 1964), pp. 1-58.

is now known as the Mexicali Valley.

Just as the over-all development of Baja California has been closely related to that of American California, the development of the Mexicali Valley has been closely related, geographically and historically, to that of California's Imperial Valley. Both were created by the same geological forces, and it was water from the same source, the Colorado River, that turned barren desert into verdant fields on both sides of the international line. But even though broad similarities exist between the historical development of the Mexicali and Imperial Valleys, their specific development has been quite different. Much of this difference stems from the fact that practically the whole of the Mexicali Valley from the early 1880's until shortly before World War II was in the hands of a few large landowners. Explaining how this came about is one of the main objectives of this study.

Mexico's Northwestern Frontier

As a result of the war with the United States in 1846-1848, Mexico was forced to cede nearly a third of its national territory, amounting to nearly 10 degrees of latitude between the Rocky Mountains and the Pacific Ocean. Long a

part of Mexico's northwestern frontier, this vast area became the new southwestern frontier of the United States. Predominantly arid and semi-arid, the lands ceded to the United States were undeveloped and sparsely populated. In many respects, there was little to distinguish them from the lands that remained Mexico's northern frontier area, which could be defined roughly as that half of the country north of a line drawn between Mazatlán and Tampico. Thus, the boundaries set by the Treaty of Guadalupe Hidalgo, and modified by the Gadsden Purchase of 1853, while they separated the two countries politically, were never to divide completely what in many ways was an integral geographic region.[2] Events on one side of the international boundary

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[2]This was especially true for the Colorado River delta area, which the new international boundary divided approximately in half. For although practically all of the Colorado's water originates in the United States, the river flows through Mexico for about the last 90 miles before emptying into the Gulf of California. In the negotiations for the Gadsden Purchase, there was a considerable desire on the part of the United States to obtain a large, additional portion of northern Mexico, including all of Baja California. There was an even stronger desire (which, particularly among Arizonans, continued well into the twentieth century) at least to extend the boundary southward to include a port site on the Gulf: ". . . the political stupidity of the United States Senate in 1854, in its refusal to secure a boundary line which included a port on the Gulf of California, has retarded the development of . . . the whole southwest." Paul Neff Garber, The Gadsden Treaty (Philadelphia: University of Pennsylvania Press, 1923), pp. 91-93, 184.

were to have their effects on the other. And since the United States rapidly became the far wealthier and more technologically advanced of the two nations, the development of its area had strong influence on the course of events in northern Mexico.[3]

Mexican response to this situation varied. At one extreme was the almost traditional belief that between a strong nation and a weak one the best defense was a desert.[4] At the other extreme was the belief that only by developing northern Mexico and making it part of the nation could its borders be secured. Official policy often fell somewhere

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For a half-century, the principal use of the river was viewed as navigation; but after 1900, irrigation entered the picture. For the next two decades, or until the "Japanese menace" emerged, complete control over the Colorado River was the most prominent argument of those agitating for the United States to annex Baja California. Eugene Keith Chamberlin, "United States Interests in Lower California" (unpublished Ph.D. dissertation in History, University of California, Berkeley, 1949), p. 156.

[3]A current demonstration of this geographic unity and United States influence is the plan to construct a nuclear electric power and salt water conversion facility on the Gulf of California for joint use by the states of Arizona and California, Sonora and Baja California. Los Angeles Times, December 17, 1965, II, 4.

[4]This is said to have been the attitude of President Sebastián Lerdo de Tejada; yet, as will be seen, it was under his administration (1872-1876) that the first attempts were made to develop the lands of the Colorado River delta.

between these extremes, but as time went on, there was an increasing accent placed on development, especially under the government of Porfirio Díaz.[5]

One of the factors furthering the development of northern Mexico was southern Mexico's agrarian problem. According to the official diagnosis, the agrarian problem had two basic aspects, an unequal distribution of the land and an unequal distribution of people on the land. It was the latter aspect that affected the north. In an effort to achieve a better distribution of inhabitants, the government sought to promote internal migration and the colonization of underpopulated areas of the nation. Toward this end, the law of July 20, 1863, was passed, dealing with the disposal and settlement of terrenos baldíos (idle lands), the unclaimed, unused lands of the nation.[6]

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[5]"The so-called 'liberals' of the Díaz group believed that Mexican territory could best be retained by granting the interested Americans such liberal concessions they would not consider political control advantageous." Chamberlin, "United States Interests in Lower California," pp. 143-44.

[6]This law also was used originally to aid Benito Juárez in raising funds to expel the French invasion. A copy may be found in Francisco F. de la Maza, comp., Código de colonización y terrenos baldíos de la república mexicana, 1451-1892 (Mexico: Secretaría de Fomento, 1893), pp. 729-35. Many Mexican laws were commonly referred to by their date, hence the use of the definite article.

NOTA

The origin of terrenos baldíos went back to the colonial period: land which had never been ceded by the Spanish Crown to individuals or Indian communities was considered public domain. Shortly after Mexican independence, the law of August 18, 1824 was enacted,[7] authorizing the disposal of terrenos baldíos by individual states, a practice which led to abuse of public interest and near-anarchy in land titles. The law of July 20, 1863, returned all public lands to federal control and provided national regulation of their disposal and settlement.[8]

Under this law, which was modelled somewhat after the Homestead Act of 1862 in the United States, almost any inhabitant of the Mexican Republic could "denounce" (denunciar), or file a claim on, up to 2,500 hectares of terrenos baldíos and purchase it from the government at a nominal sum.[9] The procedure involved filing a denouncement petition

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[7]Maza, Código, pp. 191-93.

[8]Because of the region's isolation from Mexico and close ties to American California, the dispensing of public lands by local authorities was a particularly troublesome issue in northern Baja California. Decrees of March 10, 1857, and March 14, 1861, had already specifically nullified such grants there unless validated by federal authority (Maza, Código, pp. 659-60, 694-97).

[9]George McCutchen McBride, The Land Systems of Mexico (New York: American Geographical Society, 1923), p. 94. A

with the local court having jurisdiction over the land in question. If the court found everything in order, the petition was admitted and a surveyor appointed, who, when he had finished, filed his report and map with the court. With the court's further approval, the matter was now properly sent to the governor, who forwarded the proceedings, along with his own report, to the Department of Fomento.[10] With Fomento's endorsement, the claimant paid the Department of Hacienda, or Treasury, the current tariff price for the land. Fomento would then issue a land title and notify the court to give the owner legal possession. After the title had been legally recorded, the process was complete, having taken perhaps a year or two to finish, but with the claimant apparently having a pre-emptive right to the land during the interval. The major condition imposed by a grant of _terrenos baldíos_ under the law of July 20, 1863, was a

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hectare was slightly more than 2.47 acres.

[10]As used here, the word _fomento_ is perhaps best translated as "development." This department of the Mexican federal government was first formed in 1853; its nearest equivalent in the United States would be the Department of the Interior. For a brief organizational history see Annita Melville Ker, _Mexican Government Publications_ (Washington: G. P. O., 1940), pp. 121-22.

The procedure in northern Baja California seems generally to have been directly between the court and Fomento, without benefit of the local political authority.

SCHEDULE OF PRICES FOR TERRENOS BALDIOS
IN BAJA CALIFORNIA AND SONORA, 1863-1892*

Year		Price per hectare	
		Baja California	Sonora
1863-64		.12	.25
1872-73		.06	.12
1879-80		.06	.12
1881-82		.06	.12
1885-86	First class	.20	.75
	Second "	.15	.50
	Third "	.10	.30
1887-88	First class	.30	.90
	Second "	.20	.60
	Third "	.15	.40
1889-90	First class	.65	1.10
	Second "	.40	.75
	Third "	.25	.50
1891-92	First class	.65	1.10
	Second "	.40	.75
	Third "	.25	.50

Note that the price was 50 per cent less in 1872-73 than in 1863-64, held steady for the decade 1872-1882, and then increased markedly during the land boom of the late 1880's.

*Extracted from Maza, Código.

colonization requirement, whereby the recipient was obligated to maintain at some point on the property, for four months of the year over a period of 10 years, at least one inhabitant for each 200 hectares appropriated.[11]

The belief that the best means by which to develop the country was by attracting immigrants was a pet tenet among many Mexican politicians in the period after independence. To implement this belief, colonization laws were enacted, with public lands as the lure. In spite of a record of almost complete failure for the colonization schemes that followed--including the loss of Texas to the United States--the policy of development-through-colonization seemed to lose little of its seductiveness. In fact, it reached its heights during the last quarter of the nineteenth century.

An example of this policy translated into legislation is the law of May 31, 1875.[12] This law enabled private enterprises to contract with the government to engage in colonization ventures, offering them lands, a subsidy,

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[11]Article Ten. A law enacted in 1894 abandoned the 2,500 hectare limitation and relieved the titleholder from the necessity of colonization. The law also "was made retroactive in that it annulled any penalties which might have been incurred for violation of these restrictions." McBride, Land Systems of Mexico, p. 74.

[12]Maza, Código, pp. 926-28.

freedom from import and export duties, and other benefits. It empowered the president to authorize the immigration of foreigners as colonists. From this law originated a number of the compañías delindadores, which made agreements with the government to survey and measure terrenos baldíos, receiving one-third of the land surveyed as compensation for their services.[13] Some thought the extent of compensation excessive, and the companies sometimes were accused of dispossessing land owners who did not have clear titles to their property.[14]

These land laws were of great importance, for even if much of it was of a poor quality, land was what northern Mexico had in abundance. Lacking the means to develop the area itself, Mexican policy, in effect, sought to barter large parcels of terrenos baldíos in order to attract capital and colonists. Given the state of Mexican affairs, the idea made some sense; yet in practice, it tended to engender a number of evils. Among these were that it mainly worked

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[13]Their operation became even more widespread under the law of December 15, 1883. Maza, Código, pp. 936-45.

[14]See M. Sánchez Facio, The Truth About Lower California (San Francisco: privately printed, 1889), a denunciation of "frauds committed by the Mexican International Company under the protection and sanction of the present administration of Mexico."

to the benefit of large landholders and exacerbated the latifundia problem; that the lands often fell into the hands of speculators rather than developers; and that much of the capital and many of the colonists, drawn as they often tended to be from the adjoining nation, threatened to develop the area as part of the United States rather than Mexico.[15]

The Colorado: Desert, River, and Delta

Historical knowledge concerning the region at the head of the Gulf of California and about the mouth of the Colorado River begins with the voyage of Francisco de Ulloa in 1539. Ulloa's expedition was followed by those of Hernando de Alarcón, also by sea, and Melchior Díaz, by land, both in 1540. Results from the northwest exploration of this early era were so negative, however, that further interest died out; in fact, the belief arose that California was an island. While this misconception eventually was corrected by Father Eusebio Kino's journeys of 1701 and 1702, as well as

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[15]As an effort to safeguard against this danger, the law of February 1, 1856, reiterating previous legislation, prohibited foreigners from owning land within 20 leagues of the border without an executive permit (Maza, Código, pp. 605-07). Since 20 leagues was about 52 miles, practically all the land on the Mexican portion of the Colorado River delta fell within this prohibited zone.

by Father Fernando Consag's voyage to the head of the gulf in 1746, the region remained in most respects almost a terra incognita for two centuries after its discovery. The infrequent Spanish explorers' fragmentary and impressionistic accounts provided merely a vague image "of an unattractive land, traversed by a great river which was difficult of access, surrounded by inhospitable deserts of unknown extent, and guarded from a sea approach by great and violent tides."[16]

Exploration during the next 100 years continued to be sporadic, although in the 1770's the region temporarily assumed significance to Spain as the connecting link with its newly-occupied Alta California. In 1771, Father Francisco Garcés, in the first of several journeys in the region, crossed the Colorado River and circuitously made his way as far west as Cerro Centinela (Signal Mountain), a few miles beyond the present city of Mexicali. Three years later, Garcés used his knowledge of the region to aid Juan Bautista de Anza in opening a route across the desert

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[16]Godfrey Sykes, The Colorado Delta (Washington, D. C.: The Carnegie Institution, 1937), p. 169. This book contains a chapter on the history of exploration to 1858.

between Sonora and Alta California. By 1881, however, administrative problems, the difficult terrain, and Indian hostility had combined to bring about abandonment of Spanish plans, and it was not until after Mexican independence, 40 years later, that the overland route to Alta California was reopened.

It was about this time also that the first non-Spanish contacts occurred. In 1826, Lieutenant R. W. Hardy of the Royal Navy explored and chartered the estuary of the river. The following year, James Ohio Pattie and a group trapping furs along the Gila River floated part way down the Colorado and then turned westward on foot en route to Spanish settlements on the Pacific Coast. In short, after more than three centuries of explorations and travels, the region at the head of the gulf, while no longer a complete mystery, still remained only dimly known by the time of the Mexican War and its partition between Mexico and the United States.[17]

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[17]Sykes does not treat Spanish or Mexican exploration after 1746. For Garcés and Anza, see Herbert Eugene Bolton, Outpost of Empire (New York: Alfred A. Knopf, 1931), and for abandonment of the plans, Charles E. Chapman, A History of California, The Spanish Period (New York: The Macmillan Company, 1921). For reestablishment of the route, see Lowell John Bean and William Marvin Mason, Diaries and Accounts of the Romero Expeditions in Arizona and California, 1823-

Shortly after the close of the Mexican War, thousands of treasure seekers set out for the newly discovered gold fields of what was now American California, many taking the southern overland route across the head of the Gulf of California. This California traffic intensified the United States government's interest in a transcontinental rail line, which, in turn, helped to bring about the Gadsden Purchase and led to several railroad survey expeditions being sent out in 1853. One of these expeditions, under Lieutenant R. S. Williamson, with William P. Blake as geologist, was assigned to follow California's Sierra Nevada southward in search of a suitable pass through which a railway might be built. After locating San Gorgonio Pass, the expedition proceeded southeastward and emerged upon a large desert basin known locally as La Palma de la Mano de Dios, the Palm of God's Hand. Geologist Blake gave it the name Colorado Desert, for he could see how intimately its history had been linked with the nearby Colorado River.[18]

1826 (Palm Springs: Palm Springs Desert Museum, 1962). Some of the lesser known contacts with the region during this period may be found in Jack D. Forbes, Warriors of the Colorado (Norman: University of Oklahoma Press, 1965).

[18]"The appellation may properly be confined to the regions reached by the deposition of the silt of the Colorado whether in the form of deltas or at the bottom of ancient

The Colorado is one of the great rivers of North America, but its importance is enhanced by the nature of the regions through which it flows. The river's headwaters are located in the high Rocky Mountains of north central Colorado and southwestern Wyoming. From there, following a generally southwestward course, it descends through extremely rugged and varied terrain toward the Gulf of California, nearly 1,700 miles distant. For 20 miles, the river forms the international boundary between Arizona and Baja California; then, as noted earlier, it flows for its final 90 miles entirely through Mexico. The Colorado has been called "the Southwest's greatest natural resource,"[19] and "the

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lakes. I should also include the bordering detrial [sic] slopes from the contiguous mountains." William P. Blake, "Sketch of the Region at the Head of the Gulf of California," in H. T. Cory, The Imperial Valley and the Salton Sink (San Francisco: John J. Newbegin, 1915), p. 22. Blake, who never lost interest in the region, wrote this short monograph in 1908, two years before he died. It also reviews his first trip to the region, when there was no state of Colorado to lend confusion to the desert's location. Today, the term Colorado Desert often is used to define a slightly broader area, which is itself but the westernmost subdivision of the great Sonoran Desert. See Edmund C. Jaeger, The North American Deserts (Stanford: Stanford University Press, 1957), pp. 50-51, 84-85.

[19]Samuel B. Morris, "The Colorado River--The Southwest's Greatest Natural Resource," American Water Works Association Journal, XXIX (October, 1947), 945-67.

basis upon which the settlement and development of the Southwest have been built."[20] For like the Nile, to which it has often been compared, the Colorado's lower course flows through a region that is climatically a desert.

The drainage basin of the Colorado River is a vast area of almost a quarter-million square miles. It includes, in addition to parts of Wyoming and Colorado, portions of Utah and New Mexico, nearly all of Arizona, small sections of Nevada and California, and about 2,000 square miles of Mexico.[21] The basin is divided naturally into upper and lower parts. The upper part is a plateau region, 5,000 to 8,000 feet in elevation, bounded on the north, east, and west by mountains ranging up to 14,000 feet. Through this tableland, and in descending from it to the desert plains and valleys which make up the lower part of the basin, the river and its tributaries have carved deep canyons, the most famous of which is the Grand Canyon of northwestern Arizona. Many of the feeder canyons are dry much of the year, except during the flash rains of autumn and spring and when the

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[20]Paul L. Kleinsorge, The Boulder Canyon Project (Stanford: Stanford University Press, 1941), p. 4.

[21]California and Mexico, while they have small areas technically within the drainage basin, contribute practically no water to the river.

winter snows melt and run off. Melting snows, particularly from the higher mountain ranges to the north, provide the Colorado's largest and most dependable source of water and are responsible for its characteristic annual flood, at which time the river carries a tremendous increase in volume.[22]

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[22]Since the average annual precipitation for the high mountains is approximately three times as great as for the basin as a whole, the upper Colorado and the Green, while comprising only about 29 per cent of the drainage basin, contribute about 72 per cent of the annual discharge. Kleinsorge, The Boulder Canyon Project, p. 10; Vincent Ostrom, Water and Politics (Los Angeles: The Haynes Foundation, 1953), pp. 16, 18. The snows melt during the spring and early summer, and the resultant flood usually reaches its peak in June. However, very little can be forecast with certainty about the Colorado River. "The volume of water in the Colorado River may vary widely from year to year, from month to month, and, at times, from day to day. Even the seasonal variations are not accurately predictable." Kleinsorge, The Boulder Canyon Project, p. 9. Although fluctuations at given times were much greater, the mean monthly discharge of the Colorado at Yuma, 1894-1911, varied from a low of 395,000 acre-feet in November to a high of 3,000,000 acre-feet in June. (An acre-foot is a measure of the volume of water required to cover an acre one foot in depth; it is equivalent to 43,560 cubic feet, or 325,850 gallons.) The low point, January, 1894, was 154,100 acre-feet, and the high point, June, 1909, was 6,250,000 acre-feet. Another method of measuring river flow is in second-feet (the rate of flow required for one cubic foot of water to pass a given point each second in time). The January, 1894, discharge dropped to 2,400 second-feet, while on June 24, 1909, the rate was 149,500 second-feet. Cory, The Imperial Valley, pp. 1210-11. In the 27 years prior to 1905, there were only three years in which there had been a winter flood, and never two in one year; yet during 1905-1906, there were three winter floods and a total of five floods for the

Having descended from the plateau country to the lower basin, the Colorado passes through a region of increasing aridity. This area, in general, is but a few hundred feet above sea level, with occasional mountain ranges rising from 2,000 to 6,000 feet. Here, rainfall is infrequent and the tributaries are unreliable. During much of the year, they furnish no water whatsoever; yet at unpredictable times, they can contribute flash floods of large volume. The most southerly and by far the most significant of the lower tributaries is the Gila, which joins the Colorado near Yuma.[23]

In spite of its enormous drainage basin and numerous tributaries, the Colorado River does not deliver a great

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year. Charles Robinson Rockwood, Born of the Desert (Calexico: Calexico Chronicle, 1930), pp. 34-35. On the other hand, in 1931, there was only a very mild spring flood and no summer flood; late that summer, the river's flow reached a low of less than 250 second-feet. Sykes, The Colorado Delta, p. 93. All this will give some idea of the variability of flow of the Colorado and of the hazards involved in attempting to utilize its delta for agriculture before the construction of dams to control the river.

[23]The average annual discharge of the Gila, although extremely variable, ordinarily is not great--about 6 per cent of the Colorado's total. Some years it has contributed less than 100,000 acre-feet; however, in 1916, it discharged 4,500,000 acre-feet, and on January 16th of that year was flowing at the rate of 220,000 cubic feet per second. Kleinsorge, The Boulder Canyon Project, pp. 10-11.