

SAN ANTONIO WATER HISTORICALLY

Background Information

Gunnar Brune, in his 1971 study entitled “Springs of Texas,” identifies Bexar County as one of Texas’ richest counties in history that “is inextricably tied to the large springs which were found here.” If it weren’t for these springs, San Antonio and its present day population of 1.5 million people would have probably never settled in this part of Texas.

CHRONOLOGY OF SAN ANTONIO’S WATER

1519- The Pineda expedition draws the first map of Texas. Six rivers are indicated on the map including one that will someday be named the San Antonio.

1690- Alonso de Leon Jr. accompanied by Father Damian Massanet cross the San Antonio River and note its perfect location for a future settlement and fort.

1691- Domingo Teran de los Rios, first governor of the new Province of Texas, accompanies Father Damian Massanet on his return to East Texas. Camping at a rancheria of Payaya Indians on a stream called Yanaguana, they celebrate mass and rename the stream *San Antonio* because it was the feast of Saint Anthony of Padua.

1709- The Espinosa-Aguirre-Olivares expedition stops at the springs which Father Espinosa names San Pedro. Father Olivares notes the river as a good site for missions. Father Antonio Olivares, in a new expedition to the area, notes the river as a good site for a mission.

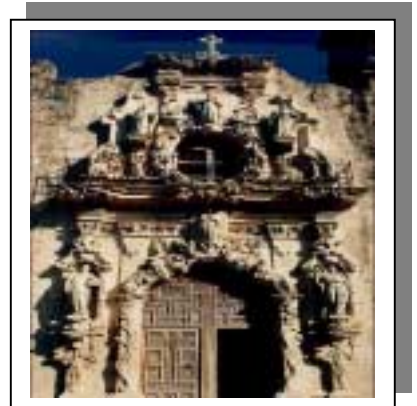
1716- The Spanish Council of War approves a site on the San Antonio River for a fortified presidio (fort.) The presidio is later recognized as the beginning of a villa, or settlement. This same council also approves the request by Father Olivares to establish a mission near the site.

1718- Father Olivares establishes mission San Antonio de Valero. The mission is later moved to two additional locations and renamed the Alamo.

1720- Mission San Jose y San Miguel de Aguayo is founded on the river. Concepcion Ditch, the first acequia to be dug, becomes operational supplying water to the growing presidio.

1730- The San Jose Acequia is begun. Settlers from the Canary Islands arrive at the presidio to establish the first legally recognized civil settlement. They call it Villa de San Fernando in honor of Fernando II.

1731- Three missions, Mission Concepcion, Mission San Juan Capistrano and Mission San Francisco de la Espada are moved from East Texas to the banks of the San Antonio River. San



Juan Acequia, Concepcion Acequia, Espada Dam, acequia and aqueduct are constructed between 1731-1739.

1776- Beginning of the American Revolution

1793- The missions are secularized by order of the Spanish crown.

1809- La Villita develops across the river from Mission San Antonio and the Villa de San Fernando.

1830- The first city regulations for the use of the river, creek and ditch waters are put into effect.

1836- Texas Declaration of Independence signed. Battle of the Alamo and Battle of San Jacinto occur.

1840s- Extensive German immigration to Texas. German immigrants settle in La Villita area to be joined by the Swiss and French.

1850s-1890s - The King William area develops on land that had been Alamo farmlands.

1861-1864- U.S. Civil War

1865- A cholera epidemic strikes San Antonio. Drinking water from the acequias are blamed for the sickness. 292 people die.

1877- The first San Antonio water works is established.

1889- The first artesian well is bored into the Edwards Aquifer by the new water works led by George W. Brackenridge.

1900- The city of San Antonio's first sewage system is fully operational.

1921- Cloudburst over the Olmos Basin and San Antonio River puts 9 feet of water on Houston Street. The flood kills 50 people and causes millions of dollars in damage.

1925- The San Antonio Water Works is bought by the city of San Antonio and is renamed the City Water Board (CWB). At the time of purchase, the company is pumping an average of 25 million gallons daily to serve some 38,000 customers.

1927- Olmos Dam completed.

1936- Texas Centennial. Jack White, owner of the Plaza Hotel visits City Hall to urge a clean-up and beautification of the river. White and the Mexican Businessman's Association stage "A Venetian Night," the first river parade.

1941- A river carnival and night parade are held. The walkways, staircases to street level, footbridges and rock walls lining the banks and Arneson River Theater are completed as is restoration in La Villita.

1946- A major flood hits downtown San Antonio, but damage is minimized by Olmos Dam and the flood bypass channel.

1962- The Parks and Recreation Department completes a major landscape program along two miles of the river walk, including 17,000 trees, shrubs, vines and ground cover.

1963- The San Antonio Chapter of the American Institute of Architects unveils a plan for the Paseo del Rio.

1968- HemisFair '68 opens.

1973- San Antonio City Council declared Mitchell Lake a Wildlife Sanctuary

1985- San Antonio River tunnel project begun. Tunnel will carry storm water 150 feet underground and return them to the river channel at Lone Star Boulevard.

1987- Dos Rios Recycling Center begins operation and effluent discharge is stopped at Mitchell Lake.

1992- The City Water Board becomes the San Antonio Water System (SAWS).

1994- The San Antonio Water System adopts the Conservation and Reuse plan. Funding for Conservation Programs such as the Watersaver Landscape Rebate and Kick the Can are established for Residential Customers.

1998- The SAWS board of trustees and the San Antonio city council approves the 50 year water plan entitled "Securing our Water Future Together". Groundbreaking begins on the recycled water project.

1999- The city of San Antonio becomes the eighth largest city in the U.S.

2000- The San Antonio River begins utilizing recycled water.

*Source: The San Antonio River, Mary Ann Noonan Guerra, 1987
The San Antonio Conservation Society*



Early Texans

“We are of the soil and the soil is of us. We love the birds and beasts that grew with us on this soil. They drank the same water we did and breathed the same air. We are all one in nature.”

From a description of Native Americans by Chief Luther Standing Bear



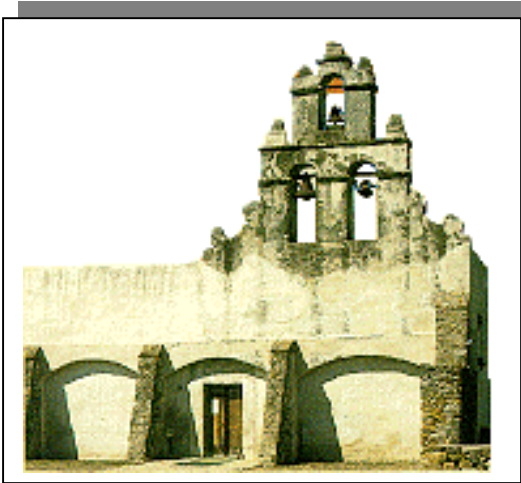
The earliest people to come to the land that we now call Texas arrived perhaps 12,000 years ago. When these people first arrived, the land was much different than it is today. Rainfall was greater and rich prairies and forests covered most of the land. Herds of giant deer, buffalo and huge mammoths grazed on the prairies. The earliest people that entered Texas were hunters looking for food.

Around 2,000 years ago, many of these early Texans found flowing springs in South/Central Texas bubbling up from a hidden source that we now call the Edwards Aquifer. The water was abundant, cool and clear. The rivers and streams that issued forth from these springs provided habitat for an abundance of deer, turkey and buffalo and the land was rich and fertile for farming. In fact, today it is believed that the area around the San Marcos springs is perhaps the oldest continually inhabited site in North America. In addition to the San Marcos springs site, early people hunted, gathered and traded around Comal springs in New Braunsfels and the San Antonio and San Pedro springs in San Antonio.

One of the earliest groups of Texans found in the Bexar County region was from a culture called the Coahuiltecan (koh • uh • weel • the • kuhnz). The Coahuiltecan were made up of many groups of natives found living from San Antonio to Corpus Christi to Old Mexico. Like their neighbors the Karankawas (kuh • rang • kuh • wawz), the Coahuiltecan were nomadic hunter gatherers. Since food was scarce in this dry grassland, the Coahuiltecan ate anything they could hunt or gather including prickly-pear cactus fruit, mesquite tree beans and agave.

Many of these San Antonio Coahuiltecan were part of the Payaya Indians. The Payaya lived along the San Antonio and Medina Rivers. They called their river Yanaguana (which means “the clear water”) and they peacefully shared it with other bands of Indians. Today we call this area the San Antonio Springs.





Spanish Settlers and the Development of a Community in Need of Water

“We marched five leagues over a fine country with broad plains-the most beautiful in New Spain. We camped on the banks of an arroyo, adorned by a great number of trees, cedars, willows, cypresses, and osiers, oaks and many other kinds... This I called San Antonio de Padua because we had reached it on his day.”

Domingo Teran de los Rios, 1691

In 1716, Spain and France were at war and the fighting carried over to the New World, America. The French controlled much of the mouth of the Mississippi River and south along the Gulf Coast. Spain, recognizing this as an immediate threat to their holdings in New Spain, quickly created a three-pronged imperial policy to strengthen their borders. The policy was unique in that it included the natives in the colonization plan rather than displacing them from their land.

As part of the plan, the natives would become the defenders of the Spanish Crown in the New World. They would be gathered together in missions, converted to Christianity and taught the principles of farming before being settled in new colonies.

The second part of the plan involved soldiers being garrisoned in nearby presidios to keep order. And third, once the native farmers had established settlements, Spanish colonists would be attracted to this area to begin new lives.

Although some historians believe Alvar Nunez Cabeza de Vaca camped at the headwaters of the San Antonio River in the 1520's which would make San Antonio one of the oldest historical sites in North America, the first true entrada, or formal Spanish expedition, began in 1690. Alonso de Leon and Fray Damian Massanet were sent to Northeast Texas to explore, expand and take possession of Spanish claim. The entrada was made up of three segments: religious, military and civilian members. The military oversaw protection of the expedition while the religious division focused on the spiritual needs of the expedition members and natives they encountered along the way. Families of the soldiers and other settlers made up most of the civilian group.

In 1691, Domingo Teran de los Rios accompanied by Fray Massanet, led another expedition to East Texas. They were instructed to establish missions among the Tejas Indians and to record their observations in this part of the territory. On June 13, 1691, the expedition came upon the Yanaguana for the first time and christened it, the San Antonio River. Not far from the San Antonio Springs, were the San Pedro Springs, which contributed a large source of water to the San Antonio River. Isidro Felix de Espinosa gave the springs their name on St. Peter's Feast Day in 1716. The Franciscan held a mass and dedicated it to St. Peter "in whose honor we gave this name to the place...San Pedro."

On April 13th 1709, another entrada stopped at the San Antonio River and San Pedro creek to take on water before continuing eastward. Father Antonio de San Buenaventura Y Olivares, a member of the religious sector of the expedition, was extremely pleased with the river and the friendly Payayas found there. He began petitioning the Spanish leaders to establish a mission.

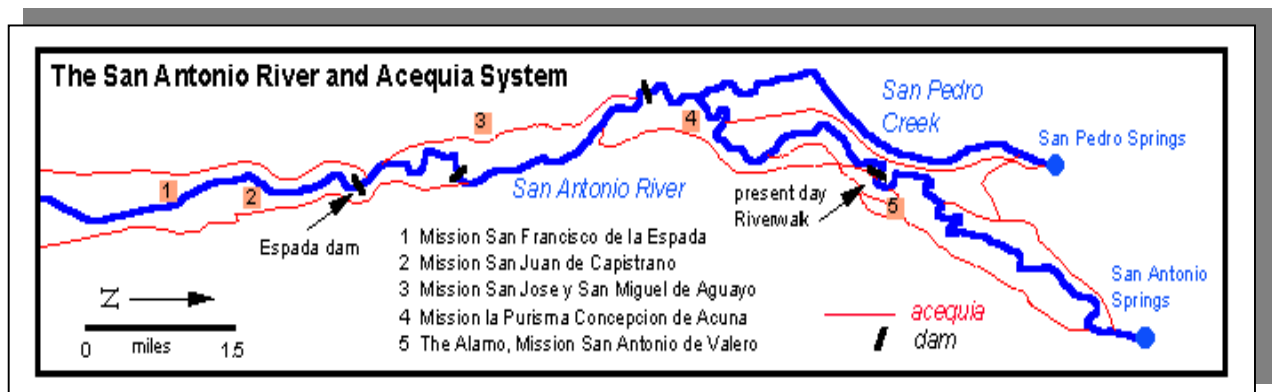
Meanwhile in 1716, Captain Domingo Ramon and seventy eight members of the entrada were once again sent to East Texas. Captain Ramon was also ordered to inspect Father Olivares river site along the way. Upon reaching East Texas, the expedition established six missions and a presidio that would further reinforce New Spain's eastern border with France.

Although Spain's three-pronged plan was working, Spanish leaders soon realized that they must establish a "halfway presence" between their new eastern settlements and the capital of New Spain in Mexico City. The newly discovered San Antonio River seemed a logical choice. Finally, in 1718 after nine years of campaigning for a mission at his river site, Father Olivares and Don Martin de Alarcon arrived at the San Antonio River to establish a mission.

It was also the clean, abundant supply of water that inspired Friar Olivares to abandon his mission on the Rio Grande and establish Mission San Antonio de Valero (The Alamo) in the Spring of 1718 on the banks of San Pedro Creek. Once again, it would be water that ultimately controlled the destiny of San Antonio.

By 1731, two missions, Mission San Antonio de Valero, Mission San Jose y San Miguel (both originally established in the region), were joined by three other missions moved from East Texas: Mission Concepcion, Mission San Juan Capistrano and Mission San Francisco de la Espada. These missions and ranches were on the best land along the rivers and they had a huge impact on the Coahuiltecan living in the region. Once the Spanish came, many of the Coahuiltecan bands moved into the missions. The steady source of food and water and the protection from stronger tribes was very appealing to them. Once in the missions, many of them married Spanish soldiers and settlers. Later, more Spanish and Mexican immigrants settled in the region and started ranches that attracted local Indians for the same reasons the missions did.

Early Spanish settlers in San Antonio knew the success of the region was dependent upon the planting and harvesting of crops. The need for water to irrigate fields and for direct use by the settlers gave rise to a series of water carrying "ditches" called acequias. The earliest acequias were constructed by the missionaries and Indians, but the settlers eventually carried out the major acequia building. Each acequia was built so that running water could be obtained on the mission grounds. A dam was built on the river, which raised the water level to the ditch. The water in the acequia paralleled the river, was used by the settlers, and then re-entered the river at a downstream position. The purity of the water was fiercely protected in the early days of the acequia system. Rows of cactus plants were even planted along either side of the acequia to keep cattle and other livestock away from the water.



Map of the acequia system

Although the acequias would remain the main source of water in San Antonio for more than 100 years, the springs still played a major role in the growth of region. San Pedro Springs became a public park in 1729 when King Philip V made a royal land grant to San Antonio settlements named San Antonio de los Llanos (San Antonio of the plains). The grant included 26,570 acres with some parcels of land being reserved for the King to grant to future settlers and other parcels of land being given to existing settlers. The area around San Pedro Springs was declared to be an *ejido* or public land to be used and owned by all people of the town. This fact makes the San Pedro Springs Park the second oldest park in the nation, second only to The Boston Commons.



By 1800, the Missionary period had, for all practical purposes, ended. San Antonio's clean, plentiful supply of water, was in jeopardy. The attention that the acequias received under the direction of the padres no longer existed. Citizens of San Antonio began using the ditches as a de facto sewer system. Early San Antonians deposited their garbage and other wastes into the ditches where they were carried downstream. By 1830 the acequia's water quality needed public regulation.

In 1836, the San Pedro Acequia was designated solely for drinking and cooking purposes. San Pedro Creek and the San Antonio River were for bathing and laundry. Fines were imposed on offenders. In addition, the town of San Antonio was growing to the point that the springs were no longer within an easy walk of the houses. Water was now a valuable commodity in San Antonio.

Water rationing had become a reality in the early 1800's. Water quantity problems soon gave rise to water quality concerns, especially during drought years. During an 1866 cholera epidemic that was blamed on water, civic-minded people began talking of organizing a water company. However, it would take a couple of years before this revolutionary idea would come to existence.

A New Water Supply for a Growing City

"We thought how easy to make San Antonio the most famed city for natural beauty on the continent...water pipes could be laid from the head fountains of the river...supplying water to residences...and then lead to the city...to supply it with spring water, or to feed a thousand dancing fountains."

San Antonio Express, July 23, 1867

In 1877, the city of San Antonio created a water works. Still using the San Antonio springs as its main supply, water was pumped to a reservoir on a high hill and then released using gravity through a series of company mains. George W. Brackenridge, a local banker and owner of land surrounding the San Antonio Springs, was confident in the new system.



But 159 years of acequia usage was difficult to change. The citizens of San Antonio were reluctant to patronize the new water works and only a handful of people used the new system once it came on line. Eleven years later in 1888, a local drilling company drilled 650 feet into the Edward's Aquifer and struck a flowing artesian well. Mr. Brackenridge knew the dependence on the San Antonio River as the primary water supply had ended. Because he feared that the spring fed source of the San Antonio River would dry up during a drought, Brackenridge immediately instructed the well company to drill a series of wells to supply his water works with a clean and abundant supply. Finally in 1891, Brackenridge struck an artesian well at 890 feet which had so much pressure that water flowed out of the pipe "15 or 20 feet high" and blew out pieces of rock "as large as a man's head" according to witnesses of its completion. The well flowed at three million gallons of water per day and soon company officials realized that the artesian aquifer would be a city water source for years to come.

Distribution and Treatment Come to San Antonio

"In the not very distant future most of Texas' springs will exist in a legend of a glorious past when mankind was one with, and reveled in, nature."

Gunnar Brune, 1981

Change was the word in San Antonio from 1890-1900. The new water supply may have triggered a rapid population increase from 18,000 in 1890 to 53,000 in 1900. Stories appearing in the San Antonio Express in the 1890's told of the abundance of water and reported that the Edward's Aquifer supply was "unlimited". But this rapid population growth also spelled trouble for the region. By the late 1890's, George Brackenridge was so disturbed by the lack of quality and quantity of the San Antonio Springs that he agreed to dispose of all his land. "I have seen this bold, bubbling, laughing river dwindle", Brackenridge wrote, "This river is my child and it is dying and I cannot stay here to see its last gasps...I must go." But Brackenridge wasn't the only one taking notice. By 1911, others were sounding the first warnings that the Edwards Aquifer was abundant but not unlimited.

In 1905, George Brackenridge sold his interests in the water company to George Kobusch of St. Louis. At that time, the name was changed to the San Antonio Water Supply Company. Shortly thereafter, Mr. Kobusch sold the business to the Belgian syndicate. While it was under foreign ownership, the water company was known as "Compagnie des Eaux de San Antonio" and was managed by the Mississippi Valley Trust Company of St. Louis, Missouri.

Partly to recover some of their financial losses from World War I, the Belgians sold the waterworks to a group of local investors in 1920. The city finally decided to issue bonds and buy the water company outright. On June 1, 1925, the utility became known as the City Water Board and its management was placed under Board of Trustees appointed by the City Council.

By 1920, the population had grown to 161,379 citizens and Edward's wells were pumping 22,494,000 gallons of water per day. The influence of water had pushed San Antonio to become one of the largest cities in Texas and an important 20th century economic and trade center, a fact that few people realized for the next 70 years.

While struggling to develop an adequate potable water supply system, the city also attempted to address sanitary sewer needs. Mayor Bryan Callaghan II advocated an organized sewage system

in 1890, but one was not authorized until 1894. By 1900, the system was fully operational and by 1930, the new Rilling Road Sewage Treatment plant was treating 25 million gallons per day.

Throughout the 1960s, 1970's and 1980's both the water and wastewater systems continued to expand as customer demand increased. The City Water Board was involved in negotiations or court action involving attempts to secure a supplemental water supply.

In 1965, the City built the Leon Creek Treatment Plant in order to ease the burden on Rilling Road. By the 1980's the city decided to build Dos Rios Wastewater Treatment Plant and to abandon the aging Rilling Road facility. The city also purchased the Medio Creek Plant in 1991 that allowed the City to provide service to the rapidly growing northwest portion of Bexar County.

In December of 1991, the city council voted to Establish a single utility responsible for water, wastewater, stormwater and reuse. The refinancing of \$635 million in water and wastewater bonds made the merger possible. A new entity, The San Antonio Water System (SAWS) became a reality on May 19, 1992.



Dos Rios Treatment Plant

Conclusion

If “an abundant supply” was the feeling in 1900-“conservation and protection” is the rallying cry today. In almost every decade since 1910, there have been warnings about the amount and quality of water in the Edwards Aquifer. The San Antonio metropolitan area now supports 1.5 million citizens and the San Antonio Water System, the largest supplier of water in the region, pumps an average of 154 million gallons per day from the Edwards Aquifer. San Pedro as well as the San Antonio Springs dry up during rainless periods and their once “impenetrable underworld” now lies at the heart of flourishing urban sprawl. An underground-pipe water system replaced most of the acequias at the end of the 19th century, but even today, the Espada Dam and its acequia continues to irrigate several small farms in South Bexar County making it the only remaining original, operational Spanish acequia system in the United States.

As for the early people of this region, the Coahuiltecs had disappeared by the time American settlers reached the area. Caught between the Spanish/Mexicans and the Apaches most of the last bands were all gone by the end of the 1800s. Their only survivors today are the many Native Texan Hispanic families in South Texas. Many families who are members of the Catholic Churches at the old missions in San Antonio can trace their families back to Coahuiltecan ancestors. The few surviving Coahuiltecs in other parts of South Texas were absorbed into the larger Hispanic/Mexican culture of South Texas. Almost any Hispanic family in South Texas who can trace their ancestors back to the early 1800s probably has Coahuiltecan blood in the family. But the culture and languages these people spoke are completely gone now.

Looking back at the history of San Antonio, it is quite clear that water has always served as a road map at the crossroads of change. Water will most probably continue to guide this region well into the next century. Water has and always will be a life giver. Not only for humans, but also for San Antonio, a city born of water.

