

History of the Buckeye Canal

BWCDD Zanjero Training

Session #1

1/2/2008

Three Make History

- On a spring day in 1885, Malin M. Jackson, Joshua L. Spain and Henry Mitchell hooked a team of horses to a wagon and headed west out of Phoenix.
- They followed the old Yuma freight road to the junction of the Gila and Agua Fria Rivers.
- They looked over the land for some place that would be easy to develop an irrigation system.
- They initially looked on the South side of the Gila
- Not being satisfied, they made a second trip and decided on a location just west of where the Agua Fria flows into the Gila to locate a dam.



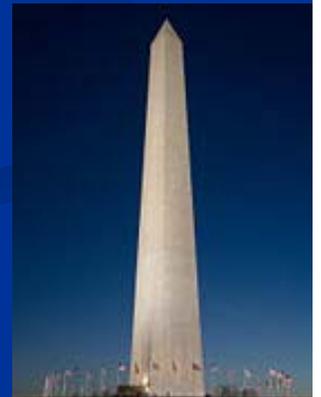
Creative From the Start

- Without pencil and paper, the three hewed out a smooth flat place on a willow tree and wrote a notice with charcoal.
- They hurried back to Phoenix, built a triangle, returned and posted a legal notice on May 28th, 1885.
- They surveyed the first three miles of the canal utilizing the triangle to see if they could get the water out of the land.
- Being satisfied that the venture was feasible, they returned to Phoenix and filed their notice of location at the recorder's office in Phoenix on June 30, 1885.



Famous Events in 1885

- January 4 - The first successful appendectomy is performed by Dr. William W. Grant on Mary Gartside.
- January 20 - L.A. Thompson patents the roller coaster.
- February 9 - The first Japanese arrive in Hawaii.
- February 21 - US president Chester A. Arthur dedicates the Washington Monument
- March 3 - American Telephone and Telegraph (AT&T), is incorporated in New York.
- March 4 - Grover Cleveland replaces Chester A. Arthur as President of the United States.



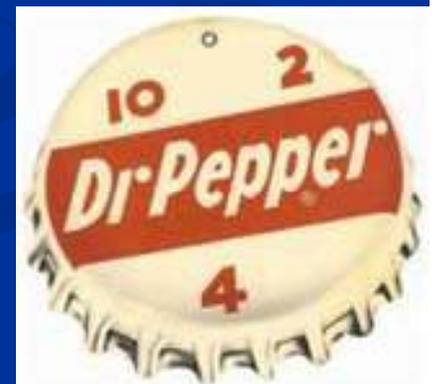
Famous Events in 1885

- April 3 - Gottlieb Daimler was granted a German patent for his 1-cylinder water-cooled engine design
- April 30 - A bill is signed in the New York State legislature forming the Niagara Falls State Park
- May 2 - *Good Housekeeping* magazine goes on sale for the first time.
- June 17 - The Statue of Liberty arrives in New York Harbor.
- July 6 - Louis Pasteur successfully tests his vaccine against rabies.
- July 14 - Sarah E. Goode is the first female African-American to apply for and receive a patent, for the invention of the hideaway bed.



Famous Events in 1885

- October 13 - Georgia Institute of Technology is established in Atlanta, Georgia as the Georgia School of Technology.
- December 1 - The US Patent Office acknowledges this date as the day Dr Pepper was served for the very first time; the exact date of Dr Pepper's invention is unknown.
- Creation of the first genuine safety bicycle, the Rover, by the nephew of James Starley of Coventry Company; John K Starley.
- John Boyd Dunlop a Scottish veterinarian, invents the pneumatic tire
- First skyscraper - Home Insurance Building in Chicago, Illinois, USA (10 floors).
- Bicycle Playing Cards first produced.





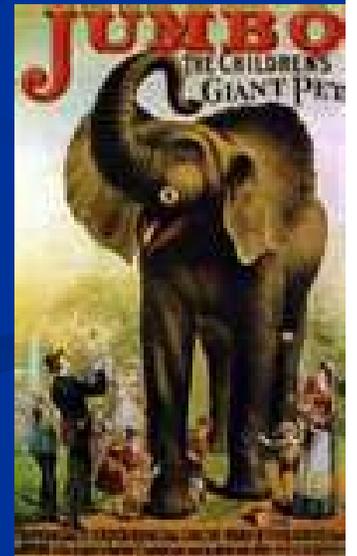
Famous Births in 1885



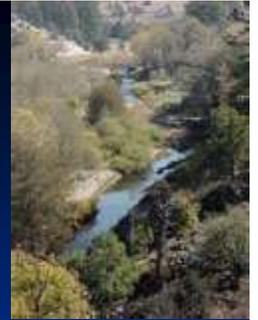
- February 7 - Sinclair Lewis, American writer, Nobel Prize laureate (d. 1951)
- February 24 - Chester Nimitz, U.S. admiral (d. 1966)
- May 7 - George 'Gabby' Hayes, American actor (d. 1969)
- July 4 - Louis B. Mayer, American film producer (d. 1957)
- November 11 - George Patton, American general (d. 1945)

Famous Deaths in 1885

- July 23 - Ulysses Simpson Grant, American Civil War general and the 18th U.S. President (b. 1822)
- September 15 - Jumbo, the great elephant & star attraction in PT Barnum's circus (train accident) (b. 1861)



With a Purpose



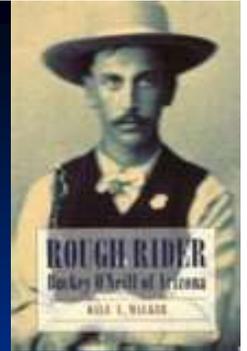
- Twelve thousand inches of water was located and claimed by the group, as was a right of way over the public domain forty feet wide to the Hassayampa Creek on which to build their canal.
- It was named the “Buckeye Canal” by Mr. Jackson in honor of his native state, Ohio, “the Buckeye State.”
- The purpose of the canal was said to be “for agricultural, milling or mechanical enterprises.”
- In September, 1885, M.E. Clanton and others organized the Buckeye Canal Company and had the new company’s articles of organization recorded with the territorial’s secretary on September 25, 1885.
- The original locators were paid \$300 for their interest and work was begun on building the canal.



Buckeye Canal Company

- On July 24, 1886 Buckeye Canal Company filed notice of an additional 38,000 miner inches, making for a total of 50,000 miner inches (1250 cfs)
- This location was recorded in Phoenix on October 8, 1886.
- The original canal survey extended from the dam at the Agua Fria River to the lower end of Arlington near the present Gillespie Dam and was completed to the Hassayampa in 1886.
- Water was turned into the canal in 1887.
- The water was to be carried across the Hassayampa river by means of a sand dam until the dam was full and then it ran out the other side.
- It was maintained this way for many years although the dam washed out every time a little flush of water came down the Hassayampa.

Buckey in Buckeye



- On October 13, 1888, William (Buckey) O'Neill, formed the Buckeye Irrigation Company.
- On that same day, the Buckeye Canal Company contracted with O'Neill to construct a dam that would divert at least 6,000 inches into the canal at all times.
- On October 28, 1888, the rights and title to the 50,000 inches (minus 6,000 inches) was sold to.
- The 6,000 inches were already appropriated and were represented by 75 shares previously issued
- These shares had first and prior rights in the canal up to 6,000 inches.

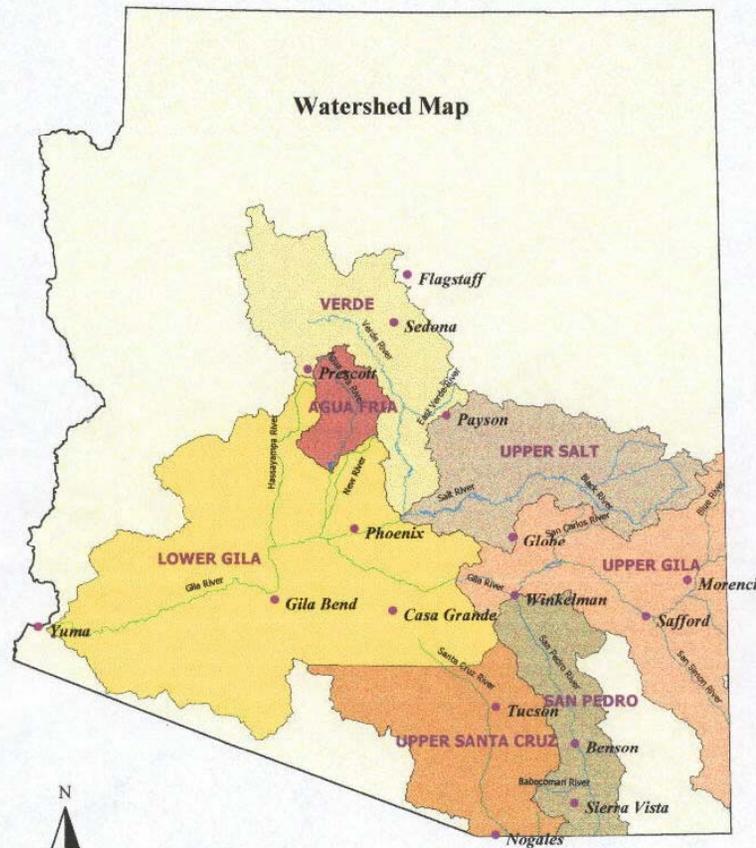


Big Watershed & Big Dreams

- Mr. O'Neill commissioned Major Edward Wilton to survey the canal.
- Major Wilton reported back that “the location of the head of the canal is the best in the valleys of the Salt and Gila rivers as it catches all the water from the Salt and Verde and Gila Rivers and also of the Agua Fria and Cave Creek.
- In fact, it catches the drainage of Northern and northeastern Arizona, northwestern New Mexico and northeastern Sonora. A vast territory larger than all the New England States.”
- Plans were made to bring over 120,000 acres under irrigation
- Funding was attempted through bonds to finance the enlargement and extension of the canal.

Big Watershed & Big Dreams

Gila River System and Source
General Stream Adjudication



Flood Problems

- The flood of 1891 flooded the Buckeye Valley and parts of Phoenix as well.
- This flood washed out the dam and gates.
- It broke the South Extension Canal and washed out or filled up with drift or sand the first five or six miles of the main canal.
- Faced with dire conditions, with little to no chance of getting water in time for crops, many of the farmers moved out.
- The Buckeye Irrigation Company talked of big plans that would cost a half million or so dollars; however, when the flood arrived they were not prepared to do anything about it.



Buckeye Farmers Rally



- Newt Clanton circulated around a petition setting forth how much they would contribute to put the canal back in shape and repair the dam and headgates so they could get water to their lands.
- It took months to get the canal and dam in shape so that water was flowing in the canal.
- Unfortunately, after a few years of normalcy, repeated rain in the summer of 1896 caused the canal to break frequently.
- The farmers were depended upon to fix the canal breaks and paid in water credits at \$1.50 per day. These were often resold at \$0.50 to \$0.75 on the dollar.

Other Problems Due to Rain

- Due to the frequency and intensity of rain, the desert was lush with vegetation, with cattle up to their bellies in desert grasses and weeds.
- This provided for free feed for the cattlemen, the main customers of the Buckeye farmers.
- This drove prices to ridiculous levels.
- One example is the sale of 60 acres of sorghum for \$100, where it normally would have fetched \$800 to \$1,000.
- To remedy the situation, a bunch of farmers approached the Buckeye Canal Company (who was again operating the canal) to lease the canal for 2 years.
- On October 5th, 1899, Buckeye O'Neill's widow sold her interests in the canal to an outfit in Fresno, California.



Buckeye's History



- Buckeye was a newspaperman, miner, county sheriff, mayor and most well known as Rough Rider.
- He made most of his fortune from Onyx mines in Mayer, AZ, but went broke trying to bring the railroad to the Grand Canyon.
- He led a Smithsonian expedition to explore the prehistoric Sinaguan ruin called "Montezuma's Castle" on Beaver Creek in the Verde Valley
- He was a captain with the Rough Riders and was shot to death at San Juan Hill in Cuba
- "The Spanish bullet is not molded that will kill me."
- Legend says that these were Captain O'Neill's last words



Competition & Turnover

- In 1899 the Arlington Canal Company was formed to water lands west of the Hassayampa.
- On June 5, 1900 the canal and 3,000 acres of land was sold and became the Buckeye Canal and Land Company.
- Farmers under the People's Ditch tried to get the Canal Company to assume operations of this section of the South Extension.
- In March of 1902, the canal was purchased by James R. Thorpe. He moved the office of the Wessex Water Company from Phoenix to Buckeye.
- Wessex constructed a telephone line through the valley for 40 miles that same year
- Angry farmers also tried to form the White Tanks Canal Company in 1903.

More Flooding



- On August 1, 1904 the largest flood since 1891 hit the canal when the Gila, Salt & Agua Fria all ran at the same time and lasted until the middle of September.
- The Dam had been damaged and work continued on it from September until December 1.
- Rain started again on New Year' Eve 1905 and water was out of the canal until June 14.
- Luckily the crops did not suffer severely due to the extensive and frequent rainfall
- Rain again in 1906 caused the Canal Company to block the canal with a dirt dam 200 yards long

The Beginning of the BIC

- February 28, 1907 farmers in the Buckeye Valley met at the Buckeye School House to discuss the possibility of acquiring the canal.
- Wessex & BIC appraised the canal system and negotiated a sale at \$92,900.
- September 23, 1907 the BIC changed the way they sold water from the inch to the acre.
- In February 1908, the BIC negotiated with the White Tank Canal Company to assume operation of the White Tank system.
- In February 1909, the BIC changed the canal routing back to the original routing, adding 1 mile in length to the canal.

Home Sweet Home



- In 1910, the upper Zanjero house was constructed on 10 Acres
- March 7, 1911 the lot for the first office was purchased by BIC
- April 2, 1912 a home site for the lower Zanjero was approved and built on 2.5 Acres
- March 1913, the first automobile came into use by the BIC
- In 1916 the BIC put a dam in the Agua Fria to divert water since the Gila was on a rampage
- In 1917 the Benson Allison Decree occurred that established the rights of each individual piece of land to water and the date of such right.
- In 1922 the BWCDD was formed as an irrigation and drainage district to help finance the new dam and to enlarge the canal.

Let the Battles Begin



- 1928 BIC filed suit against RID due to water rights and won the suit of which RID pays for four wells annually.
- 1929 BIC sued SRP & MWD, with BIC getting 1% that are released from Granite Reef
- Beginning in 1940, the Buckeye Irrigation Company has been attempting to get local, state and federal agencies to recognize the problems that the Tamarac and Salt Cedar trees pose to the valley, especially if a flood were to come down the Gila. These trees back up the water to the point that serious flooding could ensue.
- BIC sent CAP \$1,600 in 1948 to fight California in the Arizona vs. California lawsuit

Well Off



- 1947 BIC sold their 1% to Phelps-Dodge in Morenci in exchange for \$50K and between \$10 and \$20 per AC-FT for four years. They took this and immediately started drilling wells.
- Over subsequent years, both drainage and irrigation wells were drilled, with 24 wells in production by 1949.
- Due to the diminishing water in the river, in 1950, the Buckeye Irrigation Company decided to drill 14 new wells and bought a used well drilling rig.
- They also started a lateral lining program to reduce the amount of water lost to seepage.
- September 1950 saw the celebration of paying off its last bond and becoming debt free.
- After 43 years, they finally were in the black.

**phelps
dodge**

Filthy Rich in Water

- In 1966, Buckeye Irrigation Company acquired the right to purchase 30,000 acre-foot of water per year from the City of Phoenix 91st Ave treatment plant.
- Delivery started in 1971 and has proved to be a boost to the water delivery in the valley.
- Six floods in 1966, 1970, 1978 (2), 1979 & 1980, caused significant damage to the system.
- The largest flood recorded 150,000 cubic feet per second or 6,000,000 miner's inches.
- That translates to 3.44 acre-feet per second or 1.12 million gallons per second.

Water-Logged

- April 1, 1948 Roy Decker of the Soil Conservation Service made a survey of the water-logged lands and made a report that there were 6,300 acres already water logged, and that 56,000 AC-Ft of water would need to be removed annually to effectively drain the lands.
- In 1955 the water level elevation was dropping fast, 20 feet in three year in some spots, but the floods of the 60's and 70's and the treated effluent made the Buckeye Valley water-logged again.
- Arizona enacted the Ground Water Law in 1980 to accomplish safe yield.
- Legislation was brought forth to exempt Buckeye, Arrlington and St. Johns from the Phoenix AMA due to the water-logging problem.
- The exemption has been extended out to 2019.

Today

- BWCDD continues to divert water from the Gila River into our Main Canal. The South Extension Canal splits from the Main Canal near Citrus Road.
- The District's boundaries include the Main Canal to the North, the Gila River to the South, Cotton Lane to the East and the Hassayampa River to the West.
- BWCDD is over 22,000 acres.
- At our peak, we sell 16,000 inches and deliver over 40 heads of water, while running 38 pumps.
- Some farmers will run from 500 to 1,000 inches for more than a week.
- Because we divert “surface water” from the Gila, the water in the canal falls under the doctrine of prior appropriation.

Today

- Prior appropriation states; “first in time, first in right.” That is why the farmers have first right to the water in the canal.
- As our farmland becomes developed, we are looking for ways to balance the needs of the farms and new homeowners.
- We are also looking at ways to streamline the community water sign-ups via a possible internet sign-up.
- District Assessments are now on the tax roll