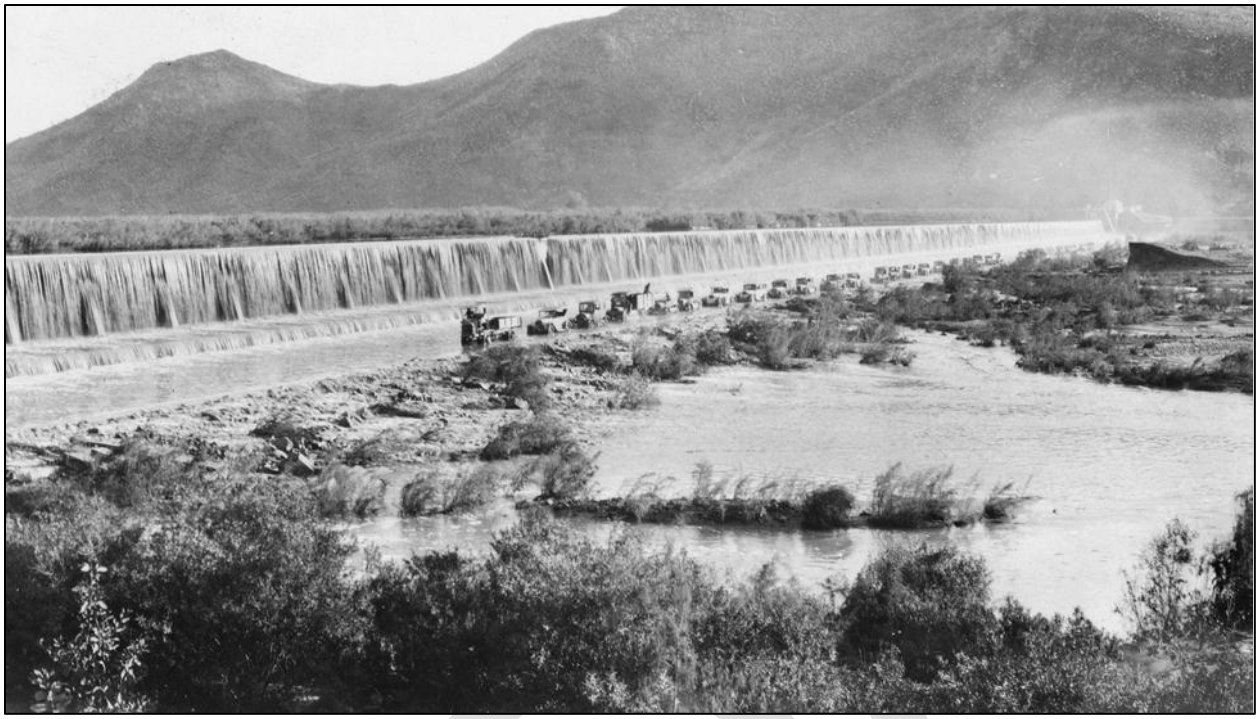

Concrete 'apron' allowed a train of vehicles to be chained together and towed across the Gila River were Gillespie bridge is located today (circa 1922).

Historic Gillespie Dam Bridge Restored

Nine steel trusses, each 200 feet long, were stretched across the Gila River south of Gillespie Dam creating a bridge for vehicular use in 1926. Now, after 86 years, the 'Old US 80 Bridge' at the Gila River has been rehabilitated by Maricopa County and the Arizona Department of Transportation.

The bridge's damaged and bent steel members were heat straightened, roller bearings were replaced (used for temperature expansion/contraction of spars), pipe rail and sway bracing were repaired plus piers were reinforced and the roadway approaches were repaved. Also, this National Register historic site now includes an interpretative display.

Imagine in 1914 a dirt road connecting Phoenix to Yuma via Buckeye, Arlington, and Agua Caliente. But, within few years, repetitive flooding at Lowdermilk and Yellow Medicine washes damaged the 'north' road and surveys began for a new route.

While bridges across the Agua Fria and Hassayampa Rivers were being constructed it became clear that a southern route, following the prehistoric Gila Trail, had numerous advantages. However, *crossing* the Gila River still posed a challenge. One spot was a constricted gap

between the Gila Mountains and the Buckeye Hills.

This narrow site had been a low water crossing point but water levels varied greatly. During the stagecoach era one perilous crossing was described as:

> "On one occasion two nuns, a gambler, and a solder hung on the outside and upstream side of the coach in order to counterbalance the flood current. As the story goes the stratagem, plus the driver's goading of his struggling horses, the nun's praying, the gambler's cursing, and the soldier's shouted encouragement, brought the coach safely to the opposite shore."

Good luck arrived in Arlington when agriculturalist Frank A. Gillespie proposed a dam to aid thousands of acres of new farmland. Since 1886 the location had been used to funnel water into the Enterprise Canal and in 1919 'construction commenced' on Gillespie Dam. The multiple-arch concrete structure was 1,768 feet in length, 56 feet tall, and cost $3 million when completed in 1921.

Relying on this historic ford for use on the new transcontinental route meant engineers had to develop a better means to cross the Gila River. One idea was to build a bridge on top of the new dam. But the design adopted was to construct a concrete apron along the downstream toe.

The apron (pictured here) was the cheapest idea and by 1922 vehicles could drive across the river during low water conditions. In high water situations, vehicles would be chained together in a 'train' that was pulled across the river by a truck. However, the Gila River was still impassable during floods.

By 1925 the Arizona Highway Department had a new bridge option - a superstructure design consisting of a series of steel trusses. To create a truss, manufactured steel parts were assembled on-site using large bolts and rivets. Support for each truss was provided by solid concrete abutments and piers placed on bedrock at depths of 25 to 43 feet below the riverbed. Constructed in 1926 the immense bridge was 1662 feet long and 19 feet wide. Total cost was $320,000.

In 1927 the Gillespie Dam Bridge was the state's second longest vehicular bridge and it was a key to completing the US 80 "Ocean-to-Ocean Highway" between San Diego and Savanna Georgia. In 1956 the cross country route was realigned and the bridge reverted to county road status.

Today, the historic Gillespie Dam Bridge has been restored and remains one of the most important examples of early bridge construction in Arizona.

From *Tonopah Tribune,* October 2012. Find more information about "Arizona Historic Bridge Inventory" visit ADOT at: http://www.azdot.gov/highways/EPG/EPG_Common/Documents_Technical_Historic_Bridge_Inventory.asp