



Green Line Update

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TEMPE BEFORE THE GREEN LINE

In the 1960s, the area that would become known as the Green Line was an ephemeral desert wash located in Papago Park in North Tempe. Typical of Arizona’s Sonoran Desert landscapes, the area was primarily populated by cactus, mesquite and creosote bushes that received little to no water aside from the occasional monsoon storms or winter rains. In 1967, the City of Tempe built a water treatment plant, Johnny G. Martinez Water Treatment Plant (JGM), in the area to treat water from the nearby canal in order to produce potable water for the growing community.

Aerial Photo of North Tempe in 1969



From the 1960s to the early 2000s, the water treatment process utilized at the JGM Water Treatment Plant involved intermittently discharging process water into a nearby wash, which is now known as the Green Line.

THE GREEN LINE - AN OASIS IN THE DESERT

Water treatment processes and environmental regulations have evolved significantly since the 1960s, as has the source and supply of water that Tempe used to sustain the Green Line. In

Aerial Photo of North Tempe in 2014



2000, Tempe entered into an agreement with the Arizona Historical Society Museum (c2003-159) to maintain the Green Line and supply it with water to maintain the lush riparian habitat that residents had become accustomed to. At the same time, the City's Water Utility received a \$229,152 grant from the Arizona Water Protection Fund Commission to operate and maintain the Green Line. The terms of the grant (00-114b WPF) required the City to maintain the Green Line for 20 years, identify a "long-term supply" of irrigation water for the area and complete specific vegetation maintenance related activities. The required tasks were completed by 2006 and funding from the grant was exhausted in the process.

WATER SUPPLY TO THE GREEN LINE

To provide a contractual source for annual water to irrigate the Green Line, the City initially utilized funding from the grant to purchase Excess Central Arizona Project (CAP) water.

Municipal water providers like Tempe receive CAP water primarily through established contracts that specify annual allotments called Municipal and Industrial (M&I) subcontracts. The contractual source of most of Tempe's CAP supply is provided through a M&I subcontract. Excess CAP water is a separate type of contractual CAP water that allows CAP users the ability to receive more water in a given year than the amounts specified in their subcontracts. Approximately ten years ago, the Colorado River system started being significantly impacted by the on-going drought on the watershed and, in an effort to sustain the river system through the drought, Excess CAP water was repurposed and became no longer available to subcontractors like Tempe.

To provide the Green Line with a more consistent supply of water, an eight-inch pipeline and pump station were constructed in 2011. This pumping system provided the City with the infrastructure necessary to supply irrigation water from the pond at Evelyn Hallman Park to the Green Line. Papago Park Pond, located at the corner of College Avenue and Curry Road, also receives water from the Green Line, after it flows under Curry Road.

As the majority of the Green Line is located within Papago Preserve, the City's Parks and Recreation Division now manages, budgets and oversees all operations and maintenance activities associated with irrigation water delivered to the Green Line. The City's Water Utilities Division manages the City's raw water supplies and controls deliveries of the small portion of Tempe's M&I CAP water required to sustain the Green Line area.

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