

Investment in flood control pays dividends

Tim Eichenberg / Chairman, AMAFCA Board of Directors

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In 1900, Albuquerque had a population of about 6,000 residents, and was heavily reliant on agriculture and animal husbandry for its economic well-being.

By the early 1940s, Albuquerque's increasing urbanization and economic potential were being negatively affected by flooding from the Rio Grande and storm water runoff from local thunderstorms. Levees were built along the Rio Grande to contain the river; however, the North and South Valleys, including the downtown area, continued to be flooded by storm water runoff.



By 1960, the greater Albuquerque urban population had swelled to more than 200,000 and, in 1963, its citizens approved the creation of the Albuquerque Metropolitan Arroyo Flood Control Authority, AMAFCA, to construct large regional flood control facilities to protect life and property.

In 1965, construction started on AMAFCA's primary facility in the northeast part of Albuquerque, the North Diversion Channel, to protect the North Valley and portions of downtown from upland flooding.

By 1972, AMAFCA's primary southeast facility, the South Diversion Channel, was being constructed to protect the South Valley area east of the Rio Grande, from downtown to the Tijeras Arroyo. In 1975, flooding on the west side of the Rio Grande in the South Valley from Isleta Pueblo to Central Avenue required AMAFCA to begin construction of dams west of Coors Boulevard.

The northwest and northeast areas of town also experienced flooding problems.

In 1988, runoff in the Calabacillas Arroyo sent hundreds of thousands of cubic yards of sediment toward the river, which caused a partial blockage of the Rio Grande. By 1990, AMAFCA started structural improvements in the arroyo to diminish peak flows and to minimize sediment transport in the naturalistic arroyo.

Albuquerque had already grown to a population of 345,000 and AMAFCA began constructing dams in North Albuquerque Acres to control peak flows and to reduce floodplain area.

The new millennium brought challenges to AMAFCA's facilities.

Storm events in 2006 produced flooding in downtown that affected business and residential properties alike. AMAFCA provided funding to the city of Albuquerque to construct regional flood control facilities to protect the Martineztown and Barelás communities.

The monsoon season of 2013 has provided us with a unique situation to evaluate the investment that we have made over the last 50 years.

In the first two weeks of July, residents in the South Valley experienced rain events that filled the Amole Dam for the first time and caused large flows in the South Diversion Channel.

No homes were flooded or streets closed in this area.

The July 23 storm blew in with hurricane-strength winds, and uprooted trees, damaged power lines, closed roads and dumped large amounts of rain from Alameda to Bridge boulevards.

Surge ponds filled, pumps stations pumped and flood control channels conveyed runoff to the Rio Grande. Only downtown reported flood damage.

It continued to rain in August and September, which resulted in many AMAFCA dams being filled to their highest levels ever. The wettest September since 1929 caused the Calabacillas Arroyo to flow more than 10 times this year. Numerous flows equated to the one seen in 1988. The AMAFCA facilities worked as designed with minimal damage.

The investment in flood control that started in 1963 to protect life and property is still paying dividends today. The North and South Valleys did not flood; the Calabacillas Arroyo did not send a large amount of sediment to the river; the Northeast Heights did not experience significant flooding; and flood damage downtown was greatly reduced.

Today, more than 650,000 people live and work in the Albuquerque urban area. AMAFCA will continue to invest in flood control so future generations will have the maximum level of protection from the effects of flooding through fiscally responsible flood control actions, and multi-use facilities that complement and enhance the beauty of our city.