The Santa Cruz River provided precious water in an arid desert region. For more than four millennia, the Santa Cruz and its floodplain have been the heart of the social and economic landscape of the Tucson Basin.

Archaeologists have found evidence that the prehistoric farmers who lived along the Santa Cruz River built canals to carry water to their fields, constructed fieldhouses for shelter, and tended their crops. In the past, the Santa Cruz River was a shallow stream that meandered northward through the broad floodplain, much different than the deeply incised channel we see today. The river has always been an intermittent stream divided into what geologists term "reaches." Buried rock formations at reach boundaries pushed underground stream flow to the surface. The more permeable areas between remained dry except during periods of heavy rain. The diagram below highlights how water availability gradually decreases downstream from Martinez Hill and then increases again just before Sentinel Peak or, as it is better known, "A" Mountain.

At the Paseo site, archaeologists uncovered a settlement where farmers lived between AD 350 and 500. Archaeologists used backhoe trenches to reveal what lay buried. After that, a wide backhoe blade scraped away the soil layers and revealed the outlines of 24 houses, which archaeologists call pithouses because they were constructed in shallow pits. Inside the houses lay the farmers’ tools, stone tools for cutting wood, and tools for grinding their corn into flour. Other objects such as large pots for storing crops were also discovered.

Prehistoric farmers certainly had knowledge of surface flows and water availability in different parts of the Santa Cruz River. The Paseo de las Iglesias project area reflects this knowledge with people settling first at the Paseo site, noted on the map, where water was available naturally. The southern end of the project area was farthest from Sentinel Peak and farthest from reliable water. Here, only small scattered settlements were found with none occupied for very long. Later, residents of villages such as the Julian Wash site east of the river developed alliances to build major irrigation canals. These canals carried water northward from the Martinez Hill area.