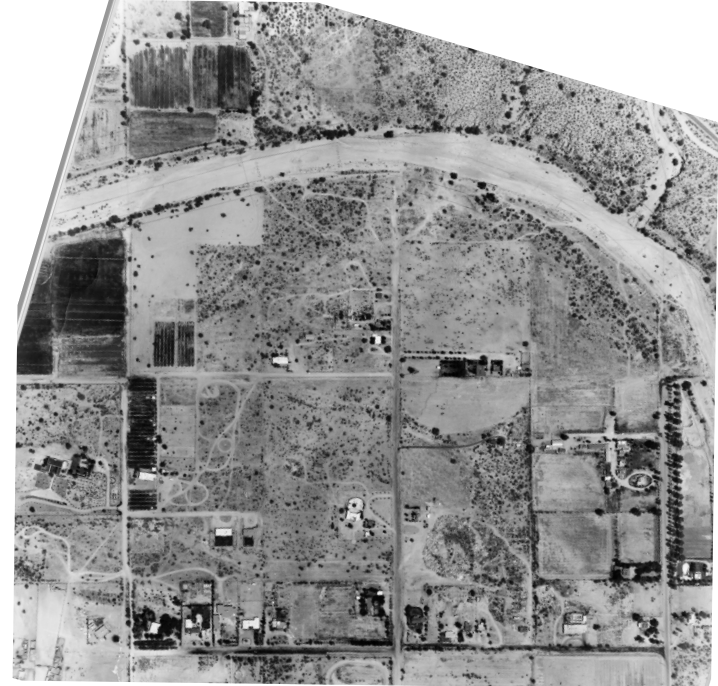


# Rio Vista Natural Resource Park, 1936–2021: A History of Land Cover Change



2021



1959

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Resources

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# Rio Vista Natural Resource Park, 1936-2021

A history of land cover change by Julia Fonseca

What follows is a brief interpretation of land cover changes at Rio Vista Park and its immediate surroundings, based on imagery available through [PimaMaps](#), a free utility hosted by Pima County. Land cover means the earth's clothing, be that bare soil, vegetation or man-made structures. The following aerial photographs provide a way to view land cover change over time and to inform our understanding of what we see today.

Rio Vista Park sits in the former floodplain of the Rillito. Photographs from 1936 and 1941 show the area still retained natural vegetation patterns that were associated with old channels of the Rillito. The likeliest dominant vegetation would have been mesquite, although bare soil or grasses were also present. The area was probably open range for livestock, based on what look like livestock trails leading across the present-day park to water-filled ponds southeast of Rio Vista. Irrigated farms surrounded the park area. Water flowed in the Rillito channel in both 1936 and 1941 photographs.

By 1959, there had been much clearing of vegetation for horse or cattle enclosures, some home construction and a little farming. The remaining natural vegetation looks much thinned. Was this due to woodcutting, livestock trampling, drought (the 1950s were quite dry) or a drop in the water table? The Rillito was not flowing in the 1959 photograph. Cactus Boulevard provided the principal access to what is now Rio Vista Park by this time.

During the 1970s and early 1980s, more land in the park area was cleared of vegetation for horse operations and houses. Soil-cement embankments were constructed after the 1983 flood.

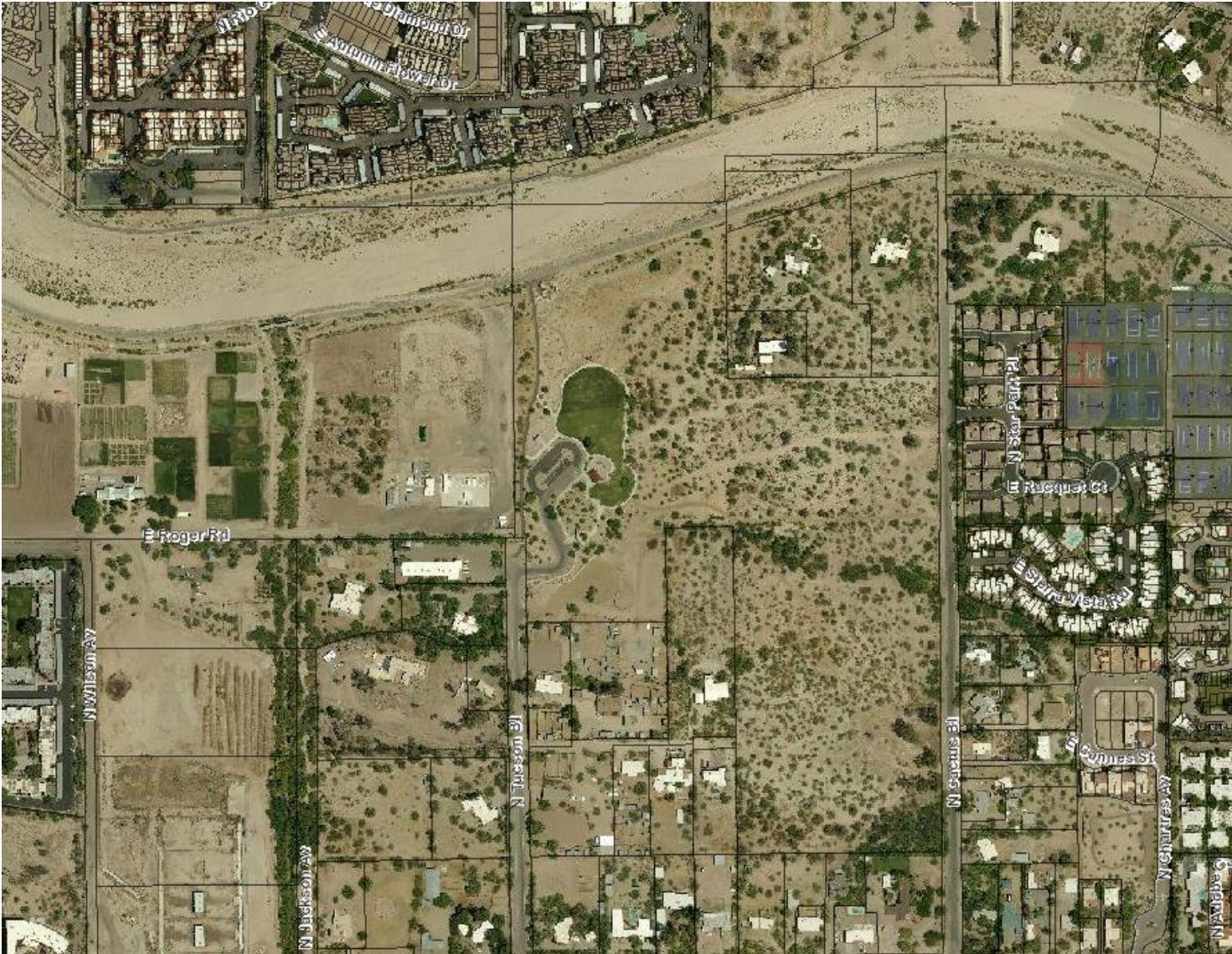
During the late 1980s and 1990s, the proportion of bare soil seemed to decrease and some vegetation re-colonized bare ground. Residential use in the park area ceased. The horse operation looks gone by 2002. By 2005, turf and parking areas are apparent; these were built on some of the most intensely disturbed ground near Tucson Boulevard. Vegetation in the drainage swales thickened considerably. By 2021, the vegetation cover in the swales appears more sparse; trail density appears similar to 2005.

In summary, the vegetation we see today has been shaped by what occurred in the past. The disappearance of the shallow water table and construction of soil-cement embankments are not the most visually obtrusive changes, but they profoundly affected the area's land use and land cover trajectory over time. To some degree, the natural vegetation in the park is still recovering from a combination of intensive livestock use and mechanical land clearing. Aerial photographs show that there are some areas that were never cleared. More recently, drought appears to have reduced the amount of cover available in drainage swales.

2021



2010



2005



2002



1998



1983

# TUCSON FLOOD

OCT. 3,





1980





1974

1959



**1941**



1936

