

**Summary of the Arizona Department of Water Resources (ADWR)
Spring 2016 Water Level Sweep of the Ranegras Plain Groundwater Basin**

Background

During March 2016 field staff from the ADWR Basic Data Unit obtained water level measurements in 76 wells located throughout the Ranegras Plain Groundwater Basin. The 2016 water level measurements were then compared to water level measurements obtained during the last water level sweep of the Basin that was conducted in 2004. Based on that comparison, a total of 58 wells were found to have water level measurements in both 2004 and 2016 that have been used to calculate water level changes over that time period. Results of the statistical analysis of the water level data are summarized in Table 1 and shown on the 2004 to 2016 water level change map (Figure 1).

	All Wells	Only Wells Showing Positive WL Change (Rises)	Only Wells Showing Negative WL Change (Declines)
Number of Wells	58	10	48
Average Water Level (WL) Change (feet)	-18.6	9.5	-24.4
Median WL Change (feet)	-6.0	6.4	-7.0
Minimum WL Change (feet)	.3	0.3	-1.7
Maximum WL Change (feet)	-131.6	24.8	-131.6

**Table 1 Summary of 2004 to 2016 Water Level Changes in the Ranegras Plain
Groundwater Basin**

2004 to 2016 Water Level Change Summary

Review of the water level data from 2004 to 2016 shows water levels declined from about -20 to -130 feet in the agricultural area from New Hope to Vicksburg (Figure 1 and 2). Many wells declined in the -30 to -70 feet range in that area. The largest declines in water level exceeded -100 feet and were measured within 5 miles of Vicksburg Junction. Smaller declines in water levels were measured in most other areas of the Basin that were surveyed. 10 wells showed rising water levels that ranged from about .3 to 25 feet. The average change in water levels from 2004 to 2016 for all wells measured in the basin was -18.6 feet.

2004 to 2016 Water Level Change In the Ranegras Plain Groundwater Basin

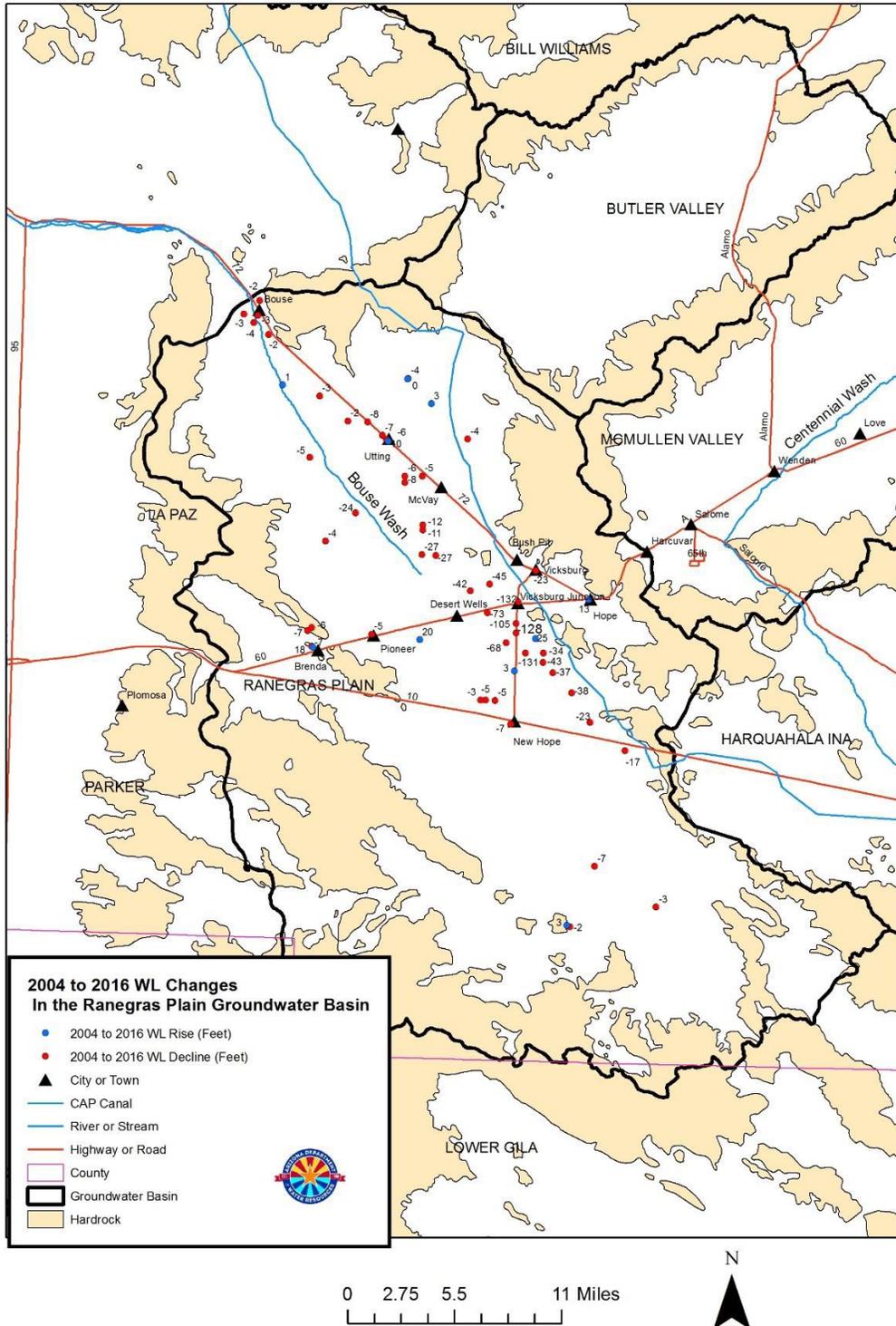


Figure 1 2004 to 2016 Water Level Changes in the Ranegras Plain Groundwater Basin

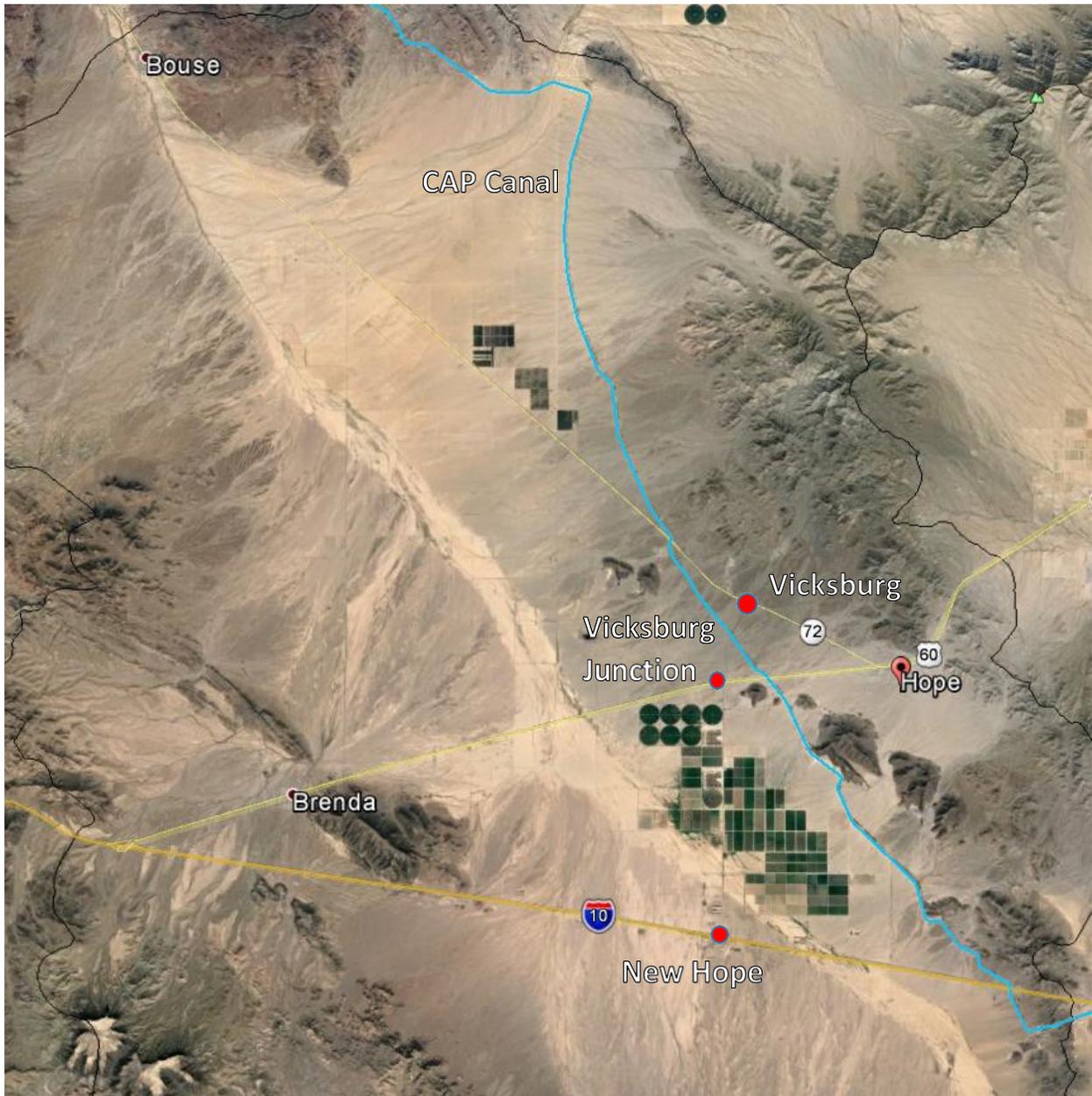


Figure 2 Google Earth Image of Ranegras Plain Agricultural Areas