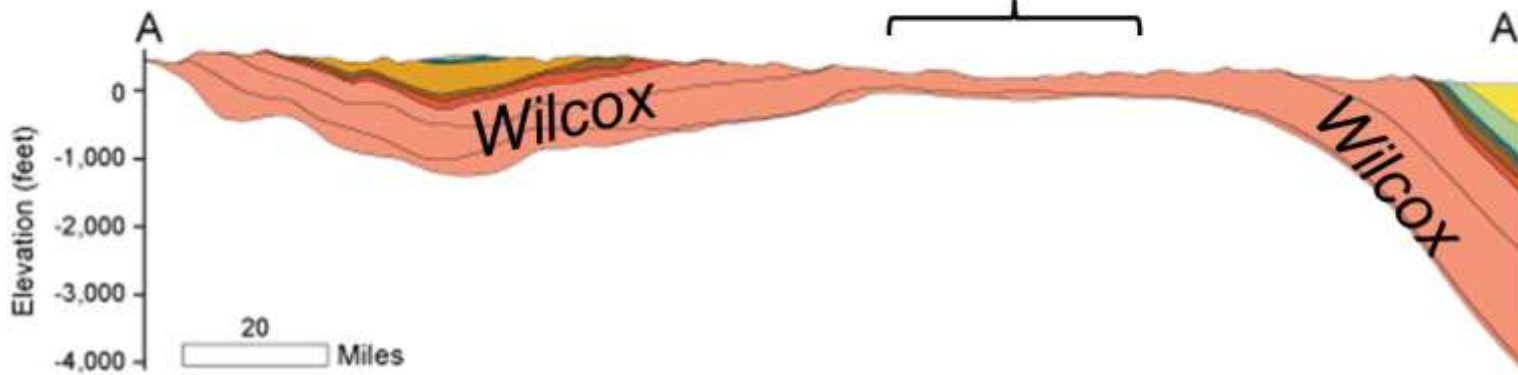


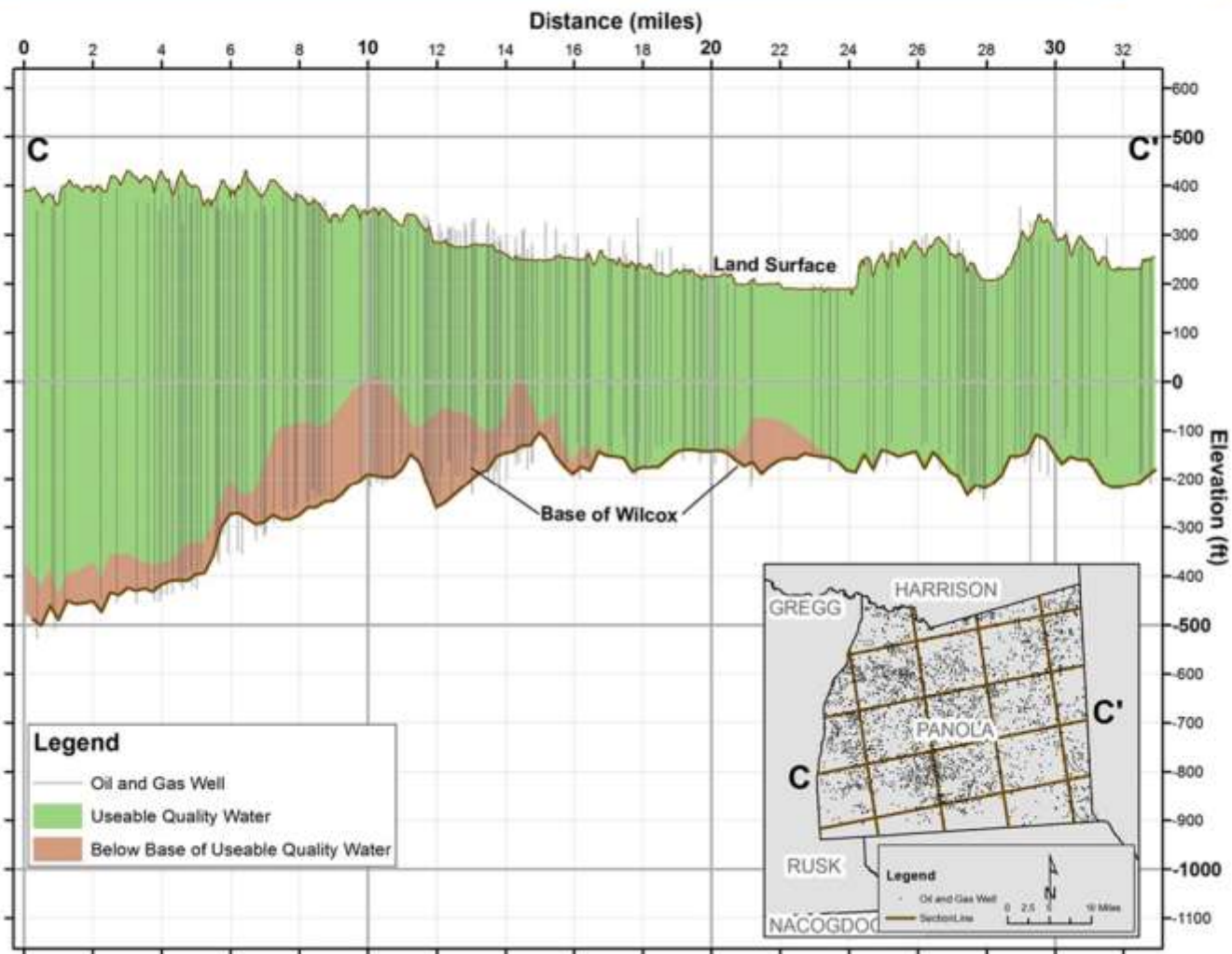
# Geologic Setting



## Panola County



# Geologic Setting



Using data from the District's well registration database, Figure 1 shows the distribution of well depths in Panola County. The median well depth is 220 feet and the average is 219 feet. Compared to some other areas of Texas, the Carrizo-Wilcox Aquifer is relatively shallow in Panola County. The shallowest wells in Panola County, typically 150 feet or less, are more likely to be negatively impacted by droughts and water level changes. Deeper wells are more insulated from these impacts. Approximately 30 percent of the wells in Panola County are 150 feet or less.

Figure 2 shows the distribution of water levels in Panola County, shown as depth to water. The median depth to water is 51 feet and the average is 57 feet. About 90 percent of the wells have a depth to water of less than 100 feet. The deeper water levels are typically associated with deeper wells but they may also be affected nearby pumping.

Figure 3 shows the locations of wells with water level measurements in the Texas Water Development Board's groundwater database and wells in the District's current monitoring well network. Through discussions with District staff, it is our understanding that many wells in the District are unused and could be readily added to the network. We, therefore, did not consider the availability of wells to be a limiting factor when developing our recommended monitoring approach.

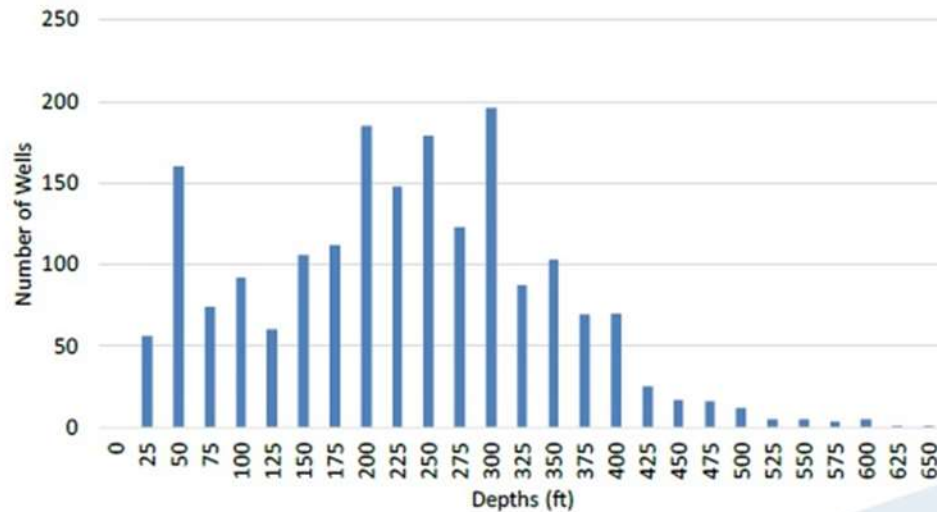
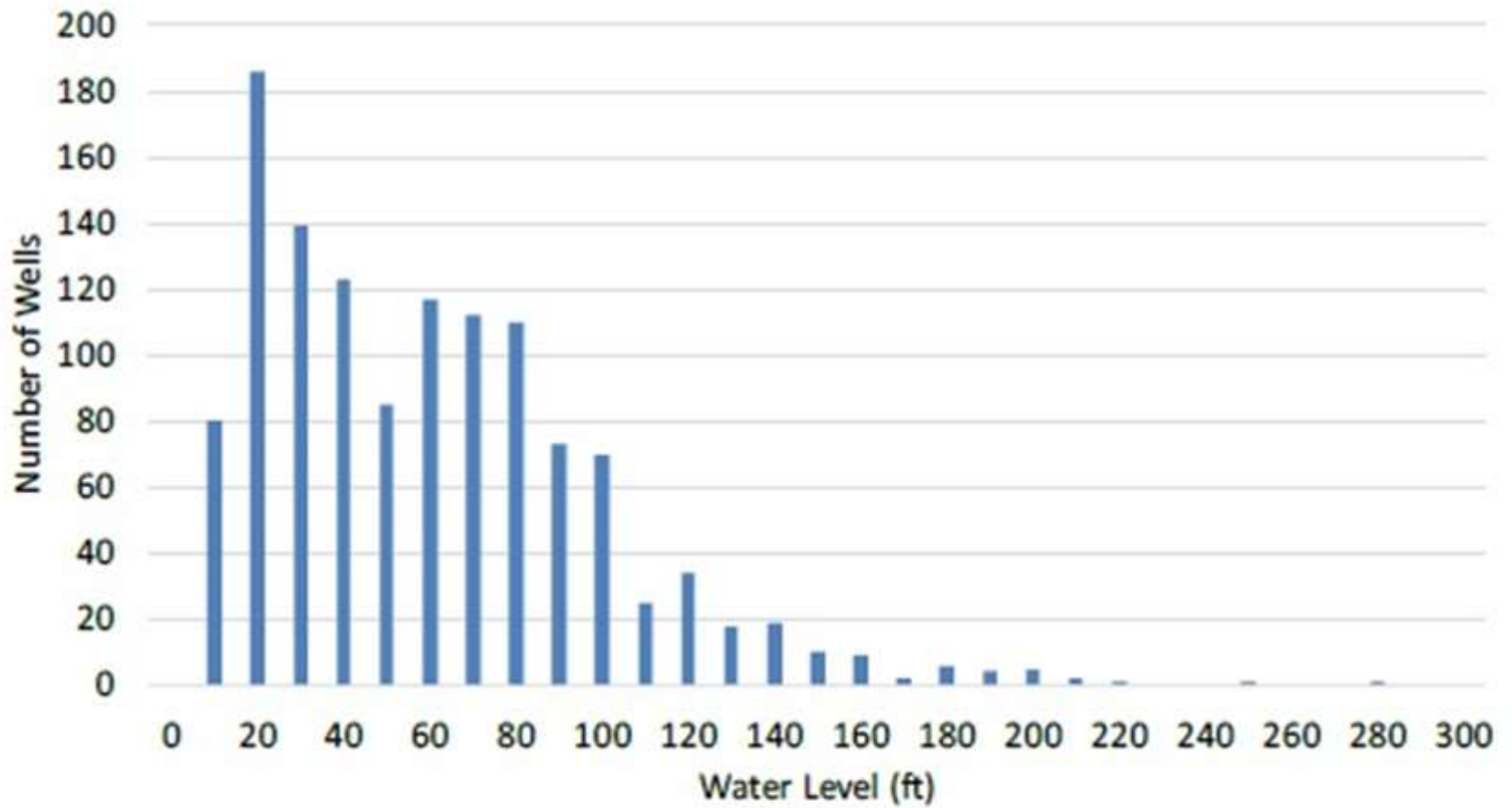


Figure 1. Histogram of well depths in Panola County.



*Figure 2. Histogram of water levels in Panola County, shown as depth to water in feet.*