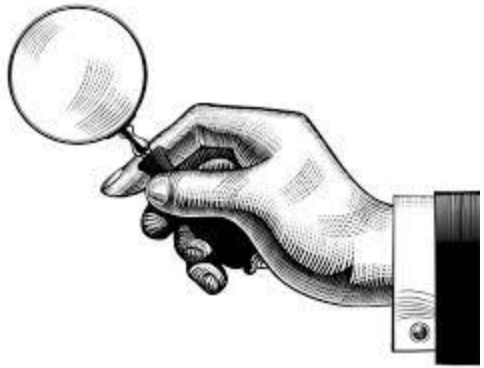
What do you notice, what do you wonder?

Type here:

Mystery in the Santa Cruz River

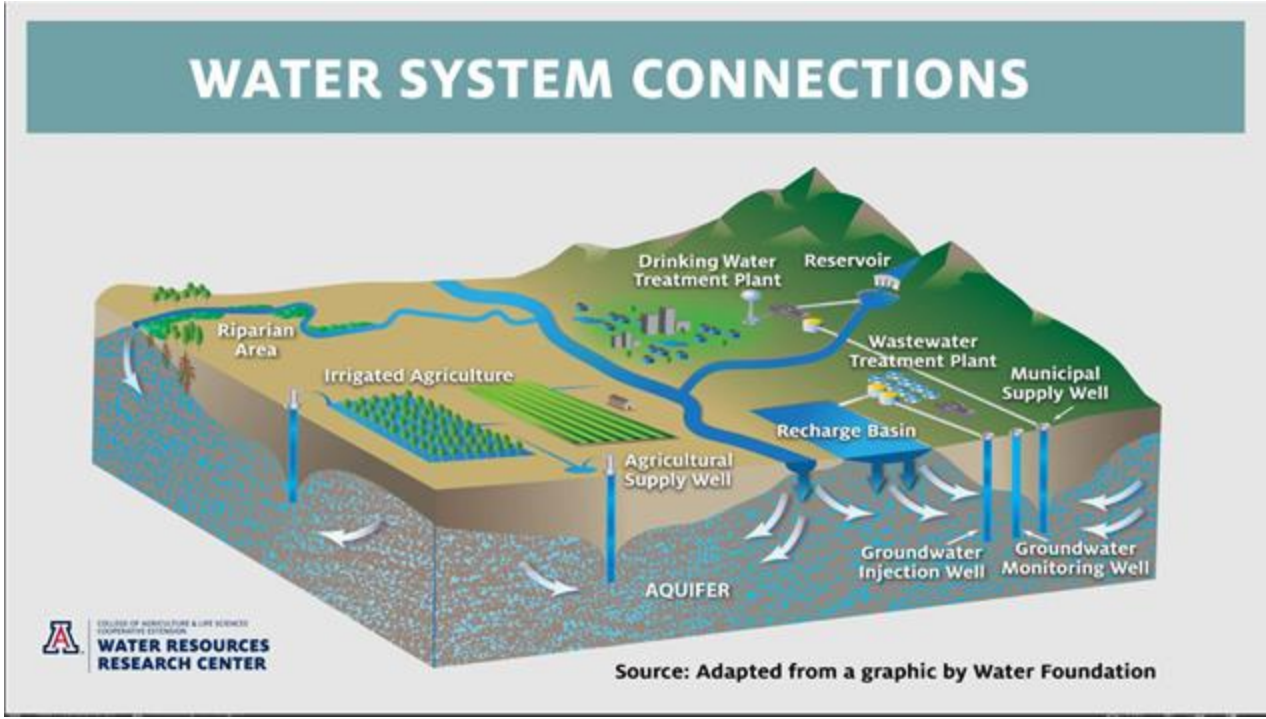
Use the following clues to explain the phenomenon in the pictures. On most slides you must type in an answer or other information that will lead you to the cause of the phenomenon. On the last slide you must make a claim about what you have discovered that caused it.



Mystery Clue #1

"Groundwater"

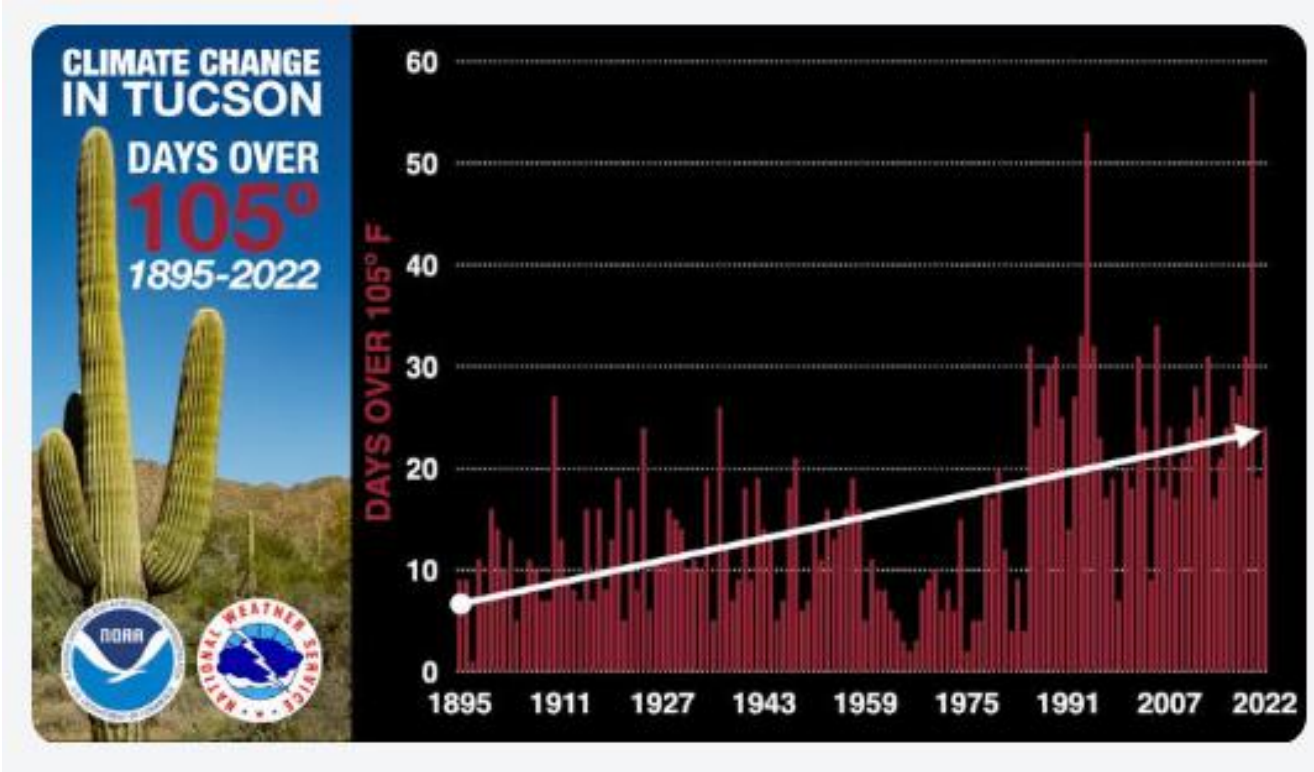
Where do you think our groundwater comes from? Explain why you think that.



Clue #2

"Climate Change"

What do you notice about the number of days in Tucson over 105? How could that impact the water cycle in Tucson?



Clue # 3

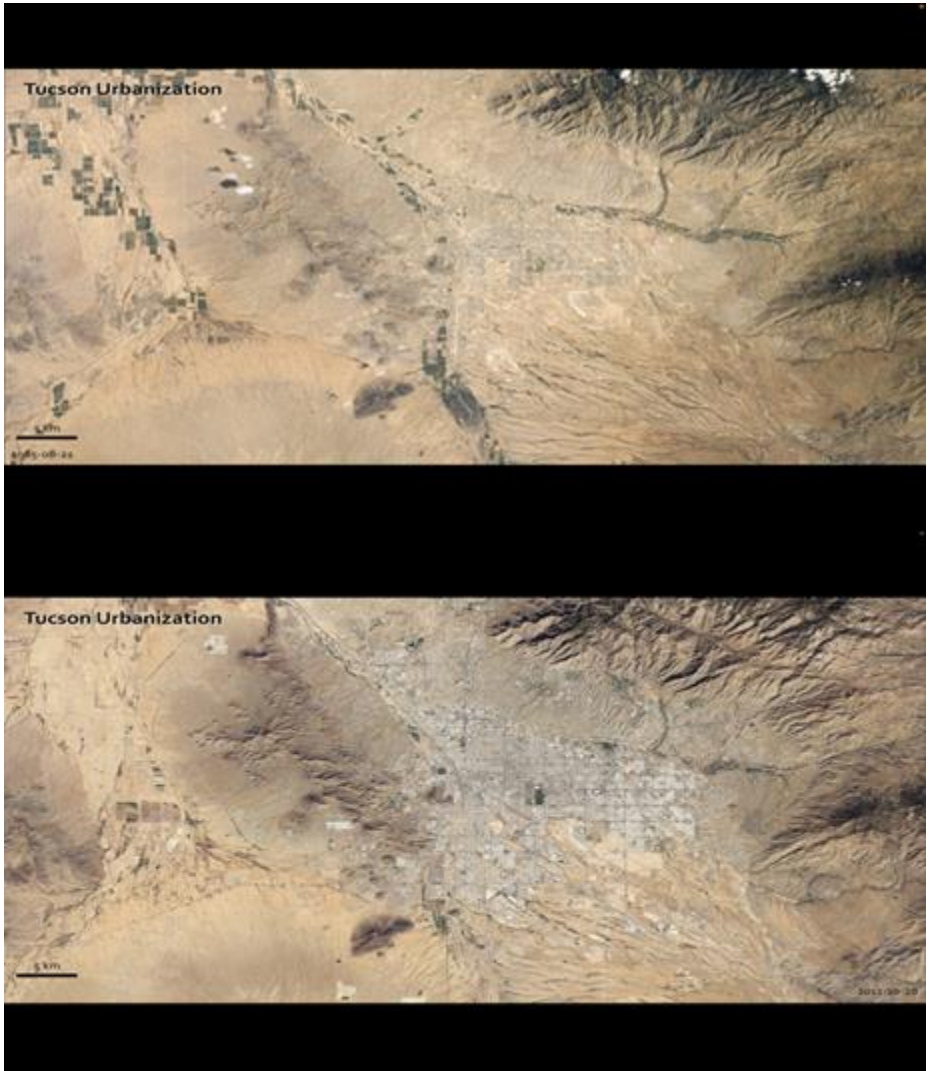
Tucson 1965

Clue # 3 Continued

Tucson 2011

Clue #3 Continued

What do these two maps show us?



Clue # 4

This graph shows water in monitoring wells, what do you believe is the cause for the overall groundwater decline?

Figure 2. Map showing monitoring wells, gravity observation stations, Heritage Project outfall site, and path of the Santa Cruz River as it approaches the southeast foot of Sentinel Peak, near Tucson, Arizona.

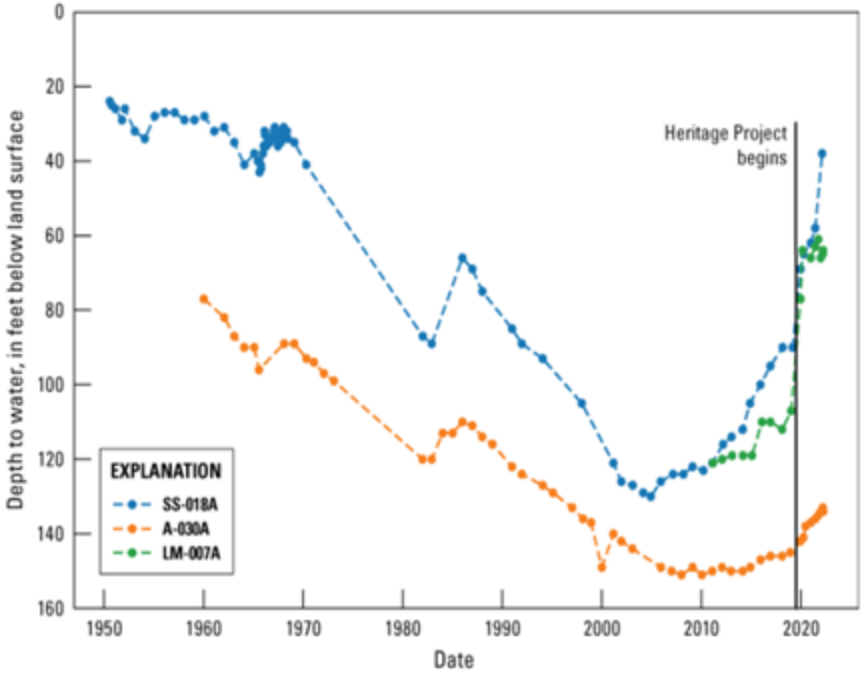
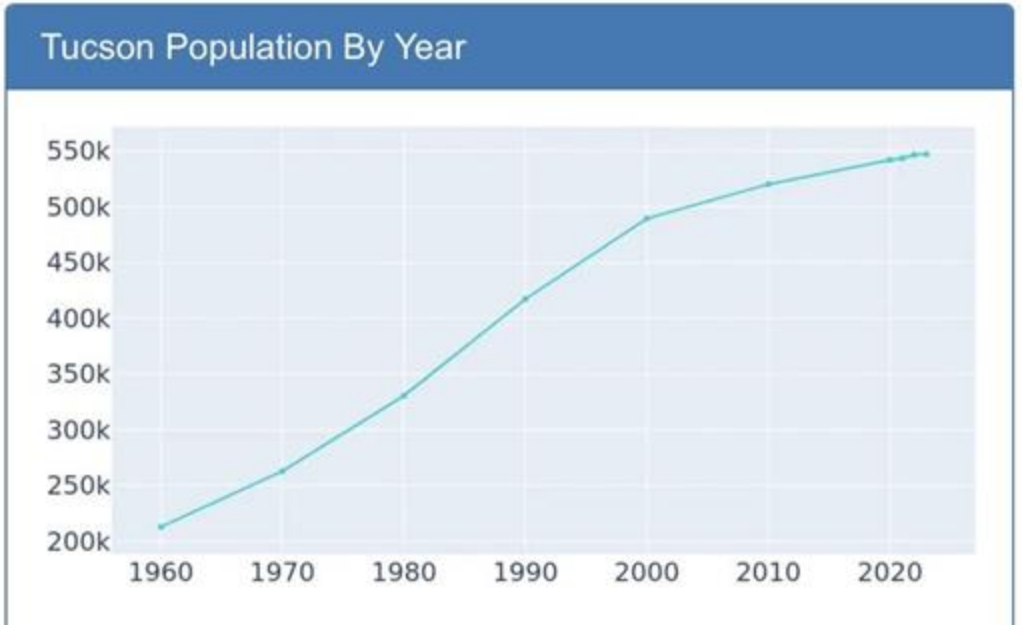


Figure 3. Groundwater-level time series (below land surface datum) for selected Arizona Department of Water Resources (ADWR) wells in the study area (fig. 2), showing groundwater declines and recovery from 1950 to 2022.

Clue #5

What information does this graph give and why is it relevant to water resources?

Tucson Population History 1960 - 2023



Clue #6

What does the video add or confirm about your thoughts on the phenomenon?

Mystery Solved?!

Using evidence from the clues, explain the phenomenon in the pictures on the first slide. What do you think happened to the water in the Santa Cruz?

Type your explanation as a CER. (Claim, evidence, and reasoning)