

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Data for the Navajo Nation

## Case Site: Navajo Nation

**Read About:** The Navajo Nation spans across three states (New Mexico, Arizona, and Utah) and is home to about 175,000 people. The Navajo Nation relies on water from three sources: precipitation, snowmelt from nearby mountains, and groundwater pumped to the surface. While the area has some deserts, it also consists of mountain forests and high mesas. The Navajo Nation has been experiencing unusually drier and hotter years recently, with more and more residents relying on water accessed from community water tanks.

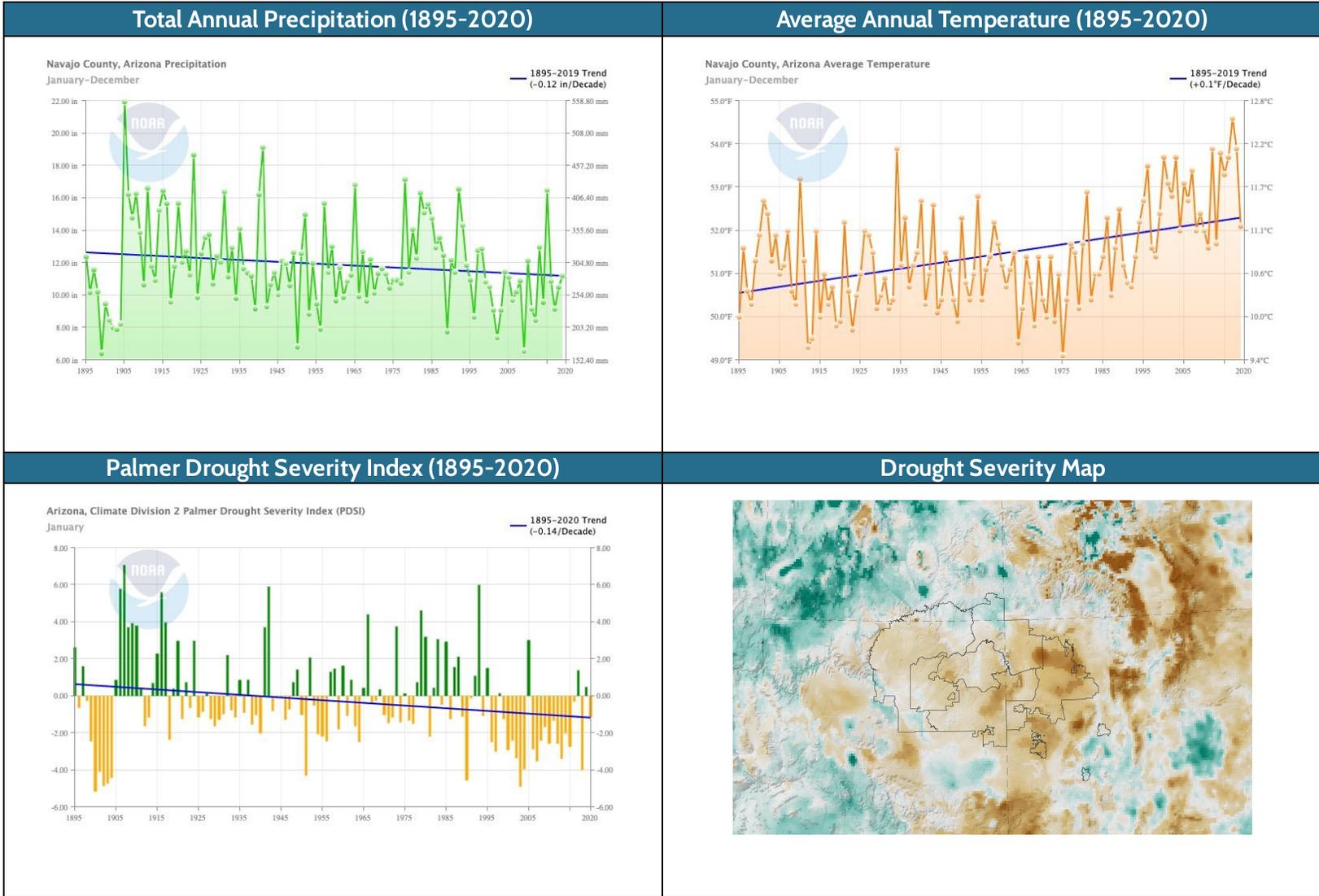


Images: On left: Trucks line up to fill water tanks and carry them home. Credit: Nick Oza/The Republic. On right: Water is Life signs are found all over the Navajo Nation.

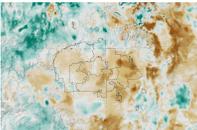
**Part 1: Prepare to Analyze and Interpret Data.**

Before you analyze the data, do the following:	Your notes:
1. <b>Read about the data</b> sources on <i>About the Data</i> . <ul style="list-style-type: none"><li>• Consider your purpose: Why are you using this data? How might it help you understand floods and droughts?</li></ul>	
2. What <b>component of the Earth’s Water System Model</b> does this community rely on and/or have problems with in the community?	
As you analyze the data, do the following:	
3. <b>Annotate (write and draw) on the graphs (WIS)</b> to highlight your observations of the data (part 2). Observations might include high points in the data, low points in the data, the direction of trend lines, or other questions you might have about the data you see on the graphs or maps.	
4. Begin <b>interpreting what you think the data means (WIM)</b> for your case site (part 3). This can include specific observations about certain years represented in the data and any overall trends you see across all years in the data set.	
5. Consider what <b>other types of data</b> you might want to look at as well or <b>new questions</b> that you have. Note those ideas in part 3.	

**Part 2: Data to Investigate.** Write or annotate on these graphs as you consider what you notice in the data (WIS).



**Part 3: Record Your Observations and Interpretations of the Data (WIM).**

Data Source	Describe your observations of the graphs:	Describe the short-term variability in the data:	Describe the long-term trends in the data:	Questions I have:
<p>Total Annual Precip.</p> 				
<p>Average Annual Temp.</p> 				
<p>PDSI</p> 				
<p>Drought Severity Map</p> 				

**Part 4: Synthesize the Data.**

Communicate Claims and Evidence	Your Notes:
What claim, if any, can you make about what is happening with precipitation (including droughts or floods) at your case site?  How does the data support your claim?	
What claim, if any, can you make about what is happening with temperatures at your case site?  How does the data support your claim?	
How will you communicate the patterns and relationships in your data to your peers?	