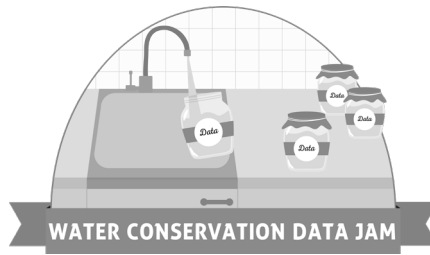


Part One -



Where's Our Water?

1. Examine all 3 graphs, and then make a claim. How will climate change affect the amount of water in the Southwest? (Example claim: There will be more/less water available in the southwest in the future because of climate change.)

Figure 1. Average Temperature in the Southwestern United States, 2000 - 2020 Versus Long-Term Average

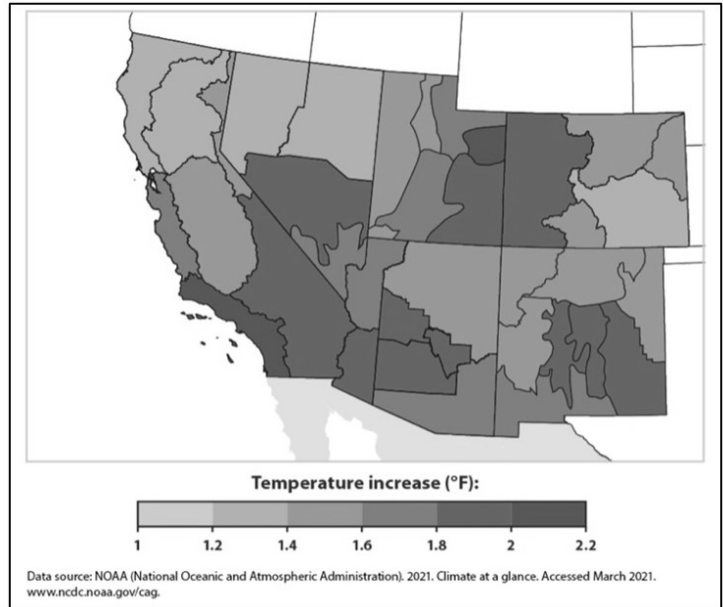


Figure 3. Trends in April Snowpack in the Western United States, 1955 - 2022

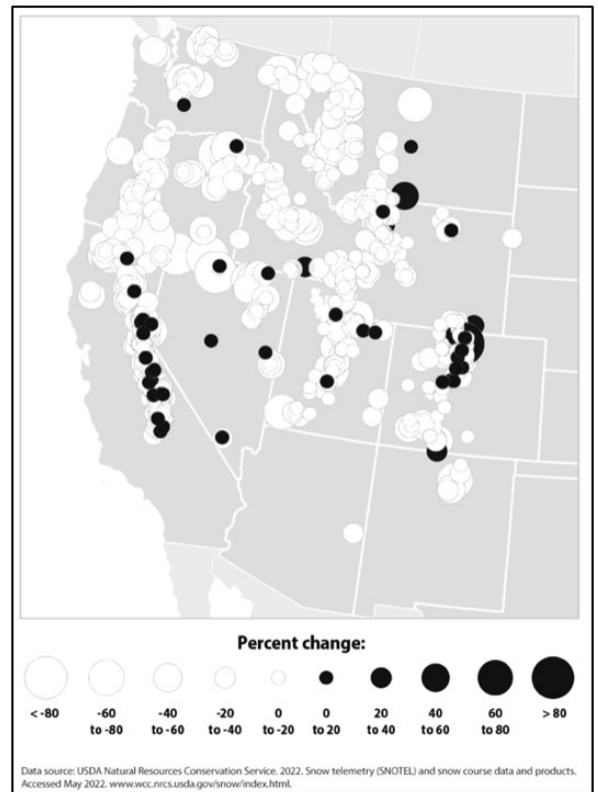
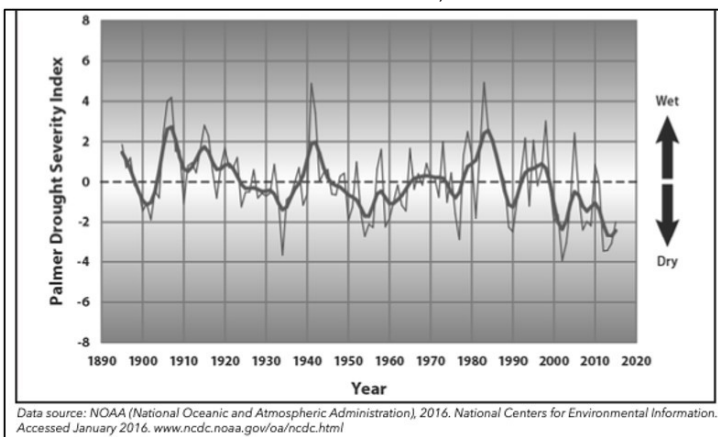
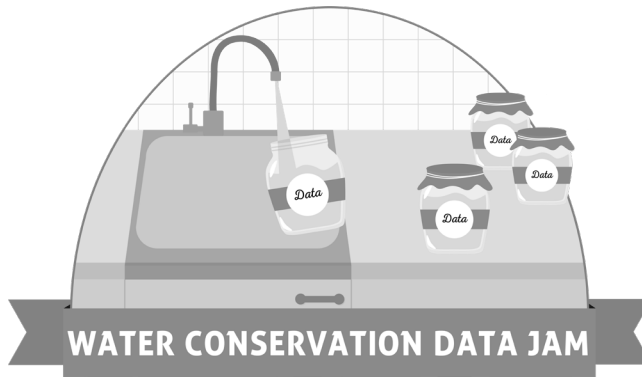


Figure 2. Drought Severity in the Southwestern United States, 1985 - 2015



2. Provide evidence for your claim. What specific data from the graphs and/or maps do you observe that can support your claim?

3. Explain your reasoning.



**WATER USE DATA FOR:** \_\_\_\_\_

YEAR	POPULATION	DOMESTIC WATER USE (MGAL/DAY)	IRRIGATION WATER USE (MGAL/DAY)

**HOW BIG IS A MEGA GALLON?**

Hypothesis: How many gallons can fit inside the classroom? \_\_\_\_\_

$1 \text{ meter}^3 = 1000 \text{ liters}$

$1 \text{ liter} = 0.264 \text{ gallons}$

Classroom Length: \_\_\_\_\_ Classroom Width: \_\_\_\_\_ Classroom Height: \_\_\_\_\_

Classroom Volume = \_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_  
Length Width Height

Classroom Volume: \_\_\_\_\_  $\text{m}^3$  x  $1000 \text{ l/m}^3$  x  $0.264 \text{ gal/l}$  = \_\_\_\_\_ gal

\_\_\_\_\_ gal  $\div$  1,000,000 gal/Mgal = \_\_\_\_\_ Mgal fit inside this classroom

### DATA TREND - BRAINSTORMING SPACE

- Look at the data carefully and list some trends you might like to explain to your audience. If you get stuck, try graphing some of the data. You will choose one trend for your project.
  
- List some possible ways to represent the data (song, rap, interpretive dance, infographic, etc.). Think about the positive and negative aspects of each one.

### DATA JAM PRESENTATION

1. Introduce all of the students who worked on this project.
2. Give the **title** of your project. Make sure it is descriptive.
3. Explain the **data trend** you are trying to get across in your project.
4. Showcase your **creative project**. For example, read your poem, act out your play, or give a tour of your physical model. Make sure to explain your legend (how the data are represented).
5. Explain how climate change will affect water use in the county or region.



*Stage 3 - Plan the Prototype Project*

5. Fill in the project planning table with the tasks needed to complete your project, the team member responsible, and the deadline.

TASKS	WHO WILL BE IN CHARGE OF THIS TASK?	DEADLINE

\*use an additional piece of paper if there are more than 8 steps in your project plan.

*Stage 4 - Execute the Project*

Carry out your project plan. When completing your project, you will likely run into obstacles and setbacks. Be sure to return to your project plan (Stage 3) and alter it as issues arise, including adjusting deadlines.

Communicate as a team. Check-in often as a group so team members can report on their tasks and everybody can remain on the same page.

*Stage 5 - Evaluate Progress and Identify Ways to Improve the Project*

6. Which parts of your project are going well?

