

Activity 20B: Drought and Wildfires in California

Rising global average temperature is associated with widespread changes in weather patterns. Scientific studies indicate that extreme weather events, such as heat waves and large storms, are likely to become more frequent or more intense with human-induced climate change.

The last decade was the hottest on record with many extreme temperature conditions becoming more common, particularly in the western US. In addition to hot temperatures, the Southwest, in particular, has experienced less precipitation than usual; this already arid region is sensitive to changes in temperature and thus vulnerable to drought, and even a small decrease in water availability can stress natural systems and further threaten water supplies.

1. Visit [Drought.gov](https://drought.gov) and enter your zip code to determine your region's current drought level. Report what you find below.
 - a. Drought status:
 - b. Precipitation total:
 - c. Average high temperature in the last 7 days:
2. Answer the following questions using [Drought.gov](https://drought.gov):
 - a. What is the current percentage of the US land area experiencing drought?:
 - b. Currently, how many people are experiencing drought?:
3. Next visit [California's drought map](#).
 - a. How many residents are currently in drought?

- b. What percentage is this of the state population?
- c. How many more Californians reside currently in abnormally dry areas?
- d. What percentage is this of the state population?
- e. On the map portion locate your county.
 - i. County name:
 - ii. Indicate the drought level for your county here:

Climate change is increasing the frequency and severity of wildfires not only in California but all over the world. Since 1950, the area burned by California wildfires each year has been increasing, as spring and summer temperatures have warmed and spring snowmelt has occurred earlier. During 2020 (as of November), California experienced five of the six largest fires ever recorded, in almost a century of records.

Unfortunately, many of us here in California have experienced the impacts of wildfires firsthand. For this next section, some may feel anxious or upset answering questions regarding what are perhaps local fire events. Talk with your instructor for guidance; you may choose to skip the next question.

- 4. Visit the [Cal Fire page](#). Bookmark this page as it will be a valuable tool for future fire events. Scroll down and from the Incident Archive, determine the following for the most recent fire to affect your area:
 - a. Estimate acres burned:
 - b. Number of incidents:
 - c. Structures damaged or destroyed: