

2023 Speak Off Competition Groundwater Resources

The Resource Conservation District has compiled information and resources on groundwater for students to use while applying for the Speak Off Competition. Please read the information below and click on the links to further your education.

Groundwater is the water found underground in the cracks and spaces in soil, sand and rock. It is stored in and moves slowly through geologic formations of soil, sand and rocks called aquifers. During a typical year, groundwater makes up approximately 40 percent of California's total water supply and makes up to 60 percent (or more) during dry years. The largest use for groundwater is to irrigate crops.

When learning about groundwater it is important to think about the quantity as well as the quality. Stressors that can deplete the quantity of groundwater include changes in precipitation and snowmelt patterns; withdrawal of ground water for drinking, irrigation, and other human uses. Groundwater contamination occurs when man-made products such as gasoline, oil, road salts and chemicals get into the groundwater and cause it to become unsafe and unfit for human use. [Click here](#) to learn about contaminated ground water in the San Joaquin Valley.

Groundwater quality is important for many reasons, most notably because of the consequences of contaminated groundwater for human health, agriculture, and the economy. Ensuring sustainable management of groundwater's quality and quantity is essential for meeting California's future water supply needs.

This Speak Off Competition requires you to connect groundwater issues to your local Greater San Diego County Resource Conservation District. In San Diego, we have three at risk groundwater basins which include Upper San Luis Rey Valley, San Pasqual Valley, and Borrego Valley. [Click here to view a map](#) of all San Diego basins. For a specific example of what Sloughhouse RCD is doing to combat groundwater loss [click here](#).

Additional Resources

[Groundwater Youtube Video \(4 minutes\)](#)
[USGS Groundwater Information](#)
[San Dieguito Groundwater Study](#)
[San Diego Sustainable Groundwater Management](#)
[California Groundwater Live](#)

