





Monday, June 8 1:00pm

<u>California's Water "Climate Change"</u> $4^{th} - 8^{th}$ grades.

The Sierra Nevada mountain range lies almost entirely within the eastern portion of California. The Sierras are not only a source of breathtaking natural beauty like Yosemite Valley and Lake Tahoe, but its snowpack provides the majority of our state's water supply. In the first installment of Huell's new series "California's Water," not only does he learn how the mountain runoff makes its way to our faucets, but how changes in our climate are significantly impacting the Sierras and how California will adapt to these changes.

After watching this episode, choose from the following questions and/or tasks to extend your learning

Question Box 1

- Describe Folsom Reservoir. What are its purposes?
- Why is the amount of accumulated snow important to the reservoirs in California?
- What is a snow course and what does it measure?
- What information is included in the snow note?
- What effects are scientists predicting climate warming will have on the spring snowpack by the end of the 21st century?
- Describe the inside of Folsom Dam.
- What river transports the snow melt from the Sierra Mountains to Folsom Reservoir?
- How do reservoirs help to maintain a consistent level of water availability throughout the year, especially in the summer when demand for water is high?

Question Box 2

- Do you think it is important for citizens to understand the information presented in the program? Why or why not?
- How can you, as a water consumer, help to offset the impact of climate change and the expected decrease in the snowpack?

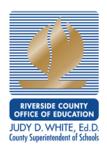
Box 3 (Tasks)

- Create a visual that represents the path that precipitation (snow) takes from the time it leaves the clouds to the time it reaches the faucet in your home.
- Summarize the steps taken to collect the information included in the snow note.
- Discuss with evidence, how is global weather change affecting the Sierra snowpack?

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• Make a claim and reason with evidence, whether or not California has a water shortage or too large of a population for our limited water resource.

Box 4 (Enrichment)

- Learn more about climate science by watching this video. Explain your new learning to a family member or friend.
- Read the article <u>here</u> about the 2020 snowpack in the Sierra Mountains. Create a short presentation for your family that includes important information about California's current water situation and steps that can be taken as we move into the summer months.
- Write out the chemical equation for water and explain all of the parts.
- Discuss with evidence, what is meant by the term, potable water.

Box 5 (Extend/Real-Life)

- Explore careers in water by completing this online interactive activity: https://spark.adobe.com/page/bhtrApJjdL2l8/
- Compare and contrast tap water to bottled water. Which has the highest quality, who regulates the quality, which one is more environmentally friendly?
- Research and discuss the California water project.