

# **The Global Warming Debate: A Case Study**



## **July Hottest Month on Record in U.S.—Warming and Drought to Blame?**

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July was the hottest month on record in the United States, perhaps due to a combination of global warming and a widespread drought, experts say. The lower 48 U.S. states experienced an average July temperature of 77.6 degrees Fahrenheit (25.3 degrees Celsius). That's about 3.3 degrees (1.8 degrees Celsius) above the 20th-century average and the highest July average since record-keeping began in 1895, according to a report released August 8 by the U.S. National Oceanic and Atmospheric Administration (NOAA)....

...On its own, the July record "is not such a major feat," Trenberth said. "But the fact that the first seven months of the year is the hottest on record is much more impressive, from a climate standpoint."

The consistent heat "highlights the fact that there is more than just natural variability playing a role: Global warming from human activities has reared its head in a way that can only be a major warning for the future."

"Eventually it gets to the point where you've got to say that something strange may be going on here—if we haven't gotten to that point, we will get to [it] soon."...  
...NCAR's Trenberth said the heat may not be as bad next year in the U.S., "but these conditions will likely occur somewhere else" on the planet, he said...

..."Human-induced climate change has a cost, and one that is ultimately much larger than slowing down or stopping the basic problem: burning of fossil fuels," Trenberth said. "As a nation we are not doing that," he said—"nor are we prepared for the consequences."

# Analysis

1. What are the potential issues and major topics in this scenario that we as chemists/scientists can address?

# Analysis

2. Compile a list for each category:

What do I know?

What do I Need to know?

3. Rank the importance of the questions in the “What do I need to know?” column.