ABOUT THE PDF DATASET VIDEO TRANSCRIPT

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You are given a data set on water use in your county. In this video we'll show you an example data set from Doña Ana County. Yours might look a little different.

The background section of the data page tells us why this topic is important. It also tells us that the data you'll use for the Water Conservation Data Jam is part of the New Mexico Water Use by Categories Report that's published every five years. The purpose of this report is to make water use data available to the public and is typically used by community planners, legislators, scientists, and individuals. These data have been simplified for the Water Conservation Data Jam.

The water use variables section tells us more about the variables included in this data set and the procedures that were used to collect them.

Data are given to you in a data table. You also have an area where you can graph the data below. We'll talk about the data table first.

To get started, you'll need to understand the variables you have. You can find variables in the column headings of the table. The first column includes data from every five years between 1995 and 2015. In the next columns you're given data on six major water use categories. These include residential; homes and public water supply; agricultural or crops; livestock or animals; commercial or business; industrial and mining; and power.

The water use data are presented in acre-feet. An acre-foot is a unit of measurement for water equal to the volume of a sheet of water one acre in size, or a bit larger than the size of a football field, and one foot deep. One acre-foot equals 325,851 gallons.

Water use is the main variable in this data set, so you should include at least one of the water use categories in your data trend. The data set also includes precipitation in inches and human population in these same years. These variables may be used to explain a water use trend but should not be used as a trend by themselves. Precipitation and human population can help you to explain the data trend you find.

Once you understand the variables in the data set you can start to look for a data trend by sketching some graphs in the space shown here.

Start by comparing two variables. For example, you could look at how one water use category changes over time. To graph change over time, make sure that years is on your x-axis. Then you can choose one of the water use categories and graph it along the y-axis. Look for patterns in the data, or relationships between the variables.

To compare how multiple water use categories change over time, you can add another water use category to the y-axis. Make sure to use a different color or symbol and include a legend. You can add another variable, like human population or precipitation to the graph. Does water use change with human population or precipitation?

Instead of change over time, you can also compare two different water use categories. Put water use "Variable A" on the x-axis and water use "Variable B" on the y-axis.

Once you have a graph, you can start to interpret the data. You can ask yourself, "What are the data showing me? How did each of the variables change? What are the patterns in the data?" If you're not able to find a data trend with the variables you've chosen, you can always sketch a new graph with different variables.

As a reminder, a good data trend should: show a pattern not just one data point; it should have more than one variable; use only data from this data set; and be specific. It should also include the main variable, which is water use.

Once you've found a pattern in the data, write it down as a one or two-sentence statement. Then add your graph to your report.

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