## WATER ALLOCATION VIDEO TRANSCRIPT

Brought to you by the Asombro Institute for Science Education. [background music]

To help prepare you for the Water Conservation Data Jam, we're going to learn about water use by six major water users in Doña Ana County, New Mexico. We'll be looking at the major water users of Doña Ana County because these are common major water users throughout New Mexico.

To learn about these water users, we'll watch a water allocation race. In this race, we'll see data of water use from Doña Ana County's residential, agricultural, livestock, commercial, industrial and mining, and power sectors.

Before we watch the water allocation race, let's talk about how it's set up. As you can see there are various containers in this race. Each container represents something related to water use. The goal of the race is to fill up the beaker for the population of Doña Ana County. If the beaker is full, that means everyone has enough water.

To meet these needs, we get our water from lakes and rivers, and the majority of our water comes from underground.

As you can see in a "Year of Plenty," there's more water available than in a "Year of Drought."

This race will use data on the totals of water use in the year 2015 and is measured in acre-feet. An acre-foot is equivalent to one foot of water covering a football field from goal post to goal post. One acre-foot equals 325,851 gallons of water in volume. Doña Ana County uses 382,501 acre-feet each year. That's more than 124 billion gallons!

Ten cups will represent the total amount of water needed for Doña Ana County and the different ways people use water. Human needs are considered residential use and is represented by one cup. This is the water we use in our homes for washing, cooking, and everything else. Irrigated agricultural use by farmers growing food, and use by livestock like cows and chickens are combined for this race. Agriculture and livestock is the largest water user in Doña Ana County and will be represented by eight cups. Water use for industry, commercial, mining, and power will also be combined since they use the least amount of water and will be represented by one cup. This is water used in restaurants and schools, constructing buildings and highways, and power plants that generate electricity.

The amount of water we have depends on whether it is a "Year of Plenty" or a "Year of Drought." However, the need for water doesn't go down during a drought year. Each participant for the "Year of Plenty" and the "Year of Drought" will do their best to fill the cups in order to fill the needs of Doña Ana County, then pour their filled cups into the beaker for the population.

People want their water needs met instantly, so they will only have two minutes to get water to the population.

Ready? Set? Water!

The participant on the left is operating in a "Year of Plenty," and the participant on the right is operating in a "Year of Drought." They have their ten cups for the different water needs and their beaker for the total population needs. They are filling up the cups to try and fill the beaker and can continue to pour water until they are out of water or out of time, whichever comes first.

As we can see, water for the "Year of Plenty" is overflowing and shows that there was plenty of water to meet the needs of the population.

On the other hand, water for the "Year of Drought" wasn't enough to fill the population container. Decisions had to be made on where to place, or how to allocate, the water.

You saw in the race that water is used in many different ways, and there's not always enough to fulfill all of our needs.

In the Water Conservation Data Jam, you'll continue to explore the data used in the race.

Have fun jamming! [background music]