

Drinking Water in the Desert – Albuquerque’s Water

How do you use drinking water? You drink it. Here in Albuquerque we also flush our toilets with it. We shower in it. We water our plants with it.

Fifty years ago we thought we had plenty of water underground. We thought our wells would never run dry. We planted grass. We took long showers. Now we know we do not have enough underground water. (See Diagram 1)

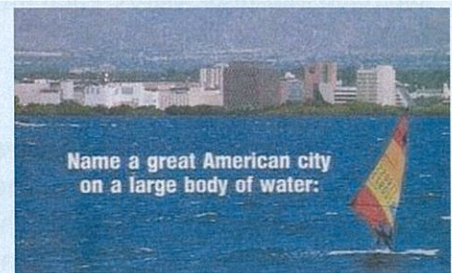
In 1993 Albuquerque used 40 billion gallons of water. That is a lot!

- How do you use water in your home?
- How do schools use water?
- How do parks use water?
- How do hospitals use water?
- How do shopping malls use water?
- Can you think of other ways we use water?

We all want to have water in the future. We did two things to make sure we will have enough.

1. We started taking water from the river. In 2009 we started using cleaned river water. You will learn more about this during the RIO Field Trip.
2. We asked everyone in Albuquerque to use less water. We live in a desert. We only get 8 inches of rain in a year. We have to be careful with it. We have to save water.

We asked people use low-flow shower heads. They help you use half as much water in your shower. We asked people to take a shallow tub. You can use half as much water in your bath.

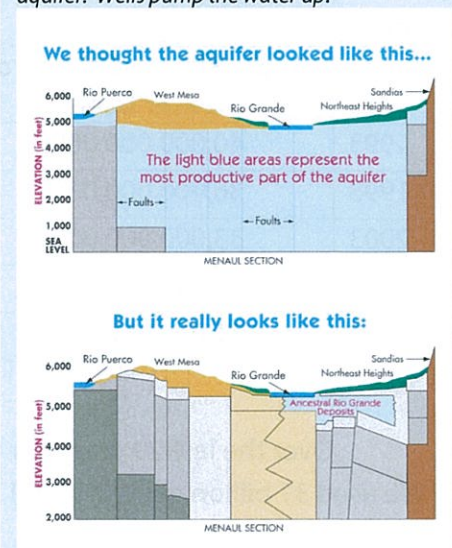


This ad for Albuquerque was used in the 1980's. It is wrong for two reasons.

1. We thought Albuquerque was built over a lot of water. We were wrong.
2. Our underground water is not a lake. You cannot boat in it! Our aquifer is a layer of rocks and dirt. Water fills spaces between rocks and dirt.

The light blue areas in these diagrams show the aquifer. The top one shows that we thought we had lots of water. We were wrong. The bottom one shows how little water is in our aquifer.

Diagram 1 Our underground water is in the aquifer. Wells pump the water up.



Get low-flow toilets!

Old toilets used needed seven gallons when you flushed. Today we have low-flow toilets. Each flush uses less than 2 gallons of water.



Don't let faucets run and run!

Faucet water should only run when it is being used. Turn off the water when you brush your teeth or wash your hands. You can save outside water by putting a nozzle on your hose. Water only runs in the hose when you pull the handle.



Get rid of your lawn. Use desert plants instead!

Grass needs about 32 inches of water each summer to grow. We get only eight inches of rain each year. The extra 24 inches of water for the grass is our drinking water. Desert plants use very little water. They can be beautiful.



Water when it is dark and cool!

If you water during the hot part of the day the water evaporates. The water in the form of a gas will form clouds. The clouds will blow away from Albuquerque before they drop rain from clouds as rain, snow, sleet, or hail.



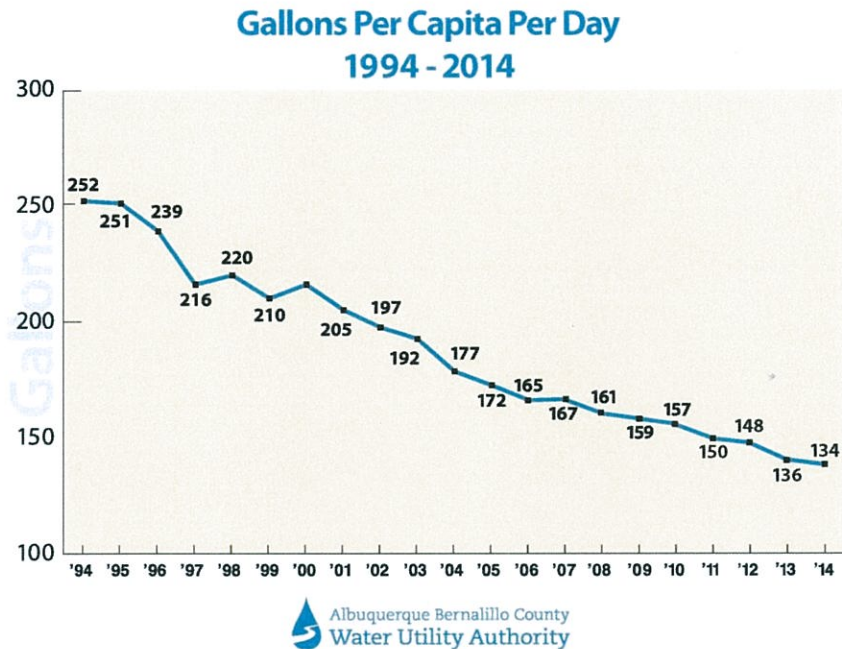
These are just a few ways to save water. You can probably think of many more. Look at Table 1. Can you tell if we are doing a good job saving water?

Table 1

Year	Approximate Gallons of Water Used	Approximate Number of People Living in Albuquerque
1993	40,000,000,000	435,000
1998	36,000,000,000	450,000
2003	33,000,000,000	475,000
2008	32,000,000,000	523,000
2013	31,000,000,000	557,000

Over the last 20 years our water use has changed. We used 40 billion gallons in 1993. We used 31 billion gallons in 2013. Do more or fewer people live in Albuquerque? How can you explain this?

The graph below shows per capita water use. That means how many gallons of water one person uses in one day. Are we doing a good job saving water?



You can see that we have learned that part of being a good citizen is protecting the things we all share, like drinking water in the desert.

You can help us get the word out. Tell people you know how important it is to save water. Choose three facts in this article and/or the Water Smart Math Worksheet. Use those facts to write and perform a one-minute public service announcement. Why is it important to save water? What is one thing everyone should do to save water? How much water would this one action save?



Albuquerque Bernalillo County
Water Utility Authority

