

Water Savers Webquest

Texas 2040 Game

In this game, you take on the role of a water manager for the City of Austin. Work hard to make it to the year 2040 while trying to support both your city's rapidly growing population and the natural environment, navigating through varied weather from rain to droughts. By 2040, experts project Austin's population to double. The expanding population puts heavier strain on our water resources, which means the game will get more challenging as you progress through the years. After you play, fill out the questions below.

Videogame Link: <u>https://coloradoriver.org/texas-2040/</u>

As you go through the game, there will be several solutions for you to conserve water as options to choose as the water manager. For example, you might have the option to make a plant that desalinates water. Name three of them you saw:

- 1. _____
- 2. _____
- 3. _____

Did you make it to 2040? If you did, what is one tactic you used to support both your population and your natural environment? If you did not, what is one thing you can improve on to make it to 2040 next time?



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Water calculator

This calculator is intended to show your daily water usage. When you calculate your usage, keep in mind that the water you use comes directly from the Colorado River, which is an important resource for our cities, agriculture, and nature. As you go through the calculator, fill out the questions below.

Video Link: https://www.watercalculator.org/

How much water did you use per day on average? ______

Per week? _____

Per year? _____

On average, it is about \$0.15 per 1000 gallons of water. At that rate, about how much money do you spend on water per year (round to nearest whole dollar)?

Conserving water is very important in order to maintain the health of our population and our natural environment. What are two ways you can reduce your water usage at home to conserve water? Talk with your family about how they can reduce their water usage. What is one way they can reduce their water usage. What is one way they can reduce their water use? List them below.



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Pollution in Our Water

Watch the video demonstrating the Colorado River Alliance watershed model and answer the following questions.

Video Link: https://youtu.be/9qpPWyxOjwg

What are the top three pollutants that occur in the Colorado River and list a source for each one that was talked about in the video.

1. Pollutant:	Source:
2. Pollutant:	Source:
3. Pollutant:	Source:

What happens when too much fertilizer (nutrients) is used on yards?

Other than the top three pollutants found in the Colorado River, common additional pollutants include chemicals, trash, and oil. Out of the six pollutants we have mentioned in this activity, what are two ways that we can reduce them in the Colorado river? List the pollutant and how to reduce the chance of it polluting our river. Example: in order to reduce bacteria, we should clean up after our pets so their waste does not get into the water.

1. Pollutant: _____

How to reduce it: _____

2. Pollutant: _____

How to reduce it: