

Dear Teacher:

**Welcome to Tucson Water's *Our Water, Our Future* program!**

- 👉 Please review this packet and familiarize yourself with all the materials. Plan about 60 minutes for each lesson. There are a total of four lessons. The first three lessons are best completed before Dr. Faucet's visit and the fourth lesson is best completed after the visit.
- 👉 We strongly encourage you to conduct at least the first two lessons prior to Dr. Faucet's visit, as they tie directly to what the students will do during that visit.
- 👉 *Remember:*  
**Please make advance arrangements to reserve a room where all of the presentations can take place.**  
The students from each class will rotate through this room. Students typically sit on the floor in front of the table.  
  
**On the day of the presentations, we'll also need:**
  - 👉 a large cleared table
  - 👉 the students' water-saving ideas on paper "drops" as per pre-visit Lesson 1.

Enjoy!

Dr. Faucet

*For more information or additional copies of this packet, please contact:*

Outreach Education Coordinator  
Environmental Education Exchange  
738 N. 5th Ave., Suite 100  
Tucson, AZ 85705  
(520) 670-1442  
outreach@eeexchange.org

*Our Water, Our Future is sponsored by:*

Tucson Water  
P.O. Box 27210  
Tucson, AZ 85726-7210  
(520) 791-4331



## OUR WATER, OUR FUTURE OVERVIEW

A water education program for 4th and 5th grade students in Tucson, Arizona. Developed and funded by Tucson Water, the City of Tucson public water utility.

Tucson Water's *Our Water, Our Future* is an interdisciplinary program that has been specifically designed for fourth and fifth grade learners and focuses on the water cycle, water supply, and water conservation in the Tucson Basin. It poses three questions:

- Where does our water come from?
- Where does it go?
- What can we do to conserve this vital natural resource?

In answering these questions, we will address the following concepts:

- water cycle
- water supply
- water as a limited resource
- water quality
- water use
- water conservation

## OUR WATER, OUR FUTURE IS A THREE-PART PROGRAM:

PART ONE includes three pre-visit classroom activities. Students will review the water cycle, discover Tucson's water history, and become "water smart."

PART TWO is a one-hour on-site presentation. Students play a water cycle game, participate in demonstrations with a groundwater model, and make their water conservation ideas count. At the end of the presentation, all students receive a five-minute shower timer to bring home.

PART THREE includes one post-visit classroom activity in which students write poetry to express their thoughts and feelings about water.

## GLOSSARY OF WATER WORDS

<i><b>aquifer</b></i>	the underground layers of rock, sand, and gravel where water is stored over millions of years
<i><b>Central Arizona Project</b></i>	the 336-mile (541 km) canal that transports Colorado River water to Tucson
<i><b>Colorado River</b></i>	the largest river in the western United States (which flows through many states, including Arizona)
<i><b>condensation</b></i>	occurs when water vapor cools and becomes liquid; clouds are formed through this process (could be considered the opposite of evaporation)
<i><b>desert</b></i>	a dry region of the world that receives less than 12 inches (30.5 cm) of rainwater each year
<i><b>evaporation</b></i>	occurs when liquid water changes into water vapor, a gas (could be considered the opposite of condensation)
<i><b>groundwater</b></i>	water that exists beneath the Earth's surface in an aquifer
<i><b>natural resource</b></i>	any resource that we use or take from the natural environment; can include both materials and energy (such as air, water, trees, soil, natural gas, oil, or minerals)
<i><b>percolation</b></i>	the downward movement of water through soil
<i><b>precipitation</b></i>	water falling, in a liquid or solid state, from the atmosphere to the Earth (examples: rain, snow, hail, sleet, dew, and frost)
<i><b>recharge</b></i>	the addition of water, usually from rain and snowmelt, into the aquifer; may be artificially done by humans
<i><b>resource</b></i>	source, ability, or supply from which we draw in time of need
<i><b>runoff</b></i>	water from rain or snowmelt flowing downhill into washes, streams, and rivers
<i><b>Santa Cruz River</b></i>	the largest river in Tucson, which is now dry most of the year and only flows after significant rains
<i><b>transpiration</b></i>	the evaporation of water from plants; occurs primarily through the leaves
<i><b>water table</b></i>	the uppermost surface of groundwater in the aquifer
<i><b>well</b></i>	a hole dug or drilled down into the aquifer to locate and obtain water (deep water is usually brought up to the surface with a pump)