

Water education expands to Ariz. schools

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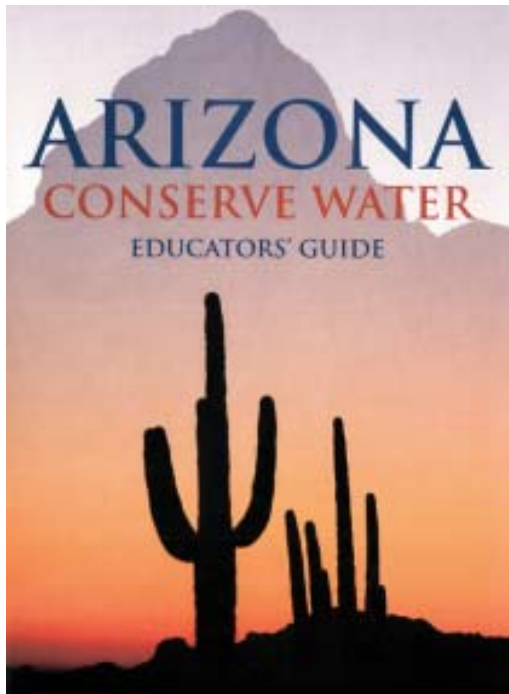
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Do you know where your drinking water comes from? Can you explain the hydrologic cycle? How well do you understand the link between Arizona's groundwater and its rivers?

Maybe you should ask your kids.

A handful of Arizona schools have added water education to their science curricula, building classroom coursework around a program designed by the state Department of Water Resources and the University of Arizona's Project WET, or Water Education for Teachers.



After good early feedback, the program's backers want to expand, touting the program as a straightforward way to teach students about water-using principles required by state-education standards.

"With the requirements teachers have, it's very difficult to get schools' attention," said Kerry Schwartz, director of Arizona Project WET. "We can say, 'We have the resources that will meet your standards and give you a local relevancy, a hook that gets kids interested in learning.'"

The state agency approached Project WET about the project in 2004 after Gov. Janet Napolitano issued her call to create a "culture of conservation" in the state. In the speech, she talked about the need to take the message into the schools.

"She wanted Arizona to be the leader nationwide in kids' K-12 water education, so we took that as a challenge to meet that need," said Marjie Risk, ADWR statewide water-conservation coordinator.

The state had worked with Project WET since 2001, so Risk approached the group about producing a water curriculum. The program, published as *Arizona Conserve Water*, was based on a national teachers' guide, but infused with Arizona-specific materials.

The Arizona guide opens with an introduction to Arizona's water, including its sources, history and management - a primer that will give teachers a foundation, Risk said - and includes a series of topic-driven classroom activities and experiments.

To illustrate the hydrologic cycle, the guide uses the San Pedro River as a case study. Students simulate the movement of water through the system, acting the roles of river water, groundwater and rain. The students react to drought, groundwater pumping and evaporation.

"We have lessons that have to do with Arizona right now," Schwartz said. "We make the connection that Arizona has amazing places, that surface water is connected to groundwater, that the things we do take water. It kind of builds that case for conservation."

Other units explore conservation methods, mixed messages in the media and water rights. The book provides a variety of games, demonstrations and object lessons and encourages older students to brainstorm ideas about water use and conservation.

"One of the things we've talked about is that, in order for people to understand water conservation, they've got to understand the properties of water, hydrology, the water cycle," Schwartz said. "We do have a challenge to get that out."

The program's backers have staged teacher-training workshops and now plan to hold a series of leadership seminars in an effort to create a grass-roots network to spread the word among schools and districts.

"The governor said she wants to create a culture of conservation for Arizona, but what does that mean?" Risk said. "Is it changing lifestyles? Educating kids? We think it's all of those things. We think these case studies can bring it alive."

For information about the teachers' guide, the program and coming training sessions, go to cals.arizona.edu/arizonawet or call Schwartz at 520-792-9591, extension 22.