



United States Department of Agriculture  
National Institute of Food and Agriculture

# Water Ripples: An Interactive Approach to Water Education

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## Introduction

Environmental education is an integral part of Extension programming in Santa Fe County, New Mexico. The Extension Agents in the county recognized the need for age appropriate teaching materials to educate school children on water use and conservation and secured fiscal support from the Southern Regional Water Program to develop interactive digital games. A project team was recruited including the author, Santa Fe County Program Director, NM Extension Water Resources Specialist, colleagues from Kentucky and Louisiana, and computer graphics experts at NMSU.

The purpose of the **Water Ripples** project is to develop youth water education materials designed for interactive 'fun-time' learning. These materials include interactive educational games for age groups ranging 4<sup>th</sup> to 7<sup>th</sup> grade. Materials are designed for stand alone instruction as a packaged presentation for young audiences.

Popular game formats such as Jeopardy are used to facilitate learning about water. The games introduce students to various concepts that can be adopted for a particular setting, e.g. rural or urban. The games help students understand the relationship of cause and effect in protecting water resources. Each response, correct or incorrect, provides additional information to enhance knowledge gained. The ultimate benefits of these program materials are to increase the understanding of water quality protection and conservation.

## Goals

- Increased knowledge/awareness of water quality protection and conservation practices
- Increased adoption of appropriate practices
- Increased resource readiness of teachers and youth professionals for program delivery

## Funders

USDA Cooperative Research, Education, and Extension Service  
Southern Regional Water Program  
New Mexico State University



## Acknowledgements

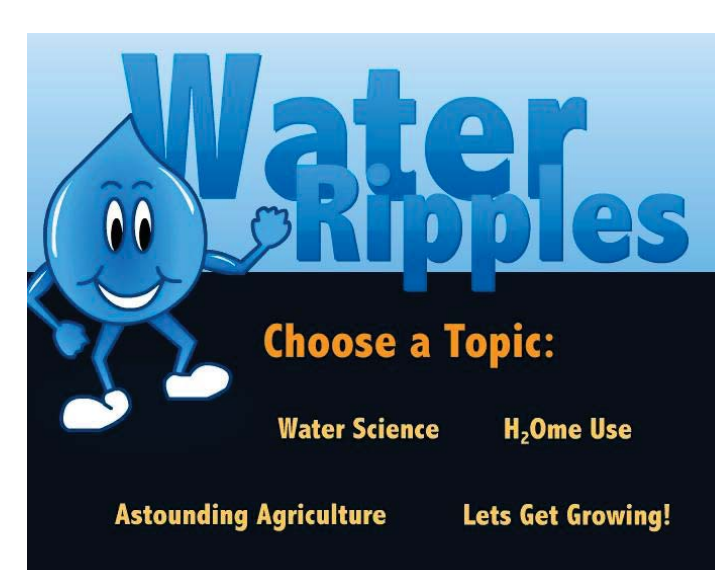
Produced by New Mexico State University Media Productions

Jeanne Gleason, EdD- Executive Producer  
Greg Coffman, Kyle Fitzpatrick- Design/Programming

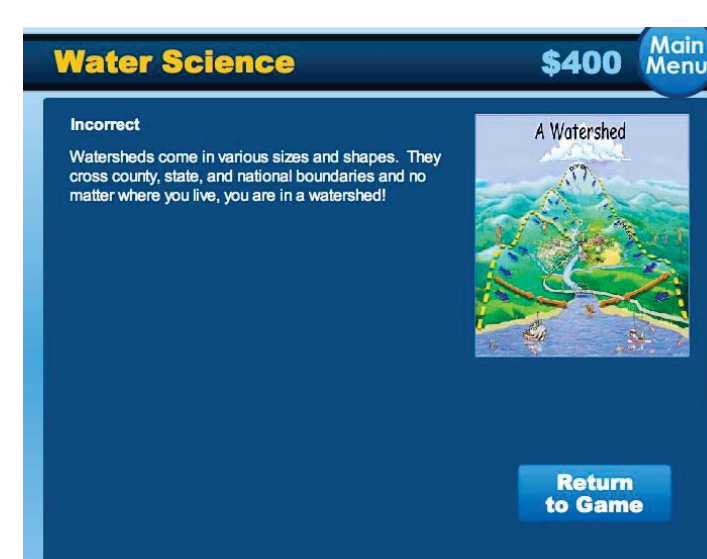
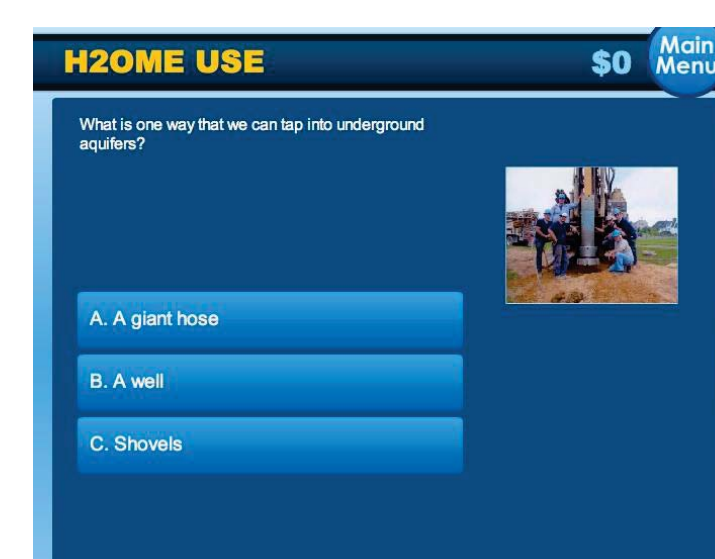
## Water Ripples Game Show Quiz



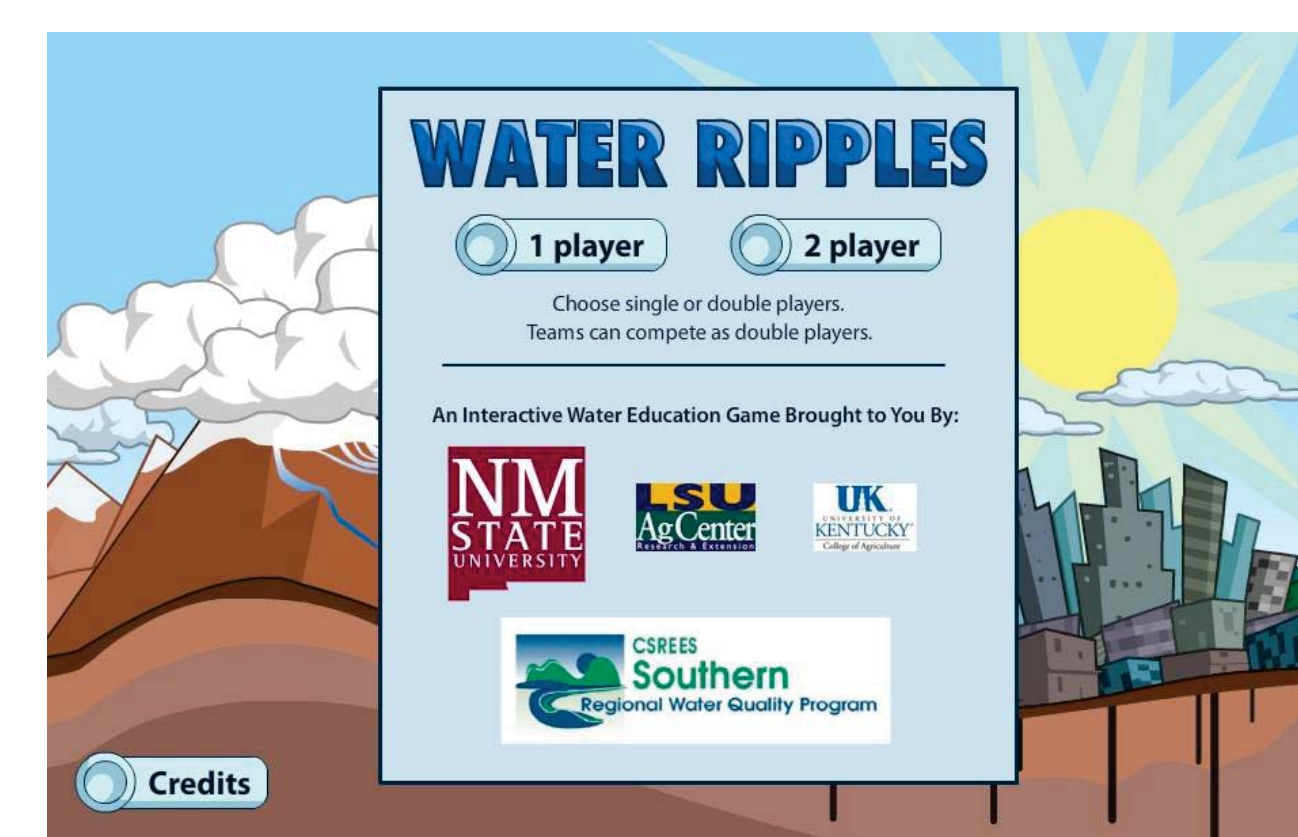
The Water Ripples Game Show Quiz includes four interactive games with four categories in each game. The games are entitled H<sub>2</sub>O Use, Astounding Agriculture, Water Science, and Let's Get Growing. Relevant water concepts are introduced through a multiple choice question format for students to answer. Along with each question basic facts and illustrations are included to further emphasize each concept. Each game is designed in an electronic format for use in LED projection, much the same as large screen television. This capability allows broader viewing for group team interaction. Approximately two hours of instructional 'game playing' is available from the entire package.



H <sub>2</sub> O USE				\$0	Main Menu
Keeping it Clean	Out of the Pipe	Drinking it Up	Fun Facts		
\$200	\$200	\$200	\$200		
\$400	\$400	\$400	\$400		
\$600	\$600	\$600	\$600		
\$800	\$800	\$800	\$800		
\$1000	\$1000	\$1000	\$1000		



## Water Ripples Board Game



The objective of the Water Ripples Board Game is to complete the journey through the water cycle by correctly answering questions along the way. The board game can accommodate 1 or 2 players. As players make their way through the water cycle they are tested with multiple choice questions in the categories of general water knowledge, scientific water knowledge, and agriculture water knowledge. Correct answers will advance the players to the next step in the water cycle. Incorrect answers preclude students from moving forward and provide additional questions in order to complete the game



## Expanding Your Knowledge

You can find the Water Ripples Interactive Water Education Games at the following website:

New Mexico State University College of Agriculture, Consumer and Environmental Sciences  
<http://aces.nmsu.edu/ces/watertaskforce/water-task-force---kids-.html>



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