Raising Your Water IQ:
A Water Conservation Curriculum

Developed by the
Texas Water Development Board

Produced by
The Center for Global Environmental Education
Hamline University

TABLE OF CONTENTS

INTRODUCTION

"When the well's dry, we know the worth of water."
- Benjamin Franklin

Water is our most precious natural resource. Without water, nothing else is possible. In this curriculum, water conservation messages and concepts derive from core academic standards detailed in the Texas Essential Knowledge and Skills (TEKS). These hands-on activities engage your students' interest in learning through our natural affinity for water.

The goals of the curriculum are to:

- Enhance students' abilities to make sound environmental decisions based on an understanding of science
- Foster students' awareness of the need for water conservation
- Help students discover and practice water conservation strategies
- Increase a sense of stewardship for local water resources, and
- Establish patterns of responsible water consumption.

This curriculum is designed to be flexible, scaffolded and interdisciplinary. Math, science, technology and social sciences combine to give students the knowledge, skills and dispositions to be more engaged, informed environmental decision-makers. The activities in this curriculum engage both hands and minds, are inquiry-based, and offer many community-based service learning opportunities. As students learn about water, they learn about themselves, and their communities.

The Texas Water Development Board has created a series of web-delivered, interactive visualizations that introduce concepts to students, and is an important component of this curriculum. Visit the site at: http://www.twdb.state.tx.us/home/index.asp and click on TWDB For Kids.

Organization-

Online Visualizations-

- Introduce the Big Ideas of water conservation using visually engaging, interactive multimedia models.

Hands-on Activities-

- Offer investigations into the foundational concepts that build to the Big Ideas. Many of these activities explore concepts that focus groups of Texas teachers have identified as particularly difficult to teach and/or learn.
- Emerge from and are aligned with, TEKS.

- Include short, straightforward background articles for students, articulating the Big Ideas, and assessments to help teachers check for understanding.

The curriculum includes activities that explore very basic concepts of the water cycle, the relationship between surface water and groundwater, how human activity has shaped natural systems, and how the natural world has shaped human culture.

Once students have explored these concepts, investigations move them out into their communities, to discover how these concepts are applied in their neighborhoods. There are projects that engage students in in-depth analyses of their own environmental behaviors, and service learning opportunities that give students a voice in shaping their environment.

You can select only those activities that fit your specific needs, or take your classroom on a journey of discovery through the entire curriculum. Materials needed for hand-on activities are common, easy to obtain, and inexpensive. In all ways, we have tried to make this curriculum fit the needs and capacities of Texas classrooms.