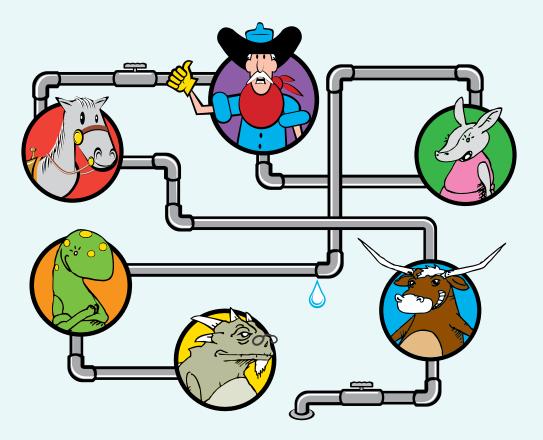
# TWDB KiDS

TEXAS WATER DEVELOPMENT BOARD K-12 EDUCATIONAL RESOURCES



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### What are the TWDB K-12 educational programs?

TWDB scientific research forms the cornerstone for these programs. They include units developed for specific age groups and range from coloring books for younger children to complete programs for older students, with teachers' guides and Texas Essential Knowledge and Skills (TEKS) guidelines.

#### **TWDB KIDS**

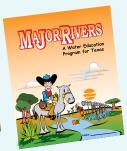
The TWDB Kids website serves as the gateway to the agency's K–12 conservation education resources. The website features resources, visualizations, and other activities to help students learn about key water resource concepts.

### Water for Texas coloring book (K-3rd)

This popular publication engages young children in exploring Texas water resources. It features Grandpa Lizard, Sally Mander, Amanda Armadillo, and Billy the Bull. Aimed at K–3 students, the coloring book teaches them about the importance of water resources and water conservation.

The coloring books may be ordered from the TWDB or downloaded from the TWDB Kids website.





### Major Rivers (4th-5th)

Major Rivers, along with his horse, Aquifer, has been visiting Texas classrooms for more than 25 years. This multidisciplinary program includes a teacher's guide, colorful and engaging student workbooks and home leaflets, and an introductory movie. The program teaches students where water comes from, how to protect water resources, and how to use water wisely.

*Major Rivers* has been updated to incorporate the latest information from the TEKS requirements and STAAR objectives for students. Student materials for *Major Rivers* are available in both English and Spanish language versions.

### Raising Your Water IQ (6th-8th)

Raising Your Water IQ is an inquiry-based, hands-on approach to teaching middle school students about Texas water resources. This free, web-based program has a teacher's guide and includes lessons on:

- watersheds and pollution
- water cycles
- porosity

- groundwater
- permeability
- wise water use



Raising Your Water IQ

Activities in this program offer community-based service learning opportunities. Relevant TEKS standards are listed in the teacher's guide.

### Water Exploration (9th-12th)

This web-based water education program for Texas high school students is aligned with the learning standards for Earth and Space Science, Advanced Placement Environmental Science, Biology, Chemistry, Environmental Systems, and Aquatic Science. By using a project-based learning approach, *Water Exploration* encourages students to conduct research and build an understanding about water science and critical water-related issues.

All learning activities and resources are packaged into modules,

or legacy cycles, which enhance student learning by making use of internet and computer technology to promote inquiry learning. Service learning is also incorporated into this program by challenging students and community members to conduct school water audits and implement water conservation strategies such as rainwater harvesting.

### Know Your Texas Water

Teachers and parents are often primarily responsible for educating youth about the importance of water resources and conservation. *Know Your Texas Water* is a web-based education resource for teachers and parents who would like to know more about Texas water. It features web quests, animations, maps, and other tools based on the TWDB's research, including the state water plan.

# WHAT IS A WATERSHED?

Small watersheds combine to become river basins. Texas has 23 major river basins.

A watershed is an area of land that drains toward a common waterway (creek, stream, river) in a natural basin. The high points of land surrounding a waterway determine the boundary of a watershed.

## **Headwaters**

Small streams or springs that are the water source for a river

# **Tributaries**

A small stream or creek that joins a larger stream or river

# **Main channel**

The primary course of a river

# Meander

A bend or loop in a river channel

# **Floodplain**

A generally flat area of land next to a river formed mainly of river sediments and subject to flooding

# Wetland

Areas where water covers the soil, or is present either at or near the surface of the soil

### **Delta**

Where a river flows into a body of standing water, such as a sea or lake, and deposits large quantities of sediment





Visit the TWDB Kids website for water education resources, visualizations, and activities. www.twdb.texas.gov/kids

