



## ***Teacher's Guide***

### **Surface Water: A Day in the Life of the Rio Grande** **Planet H<sub>2</sub>O**

#### **Grade Levels:**

Intermediate  
Junior High

#### **Subject Areas:**

Environmental Education  
Social Studies

#### **Synopsis:**

Two teenagers, one from New Mexico and the other from Texas, discuss the importance of the Rio Grande to each of their states. In New Mexico, where the river flows freely, one teen is a whitewater rafter instructing others in the recreational uses of the river. In Texas, the second teen observes a dry riverbed that occasionally becomes the Rio POCO, or little river. They and others in the program explain that the Rio Grande is diverted upstream for agricultural purposes so that the flow is vastly diminished by the time the river reaches the Texas-Mexico border. Their comments stress the importance of access to water and the role of conservation and the control of water pollution in maintaining a healthy river.

#### **Learning Objectives:** Students will:

- Understand the importance of access to water.
- Explain why the Rio Grande is almost dry in Texas and Mexico.
- Explain why the per-person water requirement has increased in the past decades.
- Appreciate the need to conserve water and to support initiatives to return water back to the rivers from which it comes.

#### **Vocabulary:**

irrigation, headwaters, upstream, downstream, surface water, water conservation

**Pre-Viewing Discussion:**

What kind of recreational activities are associated with rapidly flowing rivers?  
Where are some of these rivers located?

What is the name of the river that begins in Colorado and empties into the Gulf of Mexico? Approximately how long is this river?

Where would the water flow be greatest, in New Mexico or in Texas? What makes you think so?

How does the Rio Grande support economic activities in the Southwest?

**Post-Viewing Discussion:**

Why was the New Mexico teenager worried about the Rio Grande?

Why was the Texas teenager worried about the Rio Grande?

What were the experts' answers to upstream diversion of water from the Rio Grande?

What kind of water conservation initiatives did these experts support?

Why have per-person water requirements risen in the past twenty years?

**Further Activities:**

Find out how the Rio Grande Roundtable is looking for solutions to surface water problems.

Further investigate why the use of agricultural ground water is currently at unsustainable levels in the Rio Grande basin.

Investigate how water conservation initiatives in this area will influence the amount of water available by 2030.

Investigate the background and experience of individuals who are involved with water conservation initiatives in the Rio Grande Basin.

**Related New Dimension Media Titles:**

Latin America: Thirsty Cities (series)

Water Environment (series)

Environmental Scientist

Water and Life on Earth