About 244,000 square miles of land is drained by the Colorado River. This area is called the Colorado River Watershed. It stretches from the mountains of Colorado (Rockies) and Wyoming (Wind River Range) south and west through Utah, New Mexico, most of Arizona, and small parts of Nevada and California. In Mexico it drains parts of Sonora and Baja California. A watershed is the land area that drains water into a particular water body.

The Colorado River travels 1,450 miles from headwaters to the delta, flowing through a variety of ecosystems on its way. About 85 percent of the Colorado’s water originates in the mountains of Colorado, yet communities and ecosystems as far south as Mexico rely on its’ flow. More than 25 million people in Denver, Phoenix, Las Vegas, Los Angeles, Tijuana and other cities use its water as do people in rural areas (DAW, 2005). The river irrigates 1.8 million acres of land producing 15 percent of U.S. crops; over 80 percent of winter vegetables eaten in the U.S. are grown with its water in Yuma and Imperial Irrigation Districts (DAW, 2005).

In most years, its entire flow is stored in reservoirs or consumed and does not reach the delta at the Gulf of California, also known as the Sea of Cortez. Every drop of water is allocated (distributed according to plan) under the Colorado River Compact, and by treaty with Mexico. In 1922, negotiators of the Compact were able to agree upon dividing the watershed into two basins, the Upper and Lower. Each basin would receive 7.5 million acre feet, thus protecting the upper basin states water rights, which developed more slowly, and paving the way for the construction of dams in the lower basin. An acre-foot of water is 325,851 gallons, about the amount of water that two families of four use in a year.

Despite problems like evaporation, dams and reservoirs are an important part of the Colorado River plumbing system. They provide water storage, hydroelectric power and flood protection. Without the water storage provided by reservoirs, there would not be enough water in the river in most years to meet all of the allocations. Yet hydromodification has greatly impacted the ecosystems. Altering the flow regime, temperature, sediment transport, etc. have contributed to habitat destruction and alteration.

Objectives
Students will:
• Interpret the map
• List the Upper and Lower Basin States
• Discuss the pros and cons of a managed river system
• Assess the Colorado River’s importance to western states

Suggested Extensions
• Evaluate an issue currently affecting the Colorado River system and its inhabitants and report on it using digital technology