

## Crossing the Canyon

Soon, Waterman paddled into the Grand Canyon. It took millions of years for the river to carve the canyon. It cut through solid rock to make the canyon.

The canyon walls are steep and high. They are layered with colored rock called strata.

Each layer comes from a different time in Earth's history. Waterman now thought of his raft as a time machine. The deeper into the canyon he went, the further back in time he went. You see, the oldest rocks are at the bottom of the canyon.

## Large Lake

Waterman came out of the canyon as he neared Nevada. Here the Hoover Dam blocks the river. It weighs more than 800,000 African elephants.

The dam forms a large lake. People get water and electricity from this lake and dam, too. But the river on the other side of the dam is much smaller than it used to be.

## Water Problems

In all, 14 dams block different parts of the Colorado River. The dams have changed the river. They also have changed ecosystems.

For example, the river used to carry silt. **Silt** is made up of bits of soil, sand, and rock. Silt is important. It gives nutrients to plants and animals living along the river. Today, much of the silt is gone. It is trapped behind the dams.

Climate change affects the river, too. As Earth warms, less snow falls in the mountains. That means less water in the river. Without silt and water from lots of melting snow, fewer plants and animals live along and in the river.

Waterman does see signs of hope. People are planting trees and protecting wildlife. They are also talking about ways to better use the water so that the dams don't block as much of it. One day, parts of the river may run as wild as they did when the Grand Canyon formed.

## WORDWISE

**dam:** concrete wall that blocks the flow of a river

**hydroelectric power:** electricity produced by the force of moving water

**silt:** bits of soil, sand and rock





*Here, the river flows between the steep, colorful walls of the Grand Canyon.*



*Sunlight turns the river green at Emerald Cave in Arizona.*



*At night Waterman camps under the stars, thinking of the river's twists and turns.*

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