

The Colorado River, which flows through five U.S. and two Mexican states, is the principal river for the American Southwest.

Known for the beauty of its canyon settings, as it flows through mountainous regions, the Colorado also has another important feature. It drops, sometimes very steeply, through its various gorges.

Hydroelectric power - which uses the gravity of falling water to create energy - is a renewable resource which also uses dams. Experts targeted the Colorado River as a prime location for building dams (even though such plans interfered with certain areas held sacred by Native Americans).

Engineers selected Black Canyon as the preferred place to construct a massive dam which was originally called "Boulder." Known as a "Modern Civil Engineering Wonder," it ultimately became "Hoover Dam," in honor of America's 31st president.

This video clip depicts what it was like to construct such a massive project in such a difficult location. During summer months, temperatures could soar to 119° F, causing some workers to die of "heat prostration."

The Hoover dam - which provided jobs for thousands of workers during the Great Depression - straddles the Nevada-Arizona border. To provide workers with a place to live, in this remote area, the Bureau of Reclamation (a federal-government agency) and Six Companies, Inc., (the dam's construction company) created the town of Boulder City (on the Nevada side). Today, the former "company town" is an upscale community.

The U.S. Bureau of Reclamation gives us more facts about the dam:

Construction began in 1933 and was completed two years later. Built with 3.2 million cubic yards of concrete, the dam is some 726 feet high, ranking 20th in the world for height. From 1939 to 1949 it was the world's largest producer of hydroelectric power; today the dam generates some 4.2 billion kilowatt-hours of electricity annually. Lake Mead, the reservoir created by the dam, covers 247 square miles and is a major recreation area.

According to the U.S. government, there are no bodies in the concrete:

The dam was built in interlocking blocks. Each block was five feet high. The smallest blocks were about 25 feet by 25 feet square, and the largest blocks were about 25 feet by 60 feet.

Concrete was delivered to each block in buckets, eight cubic yards at a time. After each bucket was delivered, five or six men called "puddlers" would stamp and vibrate the concrete into place, packing it down to ensure there were no air pockets in it. Each time a bucket was emptied, the level of concrete would raise from two inches up to six inches, depending on the size of the block.

With only a slight increase in the level at any one time, and the presence of several men watching the placement, it would have been virtually impossible for anyone to be buried in the concrete. So, there are no bodies buried in Hoover Dam.

Many workers did die during the construction, however. Some fell into the river and drowned. The federal government tells us that exact statistics are hard to calculate, but the best estimate is 213 people died "on the job."

As the dam neared completion, in 1935, its reservoir - Lake Mead - was formed. Serving as backwater for the giant operation, Lake Mead began to hide the dam's upstream face as the reservoir began to fill. By March 1, 1936, all of its features were completed.

Hoover Dam opened in 1936. Today it provides energy for about 1.3 million people, every day, and attracts around 1 million visitors every year.

Credits:

Historic footage depicting the building of Hoover Dam from the U.S. Bureau of Reclamation, U. S. Department of the Interior.

See Alignments to State and Common Core standards for this story online at:

<http://www.awesomestories.com/asset/AcademicAlignment/Hoover-Dam-Building-the-Dam0>

See Learning Tasks for this story online at:

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