



Arizona Rocks 44

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One of the geologic wonders that always fascinated me is Rainbow Bridge. True bridges are not common, with arches being more common. They are both products of erosion, but a bridge needs a stream running under it. A creek will cut through a sandstone fin to form the bridge, but more commonly will erode away the entire fin. I always showed photographs of Rainbow Bridge to my Arizona Geology class, and lamented that it is really in Utah not Arizona, but it is only five miles from the Arizona border and I figure they drew the state line in the wrong place. Finally a couple of years ago, I got to Rainbow Bridge and it is breath taking. The easy way to get there is by boat across Lake Powell.

The rocks forming the bridge are Jurassic sedimentary rocks (about 200 million years old). The base is the Kayenta Formation, a river deposited sandstone, and the main part is the Navajo Sandstone, a desert sand dune deposit. The Navajo is very pure fine-grained sandstone that is resistant to erosion and forms cliffs all around the Colorado Plateau, and because of its resistance to erosion can form the spectacular Rainbow Bridge.



Aerial view of Rainbow Bridge - Google

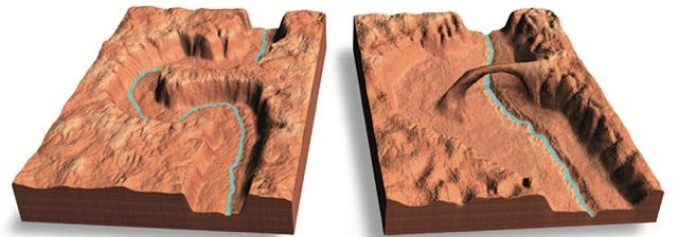


Diagram showing the formation of Rainbow Bridge from the National Park Service, the stream must erode through the sandstone fin without eroding it away.



Cross bedding in the Navajo Sandstone, from its origin as a sand dune deposit.



Rainbow Bridge is a spectacular geologic feature. Note the people under the bridge for an idea of the size.

