



### **Sandstone canyons of Lake Powell, USA**

Extending across Utah and Arizona in the western United States of America, the Colorado Plateau is dominated by red Mesozoic sandstones that lead to it being known as the Red Rock country. Upstream and north of the well-known Grand Canyon, the Colorado River flows through the rather-less-well-known area known as Canyonlands. This is a spectacular desert terrain of multiple canyons. While these lack the sheer depth of their downstream neighbour, they contain a glorious and beautiful suite of landforms. Glen Canyon is almost a detail in this great landscape, but its vertical walls in strong sandstone made it an ideal site for a concrete arch dam some 200 metres high. This was built in the 1960s to impound a reservoir with which to control the river's flow where it is so important to the economy of southern Arizona. Now known as Lake Powell, the reservoir reaches nearly 300 km back up the Colorado, and has become a major recreational area. The many tributary canyons that were once so remote within the great desert are now half-flooded and delightfully accessible to anyone with a boat. It is rather unusual to be able to float along half way up a beautiful rock canyon between steep or vertical walls cleanly cut into the unusually massive Jurassic Navajo Sandstone. Many of the canyons become progressively narrower away from the main lake, until they are impassable by either kayak, power-boat or rented house-boat. Others end in towering head-walls that are a grand scale, though their waterfalls are only active in flash-floods following a desert storm that may have developed far away in an upper catchment. This photograph is in Moki Canyon, where it emerges from a set of deeply incised meanders. Most of the canyons meander on a grand scale, while natural bridges and rock arches add further detail to the beautiful rock architecture of Lake Powell.

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