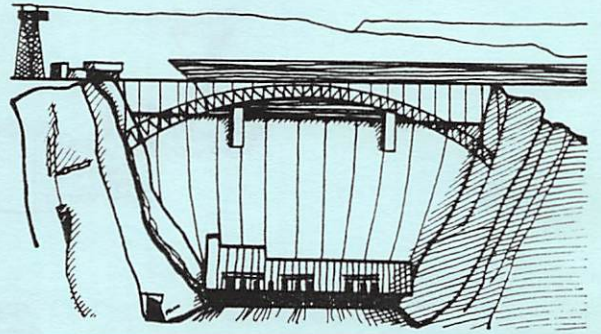


Glen Canyon

National Recreation Area
National Park Service
U.S. Department of the Interior

Where Does the Water Go?



THE COLORADO RIVER COMPACT

In the arid southwest, water is of vital importance, and the Colorado River is the principal carrier of this most precious resource. Seven states - and Mexico - receive water from the Colorado River. The seven states are divided into the Upper and Lower Colorado River Basin with the mid-point at Lees Ferry, Arizona, approximately 15 miles (24 km) below Glen Canyon Dam. The Upper Basin includes the states of Wyoming, Utah, Colorado, and New Mexico. The Lower Basin includes Arizona, Nevada, and California. In 1922, these seven states reached an agreement to divide the waters of the Colorado River between them. The Colorado River Compact was created. Water developments, such as dams and powerplants, along the Colorado River and its tributaries are the product of this arrangement. Water flows are dictated by the Compact as well.

GLEN CANYON DAM

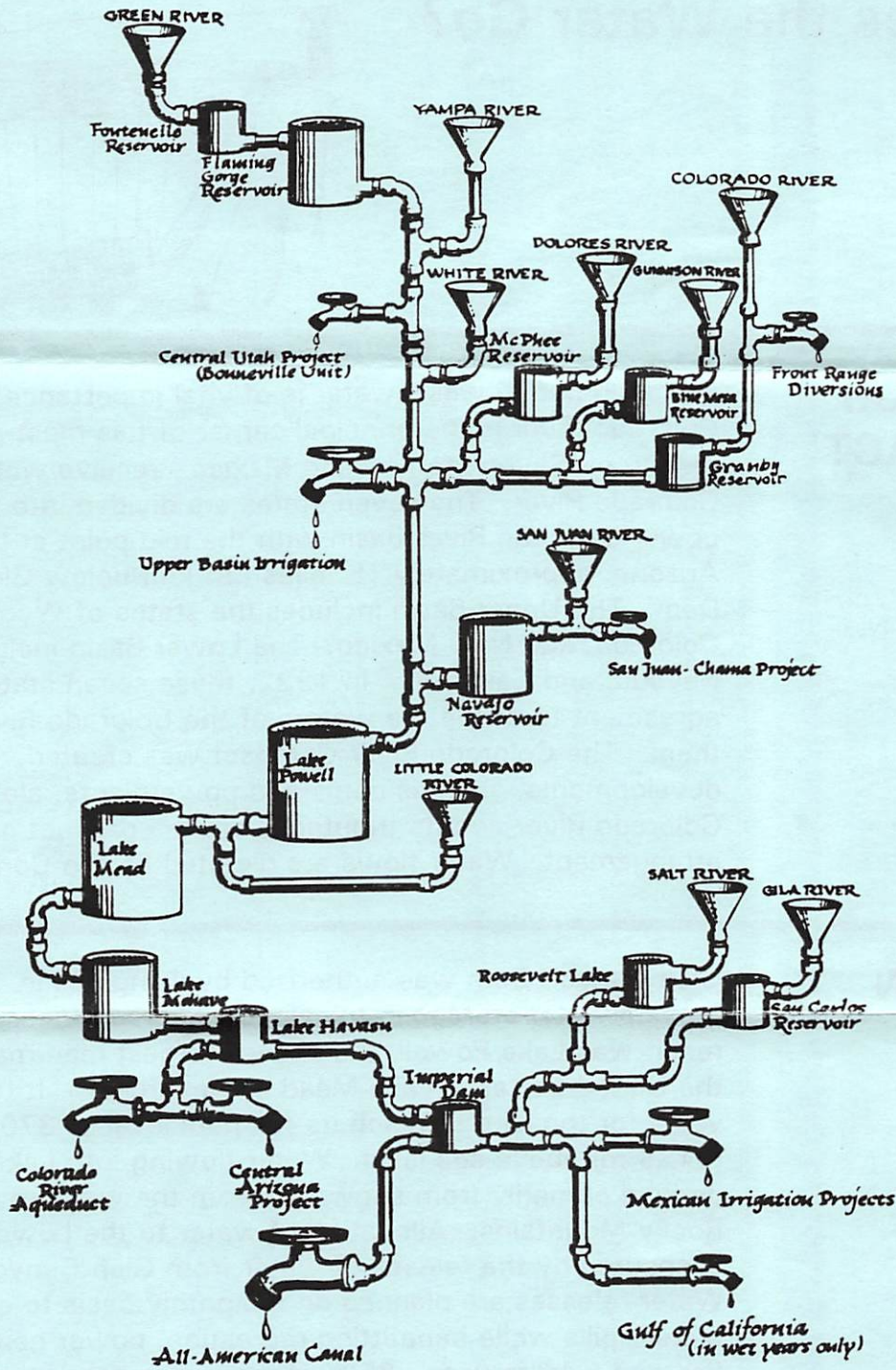
Glen Canyon Dam was authorized by Congress in 1956 to provide water storage in the Upper Colorado River Basin. The result was Lake Powell, the second largest man-made reservoir in the United States. (Lake Mead is the largest.) It took seventeen years for the lake to reach its full pool level of 3700' (1128 m) above sea level. Water flowing into Lake Powell is derived primarily from snowmelt from the western slope of the Rocky Mountains. Allocation of water to the Lower Basin states is ensured by the release of water from Glen Canyon Dam. Water releases are planned on a monthly basis to avoid high water spills while benefitting recreation, power generation, and fish and wildlife uses. 85% of the water goes to agricultural production, and a relatively small amount is used in urban areas.

CHANGES

Glen Canyon Dam has created a new Colorado River. Before the dam was built, water temperatures in the river fluctuated seasonally from 80°F in the summer to near freezing in the winter. Now, the water temperature below the dam averages 46°F year round. The Colorado River was once filled with silt and sediment. Now the river deposits its load of silt as it enters Lake Powell near Hite, Utah. Water released from the dam is clear, and the Colorado River is muddy only when downstream tributaries contribute sediment. As the habitat has changed, so have plant and animal species. Native fish, unable to survive in the colder water, have left the river. Five species are now endangered. But, this new habitat now supports a healthy trout population. Before Glen Canyon Dam, spring run-offs built and rebuilt beaches and sandbars and scoured away riverside vegetation. Now, sediment is trapped in Lake Powell, and the dam stops high river flows. Riparian vegetation grows along riverbanks, creating habitat for mammals, birds, amphibians, insects and reptiles.

THE COLORADO RIVER SYSTEM

The schematic below depicts the Colorado River system and the various developments placed on it. Although this is not a complete description, it provides a glimpse of the demands met by the river.



Reservoirs



Tributaries



Diversions

Schematic courtesy of High Country News, Paonia, CO 81428

FOR FURTHER READING

Crossing the Next Meridian, Charles Wilkinson; Island Press, 1993

Overtapped Oasis - Reform or Revolution for Western Water, Marc Reisner and Sarah Bates; Island Press, 1990

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