U.S. Department of the Interior
Bureau of Reclamation
Upper Colorado Basin Region

# Colorado River Storage Project

Authorized by Congress in the Colorado River Storage Project Act of 1956, CRSP allows for the comprehensive development of water resources of the Upper Colorado Basin states (Colorado, New Mexico, Utah, and Wyoming) by providing long-term regulatory storage of water to meet the entitlements of the Lower Colorado Basin. The project is one of the most complex and extensive river resource developments in the world and is integral to the development of the arid West.

The Initial Units of CRSP are made of dams, reservoirs and powerplants to regulate the flow of the Colorado River and provide flood control, storage, and delivery of water for irrigation, municipal, industrial, and other beneficial uses.

Colorado River operations, including CRSP operations, are governed by a complex set of authorities referred to as the "Law of the River."

The Glen Canyon, Flaming Gorge, and Wayne N. Aspinall units include hydropower plants that generate power by harnessing the kinetic energy of water as it flows from the reservoirs, through the dams, and back into the river.

Water in the reservoirs is stored for both consumptive use and as potential energy, like a battery, that can be turned into electricity, when needed, resulting in clean, renewable hydroelectric energy to assist in serving the needs of customers in seven Western states.

As part of regulating the flow, the Upper Colorado Basin Drought Contingency Plan is designed to reduce the risk of reaching critical elevations of the reservoir formed by Glen Canyon Dam, Lake Powell, and to help assure continued compliance with the 1922 Colorado River Compact.

The Drought Response Operations Agreement in the Upper Colorado River Basin creates a process to temporarily move water stored in the upstream CRSP Initial Units—Aspinall, Flaming Gorge, and Navajo—to Lake Powell when it is projected to drop below 3,525 feet above sea level. As defined in the DROA, the target elevation of 3,525 feet provides a sufficient buffer to allow for response actions to prevent Lake Powell from dropping below the minimum power pool elevation of 3,490 feet, the lowest elevation that Glen Canyon Dam can generate hydropower.

## Quick Facts

### Dams

**Combined storage capacity:** 30.6 million acre-feet

| **Construction of CRSP initial units:** | **1956-1977** |
|---|---|
| Glen Canyon Unit, Arizona/Utah | 1956-1963 |
| Flaming Gorge Unit, Utah/Wyoming | 1958-1964 |
| Navajo Unit, New Mexico/Colorado | 1956-1966 |
| Wayne Aspinall Unit, Colorado (3 units) | |
| Blue Mesa | 1962-1966 |
| Morrow Point | 1963-1968 |
| Crystal | 1972-1977 |

### Powerplants

**Combined hydropower generation capacity:**
More than 1,800 megawatts.

Provides power to 5.8 million customers in seven Western states and generates a total of more than 5 million MWh of energy annually.

### CRSP benefits:

Benefits include river flow regulation; water storage for consumptive use; reclamation of arid and semi-arid lands; flood control, recreation; and clean, renewable hydroelectric power generation. The project also provides for fish, wildlife, and other environmental considerations in accordance with the Colorado River Basin Project Act of 1968; National Environmental Policy Act of 1969; Endangered Species Act of 1973; and Grand Canyon Protection Act of 1992.

### Operations

**Annual Operating Plan:**
Each year the Secretary of the Interior prepares an annual operating plan describing, among other things, the projected operations for Colorado River reservoirs for the upcoming year. (https://www.usbr.gov/uc/water/rsvrs/ops/aop/)

**24-Month Studies:**
An operational study is created each month using forecasted inflows and expected operations to project future Colorado River reservoir volumes and releases for the next 24-month period. (https://www.usbr.gov/uc/water/crsp/studies/index.html)

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## Storage Dams and Participating Projects