



GLEN CANYON DAM ADAPTIVE MANAGEMENT PROGRAM

Using science to manage river resources in Grand Canyon

Hydropower and the Adaptive Management Program

Hydropower Overview

Dams convert energy from falling water into electricity. Hydropower is a clean, renewable and reliable energy source that contributes between eight and 12 percent of United States' electrical generation and serves nearly 35 million residential customers. It is used to follow fluctuating electrical demand, or peaking power, while the larger, less-flexible coal and nuclear resources provide baseload power. Hydropower facilities are ideal for following rapid changes in electrical demand because they can be quickly adjusted to meet these changes.

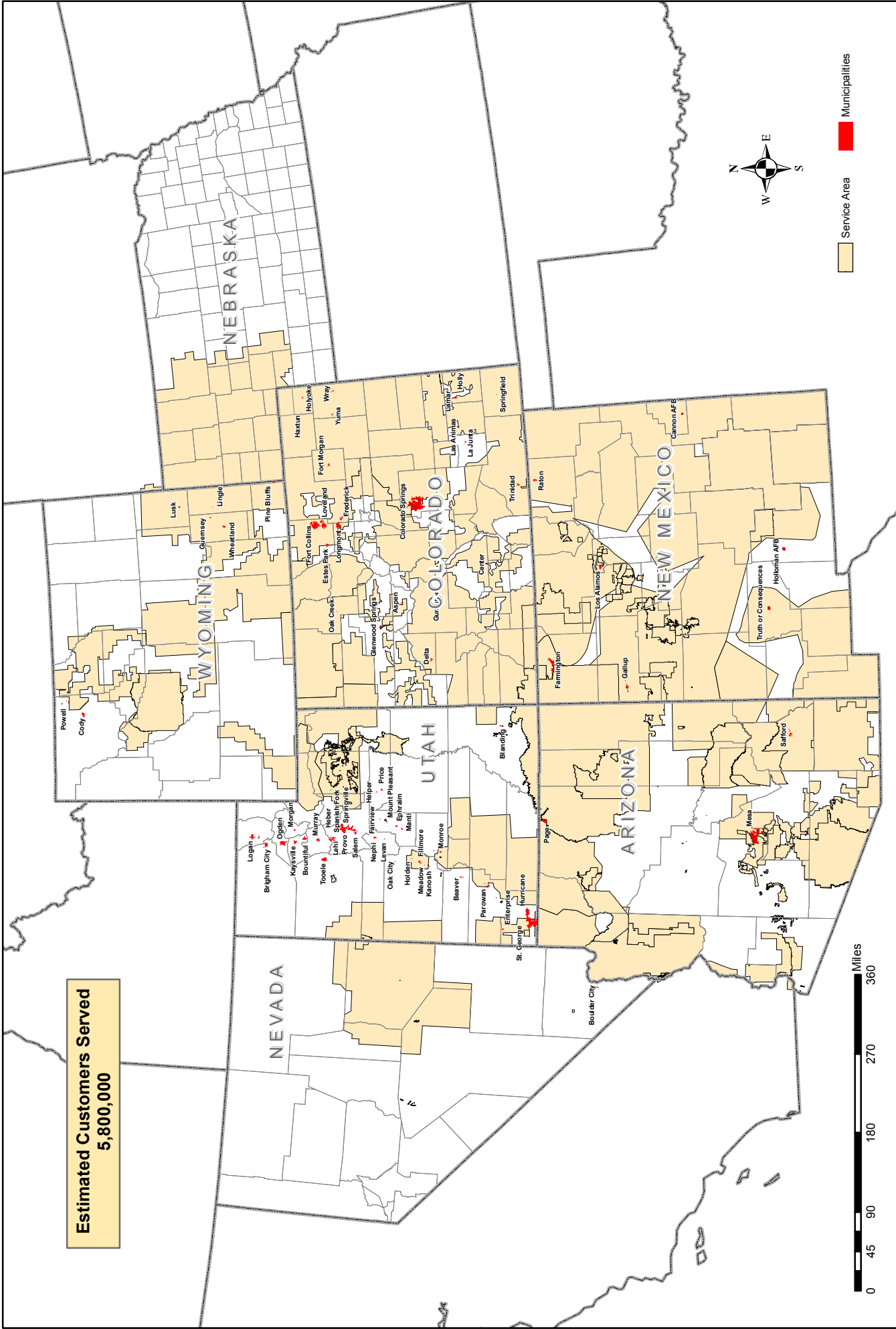
Glen Canyon Dam is the largest generating facility of the federal Colorado River Storage Project (CRSP). The dam's eight generators can produce up to 1,300 megawatts, enough electricity to serve 1.3 million residential customers. The integration of hydropower and other resources provides an efficient and flexible operation of this region's electrical resources. Releases of water from Glen Canyon Dam are adjusted in part to accommodate daily and seasonal peak power demands.

CRSP Customers, Revenues, and the Adaptive Management Program

- Power generated at Glen Canyon Dam is sold under 20-year contracts within the states of Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming. CRSP power is sold to non-profit entities who serve over five million customers.
- Revenues from the sale of CRSP power are deposited in the U.S. Treasury and are used to fund Glen Canyon Dam's construction costs (including interest), irrigation assistance, operation and maintenance costs, salinity control, and environmental programs.
- The Glen Canyon Dam Adaptive Management Program (AMP) can affect hydropower production at Glen Canyon Dam. The intent of the AMP is to improve the resources downstream of Glen Canyon Dam, recognizing that hydropower is an integral component of the region's economy.
- Since 1991, operations have been changed at Glen Canyon Dam to address environmental concerns, reducing electricity generation by about one-third. This reduction in electricity must be purchased from other generating resources (such as coal, thermal, gas, nuclear) and paid for by CRSP customers.
- Since 1983, CRSP power revenues have funded over \$225 million of costs associated with environmental programs in the Grand Canyon. Since 2000, environmental experiments at Glen Canyon Dam recommended through the AMP cost an additional \$33.5 million.
- Service area profiling distribution of CRSP power provided on the back of this fact sheet.

(over)

Estimated Customers Served
5,800,000



Service Area
Municipalities

Western Area Power Administration
An agency of the U.S. Department of Energy
The Colorado River Storage Project
Management Center

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DISCLAIMER:
The data represented on this map has been developed from the best available sources. Although efforts have been made to ensure that the data is accurate and reliable, errors may exist. The data on this map is for reference use only. Population figure generated from U.S. Census year 2000 data.

The Colorado River Storage Project
Management Center Service Territory

