

RECLAMATION

Managing Water in the West

Providing Flood Protection For California's Northern Region and Central Valley

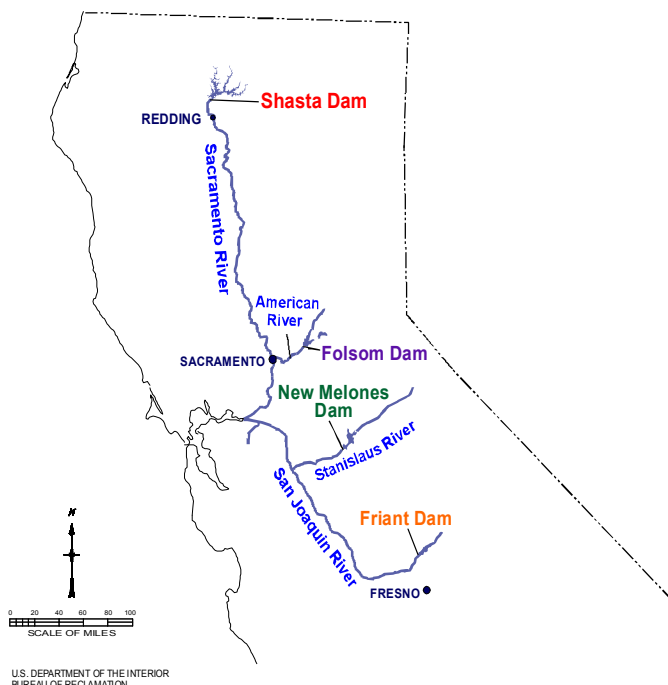


Folsom Dam

INTRODUCTION

The Bureau of Reclamation's Mid-Pacific Region is responsible for operating the Central Valley Project (CVP) - a system of 20 dams and reservoirs, 500 miles of major canals, and other facilities located mainly in the Sacramento and San Joaquin Valleys of California. The CVP is the Nation's largest water development project managing about 9 million acre-feet of water and delivering about 7 million acre-feet of water for urban, industrial, agricultural, and environmental uses. Another important role for the CVP is providing flood protection for California's Northern Region and Central Valley. For example, during the 1997 New Year's floods, CVP dams held back more than 2 million acre-feet of water that could have caused more than \$1 billion in property damage. During the 2005 flood season, Shasta and Folsom Dams held back more than 1 million acre-feet of water in December 2005 and January 2006 to help prevent damage from winter storms.

Reservoirs and Rivers that Assist with Flood Control for California's Northern Region and Central Valley



| | |
|------------------------|-------------------|
| Shasta Dam | Sacramento River |
| Folsom Dam | American River |
| New Melones Dam | Stanislaus River |
| Friant Dam | San Joaquin River |

The flood control season for Reclamation reservoirs generally runs from early October through as late as mid-June. Most CVP reservoirs are governed by flood control requirements determined by the U. S. Army Corps of Engineers (Corps). Preparations for the flood season may actually begin in mid-summer when consideration is given to gradually reducing reservoir storage to provide room for winter rains. These reduced storage levels are set by the Corps and must be met in early October.

PREPARING FOR FLOOD CONTROL SEASON

Prior to the flood control season, reservoir operators review the operational flood control requirements of the reservoirs that they have primary operational responsibility. Flood operations may require 24-hour staffing, and each operator understands the flood operational requirements for reservoirs in the CVP.

In addition, operators attend pre-flood season operational coordination meetings with the National Weather Service's California-Nevada River Forecast Center, the California Department of Water Resources, the Corps, and local agencies. All communication and contact lists are checked and updated, such as call lists, e-mail addresses, and web site links.



Shasta Dam

Generally, reservoirs offer flexibility by temporarily storing large flows of water that would have been damaging if not captured, and allowing more gradual water release rates that downstream areas can more easily absorb. This process also partially empties the reservoirs so the cycle can be repeated for upcoming storms.

As another aspect of flood season preparations, Reclamation Area Offices at the reservoir sites test equipment and ensure that maintenance and repairs are completed on facilities that may be involved in flood control operations.

CONTROLLING FLOWS DURING FLOOD CONTROL SEASON

During the flood control season, operators monitor reservoir inflows and storage as well as rainfall and runoff forecasts and conditions elsewhere in the system. Water releases from the reservoirs can be managed to meet flood control objectives for a particular area.

COMPLETING THE CYCLE

As the flood season transitions into spring and summer, Reclamation operators are permitted to slowly fill the reservoirs again for summer operational purposes such as water supply, salinity control, fish and wildlife protection, and power production. As a secondary benefit, many CVP reservoirs provide substantial summer recreation opportunities to local communities.

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For more information, please contact:

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or visit the MP Region's Central Valley Operations Office website:

www.usbr.gov/mp/cvo/