

WATER EDUCATION FOUNDATION

CALIFORNIA DROUGHT UPDATE

March 27, 2014

**Thomas W. Birmingham
Westlands Water District**

Major Water Projects

💧 Federal – Central Valley Project (CVP)

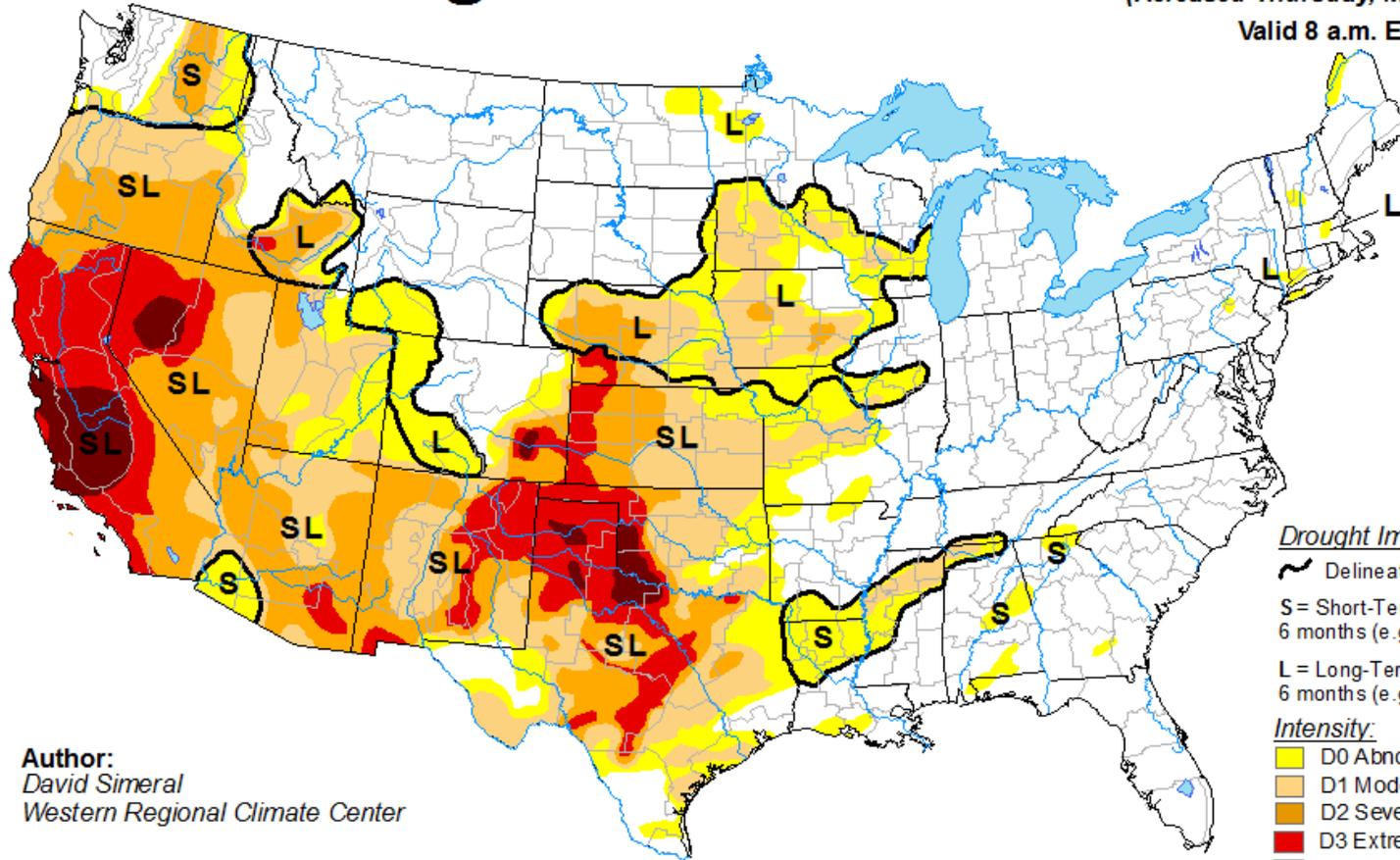
💧 State – State Water Project (SWP)

💧 Local – Many smaller projects throughout state



U.S. Drought Monitor

March 25, 2014
(Released Thursday, Mar. 27, 2014)
Valid 8 a.m. EDT



Author:
David Simeral
Western Regional Climate Center

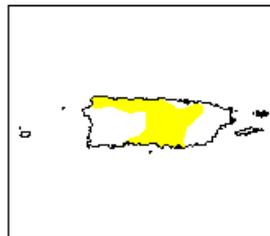
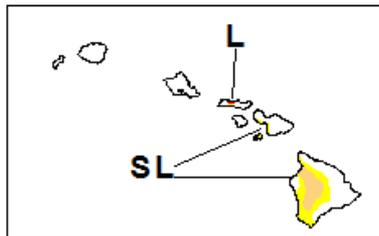
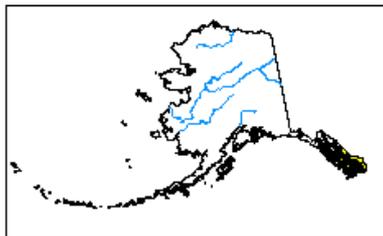
Drought Impact Types:

- Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



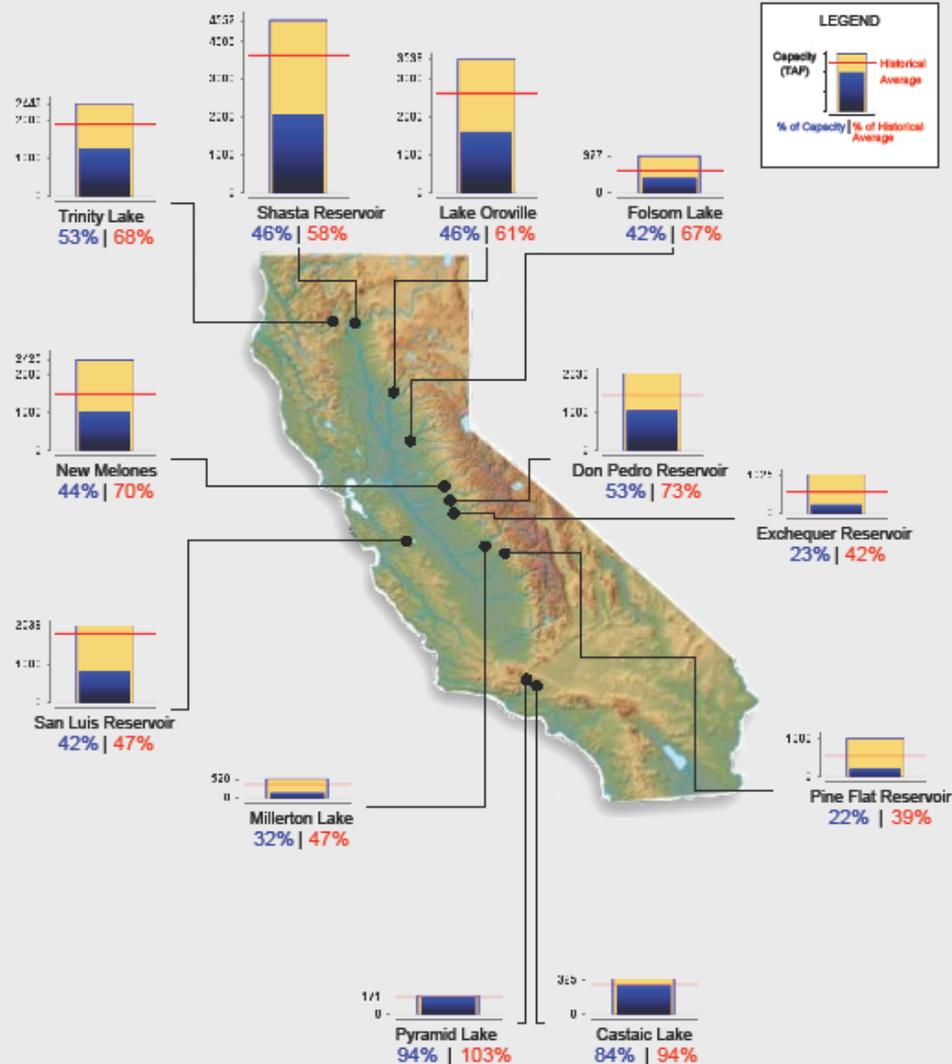
<http://droughtmonitor.unl.edu/>



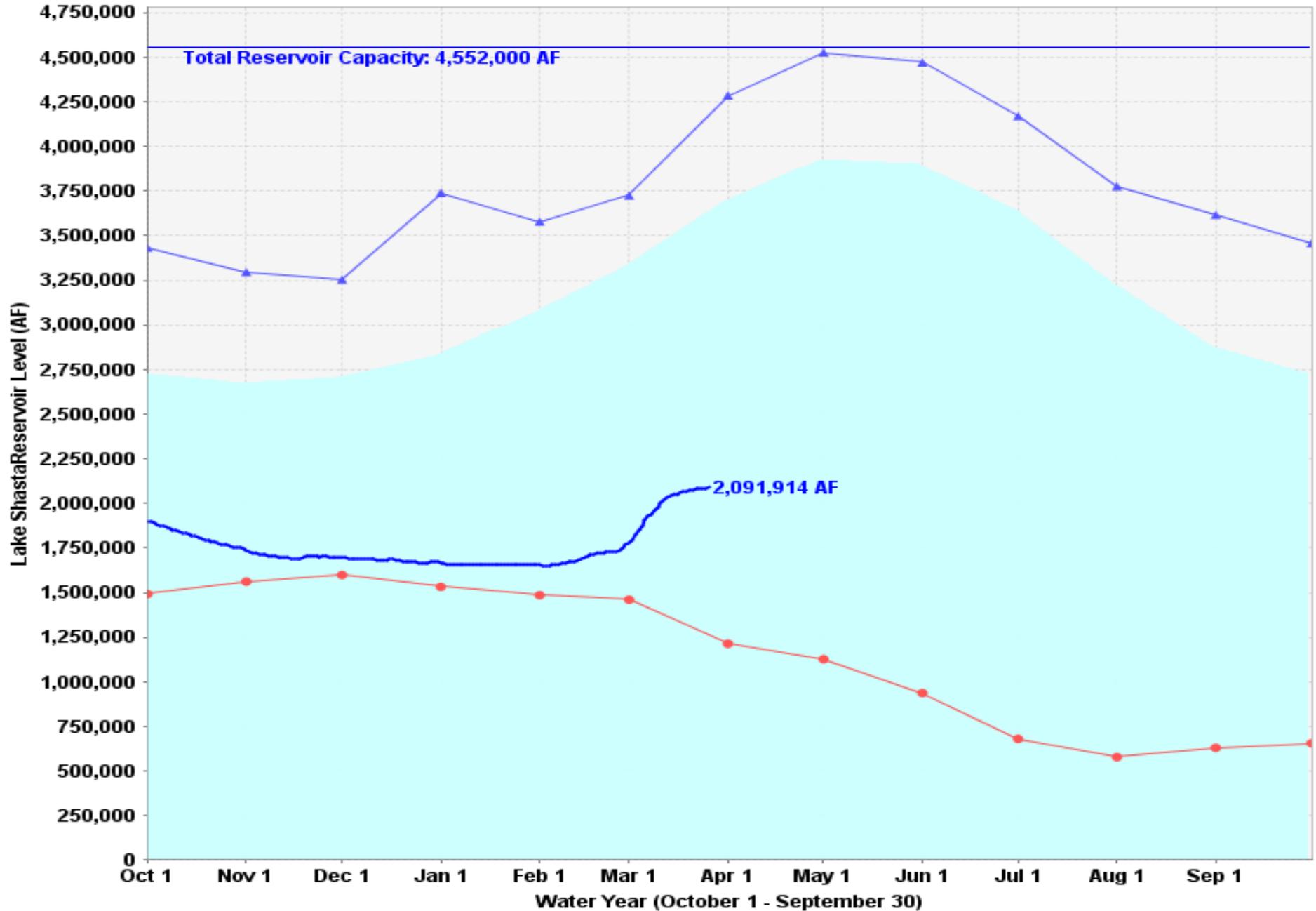
Reservoir Conditions

Ending At Midnight - March 26, 2014

CURRENT RESERVOIR CONDITIONS

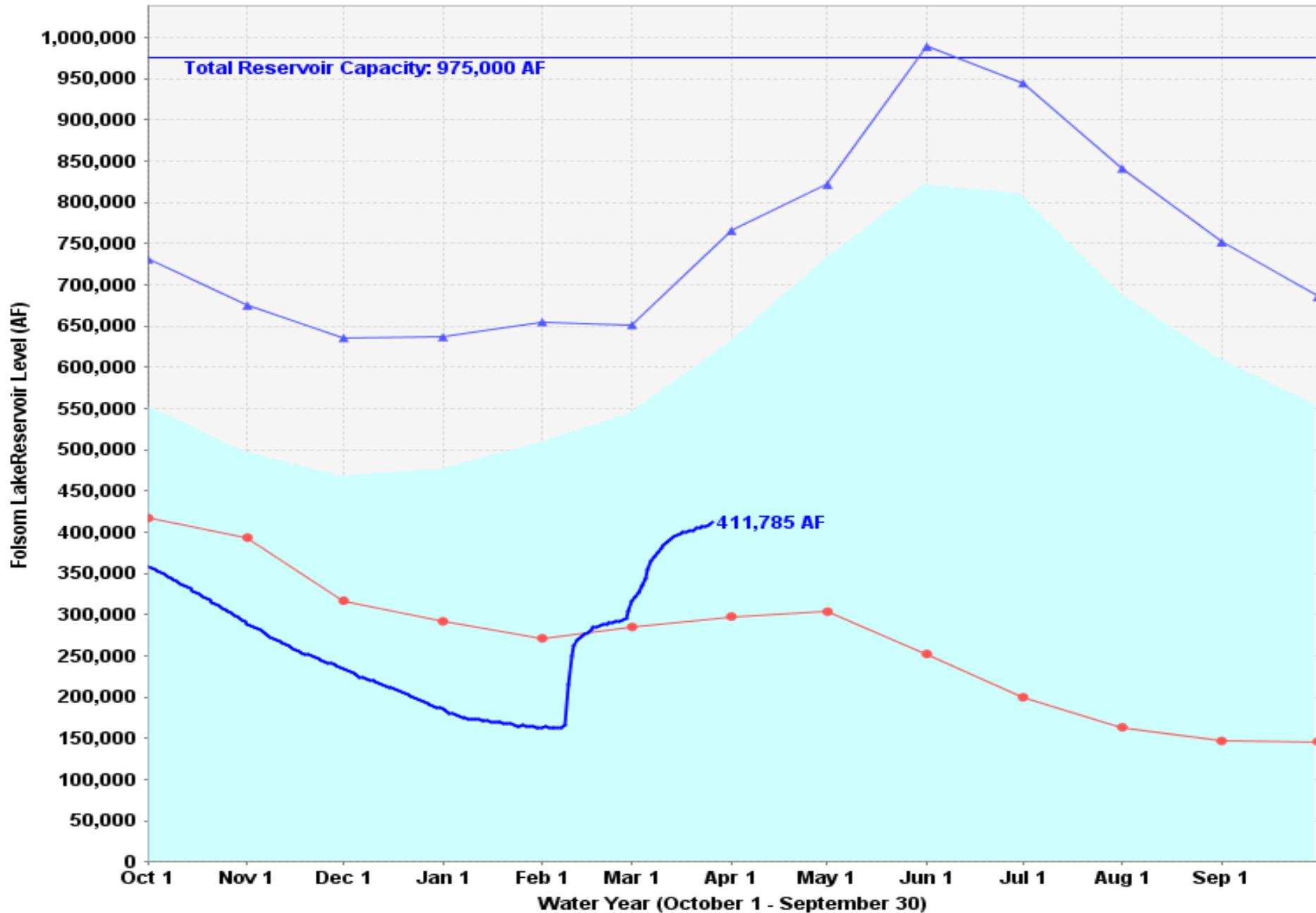


Lake Shasta Storage Levels



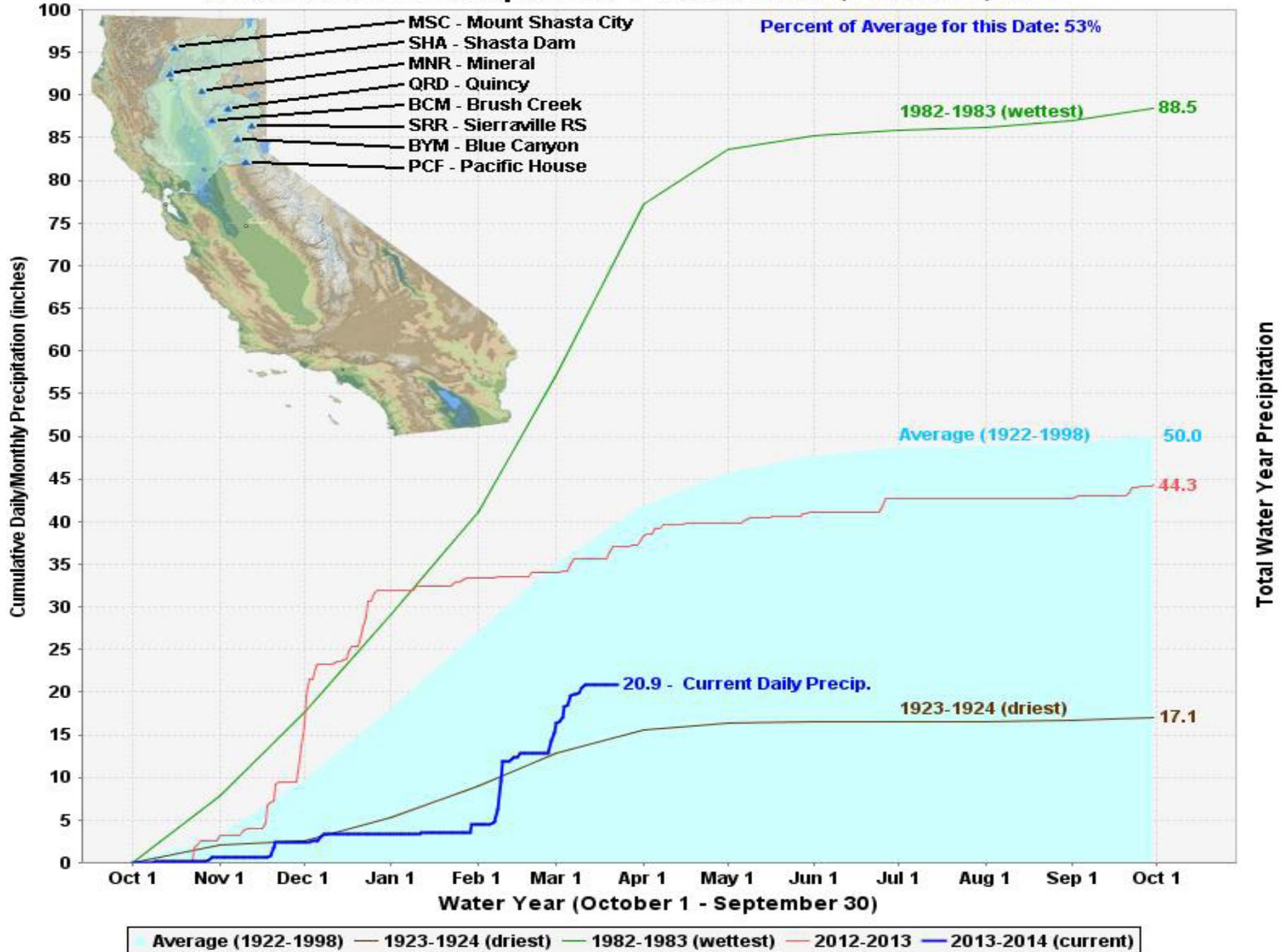
Historical Average — Total Reservoir Capacity — 1976-1977 (dry) — 1982-1983 (wet) — 2013-2014(current)

Folsom Lake Storage Levels

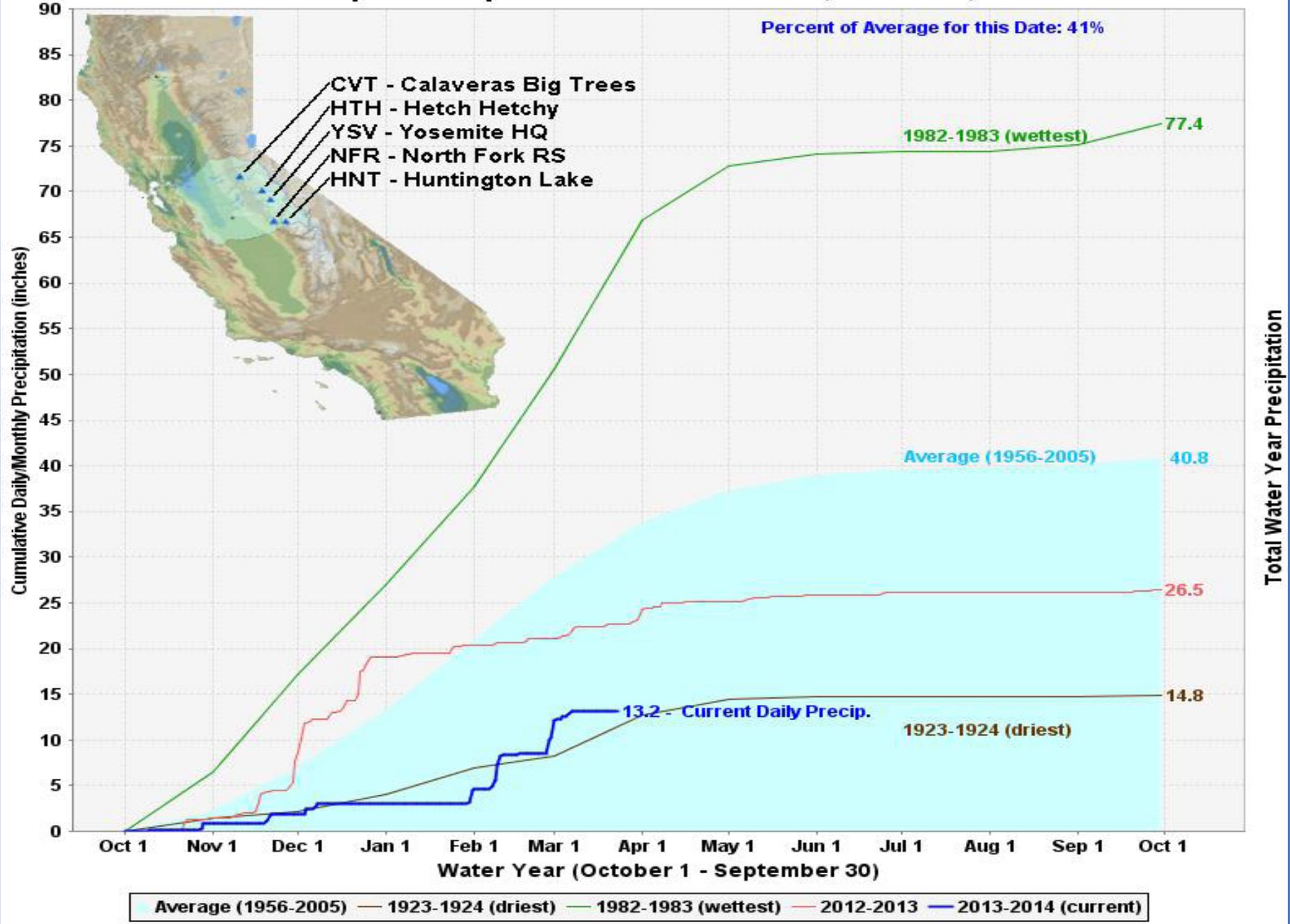


■ Historical Average
 — Total Reservoir Capacity
 ● 1976-1977 (dry)
 ▲ 1982-1983 (wet)
 — 2013-2014(current)

Northern Sierra Precipitation: 8-Station Index, March 24, 2014

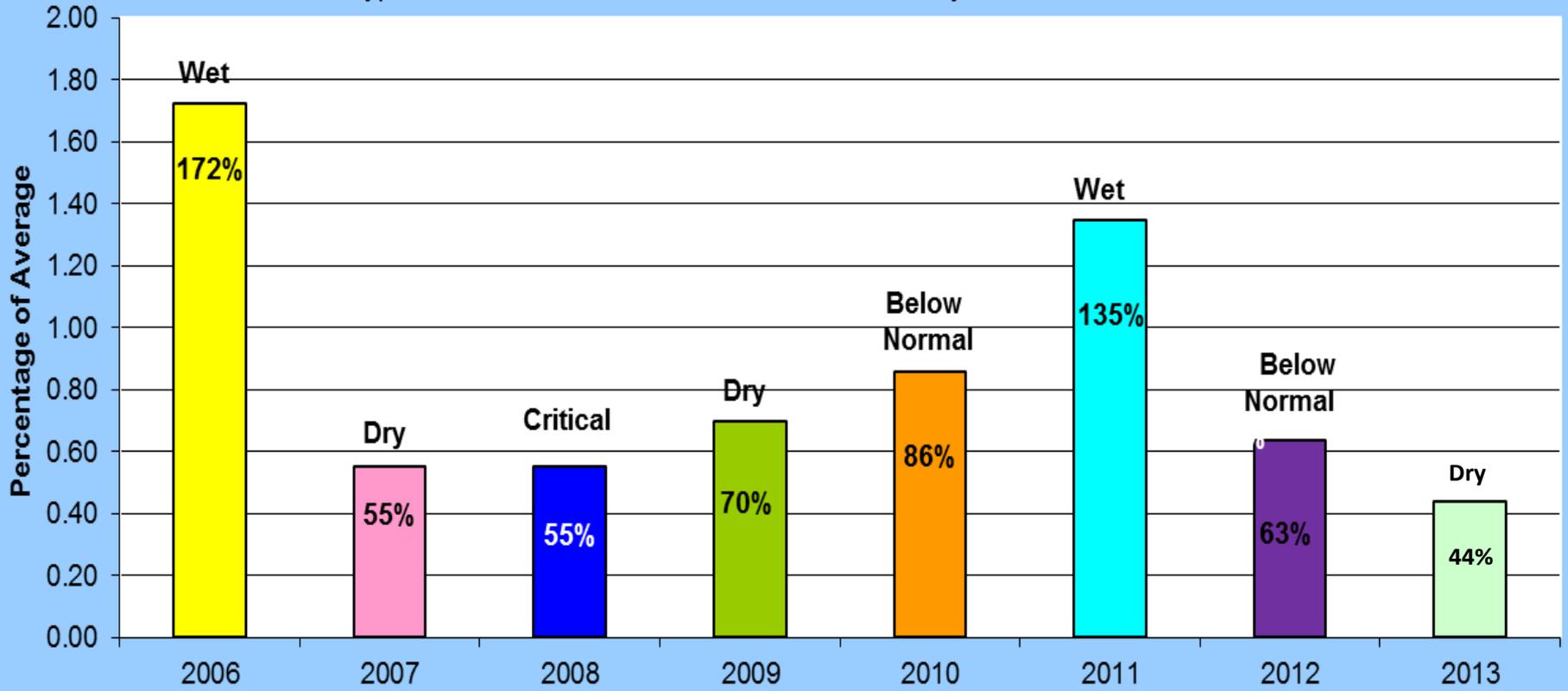


San Joaquin Precipitation: 5-Station Index, March 24, 2014



Sacramento Valley Unimpaired Runoff

Year type clasification is based on the Sacramento Valley Water Year Index 40-30-30



What has changed since 1977:

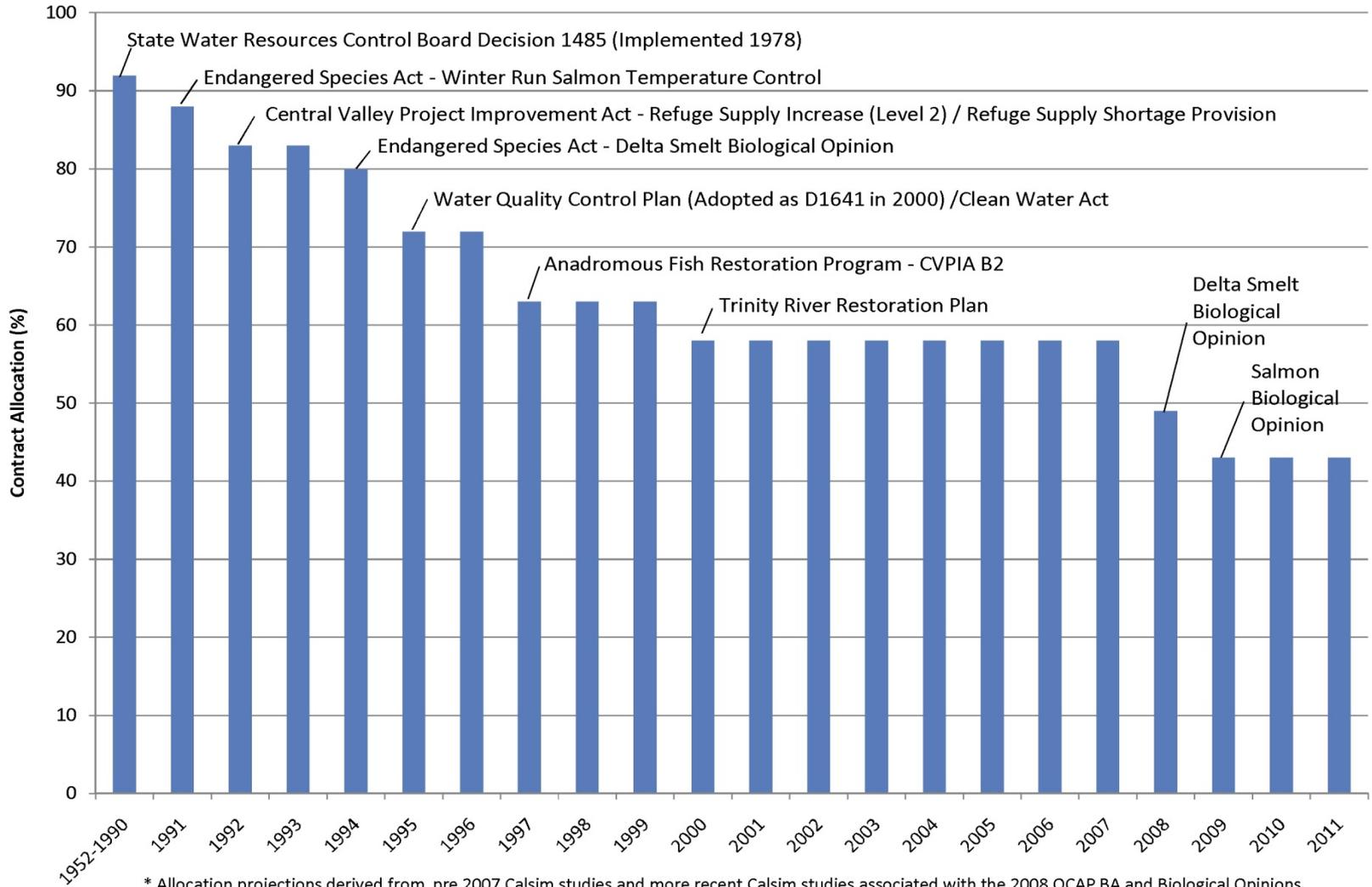
In 1977 there were 22 Million Californians,
today 38 Million [+16,000,000 an increase of
72%]

In 1977 our per capita income was \$8,500,
today \$42,500 [+\$34,000 an increase of 400%]

In 1977 gross farm revenue was \$9.6 Billion,
today \$45 Billion [+\$35,400,000,000 an
increase of 368%]

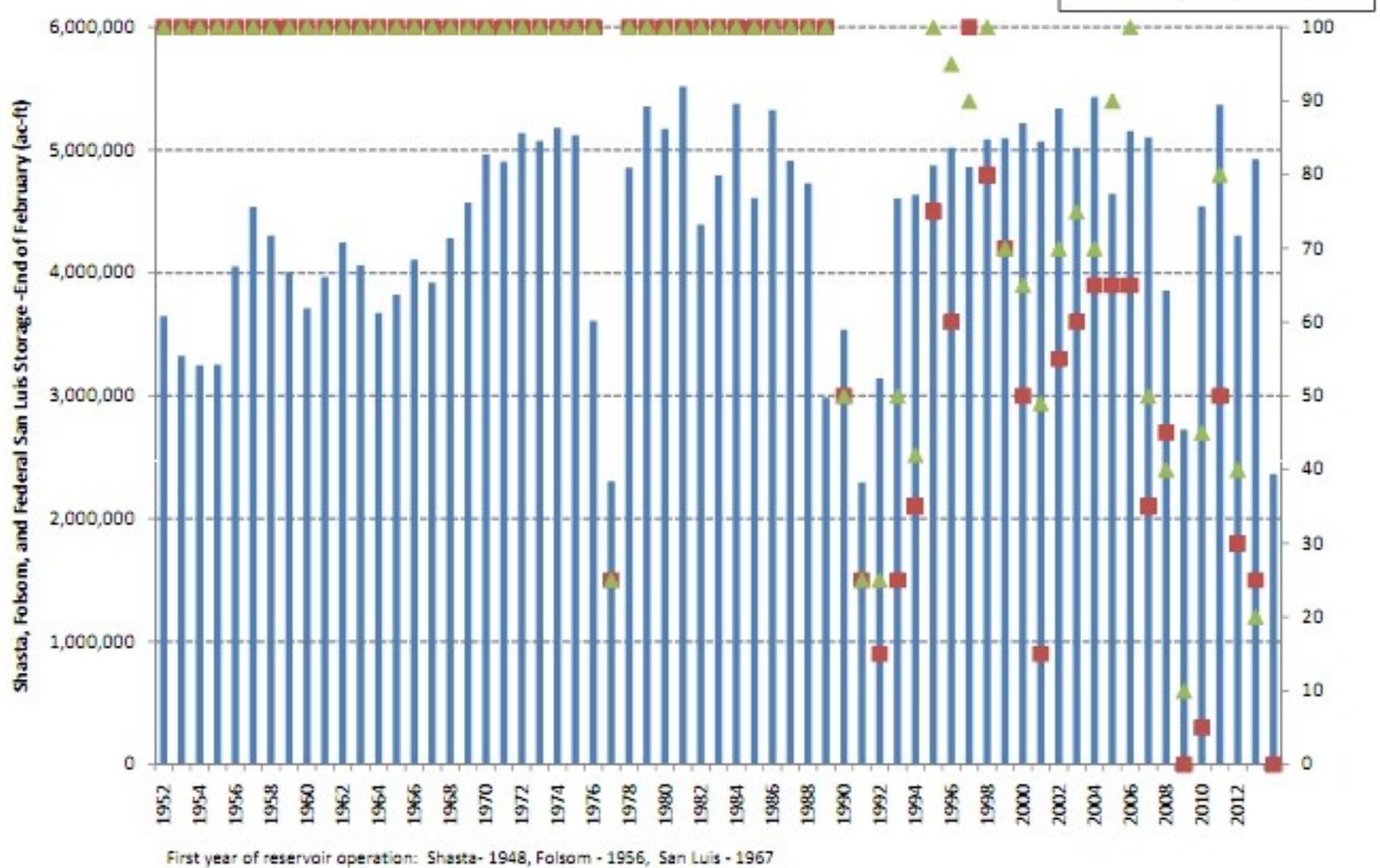
Since 1977 a multitude of government
regulatory and policy decisions have placed a
raft of “priority environmental uses” ahead of
historic human needs and have reduced the
average water supply for CVP South of Delta Ag
Service Contractors from 90% reliability to 40%
reliability.

Long Term Average, CVP S. of Delta Ag Service Contract Allocation



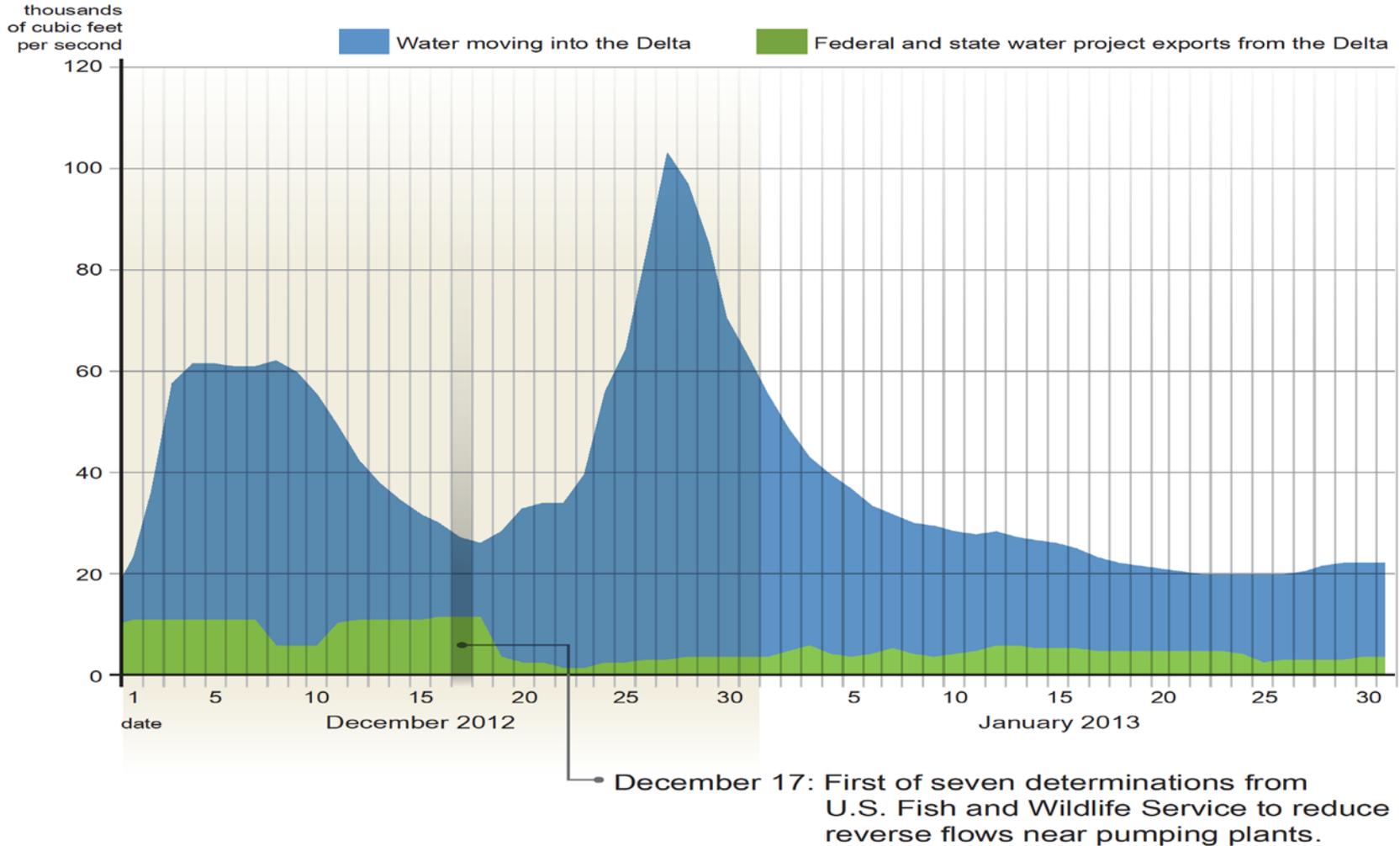
* Allocation projections derived from pre 2007 Calsim studies and more recent Calsim studies associated with the 2008 OCAP BA and Biological Opinions

CVP Storage vs Ag Service Allocation (1952-2014)



Delta Inflows and Water Project Exports

December 1, 2012 – January 31, 2013



Source: California Department of Water Resources

Water Not Captured For Beneficial Use During Peak Delta Flow February 2014

