

# Mass Care Drought Summit 2014

## State Department of Social Services Cal OES

*DROUGHT PREPAREDNESS & RESPONSE*



Bill Croyle, Drought Manager  
Department of Water Resources  
*May 1, 2014*

PUBLIC SAFETY

ENVIRONMENTAL STEWARDSHIP

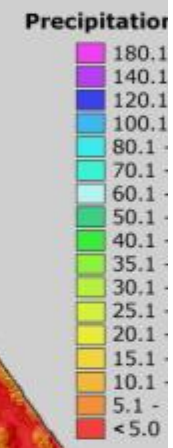
ECONOMIC STABILITY

# OVERVIEW

- **Snow**
- **Surface Water**
- **Groundwater**
- **Concerns**

# Precipitation

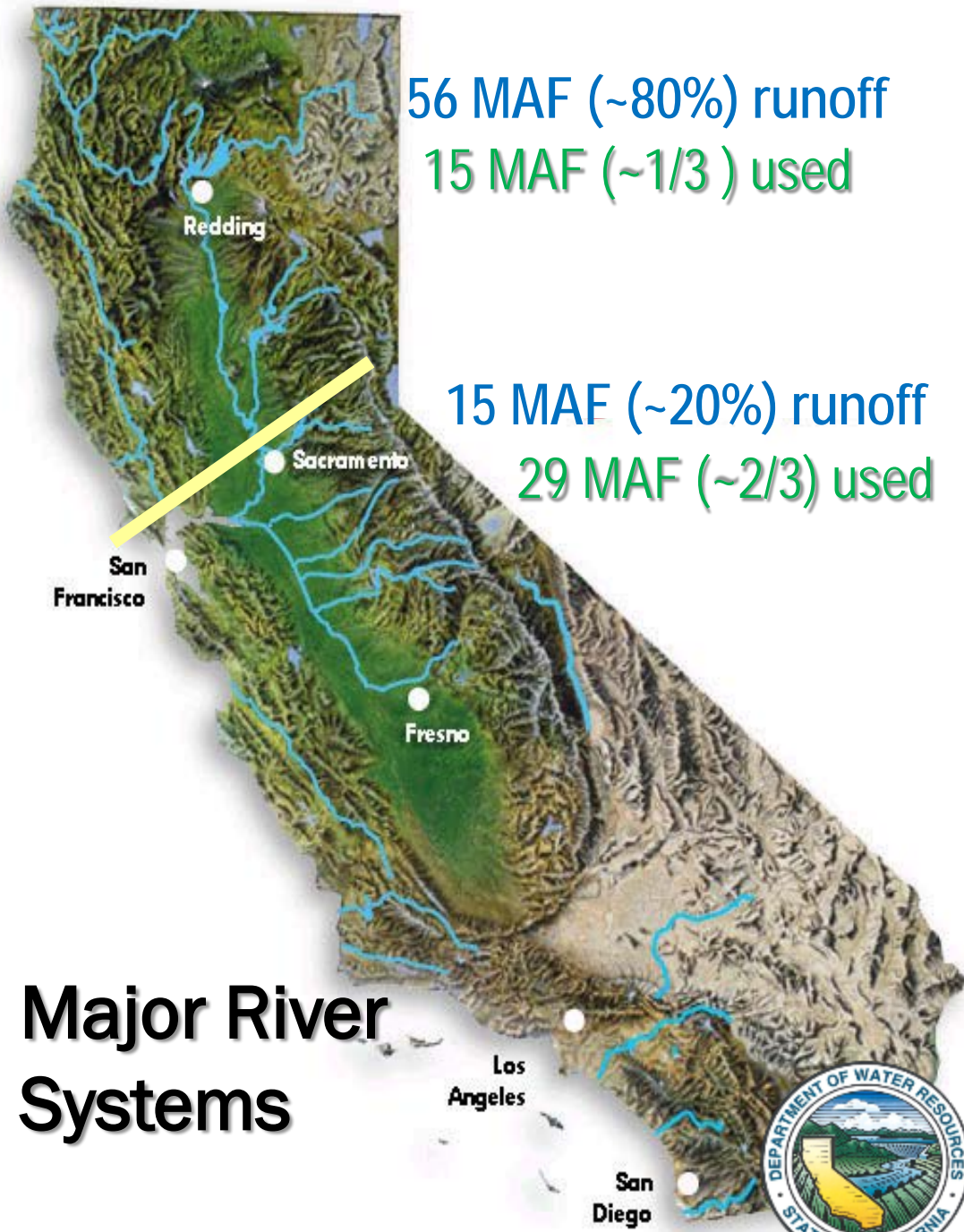
Average Annual Precipitation California (With Shaded Relief)



100 miles

Adapted from the National Atlas

SOURCE: <http://education.usgs.gov/california/resources>

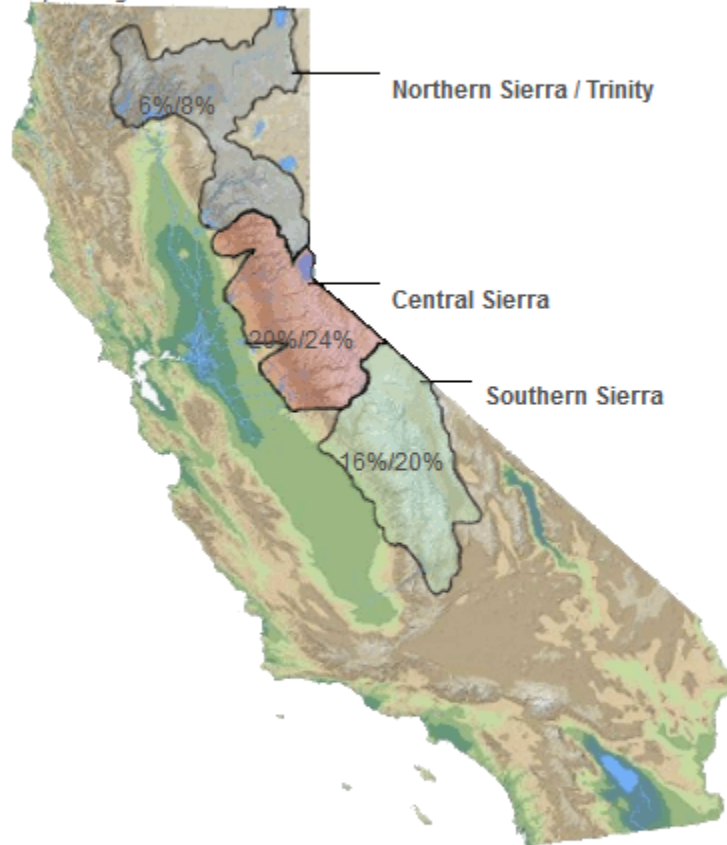


# → Snow Water Equivalents (inches)

Provided by the California Cooperative Snow Surveys

Data For: 30-Apr-2014

% Apr 1 Avg. / % Normal for this Date



## NORTH

Data For: 30-Apr-2014

Number of Stations Reporting	26
Average snow water equivalent	1.7"
Percent of April 1 Average	6%
Percent of normal for this date	8%

## CENTRAL

Data For: 30-Apr-2014

Number of Stations Reporting	42
Average snow water equivalent	6.1"
Percent of April 1 Average	20%
Percent of normal for this date	24%

## SOUTH

Data For: 30-Apr-2014

Number of Stations Reporting	28
Average snow water equivalent	3.9"
Percent of April 1 Average	16%
Percent of normal for this date	20%

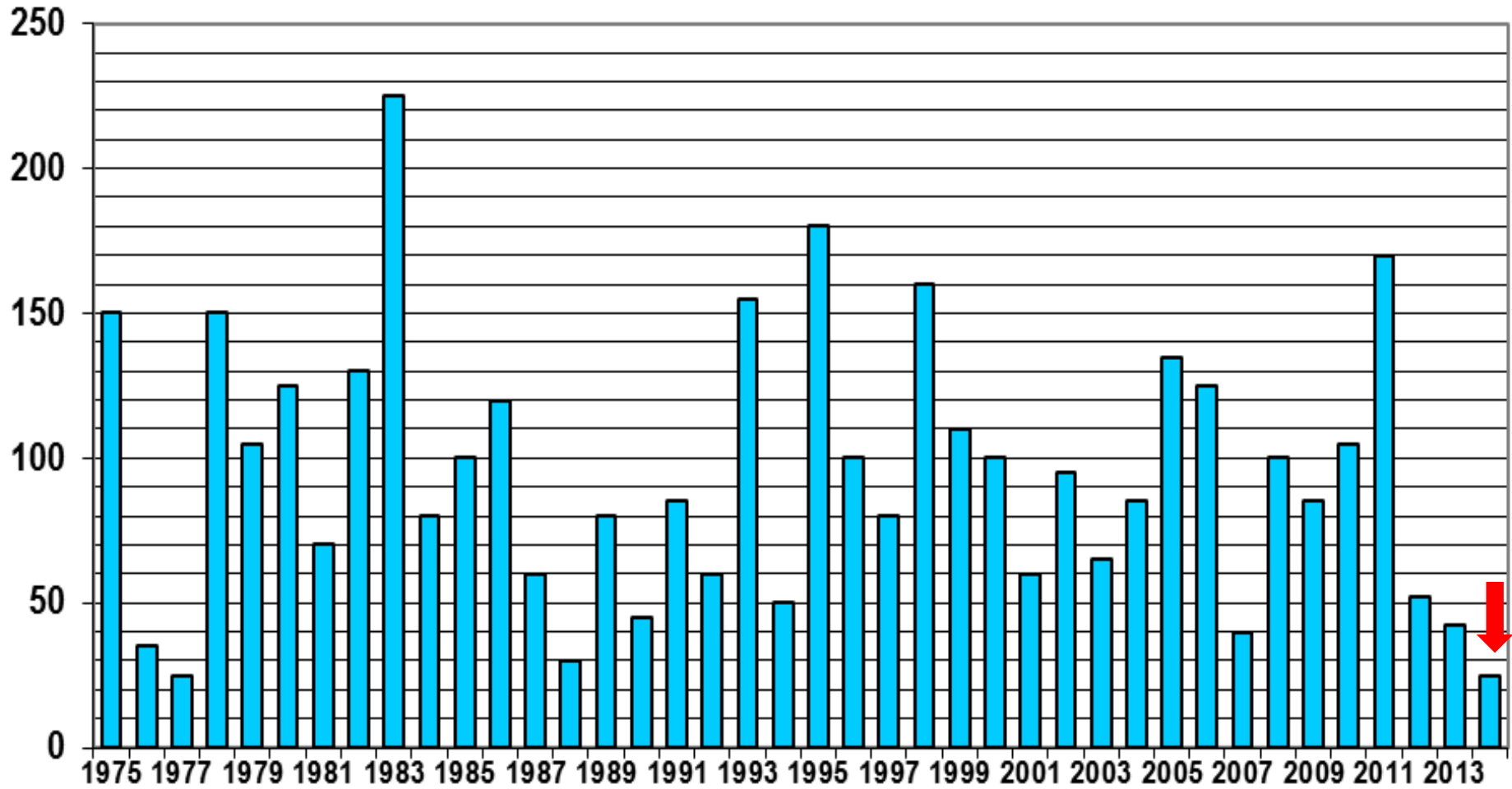
## STATEWIDE SUMMARY

Data For: 30-Apr-2014

Number of Stations Reporting	96
Average snow water equivalent	4.3"
Percent of April 1 Average	15%
Percent of normal for this date	19%

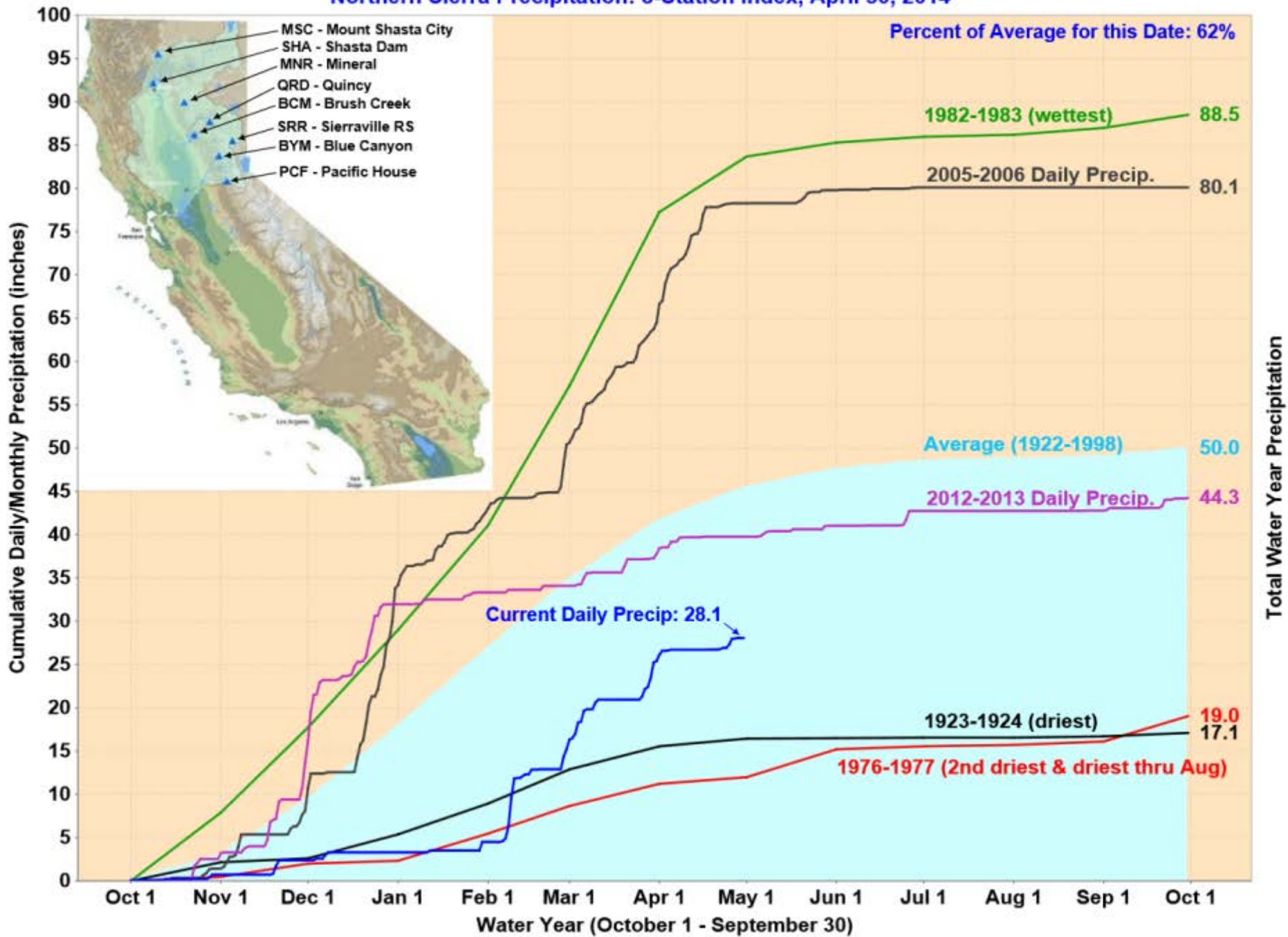
Change Date :  30-Apr-2014

## April 1 Snowpack Water Content Statewide Percent of Average



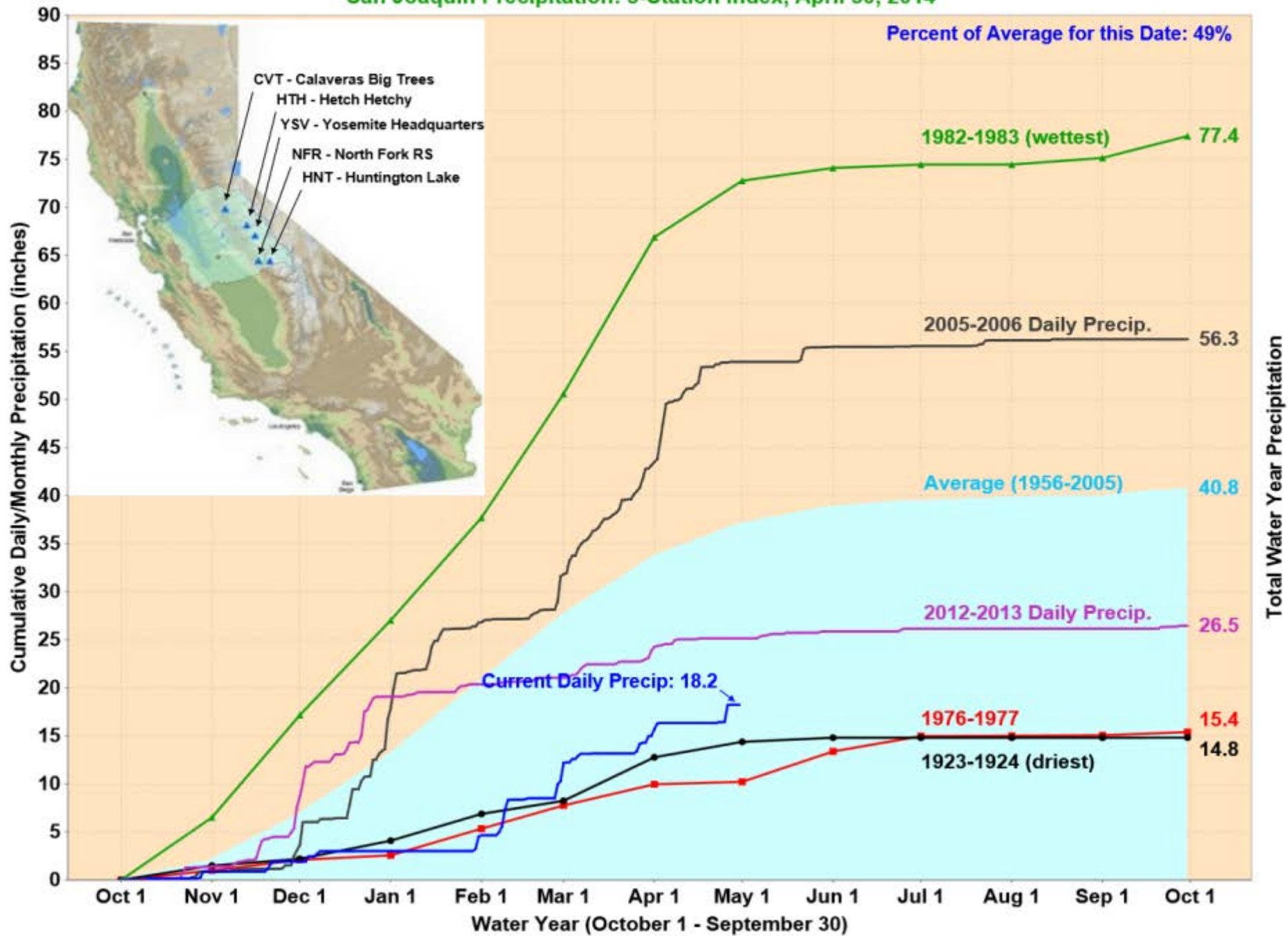
# Northern Sierra Precipitation: 8-Station Index, April 30, 2014

Percent of Average for this Date: 62%



# San Joaquin Precipitation: 5-Station Index, April 30, 2014

Percent of Average for this Date: 49%

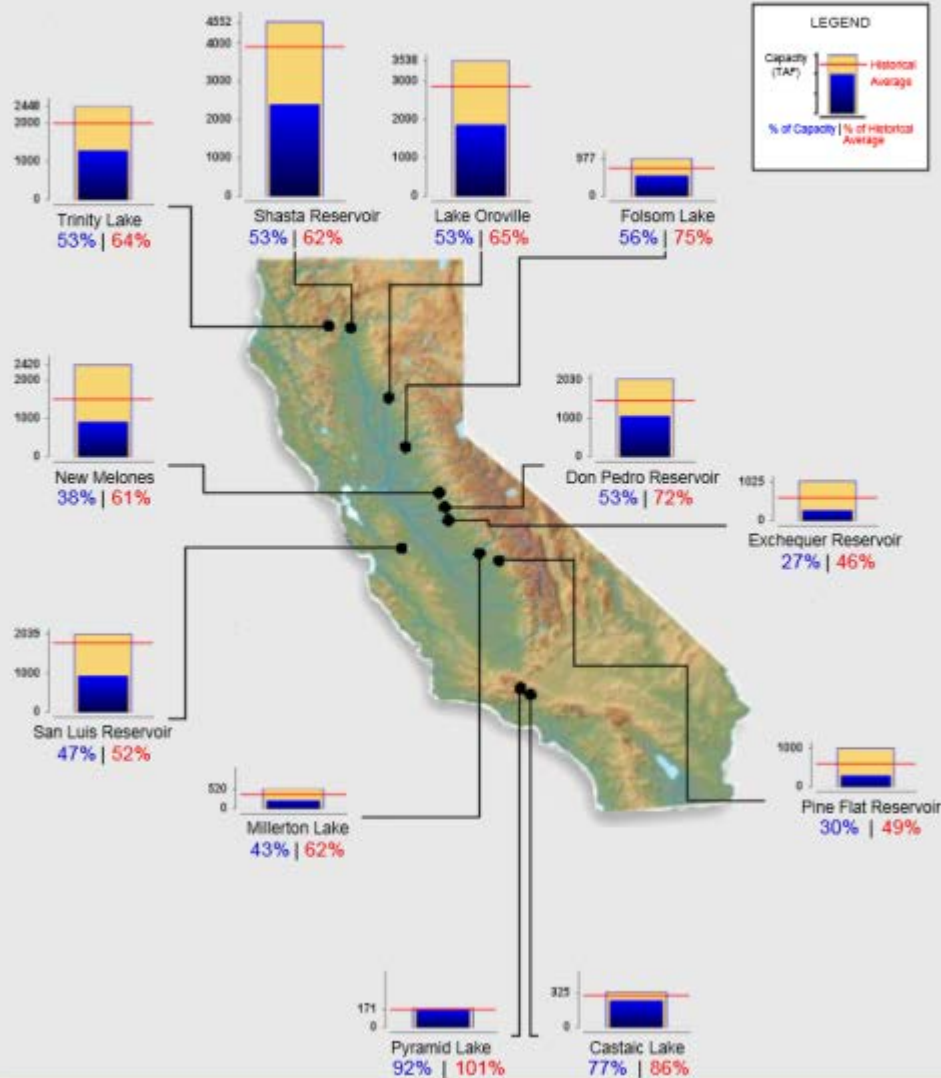




# Reservoir Conditions

Ending At Midnight - April 29, 2014

## CURRENT RESERVOIR CONDITIONS

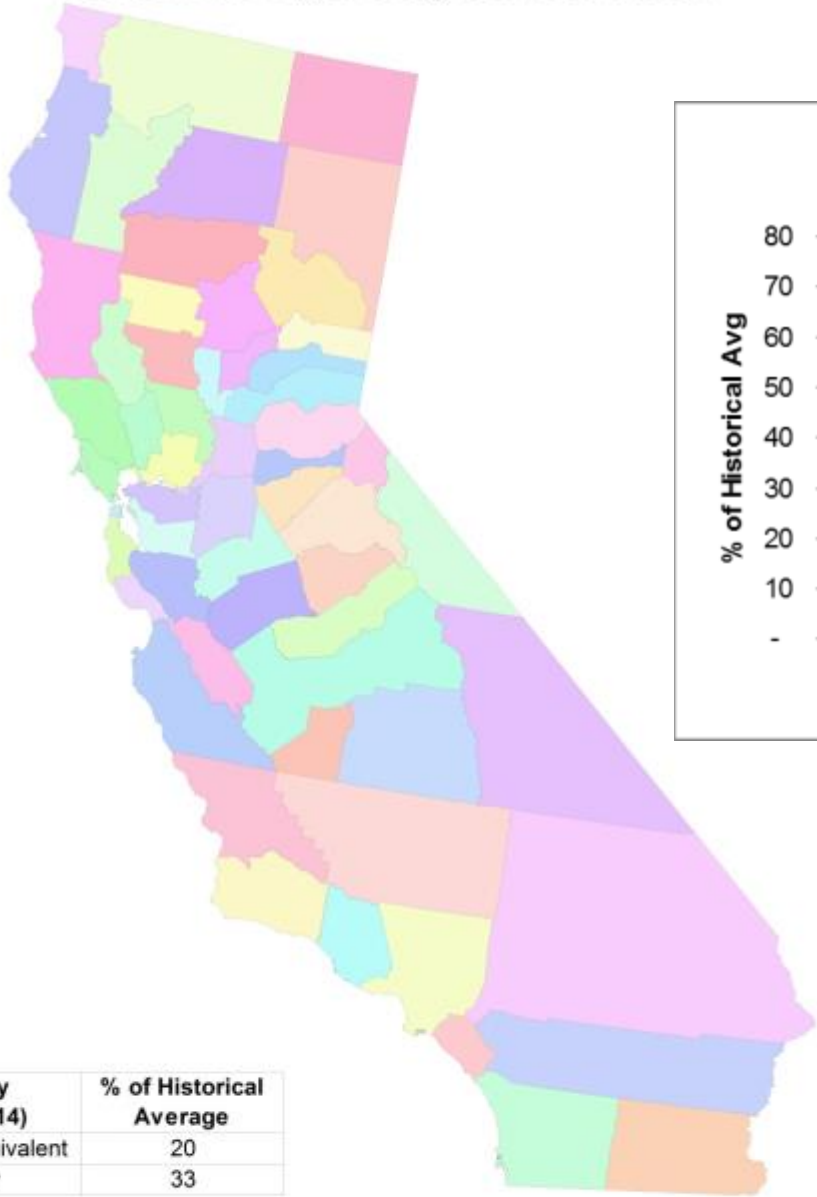


Graph Updated 04/30/2014 08:45 AM

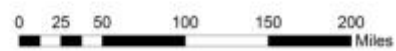
& RESPONSE



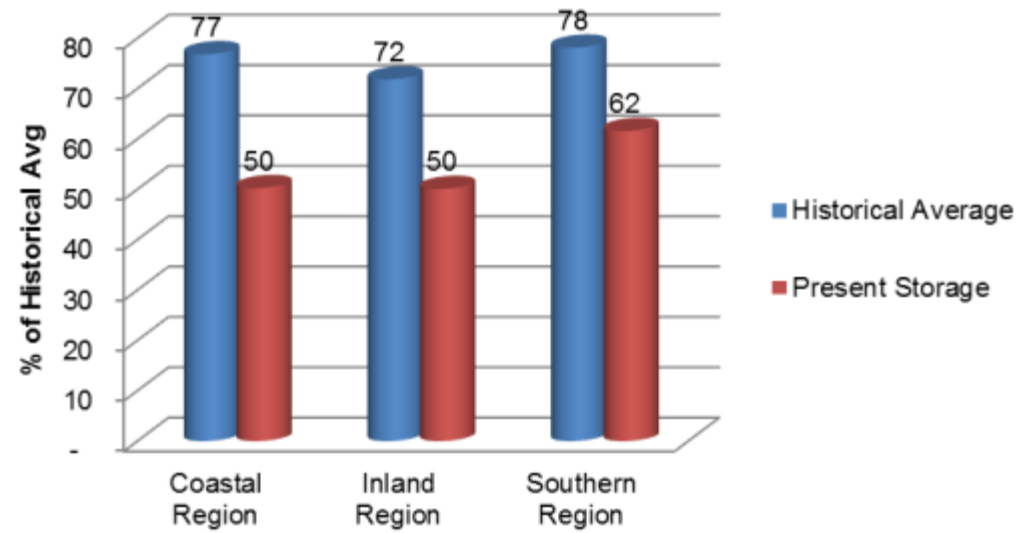
# Statewide Hydrological Condition



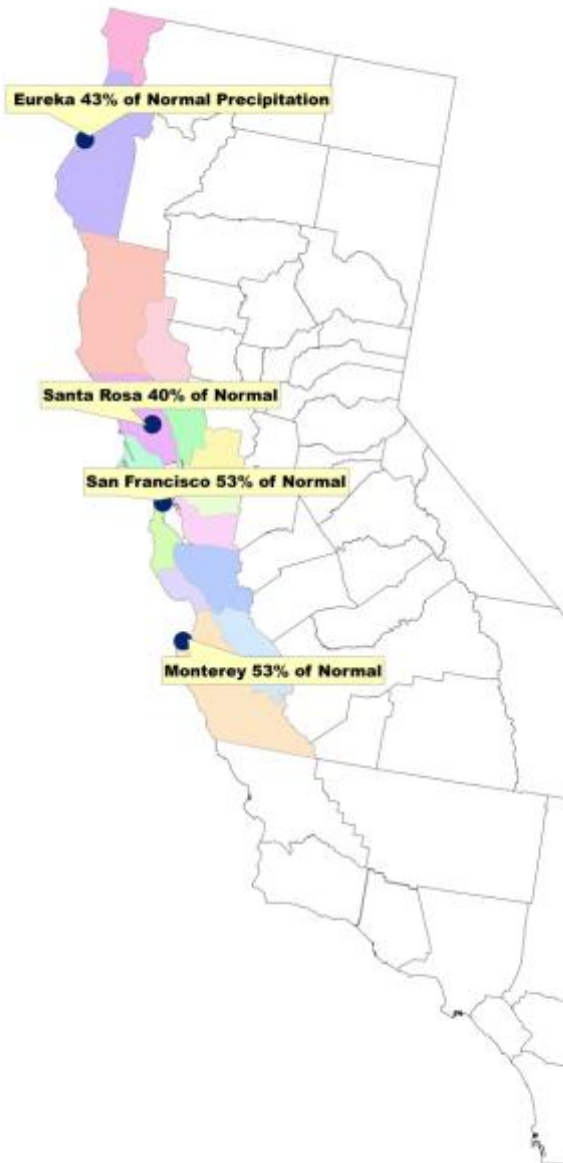
Hydrology (April 1, 2014)	% of Historical Average
Snow Water Equivalent	20
Full Natural Flow	33



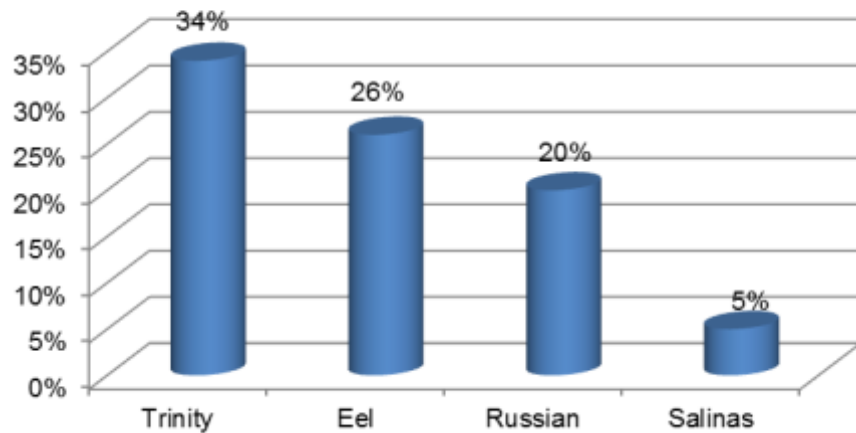
## Statewide Reservoirs Condition



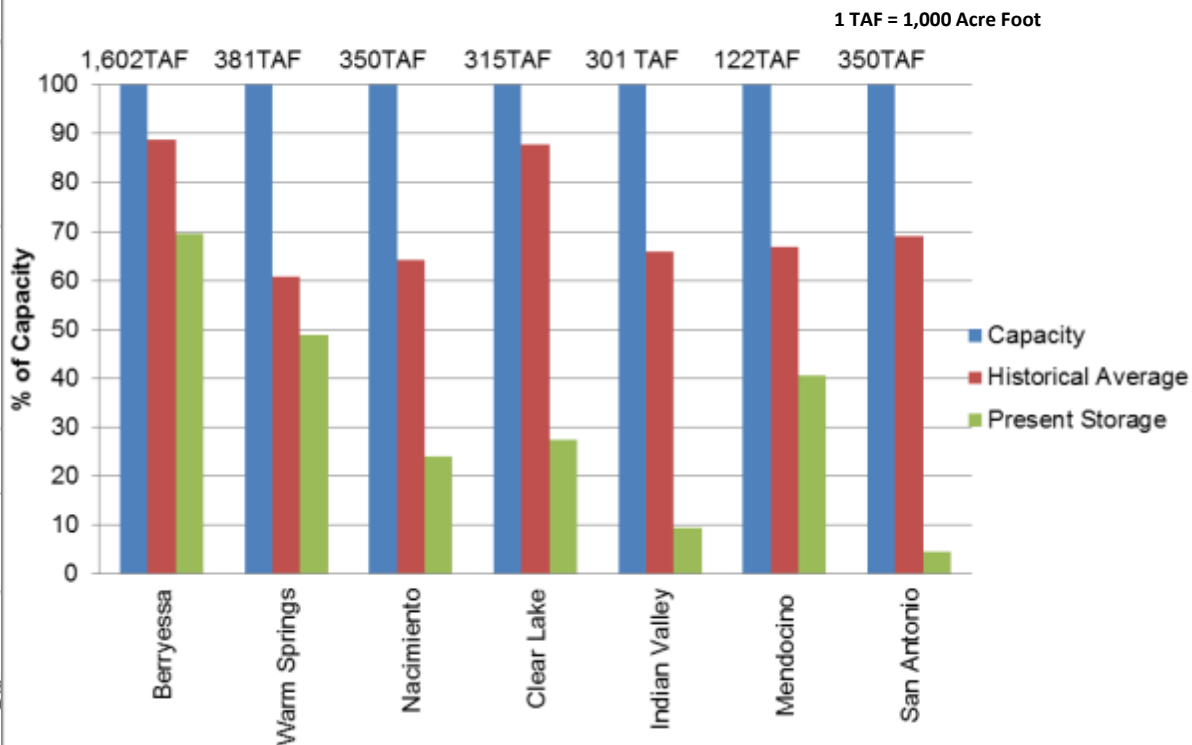
# Coastal Region



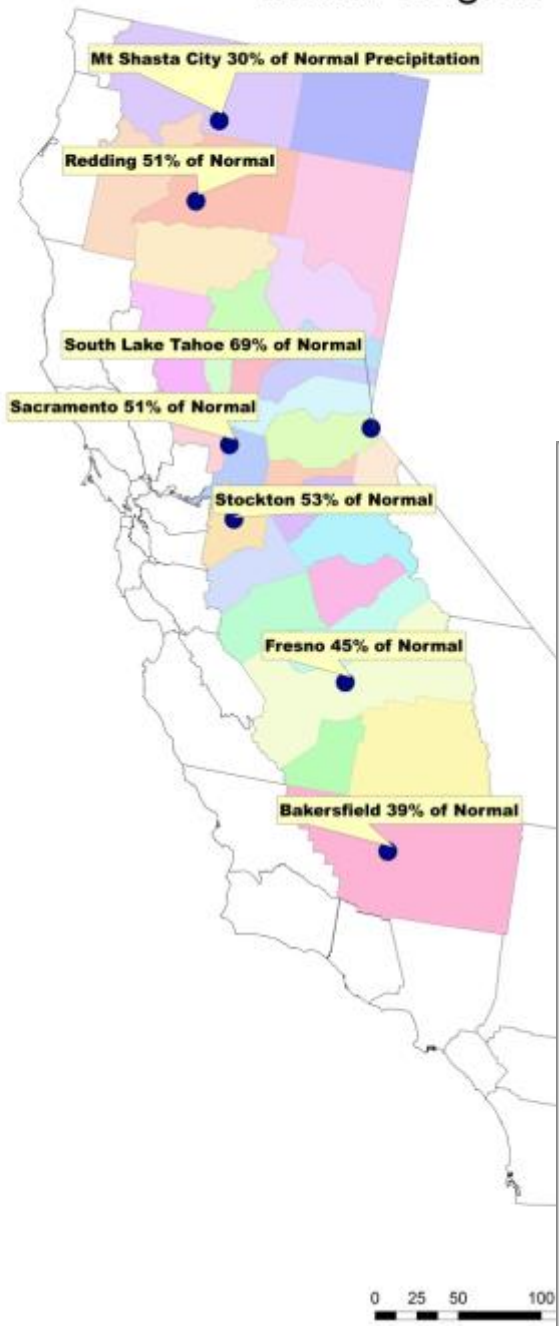
## Major Coastal Rivers % of Historical Average Full Natural Flow



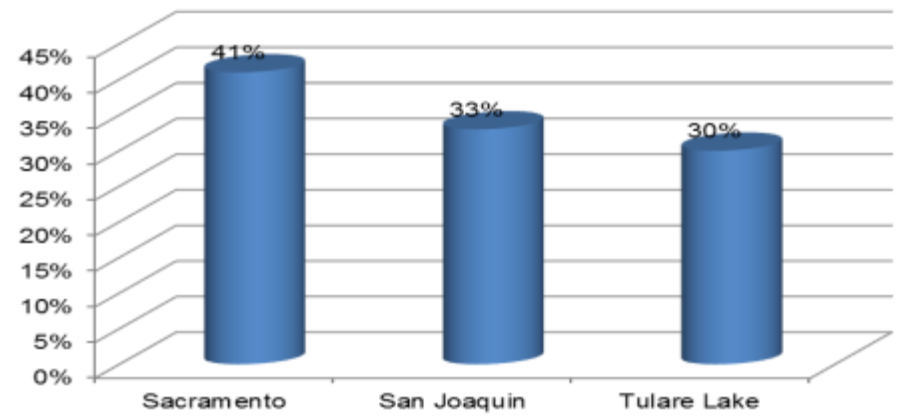
## Coastal Reservoirs Condition (April 30, 2014)



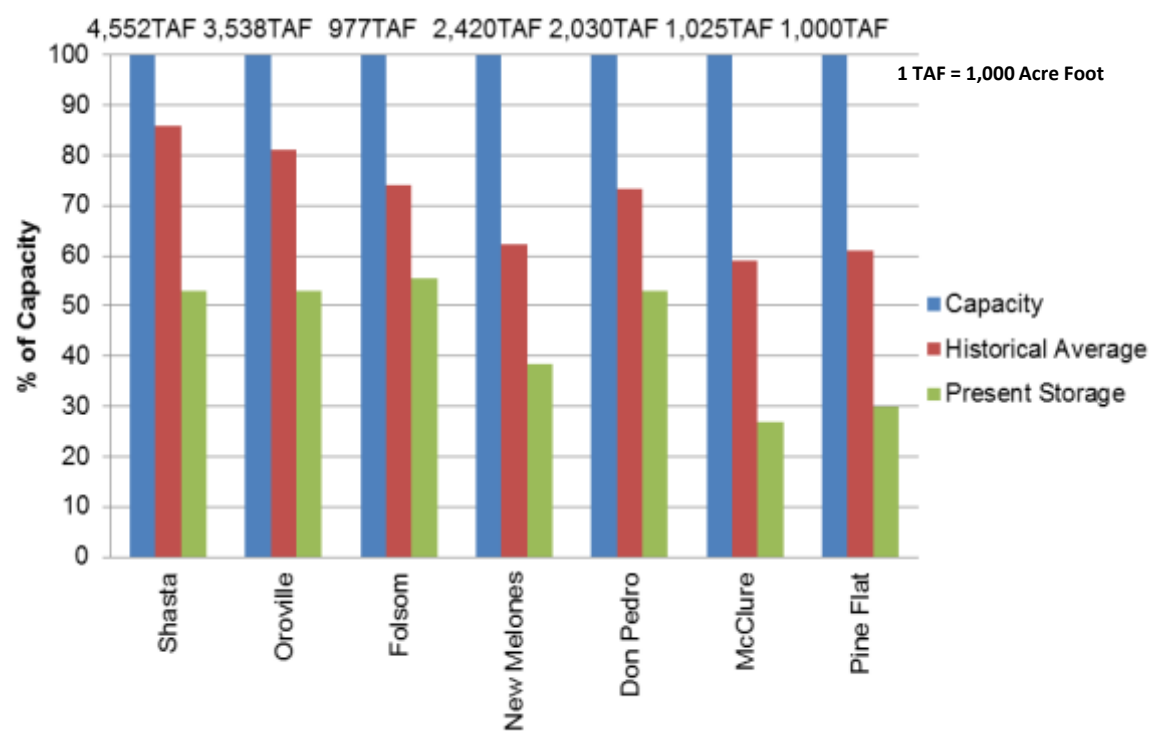
# Inland Region



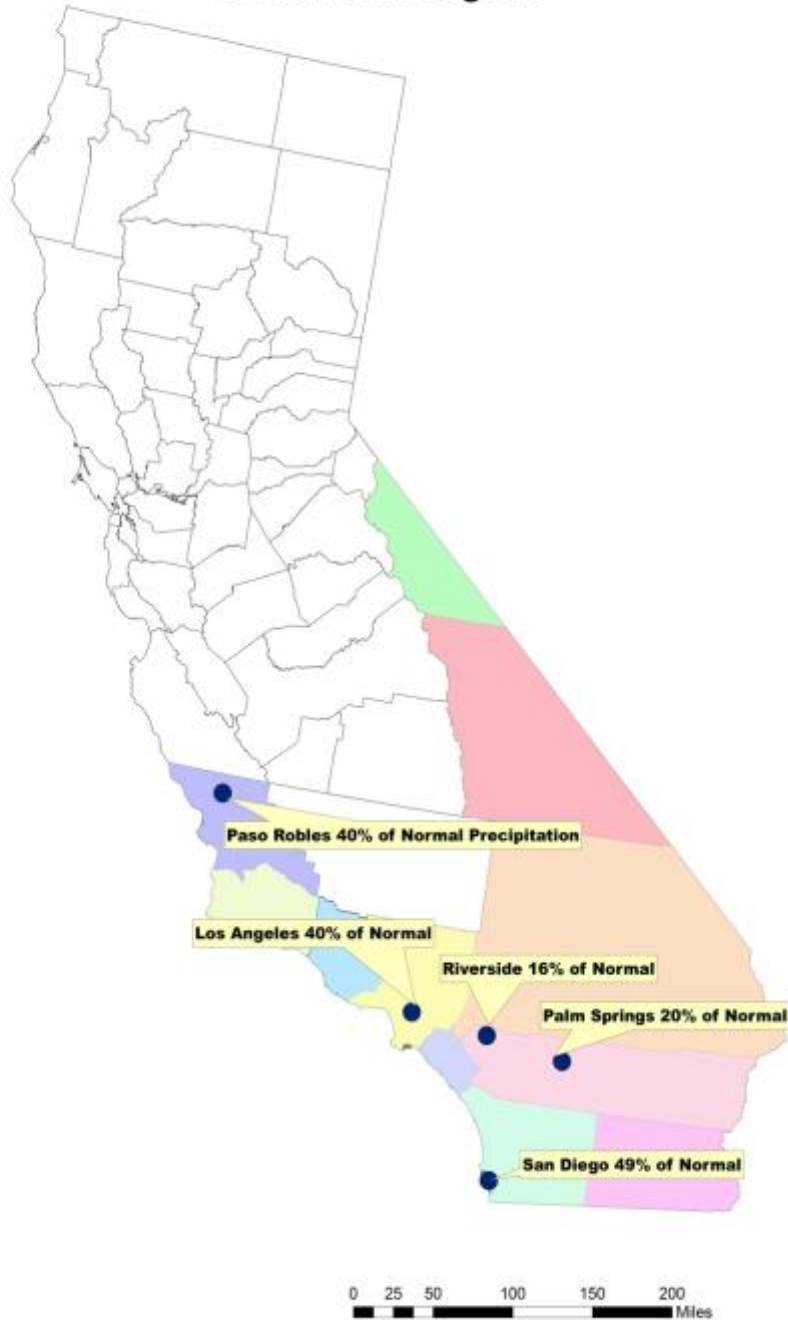
## Major Inland River Regions % of Historical Average Full Natural Flow



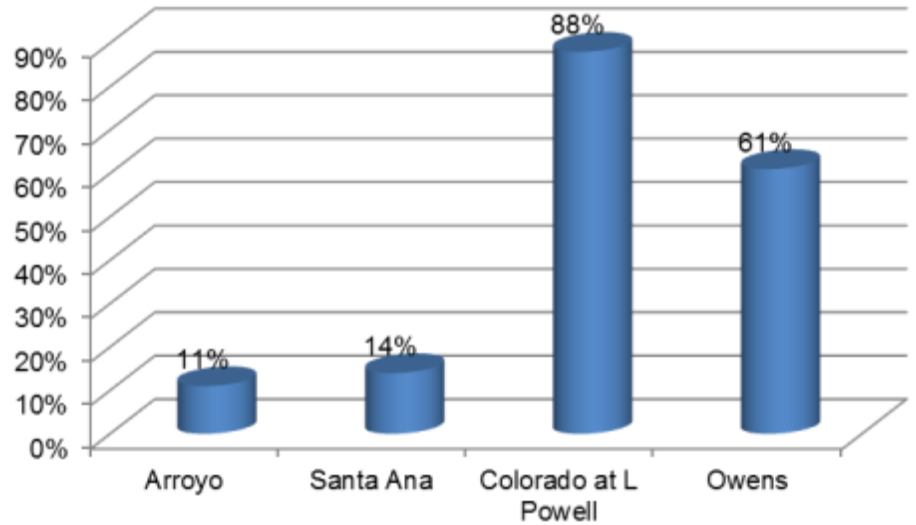
## Inland Reservoirs Condition (April 30, 2014)



# Southern Region

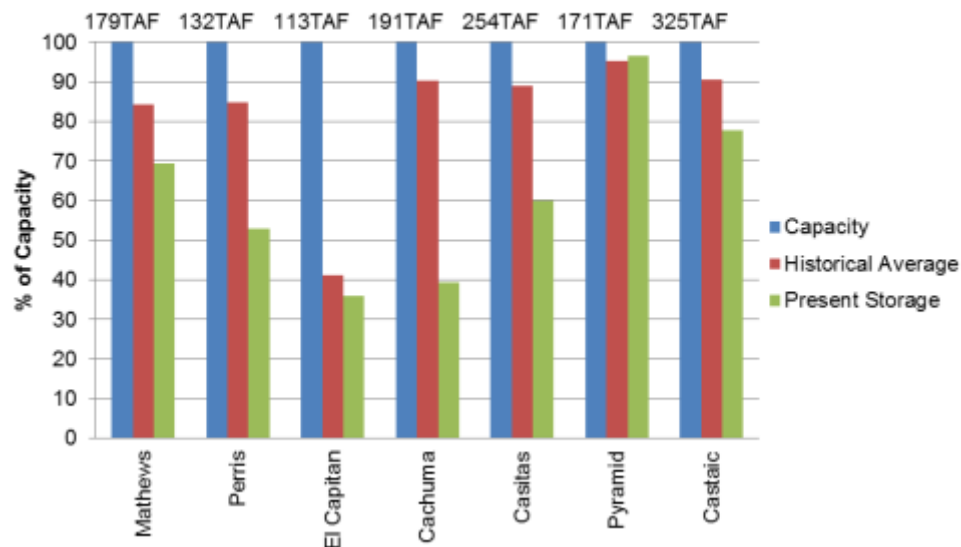


## Major Rivers in Southern Region % of Historical Average Full Natural Flow



## Southern Reservoirs Condition (April 30, 2014)

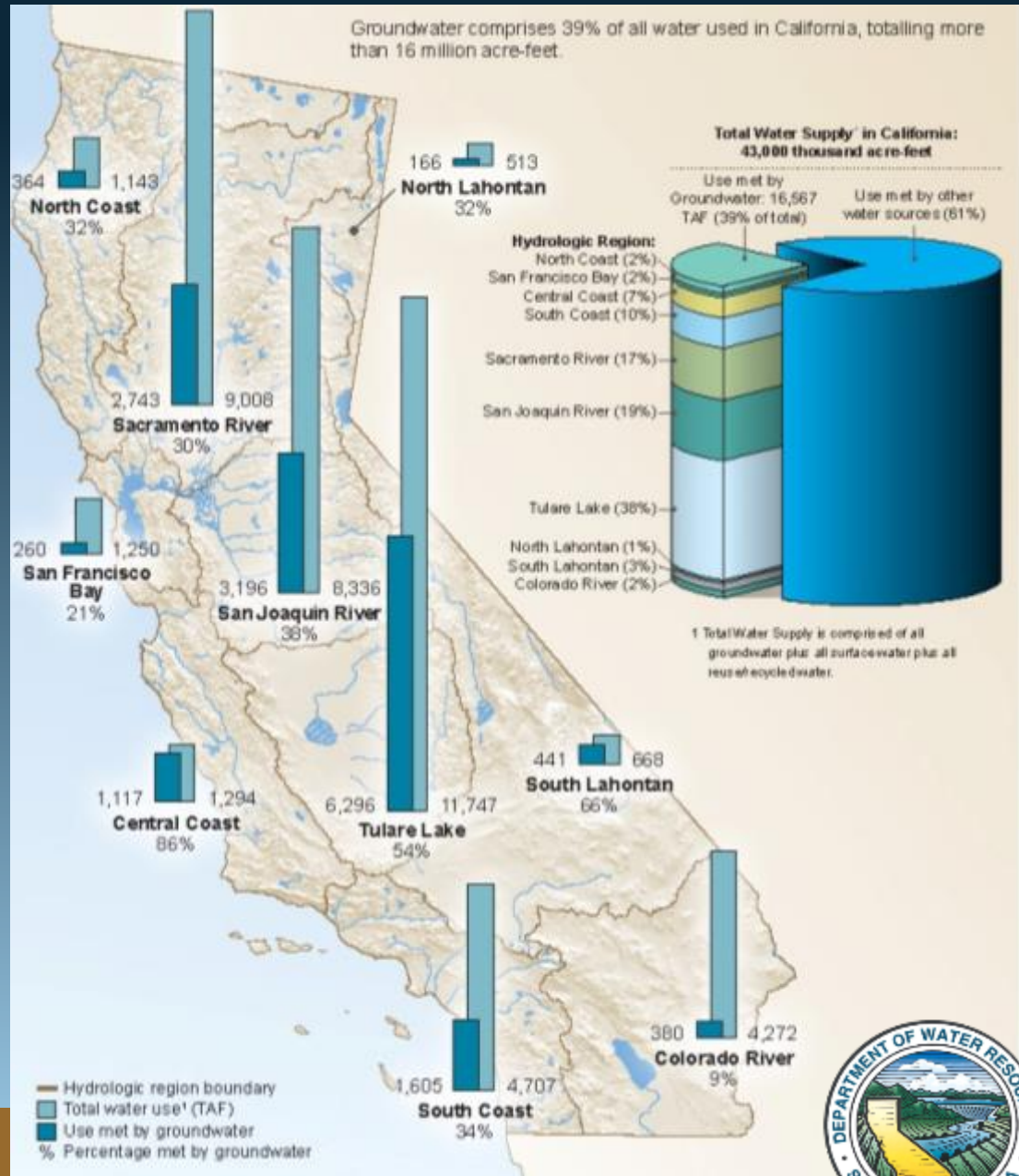
1 TAF = 1,000 Acre Foot



# Statewide Groundwater Use

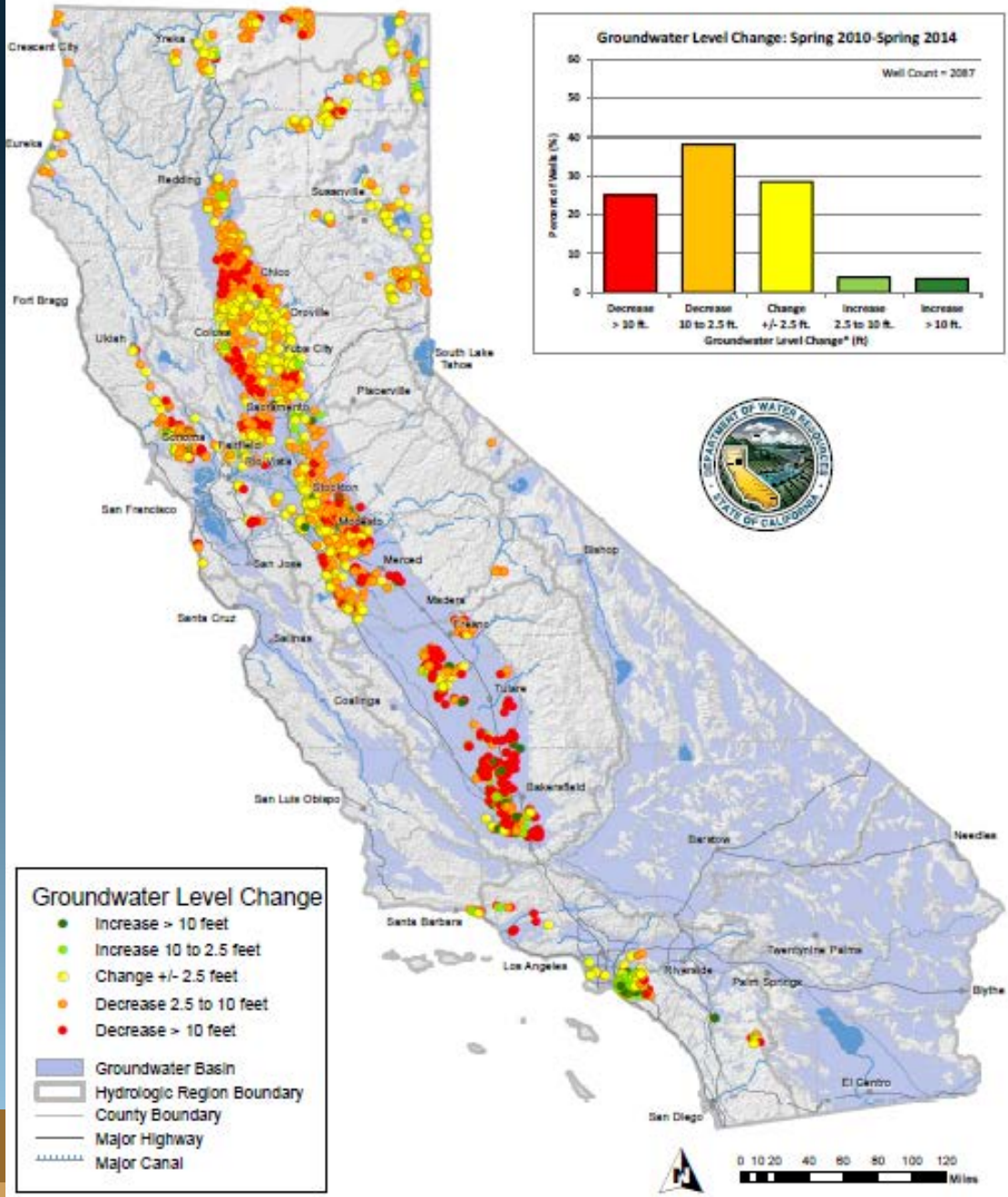
Regions with highest use:  
(relative to statewide total)

- Tulare Lake 38%
- San Joaquin River 19%
- Sacramento River 17%
- South Coast 10%



# Groundwater Level Change

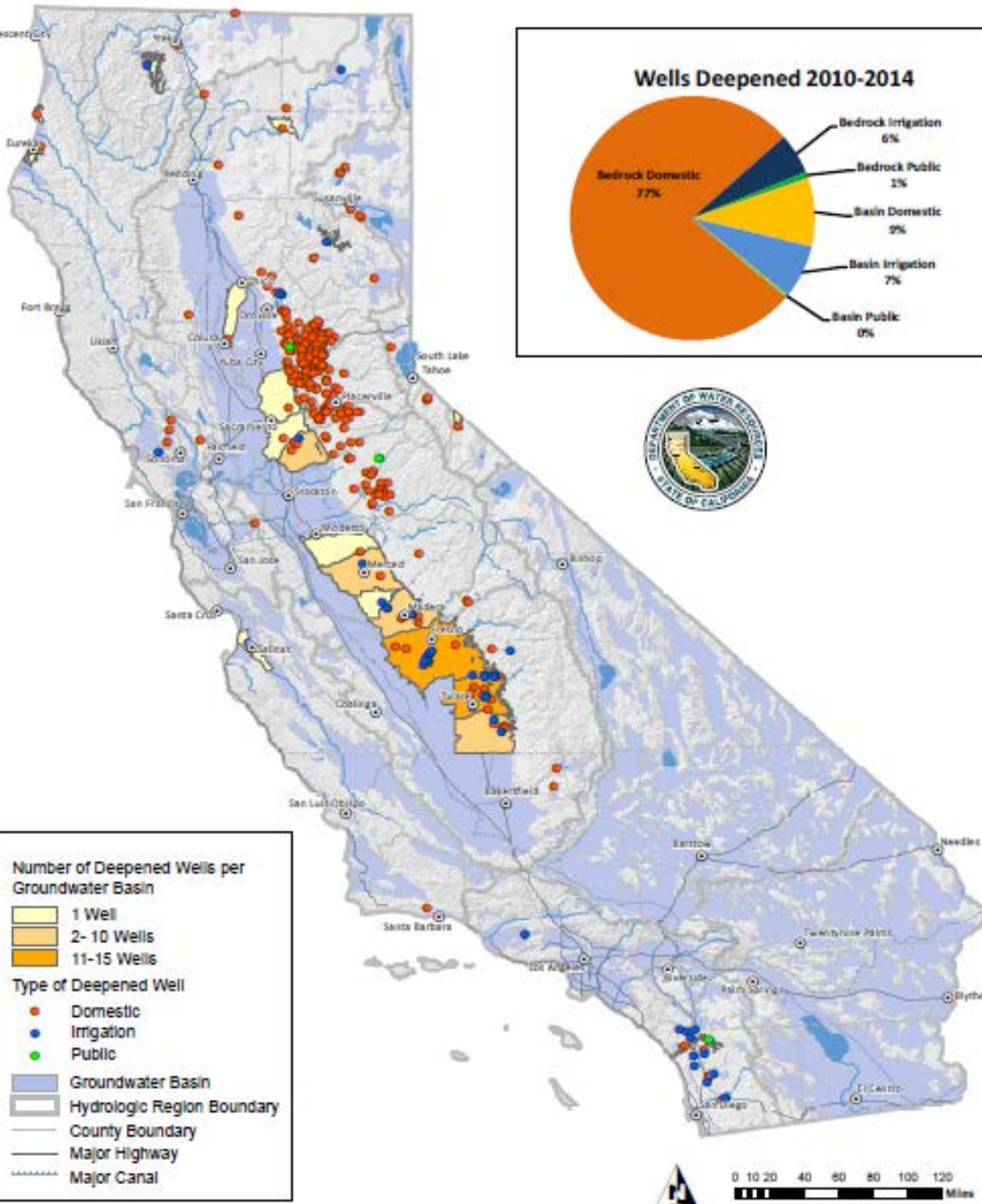
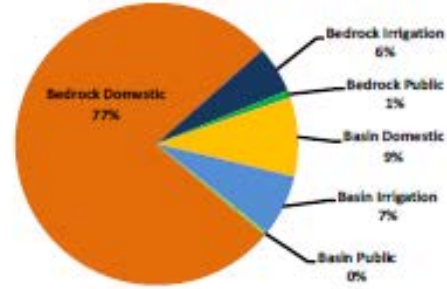
Spring 2010 to Spring 2014



# Well Deepening Activity

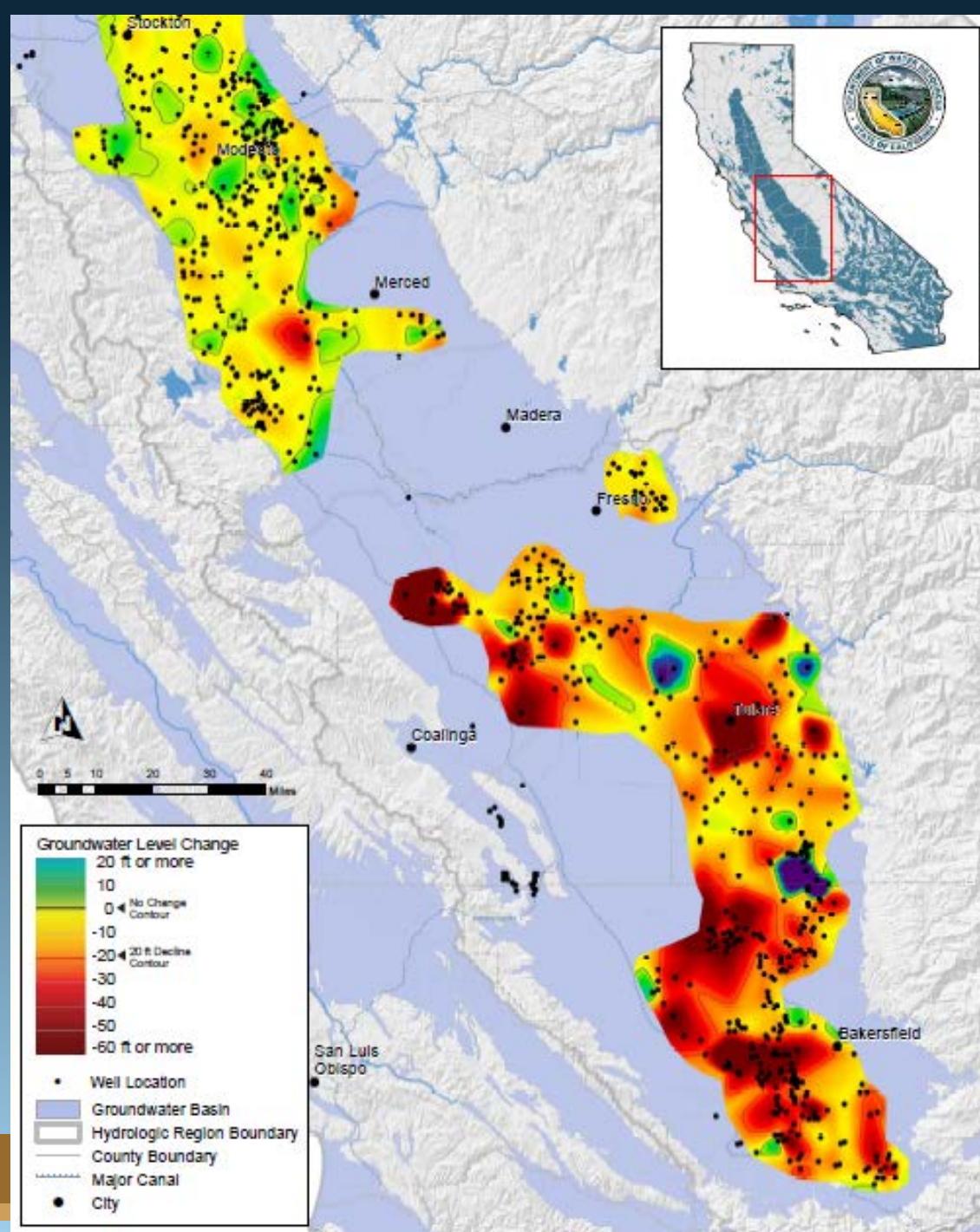
2010 – 2014

Wells Deepened 2010-2014



# Groundwater Level Change

Southern Central Valley  
Spring 2013 to Spring 2014





# DROUGHTS

- Normal part of the hydrologic cycle
- Impacts are site-specific and sector-specific
- The greatest economic impact - Fire



# GREATEST RISKS IN 2014

- **Health & safety and economic**
  - Catastrophic wildfires (e.g., Southern California in 2003 and 2007)
- **Health & safety**
  - Impacts to small water systems in rural areas (including wildfire damage)
- **Environmental**
  - Continued San Joaquin Valley land subsidence, spawning beds
- **Economic**
  - Minimal water allocations to some agricultural water users, particularly in the San Joaquin Valley

# CALIFORNIA



## POPULATED PLACES

- 1,000,000 and over • Los Angeles
- 500,000 – 999,999 • San Francisco
- 100,000 – 499,999 • Berkeley
- 25,000 – 99,999 • Hollister
- 24,999 and less • Ukiah
- State capital ★ Sacramento
- Urban areas ☀

## TRANSPORTATION

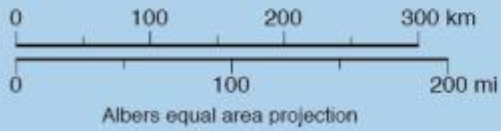
- Interstate; limited access highway 
- Other principal highway 
- Railroad 
- Ferry 

## PHYSICAL FEATURES

- Streams: perennial; intermittent 
- Lakes: perennial; intermittent 
- Highest elevation in state (feet) +4,421 m (14,505 ft)



PACIFIC OCEAN



# Call to Conservation

The governor asked all Californians to reduce water consumption by 20 percent and referred residents and water agencies to the Save Our Water campaign -- [www.saveourh20.org](http://www.saveourh20.org) -- for practical advice on how to do so.



# Information and Contacts

- Drought Management Operations Center: (916) 574-2619
- Public CDEC access: <http://cdec.water.ca.gov>
- Agency access: <http://cdec4gov.water.ca.gov>  
Call (916) 574-1777 to Apply
- Webcast Weather/Hydrology Briefings: [wx\\_webcast-request@water.ca.gov](mailto:wx_webcast-request@water.ca.gov)
- Web Links:
  - Water Conditions: <http://water.ca.gov/waterconditions/>
  - Water Transfers: <http://water.ca.gov/watertransfers/>
  - Drought Page:  
<http://water.ca.gov/waterconditions/drought/>
  - Public Affairs: <http://water.ca.gov/publicaffairs.cfm>

# Drought & Grant Resources

- <http://www.water.ca.gov/waterconditions/index.cfm>
- <http://www.water.ca.gov/waterconditions/declaration.cfm>
- <http://www.water.ca.gov/waterconditions/background.cfm>
- <http://www.water.ca.gov/waterconditions/emergencybarriers.cfm>
- <http://www.water.ca.gov/waterconditions/publications.cfm>
- <http://www.water.ca.gov/nav/nav.cfm?loc=t&id=103>