Update on 2017 Water Supply Outlook

June 13, 2017

Santa Clara Valley Water District

Overview

Water Supply and Outlook

- 2017 Retail Water Use and Savings
- Water Supply Conditions
  - Current Hydrologic and Reservoir Conditions
  - 2017 Outlook
  - End of Emergency Drought Conditions
  - Drought Recovery and Achievements

From Drought Emergency, looking forward

- Making Water Conservation a Way of Life
  - State Board Draft Framework
  - Water Conservation Targets and Programs

Recommendation

Water Supply Conditions and Outlook

Water Savings by Major Retailers

Water Retailer	2014 (Cumulative Feb to Dec)	2015	2016	2017 (Cumulative Jan to April)
San Jose Water Co.	13%	28%	29%	29%
Santa Clara (City)	10%	18%	21%	19%
Sunnyvale	14%	26%	24%	22%
San Jose Municipal	13%	26%	27%	30%
California Water Service	16%	33%	32%	41%
Palo Alto	16%	29%	27%	33%
Mountain View	16%	28%	29%	33%
Great Oaks	16%	29%	29%	28%
Milpitas	11%	18%	19%	20%
Gilroy	14%	26%	25%	24%
Morgan Hill	19%	33%	30%	32%
Purissima Hills Water	16%	26%	31%	47%
Stanford*	7%	28%	35%	38%*
Total	13%	27%	28%	28%

*Data through March. April data not available as of June 1, 2017

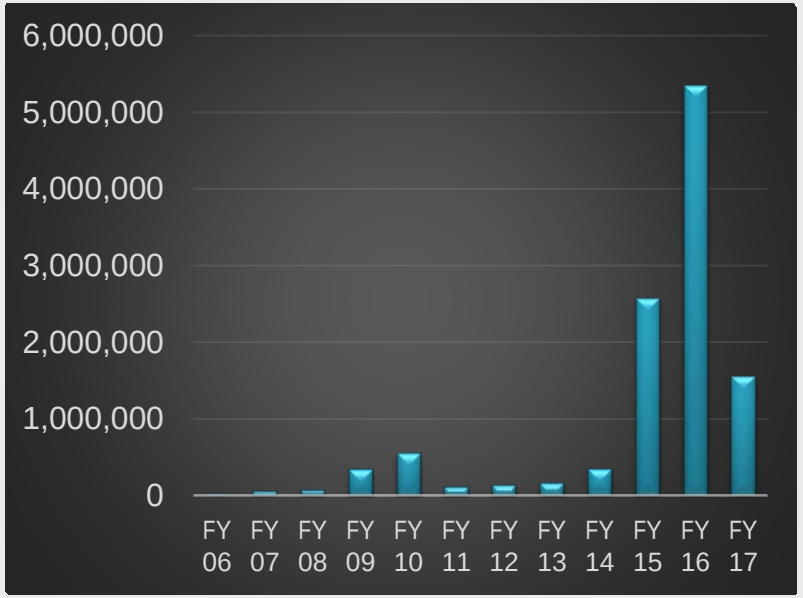
Summary of Drought Response Achievements

- Successful implementation of the 15 drought strategies
- Up to 28% water use reduction by the community
- Collaboration with water retailers and municipalities
- Increased awareness of wise water use and water use efficiency
- Continued high level of service despite water supply and water quality challenges

Successful Water Conservation Program

- Milestone: over 10M sq ft of turf removed, saving over 1,000 AFY
- Budget during drought: nearly $25.2M (turf conversion and equipment upgrades)
- Rebates issued: over $23.5M
- Projects in-process: $660k
- Remaining funding: $970k

Square Feet of Turf Removed

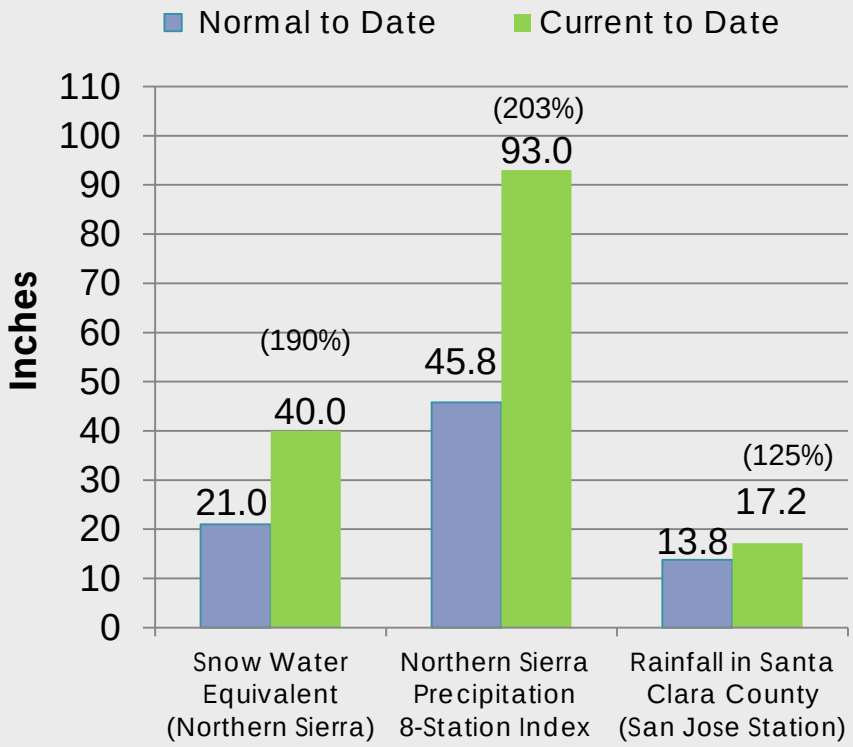


Hydrologic and Reservoir Conditions

Hydrologic Conditions Are Above Average

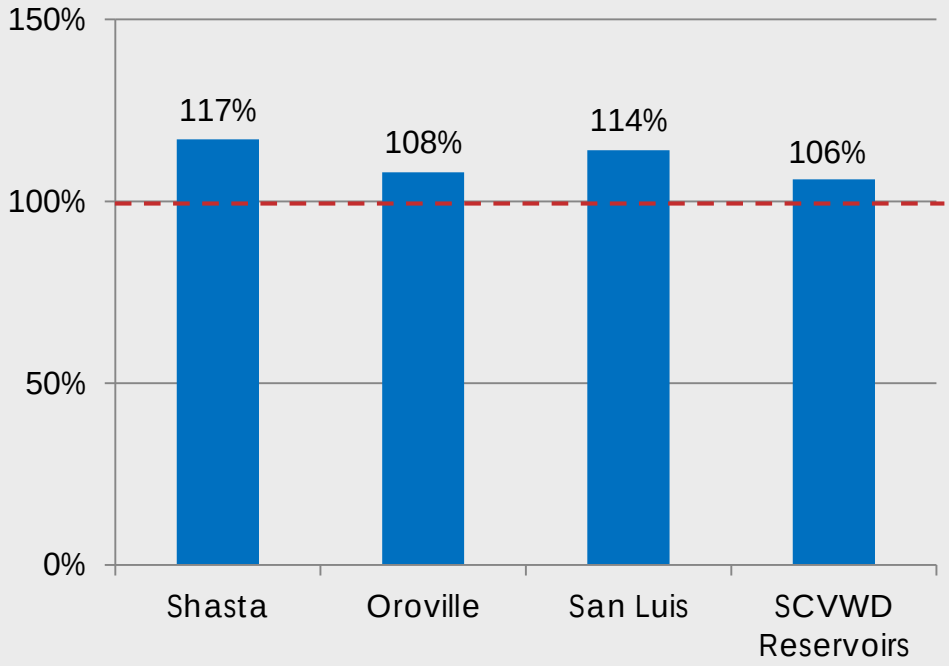
Precipitation 2016/2017 Water Year

As of May 1, 2017

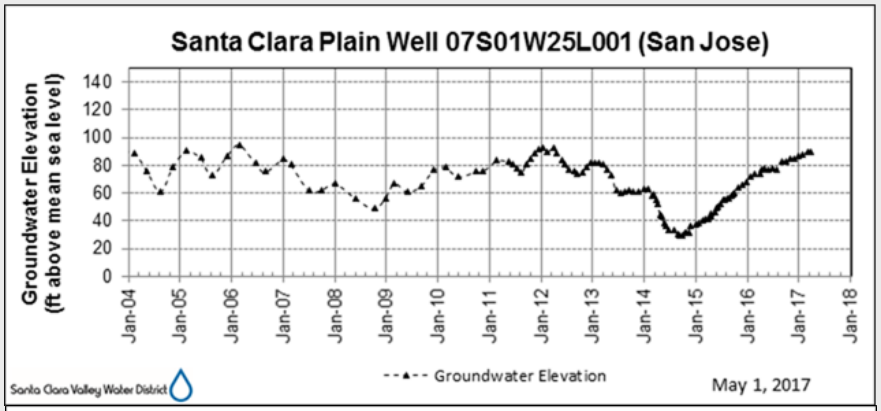


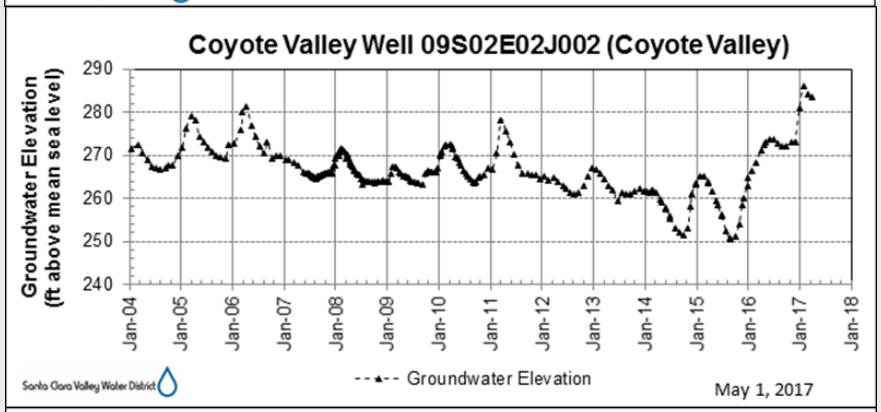
Reservoir Storage

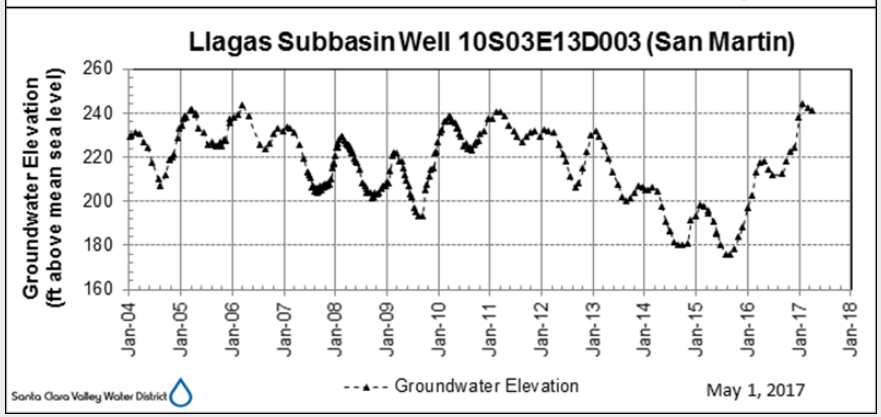
Percent of long-term average to date
As of May 1, 2017



Groundwater Conditions

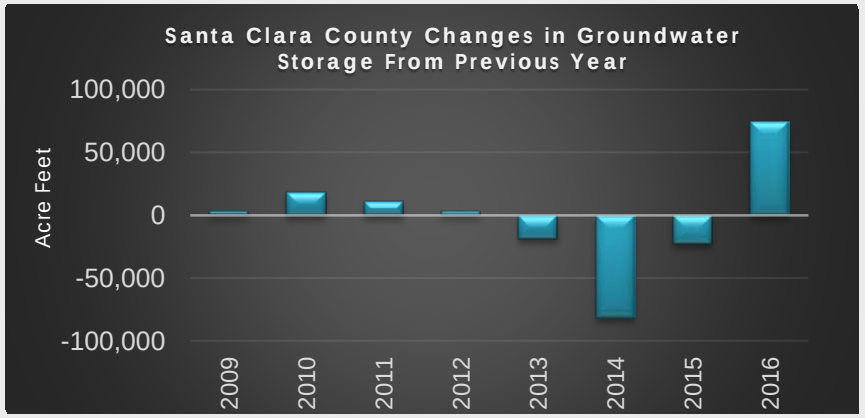






Groundwater elevations in key index wells have recovered to pre-drought levels.

Positive changes in groundwater storage were seen in 2016 and continue in 2017.

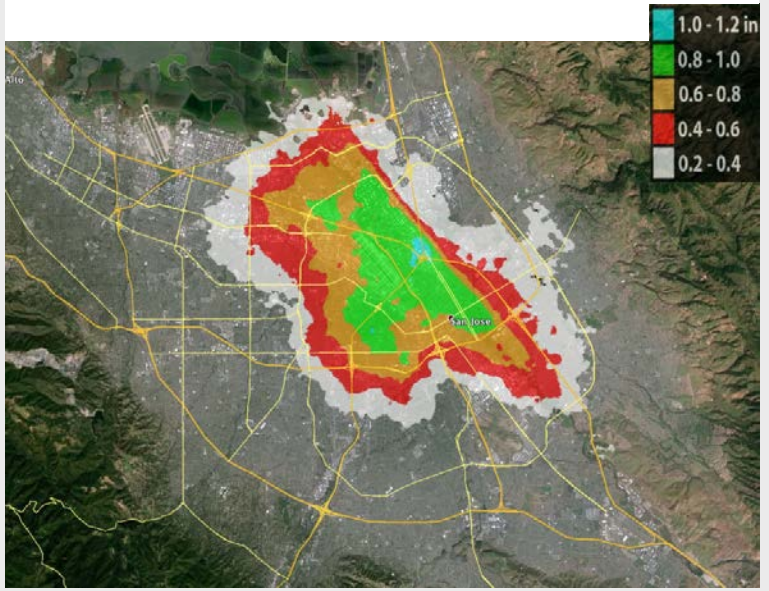


Local Groundwater Recovery

Satellite data shows subsidence in several locations in California. For Santa Clara Valley, groundwater recovery is shown by slight uplift.

General location	Period	Change in Land Surface
San Joaquin Valley (Corcoran, affecting the California Aqueduct)	May 2015 – September 2016	- 22”
East Side Bypass (El Nido)	May 2015 – September 2016	- 16”
Mendota (Tranquility)	May 2015 – September 2016	- 20”
Santa Clara Valley (San Jose)	March 1, 2015 to March 7, 2016	+ 1”

Santa Clara Valley Uplift in Inches



2017 Outlook

85% =SWP Allocation (85 TAF)

100% =CVP Allocation (152.5 TAF)

Up to 75% =Semitropic (put up to 69 TAF)

310 TAF =End of Year Groundwater Storage

Lake Oroville (Photo: Justin Sullivan/Getty Images)

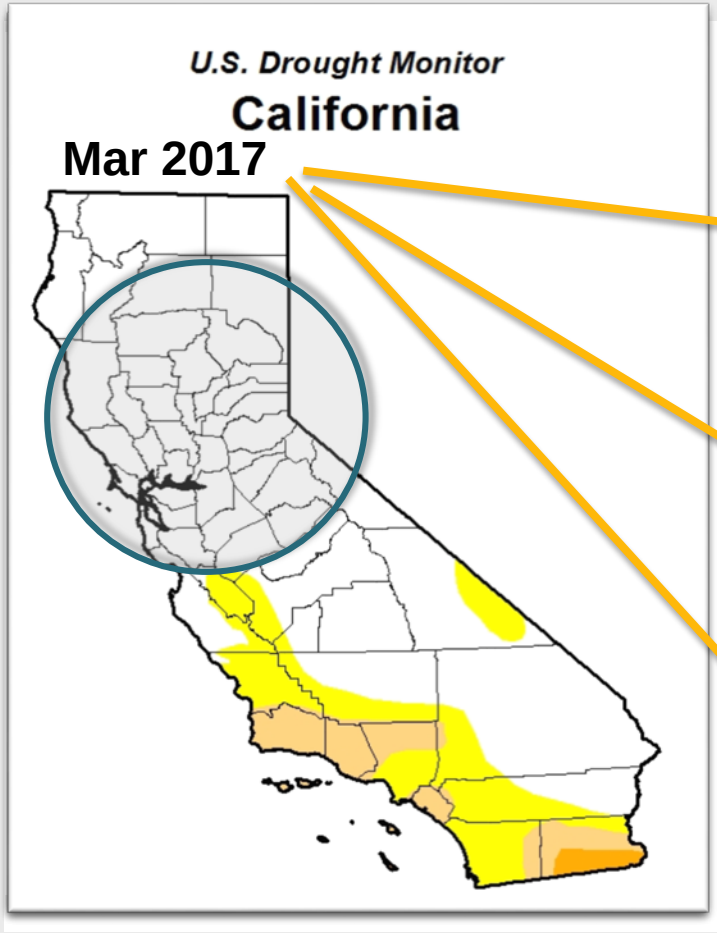
Sierra snowpack (Photo SFGATE/NASA)

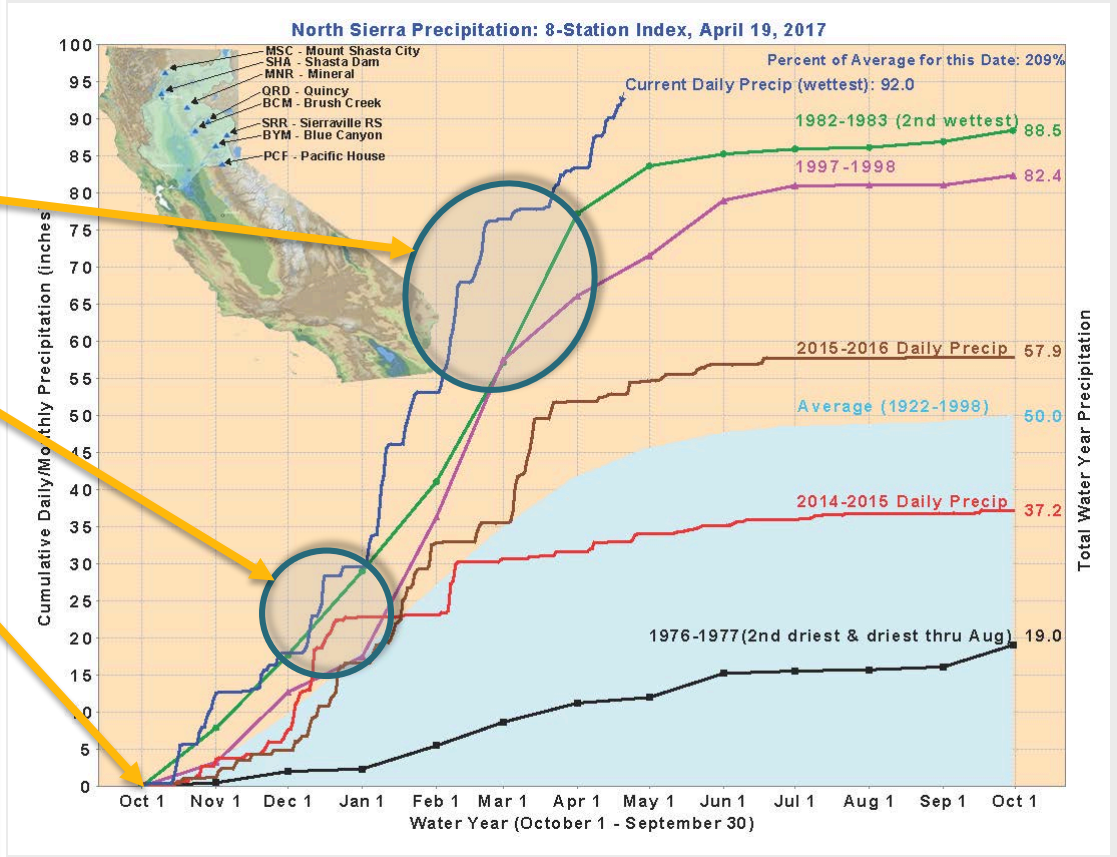
Water Shortage Contingency Plan Stages

Normal (Stage 1) *No water use reductions*	Above 300,000 AF
Projected 2017 EOY Storage →	
Alert (Stage 2) *0-10% reductions*	250,000 – 300,000 AF
Severe (Stage 3) *10% -20% reductions*	200,000 – 250,000 AF
Critical (Stage 4) *20% -40% reductions*	150,000 – 200,000 AF
Emergency (Stage 5) *40% -50% reductions*	Below 150,000 AF

End of Year (EOY) Groundwater Storage

End of Drought Emergency





Governor's Executive Order

Terminate Drought State of Emergency (except some counties)

Rescinds Emergency Proclamation and Executive Orders

Rescinds mandatory conservation and stress tests

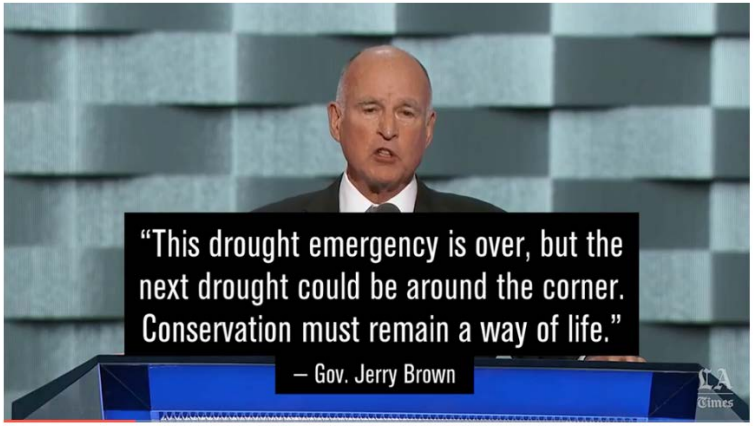
Keeps provisions in EO B-37-16, such as: monthly reporting and water waste prohibitions

Governor Declares End of Emergency Drought April 2017

OROVILLE, CA – AUGUST 19, 2014

OROVILLE, CA – APRIL 11, 2017

(Photo: Justin Sullivan/Getty Images)

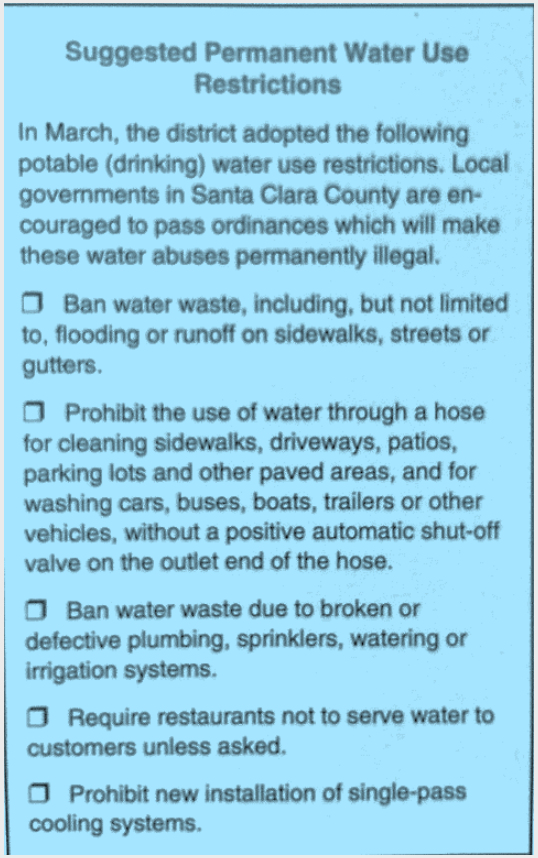


(April 7, 2017; LA Times)

End of 1987-1992 Drought Emergency

History Repeated. Move to Water Wise Practices

- Significant rains Dec/Jan/Feb 1993
- March 1993 declare end of drought
- Adopt Resolution 93-19, stating:
  - Water supply availability
  - Community responded
  - Continued good practices and programs
  - Efficient water use
  - Recommend water waste prohibition



Suggested Permanent Water Use Restrictions

In March, the district adopted the following potable (drinking) water use restrictions. Local governments in Santa Clara County are encouraged to pass ordinances which will make these water abuses permanently illegal.

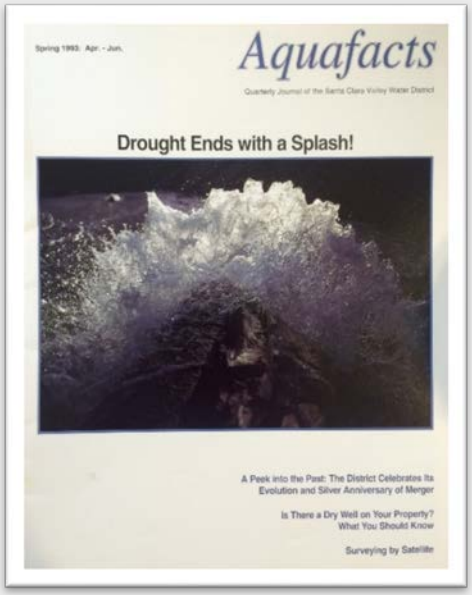
❒ Ban water waste, including, but not limited to, flooding or runoff on sidewalks, streets or gutters.

❒ Prohibit the use of water through a hose for cleaning sidewalks, driveways, patios, parking lots and other paved areas, and for washing cars, buses, boats, trailers or other vehicles, without a positive automatic shut-off valve on the outlet end of the hose.

❒ Ban water waste due to broken or defective plumbing, sprinklers, watering or irrigation systems.

❒ Require restaurants not to serve water to customers unless asked.

❒ Prohibit new installation of single-pass cooling systems.



Aquafacts

Drought Ends with a Splash!

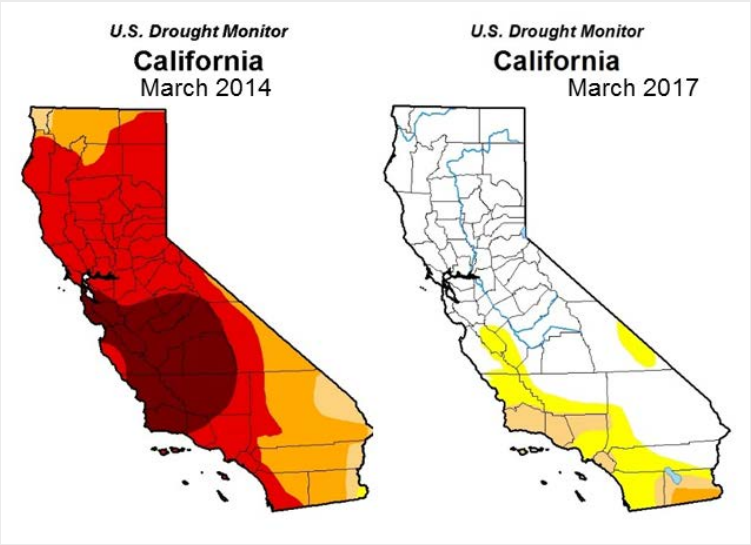
A Peek into the Past: The District Celebrates Its Evolution and Silver Anniversary of Merger

Is There a Dry Well on Your Property? What You Should Know

Surveying by Satellite

From Drought Emergency, Looking Forward

2014 Snowpack | 2017 Snowpack

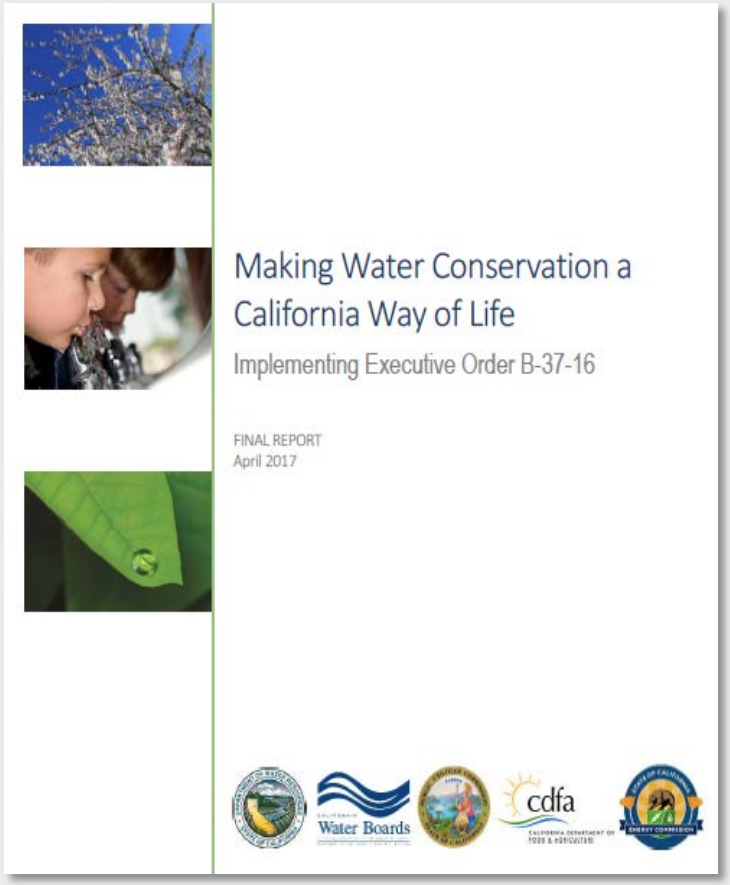


State Transition to Conservation as a Way of Life

Governor's Executive Order

State Board transitions away from monthly and annual percent reductions

Move towards water use efficiency and water budgeting targets



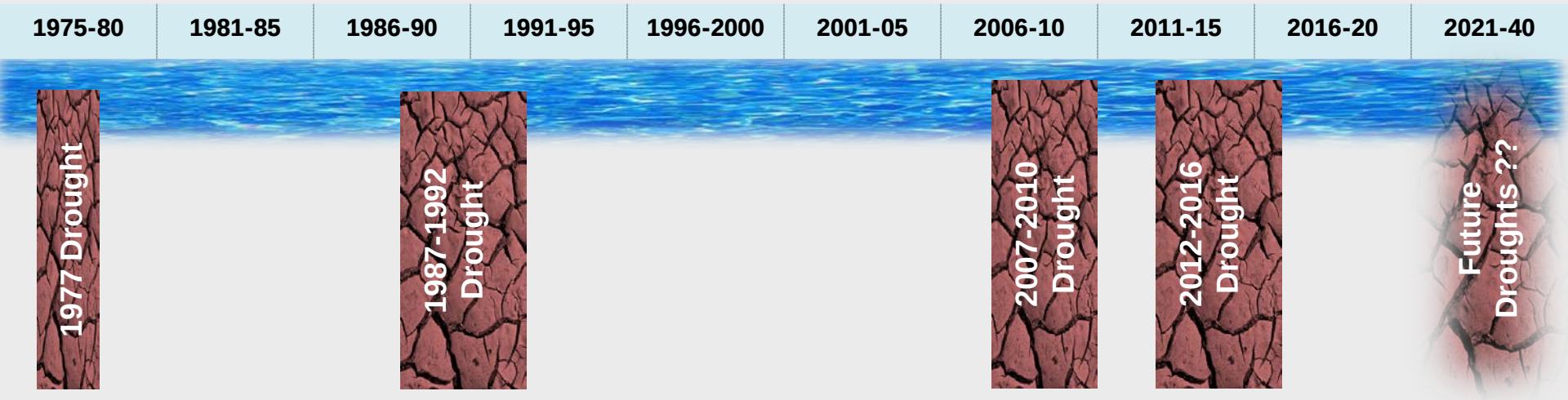
Planning for the Future

- Water Supply Master Plan 2017 Update considers reliability in light of future drought and water shortage
- Will recommend water supply portfolios including increased water conservation
- Long-term water supply planning considers changes in growth and hydrology
- Planning for improved coordination with land use agencies

Planning for the Future

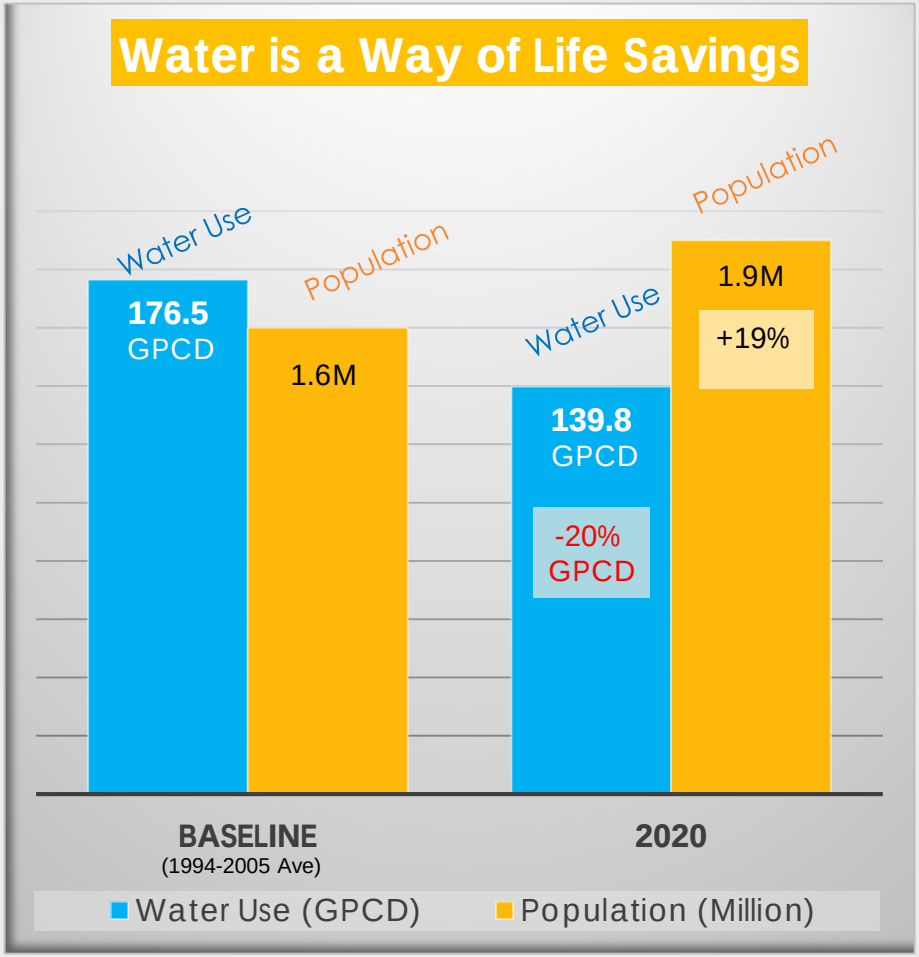
- Long-term planning considers the next drought is around the corner.

- This increases the importance for making conservation a way of life



Water Conservation is a Way of Life: Targets

- 100,000 AF savings by 2030
- 20% - GPCD reduction by 2020
- New Methodology by 2020 (State Framework)



GPCD = Gallons per Capita per Day

Water Conservation is a Way of Life

Includes:

- Water wise practices
- Water conservation programs
- Messaging to encourage conservation as a way of life
- Water waste restrictions
- Water waste reporting and inspector programs
- Potentially a day per week watering schedule

Recommendation

APPROVE RESOLUTION NO. 17-__

Rescinding Resolution 17-08, and calling for efforts to make water conservation a way of life.

Commends the community and retailers for their significant water use reductions.

Recommends all municipalities consider permanent water waste prohibitions, including a maximum three day per week irrigation schedule.

Supports additional efforts to increase countywide water use efficiency through continued investments.

Supports water use efficiency targets and the water waste prohibitions currently in effect by the State, or as may be amended.