

WATER IN THE WEST

Montana Water Summit

March 6, 2018



Stanford

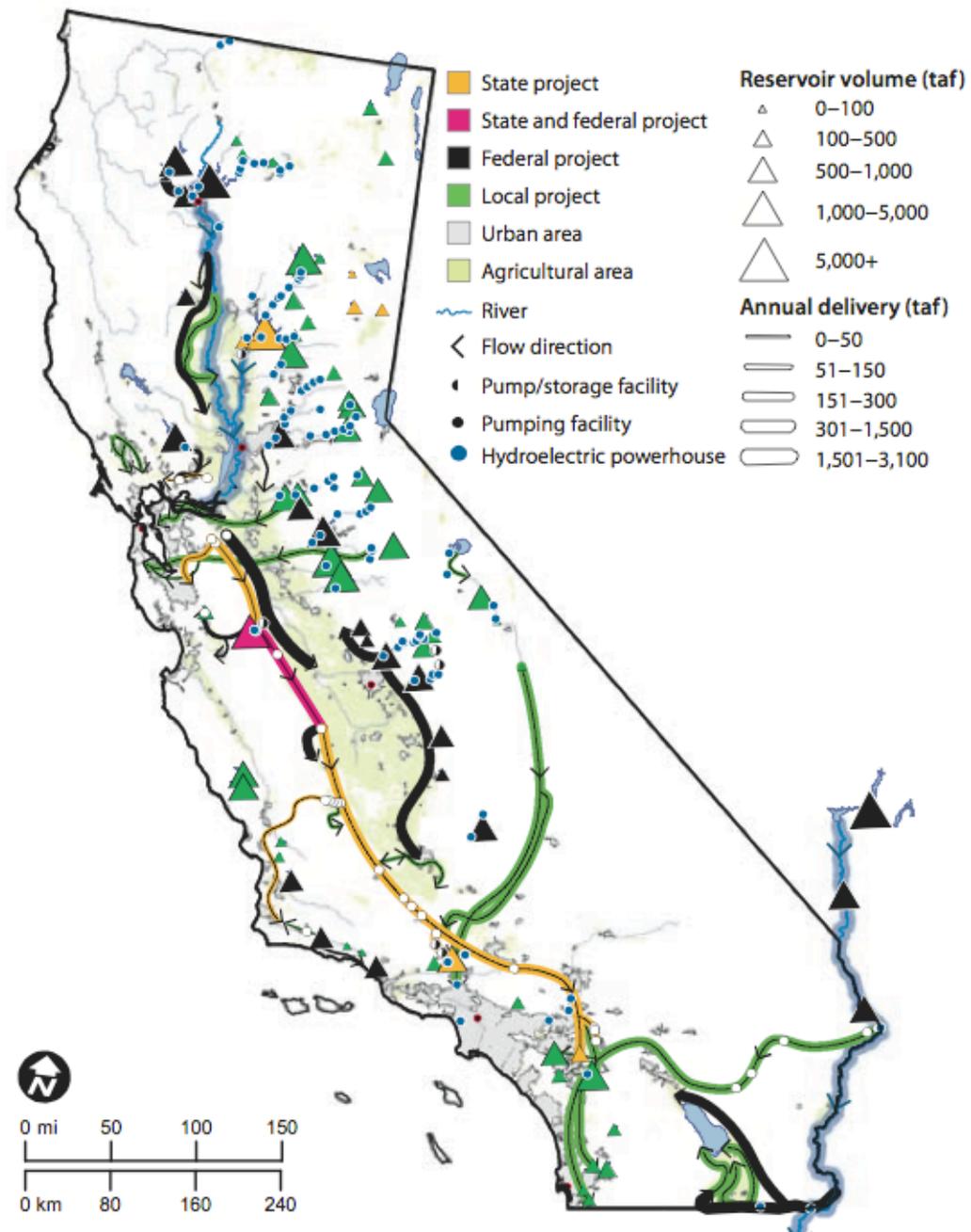


STANFORD UNIVERSITY
THE BILL LANE CENTER
FOR THE AMERICAN WEST



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WOODS
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ENVIRONMENT

California has an elaborate network of conveyance and storage infrastructure, controlled by different agencies

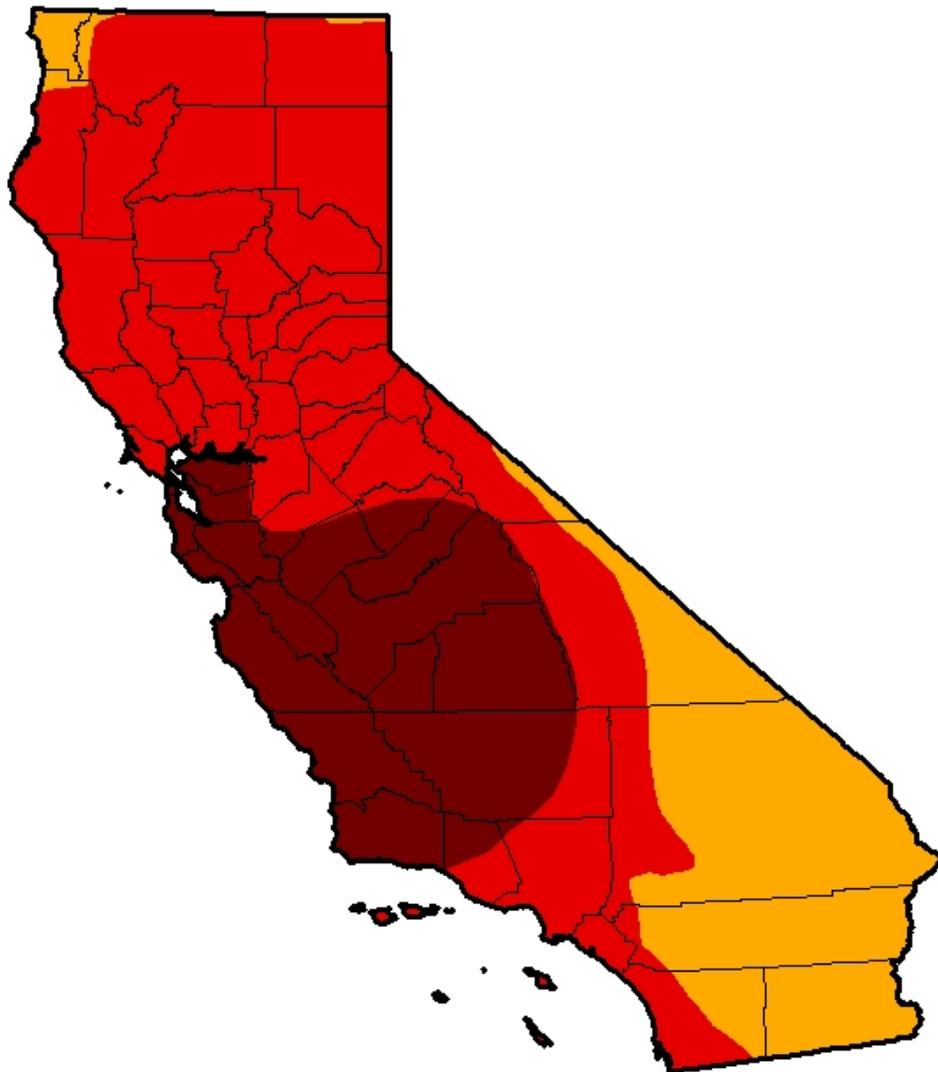


U.S. Drought Monitor California

May 20, 2014

(Released Thursday, May 22, 2014)

Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	100.00	76.68	24.77
Last Week <i>5/13/2014</i>	0.00	100.00	100.00	100.00	76.68	24.77
3 Months Ago <i>2/18/2014</i>	0.00	100.00	94.54	90.82	68.30	14.62
Start of Calendar Year <i>12/31/2013</i>	2.61	97.39	94.25	87.53	27.59	0.00
Start of Water Year <i>10/1/2013</i>	2.63	97.37	95.95	84.12	11.36	0.00
One Year Ago <i>5/21/2013</i>	0.00	100.00	98.16	46.25	0.00	0.00

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.

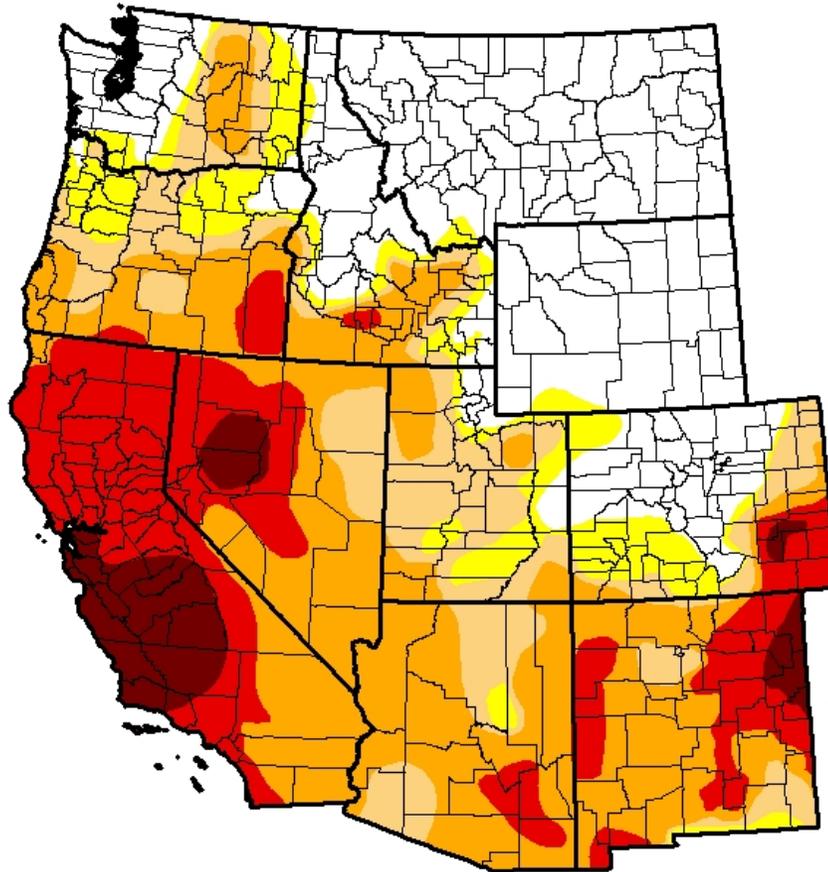
Author:
Michael Brewer
NCDC/NOAA



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

U.S. Drought Monitor West

May 20, 2014
(Released Thursday, May 22, 2014)
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Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	31.18	68.82	60.82	47.50	20.37	4.81
Last Week <i>5/13/2014</i>	31.18	68.82	60.82	47.37	19.96	4.70
3 Months Ago <i>2/18/2014</i>	21.76	78.24	59.88	40.17	14.89	2.58
Start of Calendar Year <i>12/31/2013</i>	22.20	77.80	51.44	31.11	7.75	0.63
Start of Water Year <i>10/1/2013</i>	25.25	74.75	58.96	34.18	5.57	0.63
One Year Ago <i>5/21/2013</i>	13.30	86.70	71.40	47.04	15.04	5.99

Intensity:

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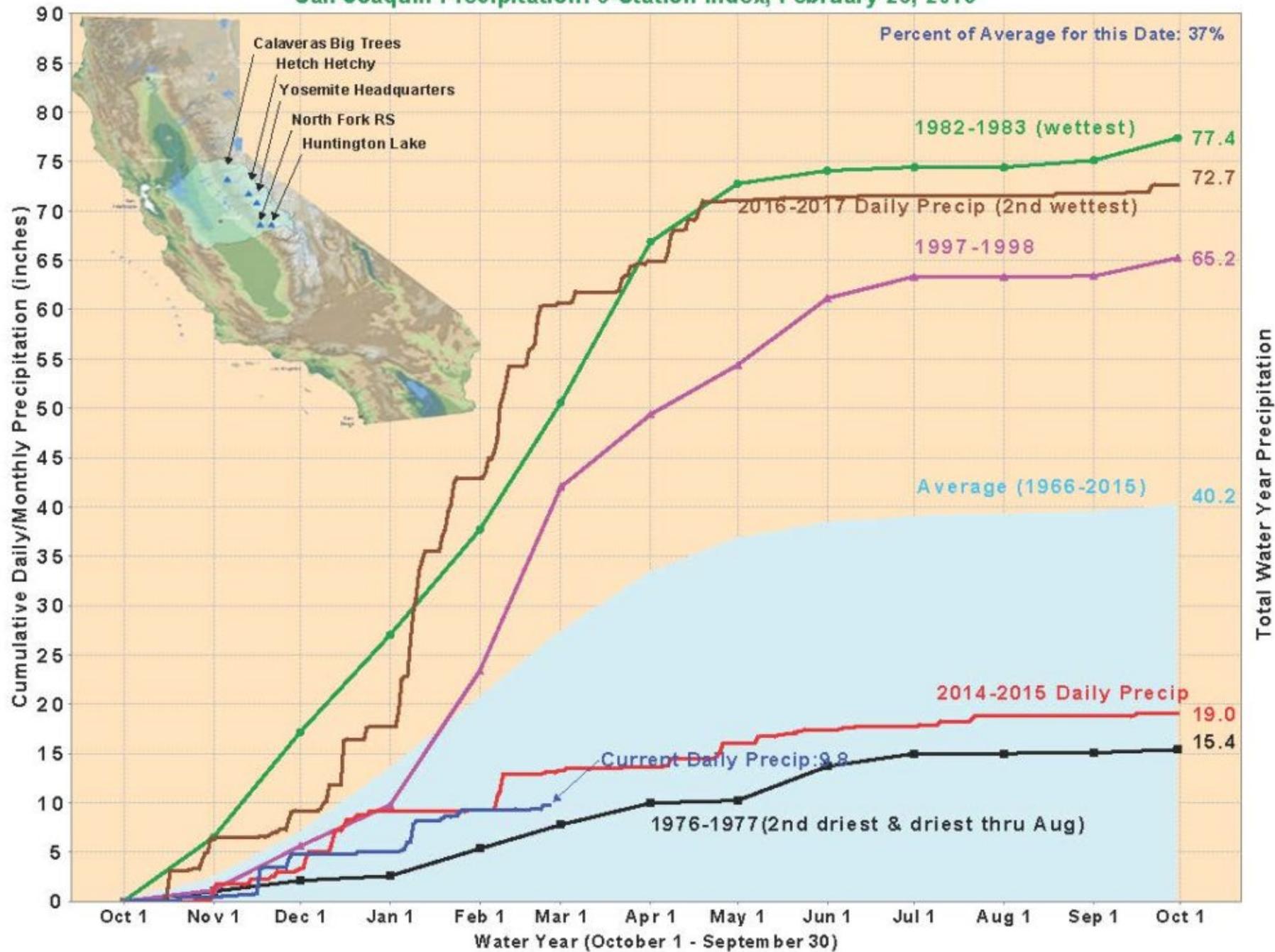


Montana Water
Summit



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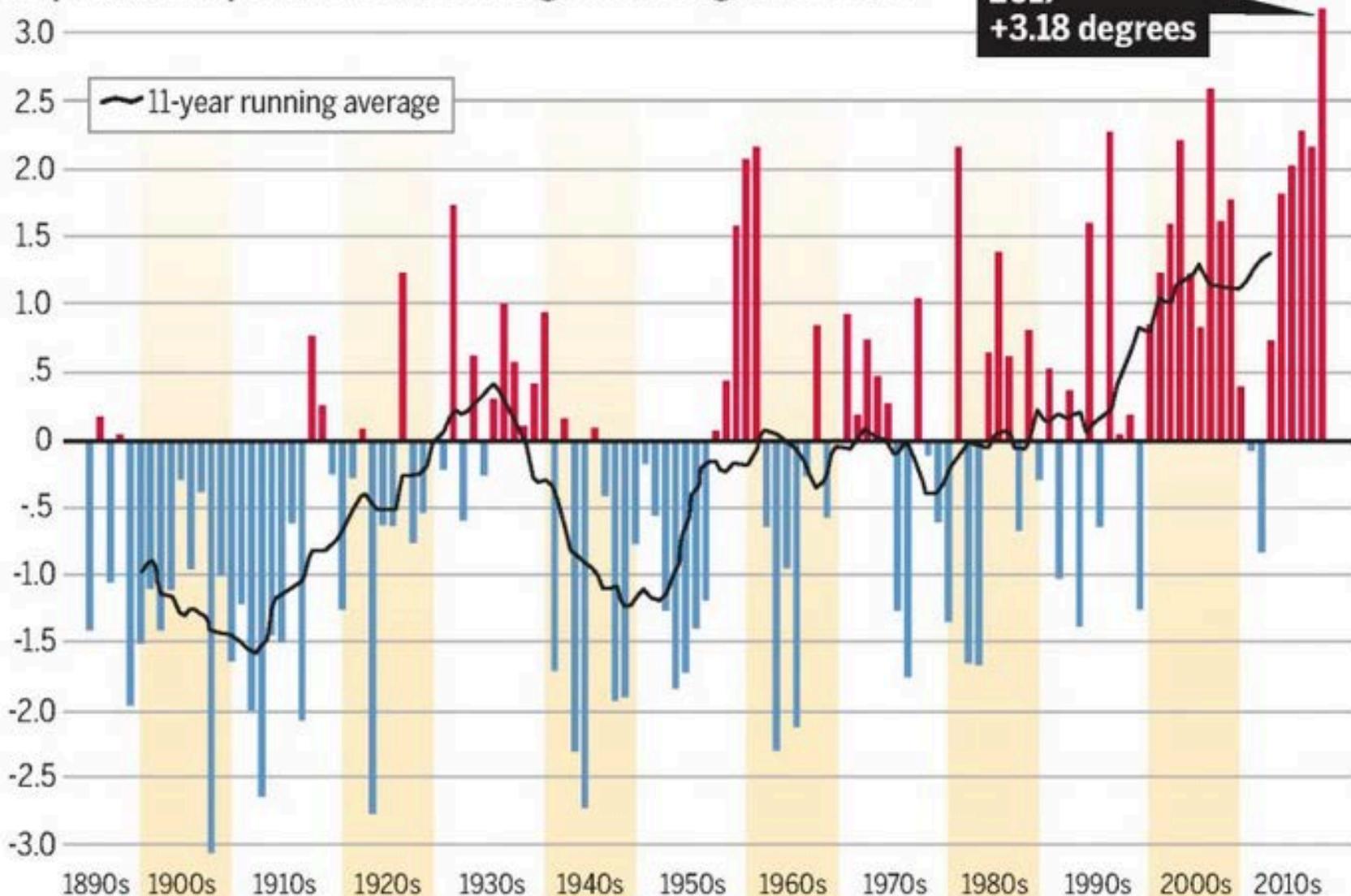
San Joaquin Precipitation: 5-Station Index, February 25, 2018



CALIFORNIA SUMMERS ARE GETTING WARMER

This summer's departure from the average temperature for the months of June, July and August was the highest recorded, extending an upward trend since the 1950s.

Temperature departure from 70.4 degrees average, 1885-2017



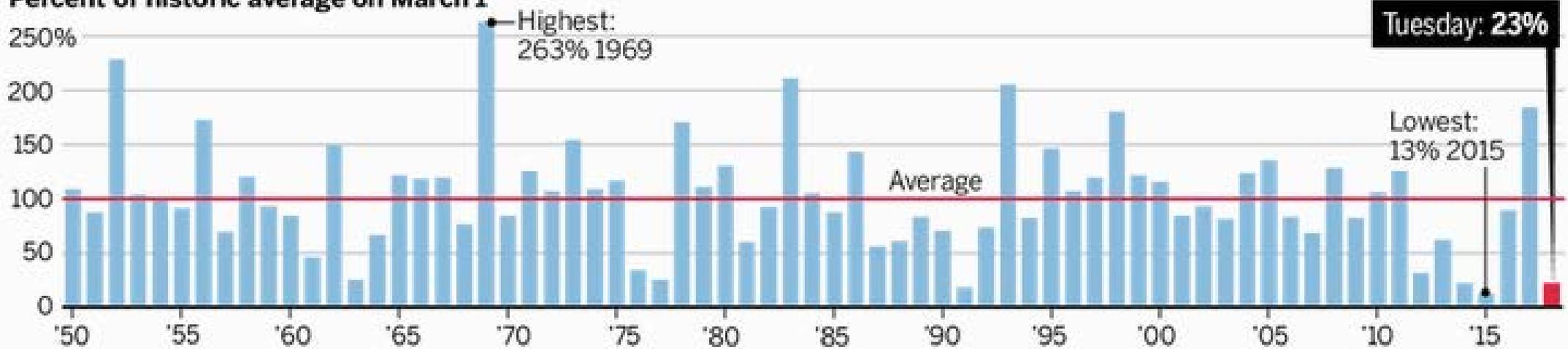
Source: Western Regional Climate Center

BAY AREA NEWS GROUP

LOW SNOWPACK STOKES DROUGHT FEARS

The Sierra Nevada snowpack on Tuesday was 23 percent of the historic average — among the lowest recorded since 1950.

Percent of historic average on March 1



Source: California Department of Water Resources

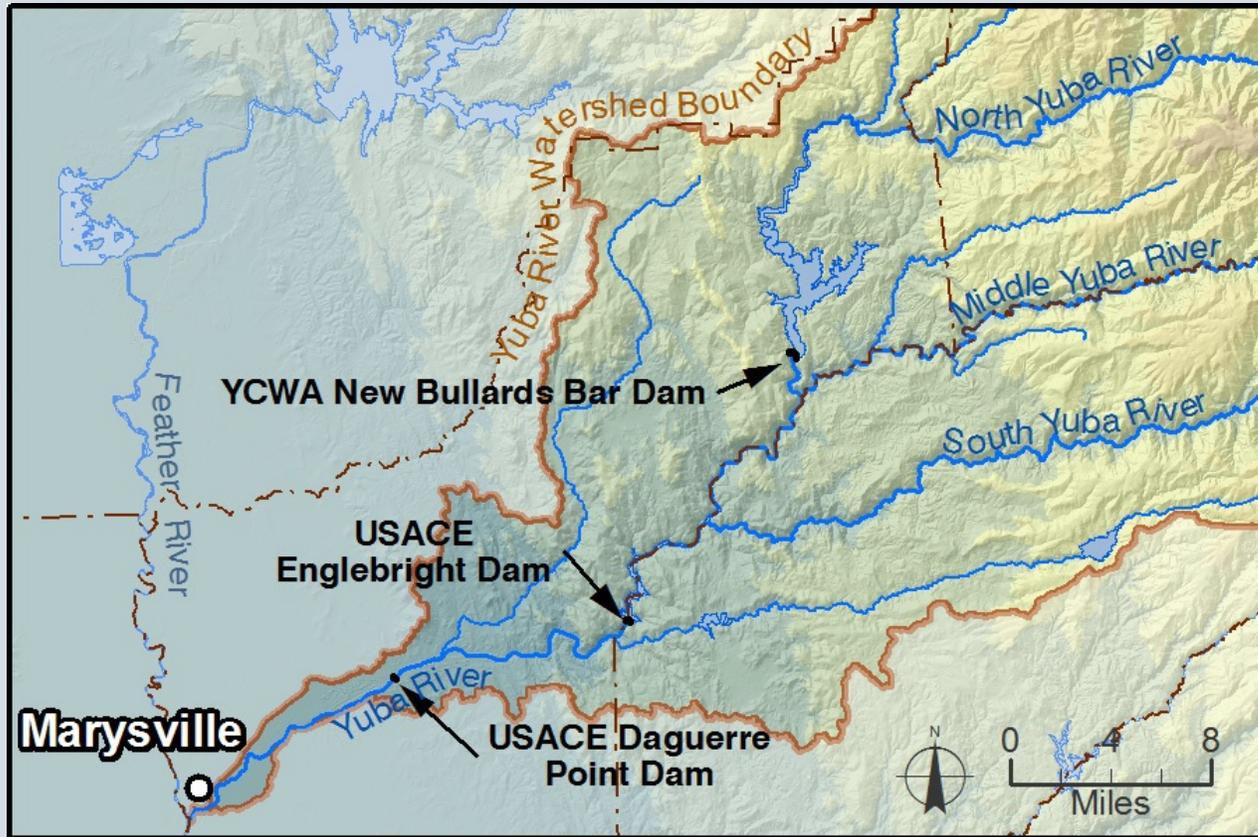
BAY AREA NEWS GROUP

Key Lessons Learned

- Importance of data.
- Plan for drought: identify objectives and actions needed to achieve them.
- Conjunctive use and local storage (especially groundwater) add flexibility.
- Water transfers can play a key role.

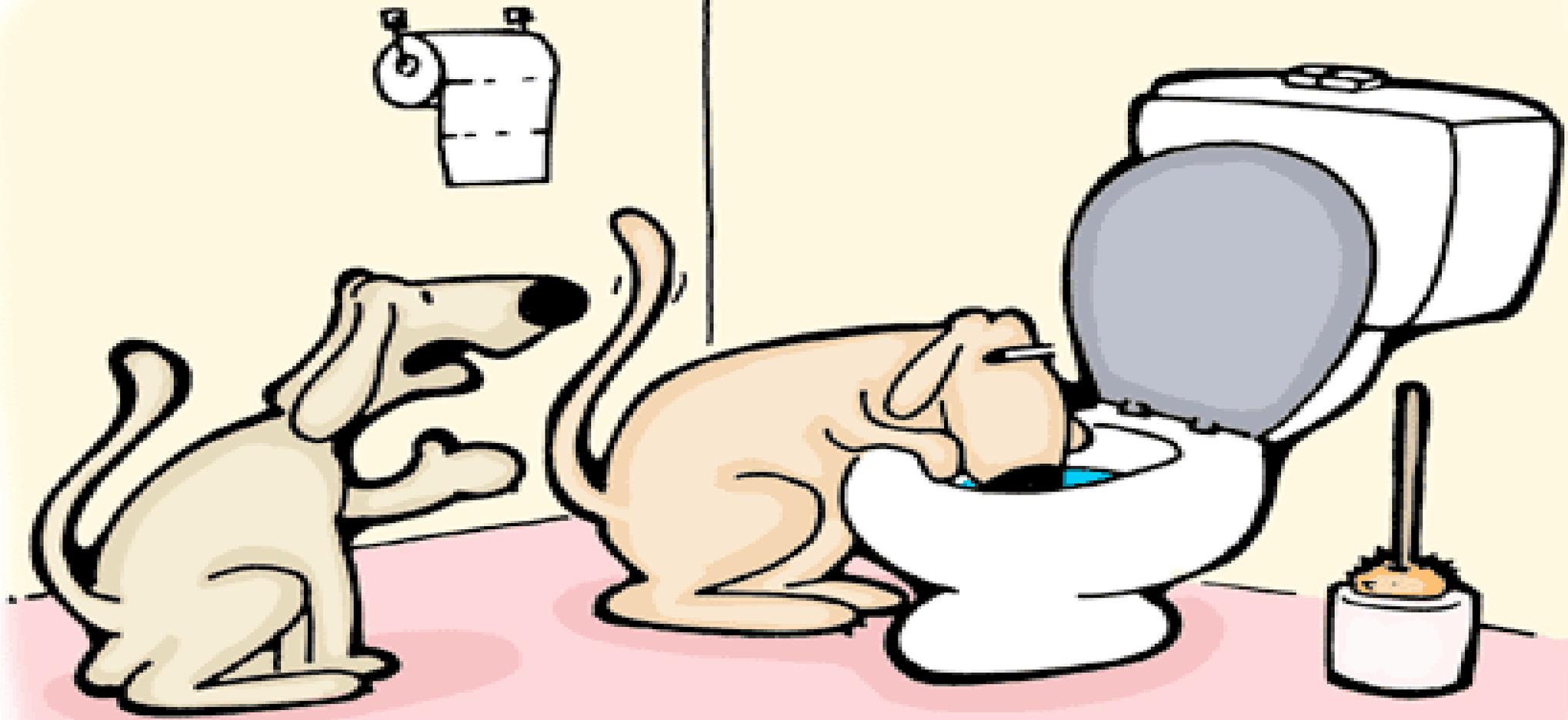
Tale of Two Rivers

Yuba River



Russian River





*You better not drink that,
it might be recycled water.*

INKCINCT