



The Drought and Food Access in California



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Public Health Alliance Vision

All Southern California communities are healthy, vibrant and sustainable places to live, work and play.

9 Local Health Departments:

- Orange
- Long Beach (City)
- Los Angeles
- Pasadena (City)
- Riverside
- Santa Barbara
- San Bernardino
- San Diego
- Ventura

Nearly

60%

of CA Population



The Drought: How Bad is it?

- Extreme drought in most of state

U.S. Drought Monitor California

May 26, 2015

(Released Thursday, May. 28, 2015)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.14	99.86	98.71	93.91	66.60	46.73
Last Week 5/19/2015	0.14	99.86	98.28	93.91	66.60	46.77
3 Months Ago 2/24/2015	0.16	99.84	98.10	93.44	67.46	39.92
Start of Calendar Year 12/30/2014	0.00	100.00	98.12	94.34	77.94	32.21
Start of Water Year 9/30/2014	0.00	100.00	100.00	95.04	81.92	58.41
One Year Ago 5/27/2014	0.00	100.00	100.00	100.00	76.68	24.77

Intensity:

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

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

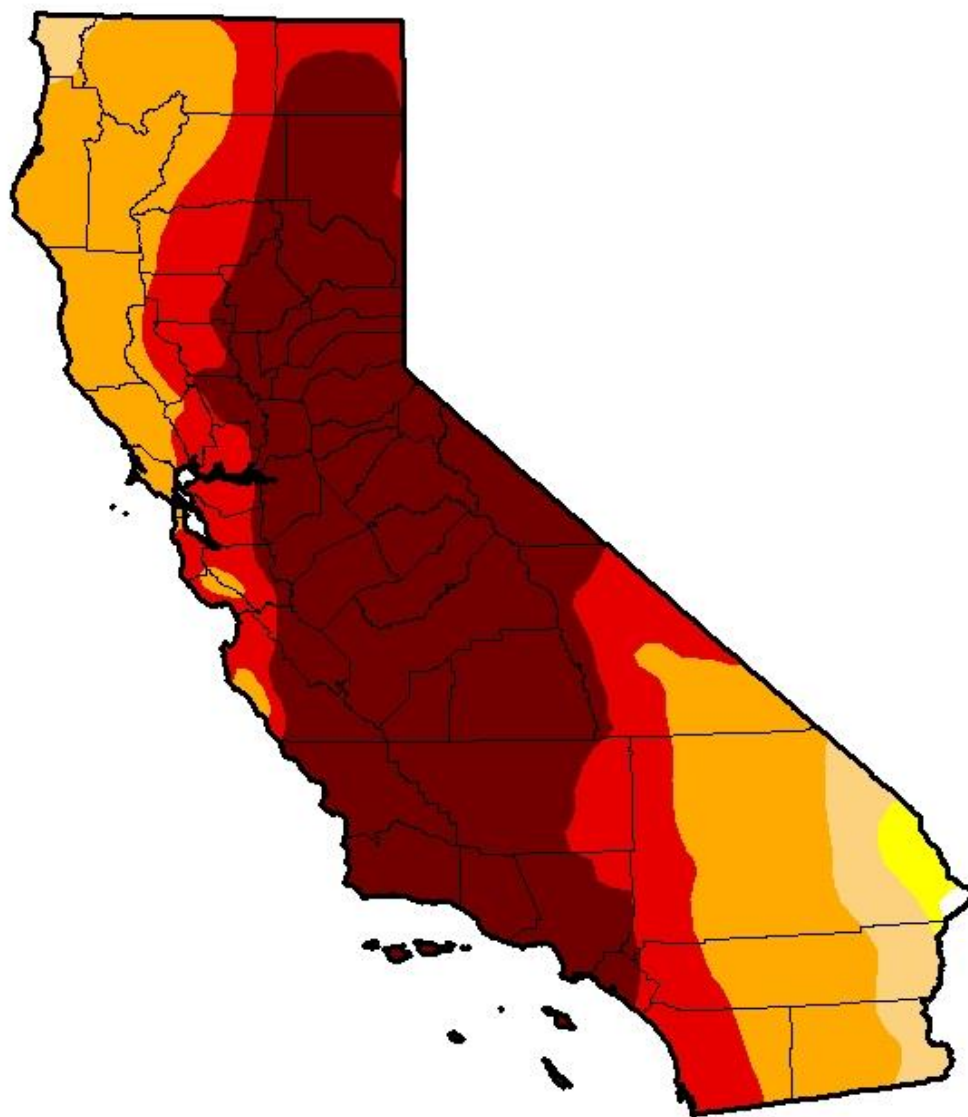
Author:

Brad Rippey

U.S. Department of Agriculture



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



The Drought: How Bad is it?

- Extreme drought in most of state
- 2014 driest year on record
- Precipitously low storage (our insurance)
 - Reservoir storage 65% of average
 - Sierra snowpack “virtually gone”
- Likely moving into El Niño but lack of storage and long-term projections suggest DRY=NEW NORMAL

Drought and Health

- Water quantity
- Water quality
- Food insecurity
- Wildfire
- Dust
- Vector-borne disease
- Infectious disease
- Sanitation
- Recreational risk
- Mental Health

Drought and Food Access

- Regional food availability
- Food prices affected by drought
- Increased water rates
- Unemployment in agriculture and trucking
- Water as food access issue

Regional Food Availability

- Direct costs to agriculture: \$1.5 billion
- Loss of 17,100 seasonal and part-time ag jobs
- Loss of 428,000 acres (5%) of irrigated land in the Central Valley, Central Coast and Southern California due to drought
 - 41,000 acres tree fruits and nuts fallowed
 - 10,000 acres vegetables and non-tree fruit fallowed

(Howitt et al. 2014)

Food Prices

- Drought affects food prices
- There is a lag
- Many other factors contribute; hard to discern direct links

“The ongoing drought in California could have large and lasting effects on fruit, vegetable, dairy, and egg prices.”

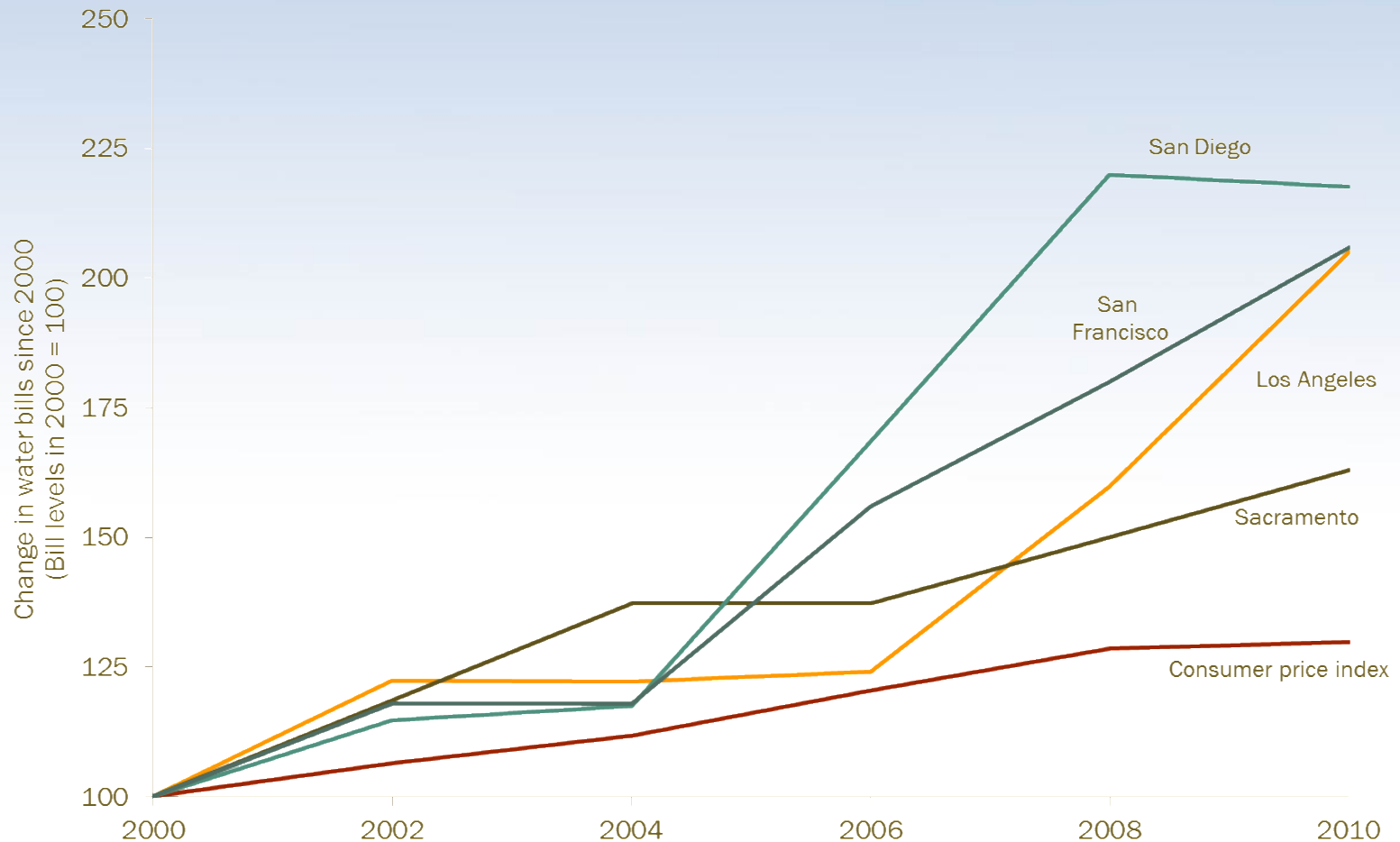
(USDA ERS Food Prices Outlook 2015)

Rising Water Cost

- Affordability of water: protecting most vulnerable populations
- Affordability of filtration
- Water for urban food production affected

Urban Water Bills Rising

Urban water bills have been rising faster than inflation



Credit: Ellen Hanak, PPIC 5



Unemployment

- 2014: loss of 17,100 seasonal and part-time jobs related to agriculture due to the drought (UC Davis)
- 73 percent of California ag workers earn less than 200 percent of poverty; vulnerable to food insecurity
- Impacts eased by Drought Food Assistance Program (\$25 million for drought boxes to affected counties via CDSS/Food Banks) and other efforts
- Unemployment 25-40% in some ag communities

Water as Food Access Issue

- Water important nutritional element
- Drought impacts healthy water intake; increased substitution with sugar-sweetened beverages
- About 250,000 Californians sometimes go without water due to insufficient supply or are exposed to contaminated water (PacInst)
- Water footprint of our diets—education

Local Responses

- Regional food availability: Ag resilience (CAFF, NRCS, RCDs), Recovery (Food Recovery Network, NRDC, Imperfect Produce), local gardens (Daily Acts)
- Food prices affected by drought: Opp for FANOut?
- Increased water rates: CWC, EJ Coalition for Water, CRLAF, Clean Water Action
- Unemployment: CDSS, Food Banks, Fresno Metro Ministry
- Water as food access issue: CalEndow, CWC, EJCW, CRLAF, CWA

How to Engage?

- Ongoing education on the issues
- Needs identification and data collection
- Target and expand emergency funding to fit needs
- Provide emergency technical assistance
- Partner on longer-term solutions
- Align internal policy with drought mitigation

Water and Health Webinar Series

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graph TD; A[Water and Health Webinar Series] --> B[Water Crisis Strategies for Public Health Leaders]; A --> C[Water, Drought and Environmental Health]; A --> D[Drought, Climate and the Food We Eat (Nutrition)];
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Water Crisis
Strategies for
Public Health
Leaders

Water, Drought
and Environmental
Health

Drought, Climate
and the Food We
Eat (Nutrition)

<http://phasocal.org/water-initiative>

Upcoming webinars

- **Nutrition Series: Rethink your Drink: Getting Safe Tap and Drinking Water into Schools and Community Places** (June 16, 2 pm) with Dr. Anisha Patel, UCSF; Laurel Firestone, Community Water Center
- **Environmental Health Series: California's Water Crisis: Leadership Opportunities for Environmental Health** (June 19, 9 am) with Angelo Bellomo, Environmental Health Director, LA County; Carlos Borias, LACDPH
- **Leadership Series: Drought Impacts on Disadvantaged Communities: Mitigation Strategies** (June 24, noon) with Jennifer Clary, Clean Water Action; J.R. DeShazo, UCLA

Our state is facing a game-changing drought and long-term projections of climate change that will have profound public health impacts. How will the drought, water availability and water pricing affect food security, nutrition, and public health? What is the role for public health, agriculture, and food system partners as we enter this “new normal”?

Join us for a webinar series to explore the interconnections among water, nutrition and health. Learn how you can bring positive health outcomes to your community and connect with partners working on this pressing issue.

Ready to learn more?

Please join the Public Health Alliance of Southern California for a webinar series:

[Drought, Climate and the Food We Eat: Safeguarding Nutrition and Food Security in Dry Times](#)

May 27 (12-1 pm): **The Water Crisis and Health 101: An Introductory Webinar**

June 16 (2-3 pm): **Rethink Your Drink: Getting Safe Tap and Drinking Water into Schools and Community Places**

July 22 (12-1 pm): **Agriculture and Drought: Implications for Food Security**

August 18 (2-3 pm): **Our Diets and the Water Footprint of Regional Agriculture**

September 15 (2-3 pm): **Water Security for Community and Household Gardens: The Promise of Greywater**

October 20 (2-3 pm): **Emerging Water-Friendly Production Methods and Foods**

November 18 (12-1 pm): **High Opportunity Levers for Water and Health: Resources, Policy and Next Steps**



Thank you!

For more information on the Water Initiative:

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www.phasocal.org/water-initiative