# California Water Story 101: Where are we and where are we going?





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Chair, State Water Resources Control Board Israel-California Agriculture Convening Sacramento, CA May 25, 2017



### **Overview**

- Introduction
- CA Water Context
- Selected policies



# All you need to know about CA water policy

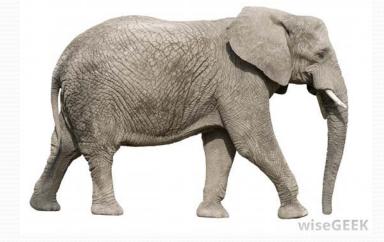


## Setting—the whole elephant

- Most Variable hydrology
  - Year to year
  - Location to Location
  - Time of year
- Mix of sources
  - Surface Water local or imported (storage/conveyance)
  - Groundwater (intensely local)
  - Every locale different mix
  - Mix of water rights varies greatly
  - Impact of drought varies greatly
- Mix of solutions
  - Conservation/Recycling/Stormwater/Desal
  - Integrated Water Management in regions and statewide
  - Storage, storage, storage, storage and other infrastructure improvements

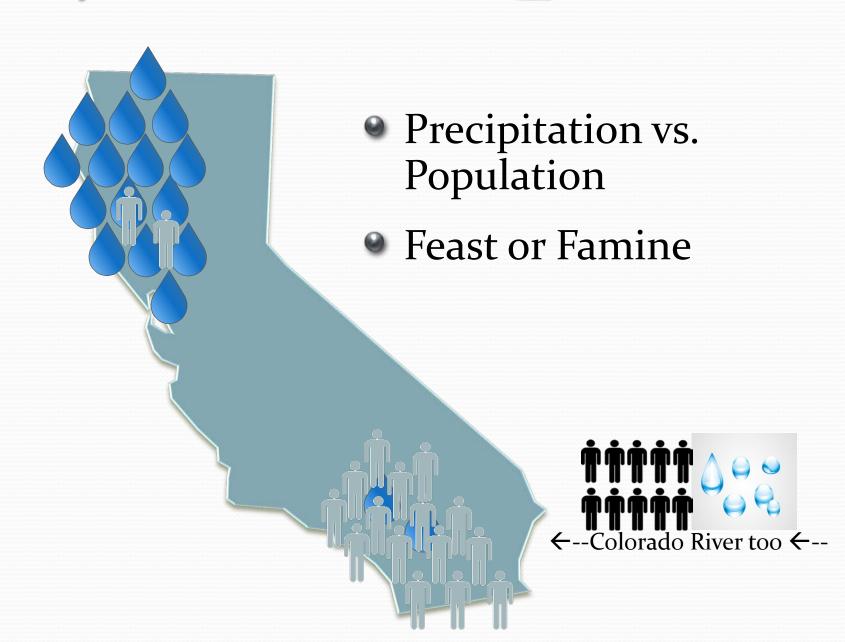
#### Basics

- 38 million people → 50 million
- Majority of population lives in large cities 100s of miles from water source
- One of 5 Mediterranean large scale agricultural opportunities in world
- Most biodiversity; losing biodiversity most rapidly
- Institutional setting: local control; 2600 water agencies (411 "large")



Climate change and other drivers as gamechangers

### It's complicated



## Major Water Projects

- Federal Central Valley Project (CVP)
- State State Water Project (SWP)
- Local Many other projects throughout state, including Colorado River system, Hetch Hetchy, EBMUD, Owens Valley

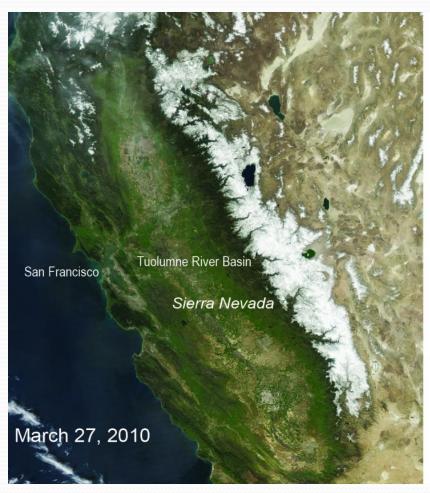
Source: Water Environment Foundation



## Delta is key hub for co-equal goals



# This is California on Climate Change



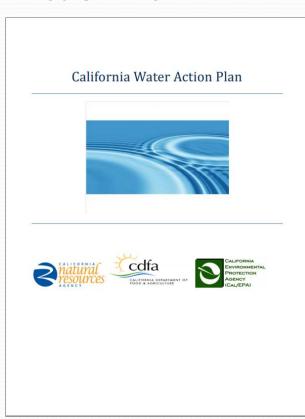
Tuolumne River Basin San Francisco Sierra Nevada March 29, 2015

March 27, 2010

March 29, 2015

**Source: NASA** 

## California Water Action Plan



- Make Conservation a California Way of Life
- Increase Regional Self-Reliance and Integrated Water Management Across All Levels of Government
- Achieve the Co-Equal Goals for the Delta
- Protect and Restore Important Ecosystems
- Manage and Prepare for Dry Periods
- Expand Water Storage Capacity and Improve Groundwater Management
- Provide Safe Water for All Communities
- Increase Flood Protection
- Increase Operational and Regulatory Efficiency
- Identify Sustainable and Integrated Financing Opportunities

## Recent crisis: Worst drought in modern times



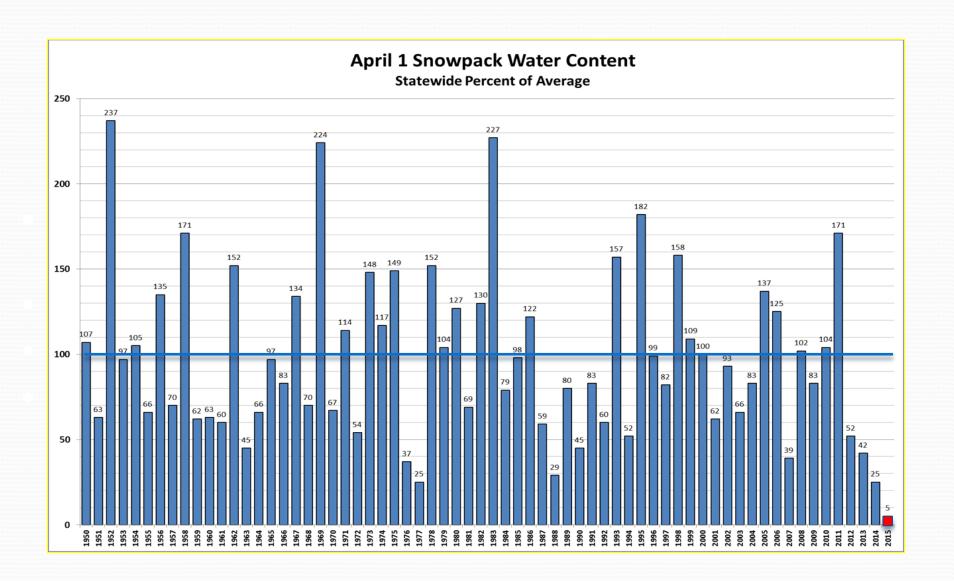
January, 2013

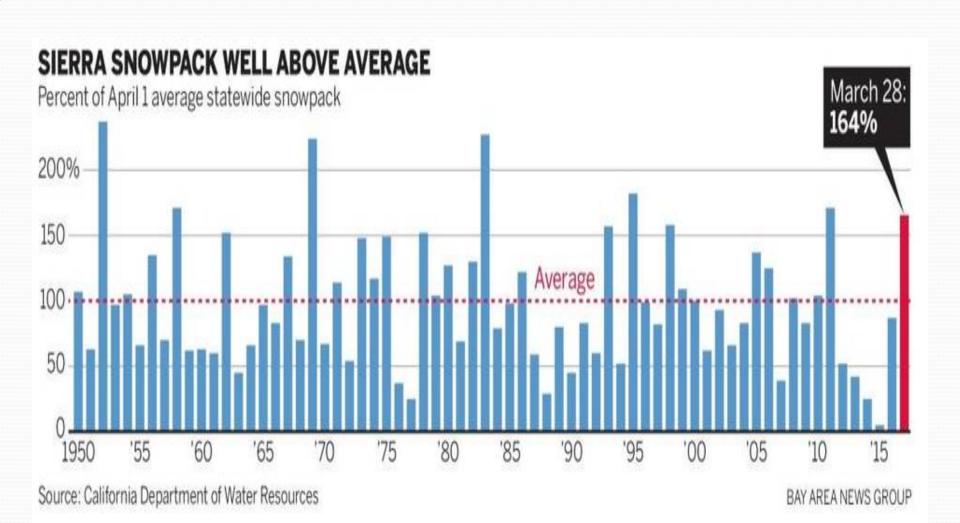
January, 2014

Credit: NASA

Harbinger of things to come—think Australia and Climate Change

## Snow Water Content





## Wake up call: The guy on the right

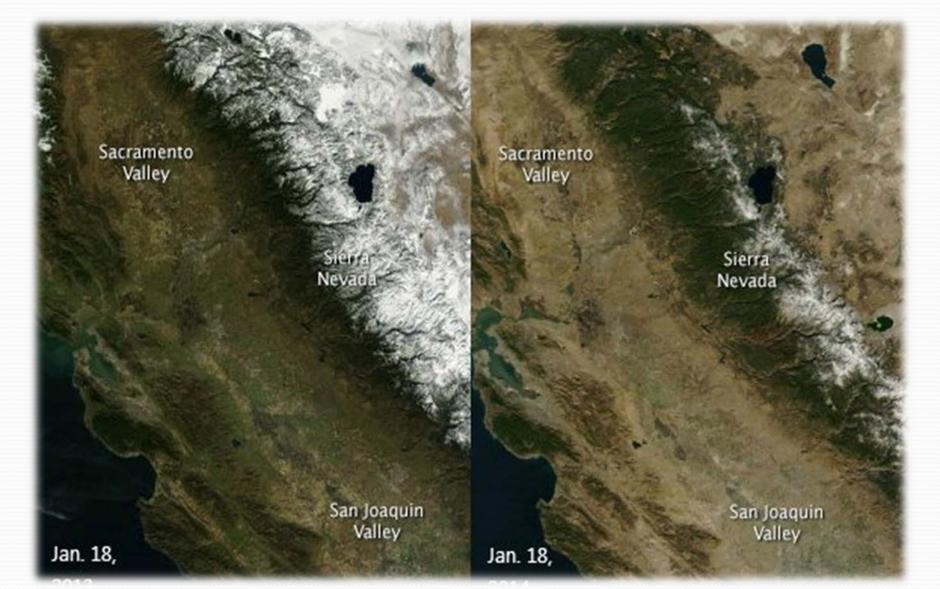


# Dealing with reality

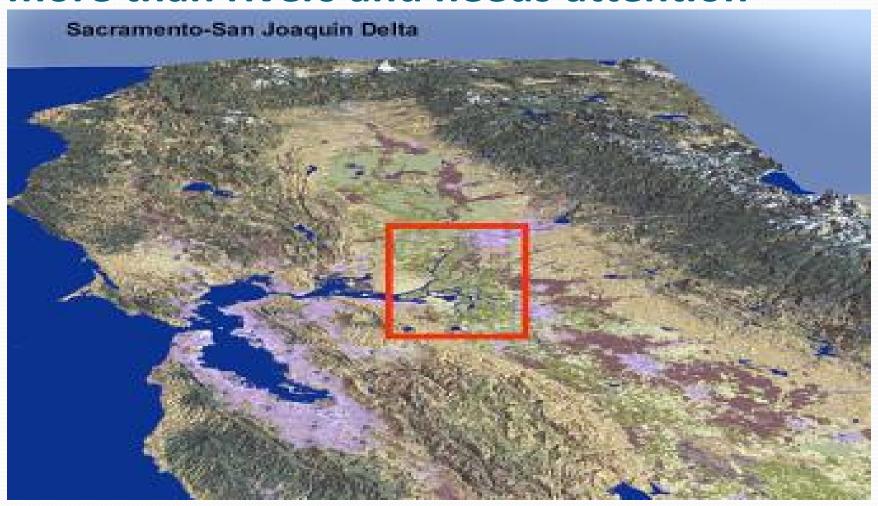
"I am a firm believer in the people. If given the truth, they can be depended upon to meet any national crisis. The great point is to bring them the real facts, and beer."



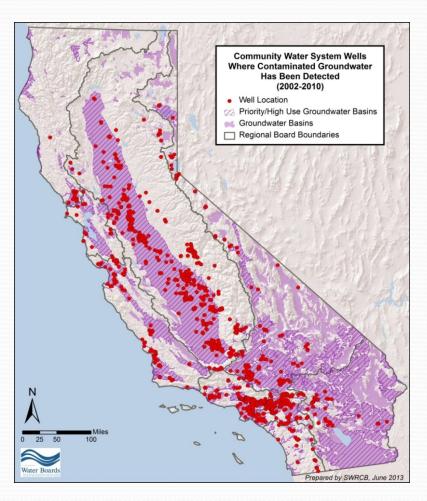
## Reality: Loss of snowpack



## Reality: The Delta is the confluence of more than rivers and needs attention



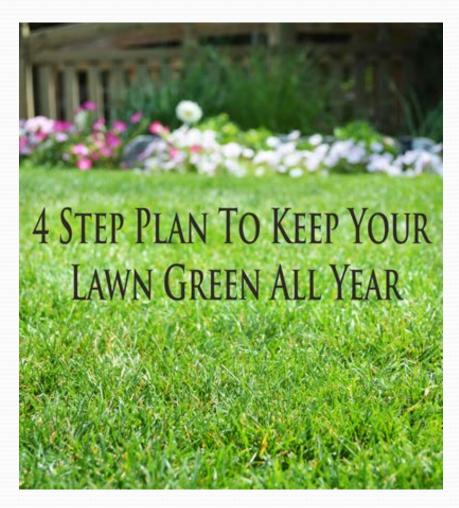
# Reality: Community Well Systems Where Contamination has been Detected



# Reality: Our infrastructure is aging and inadequate to the times



## Reality: We could be a lot more efficient

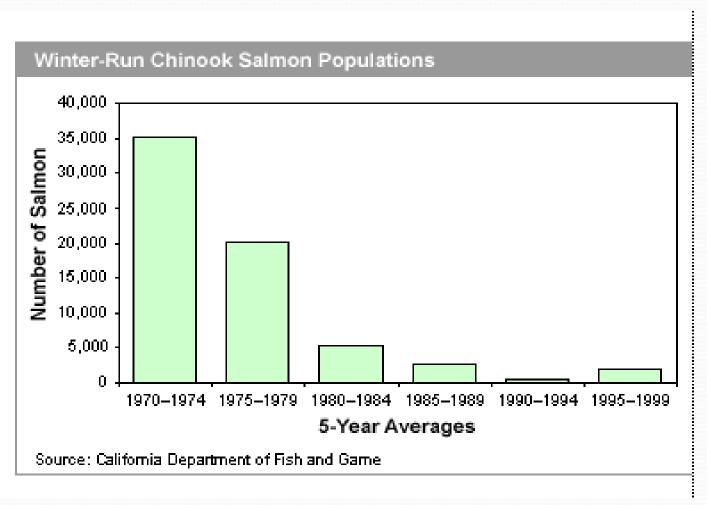




# Reality: California agriculture is precious resource for all of us



# Reality: Fish and wildlife are imperiled and precious too



## Reality: We can do something

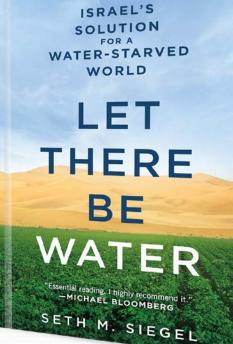
about it



Water 4.0

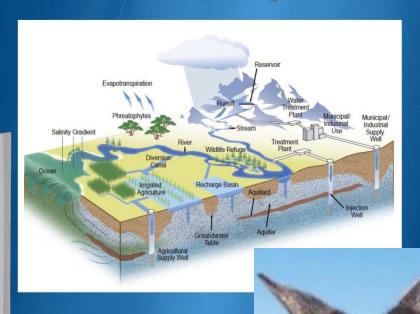
The Past, Present, and Future of the World's Most Vital Resource

Daniel Carllele



A Call to Integrate

Interconnected Systems Require Integrated Solutions



# Reality: We are doing something about it

- Myriad Individual acts of transcending traditional silos
  - Integrated Regional Water Management
  - Drought "angels"
  - Fish/farmer win/wins—e.g., rice
- Legislative agreements, e.g.,
  - "Human right to water"
  - 2009 legislation/"coalition of the willing"
  - Groundwater legislation
  - Water Bond--\$7.57 billion
  - Water Rights improvements, including measurement
- Water Action Plan and other examples, e.g.,
  - Conservation, recycling, stormwater acceleration
  - Public support for conservation, for fish/wildlife, for agriculture
  - 25% savings examples
  - Groundwater management movement
  - Elevation of floodplain restoration in public discourse, upper watersheds
  - Delta actions, regulatory and Cal Eco-Restore

## Selected Regulations/Priorities

**Overall: Implement Water Action Plan** 

#### **Water Supply**

- Bay-Delta Water Quality Plans
- Delta Water Fix: Water Rights Permit change
- Sustainable Groundwater Management Act
- Urban Conservation Regs: bridge and pivot to long term efficiency

#### **Water Quality**

- Safe Drinking Water: top of charts
- Recycling, Stormwater, Desalination incentives and regulation
- Irrigated lands regulatory program
- CV Salts+

**Both: Improved Data and Racing Cannabis** 

## STOP THE REGULATORY DROUGHT





## Wendell Berry

- "To cherish what remains of the Earth and to foster its renewal is our only legitimate hope of survival."
- "Eating is an agricultural act."
- "You cannot save the land apart from the people, or the people apart from the land."

## Thank you

