

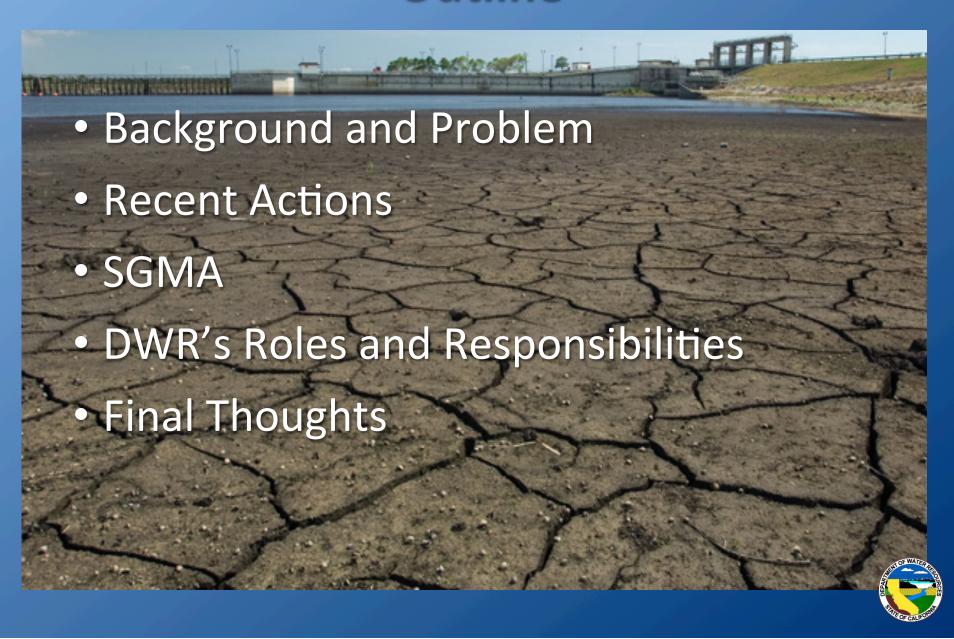
# The Sustainable Groundwater Management Act and DWR's Role in Sustainable Groundwater Management

Building Livable Communities
March 2015

Paula J. Landis
CA Department of Water Resources



### Outline



### Groundwater Storage

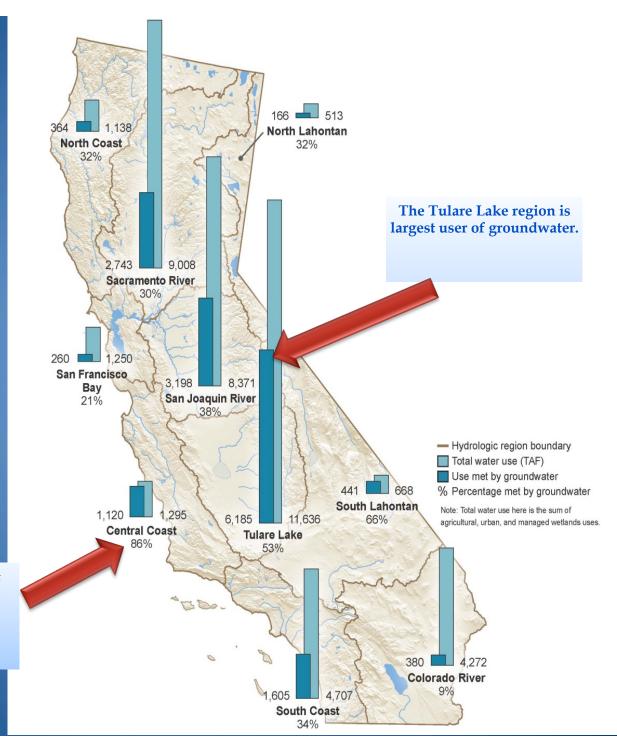
- Groundwater Basins carry 10 times the capacity of California's surface storage
- Cost-effective, local storage



### Groundwater Supply in California

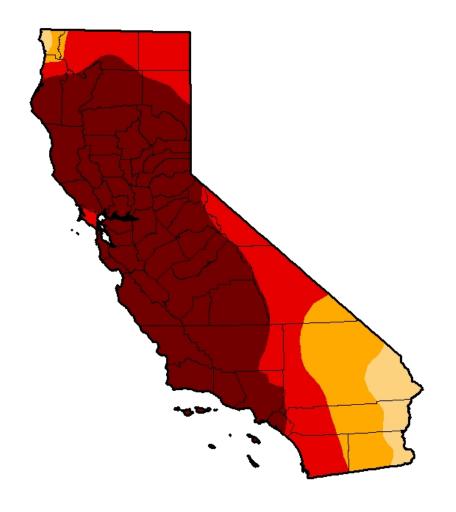
2005-10 Average

The Central Coast region is the most groundwater dependent.



### Most of CA in Exceptional Drought Condition

### U.S. Drought Monitor California



#### October 7, 2014

(Released Thursday, Oct. 9, 2014) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Сиптепт	0.00	100.00	100.00	95.04	81.92	58.41
Last Week 9/30/2014	0.00	100.00	100.00	95.04	81.92	58.41
3 Month's Ago 7/8/2014	0.00	100.00	100.00	100.00	78.97	36.46
Start of Calendar Year 12/3/1/2013	2.61	97.39	94.25	87.53	27.59	0.00
Start of Water Year 930/2014	0.00	100.00	100.00	95.04	81.92	58.41
One Year Ago	2.52	97.48	95.95	84.12	11.36	0.00

#### Intensity:



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

#### Author:

Mark Svoboda National Drought Mitigation Center





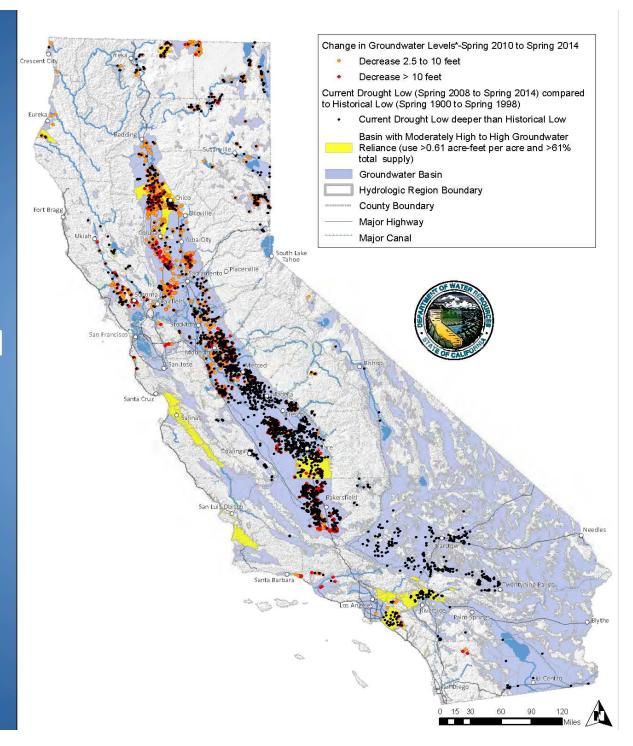






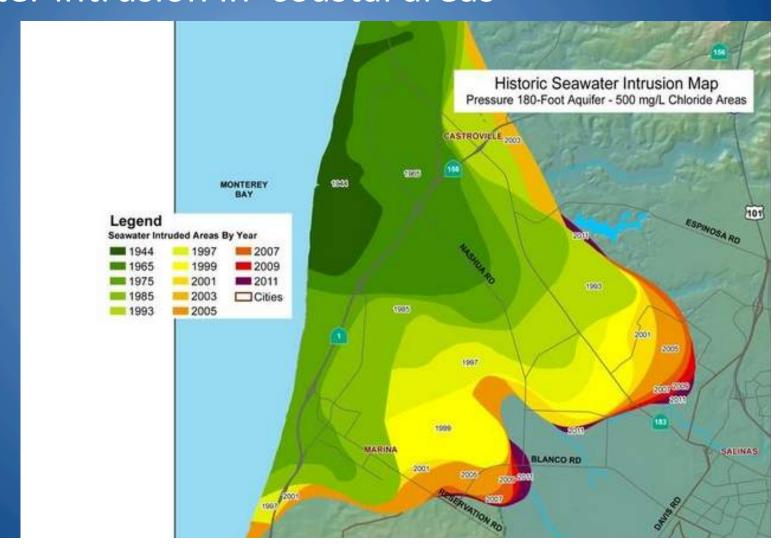


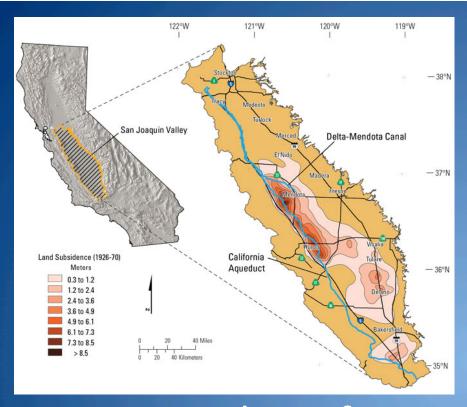
Black Dots = Groundwater Level at Lowest Recorded



### Water Quality

Seawater intrusion in coastal areas





- Permanent loss of water storage
- Damage to infrastructure and water delivery systems

### Subsidence



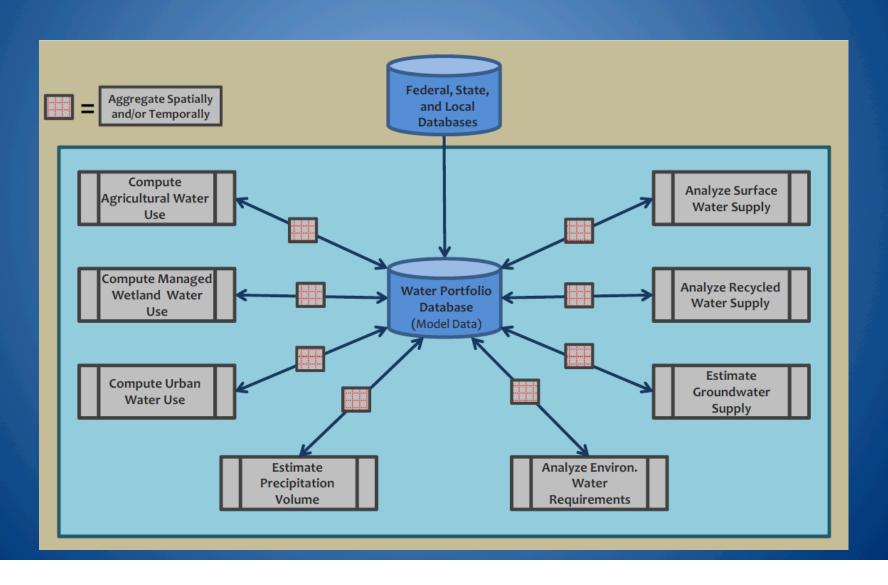
### **Ecosystem Impacts**



### Vital Resource Under Stress



# Water Balance is essential for sustainability



### California Water Action Plan

**Financing** Safe **Drinking** Conservation Water Action 6: Expand water storage Delta Co-**Operational Equal** Efficiency capacity and Goals California improve Water **Action Plan** groundwater Flood **Ecosystem Protection** Restoration management Regional **Prepare** Self for Dry Reliance **Periods** Storage and Groundwater

## California's Major Milestones toward Sustainable Groundwater Management



# The Sustainable Groundwater Management Act of 2014

- Requires sustainable groundwater management
- Promotes local control



### Sustainable Groundwater Management: Overview

Framework

- Applicability
- Definitions

Local's Role

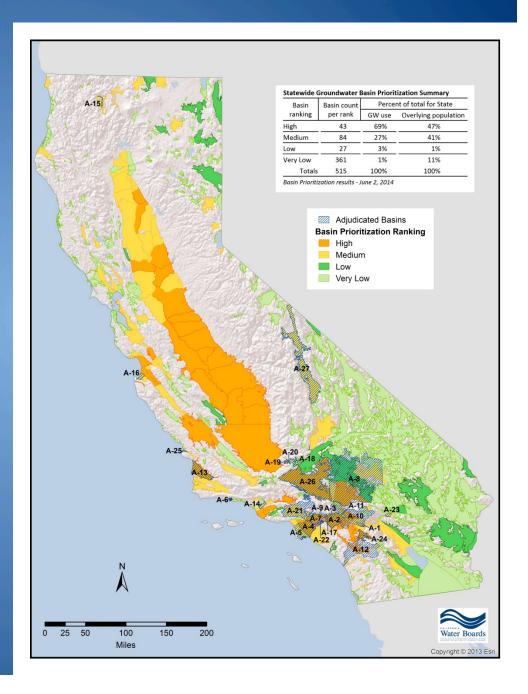
- Establish GSA
- Powers & Authorities
- Sustainability Plans
- Deadlines

State's Role

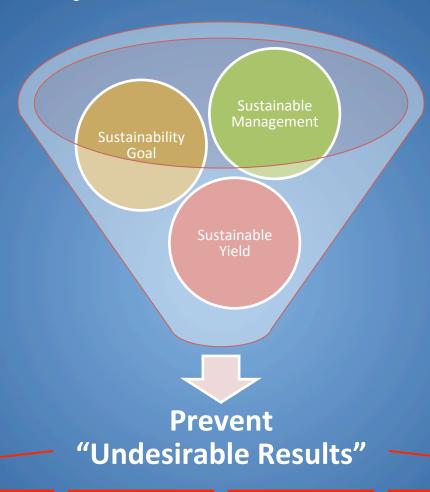
- Develop guidance or rules
- Provide Technical and Planning Assistance
- State Evaluation and Assessment
- State Intervention

### **SGMA 2014**

- Requires GW
   sustainability plans in
   high- and medium priority basins
- GSA (Groundwater Sustainability Agencies)
- GSP (Groundwater Sustainability Plan)
- Defines time frame for accomplishing goals
- Does not require adjudicated basins



### Sustainability:



Lowering of Groundwater Levels

Reduction in Groundwater Storage

Seawater Intrusion

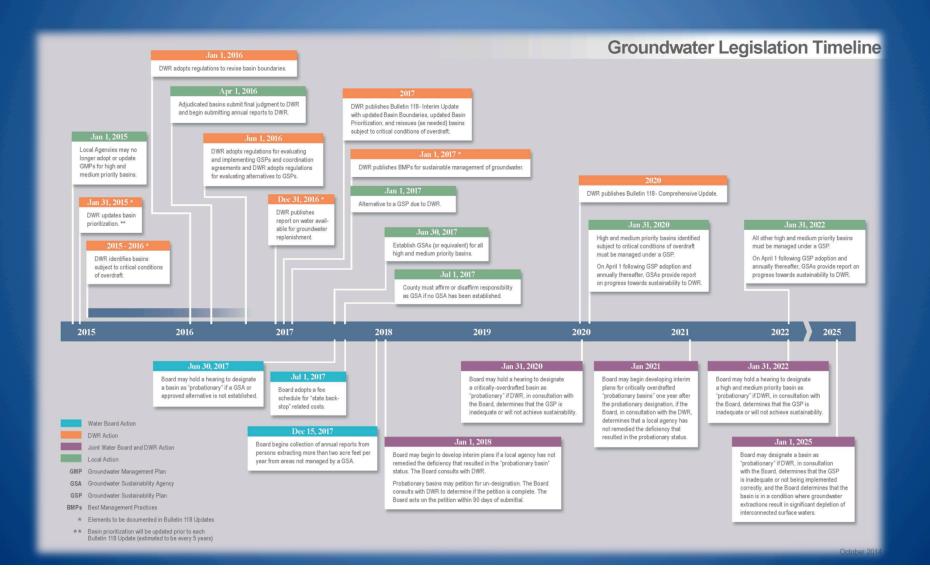
Water Quality Degradation

Land Subsidence Depletions of Surface Water

### Phases to Implement Groundwater Legislation and Achieve Sustainable Groundwater Management

Phase 2 Phase 1 Phase 3 Phase 4 Initial Realignment Development and Adoption Management Sustainable of through Groundwater Governance of and Area Groundwater Water **Management** Sustainability **Budgets** Plans (GSPs) (Jan 2020 or 2022 plus 5-10 years) (20 years from 2020 (Oct 2014 (2017 to or 2022) Jan 2020 or 2022) through 2017)

### **Groundwater Legislation Timeline**



### **Key Principles**

- Groundwater is best managed at the local or regional level, and local agencies should have the tools they need to sustainably manage their resources
- When local or regional agencies cannot or will no manage their groundwater sustainably, the State will intervene until the local agencies develop and implement sustainable groundwater management plans

#### Communication and Outreach

One on One Agency & Organizations

Associations, Foundations & Organizations State Agency Partners

DWR's
Sustainable
Groundwater
Program
Management
Team

Federal
Agencies and
Tribal
Governments

Practitioner Advisory Panel

Statewide Public Meetings

### Communication

- Joint Websites
  - http://www.water.ca.gov/cagroundwater/
  - http://www.waterboards.ca.gov/water\_issues/programs/gmp/
  - http://www.water.ca.gov/groundwater
- Speaking Engagements
  - 27 engagements since mid November
- Brochures, Technical Fact Sheets
- Webinars
- Workshops
- Strategic Plan
- Assistance to local agency communication

### Outreach

- SWRCB
  - Management Team
  - Communication Team
  - Data Team
  - Regulations Team
- Water Commission
  - Sub Committee
- Practitioners Advisory Panel
- Leveraging Organizations for Communication and Outreach
- NGOs
- Federal Agencies and Tribal Governments
- Public Listening Sessions

### DWR's Sustainable Groundwater Management Program

Provide Statewide Technical Assistance Provide Statewide Planning Assistance

Assist State and GSA Alignment and provide Financial Assistance

Develop a
Framework for
Sustainable
Groundwater
Management

DWR's
Sustainable
Groundwater
Management
Program

Provide Interregional Assistance

### **Immediate Actions**

Developing Regulations for Basin Boundaries

Updating
Basin
Prioritization

Identify
basins
subject to
conditions of
critical
overdraft

Developing
Regulations
for
Groundwater
Sustainability
Plans



#### Questions

When properly managed, groundwater resources will help protect communities, farms, and the environment against the impacts of prolonged dry periods and climate change.

California Water Action Plan 2014



State: http://groundwater.ca.gov

DWR: http://www.water.ca.gov/groundwater/

SWRCB: <a href="http://www.waterboards.ca.gov/water\_issues/programs/gmp/">http://www.waterboards.ca.gov/water\_issues/programs/gmp/</a>

