

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

State Board of Food and Agriculture
October 6, 2015

David Gutierrez
CA Department of Water Resources



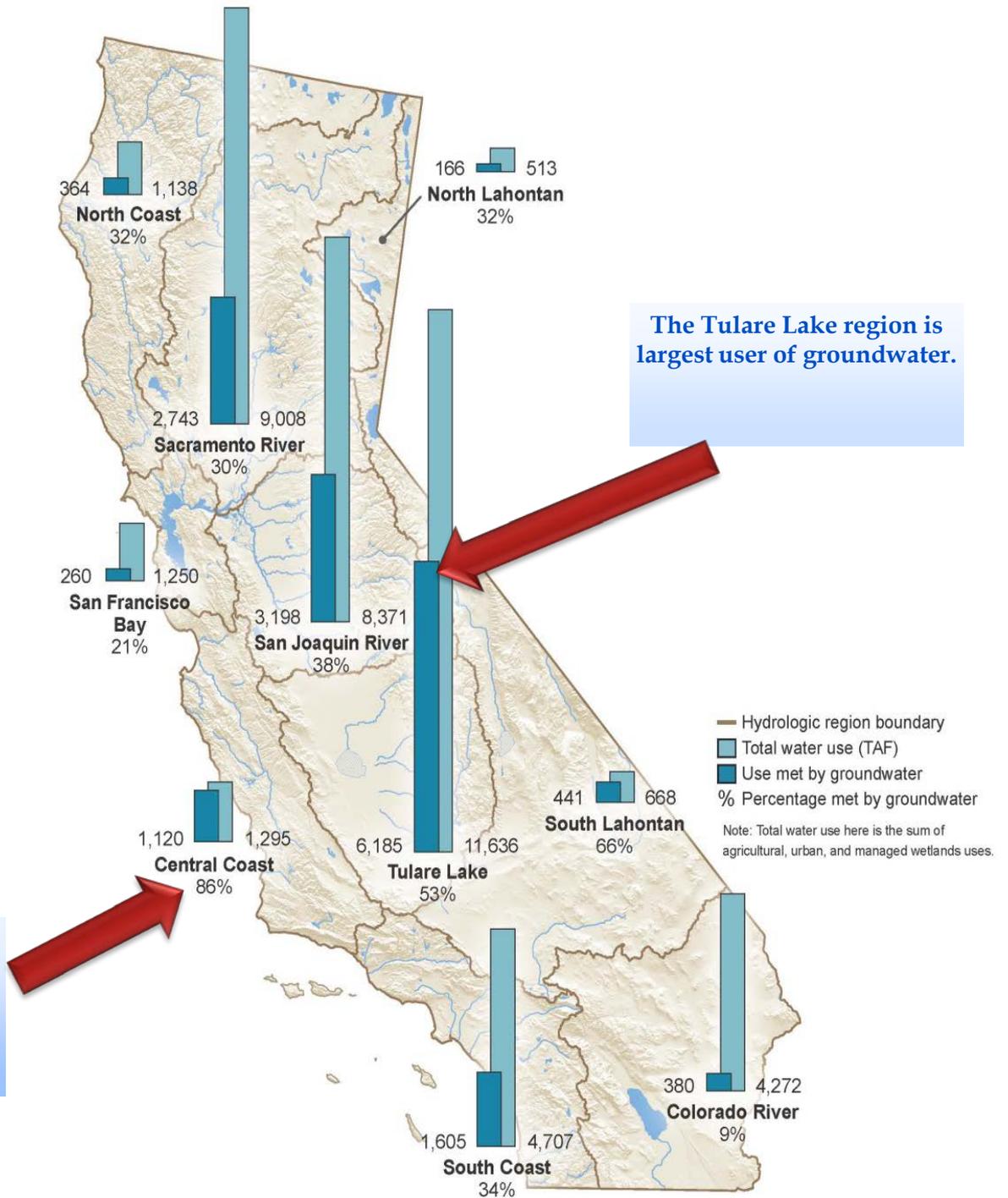
Groundwater Storage

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

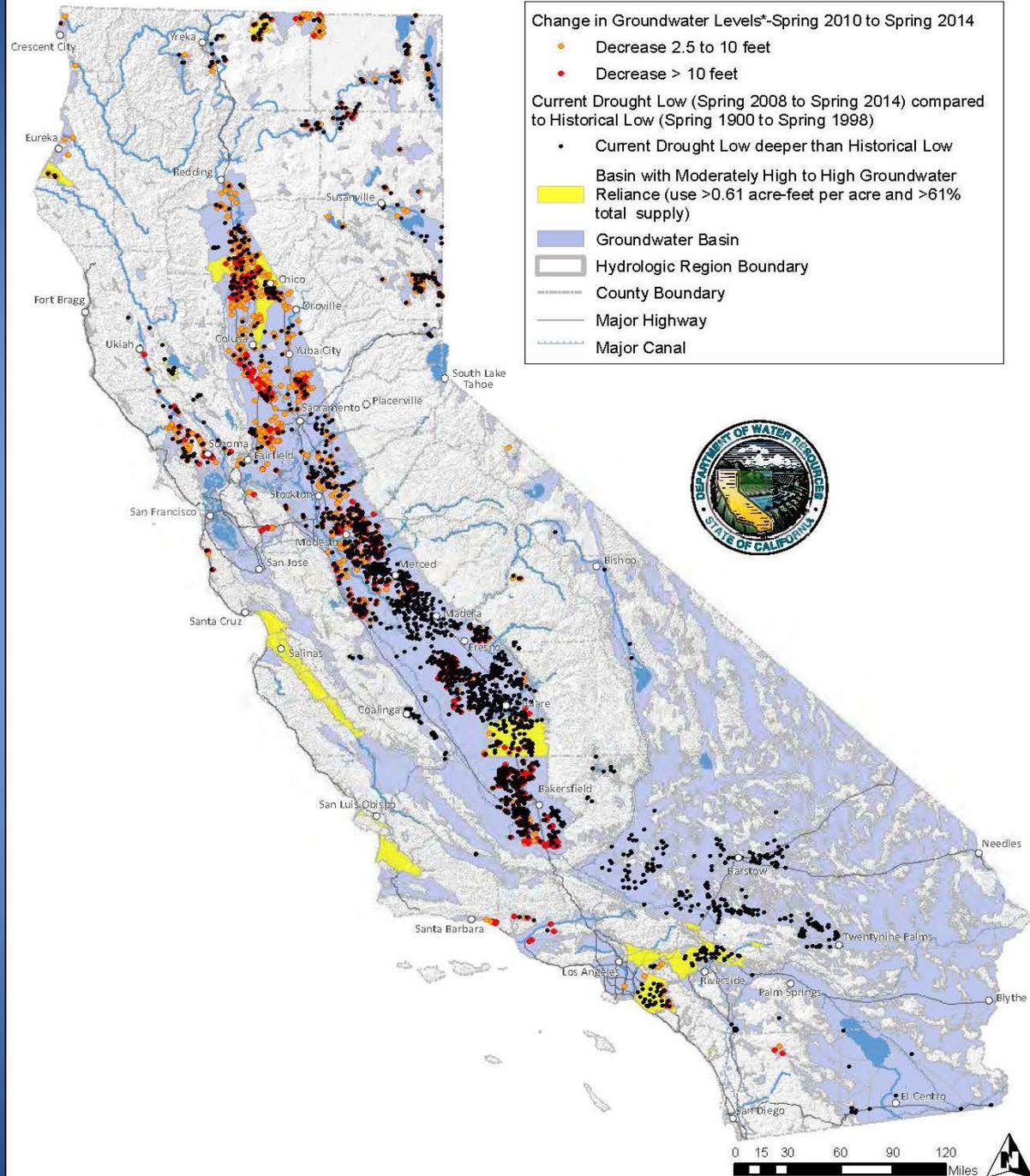


Ground-water Supply in California

2005-10 Average

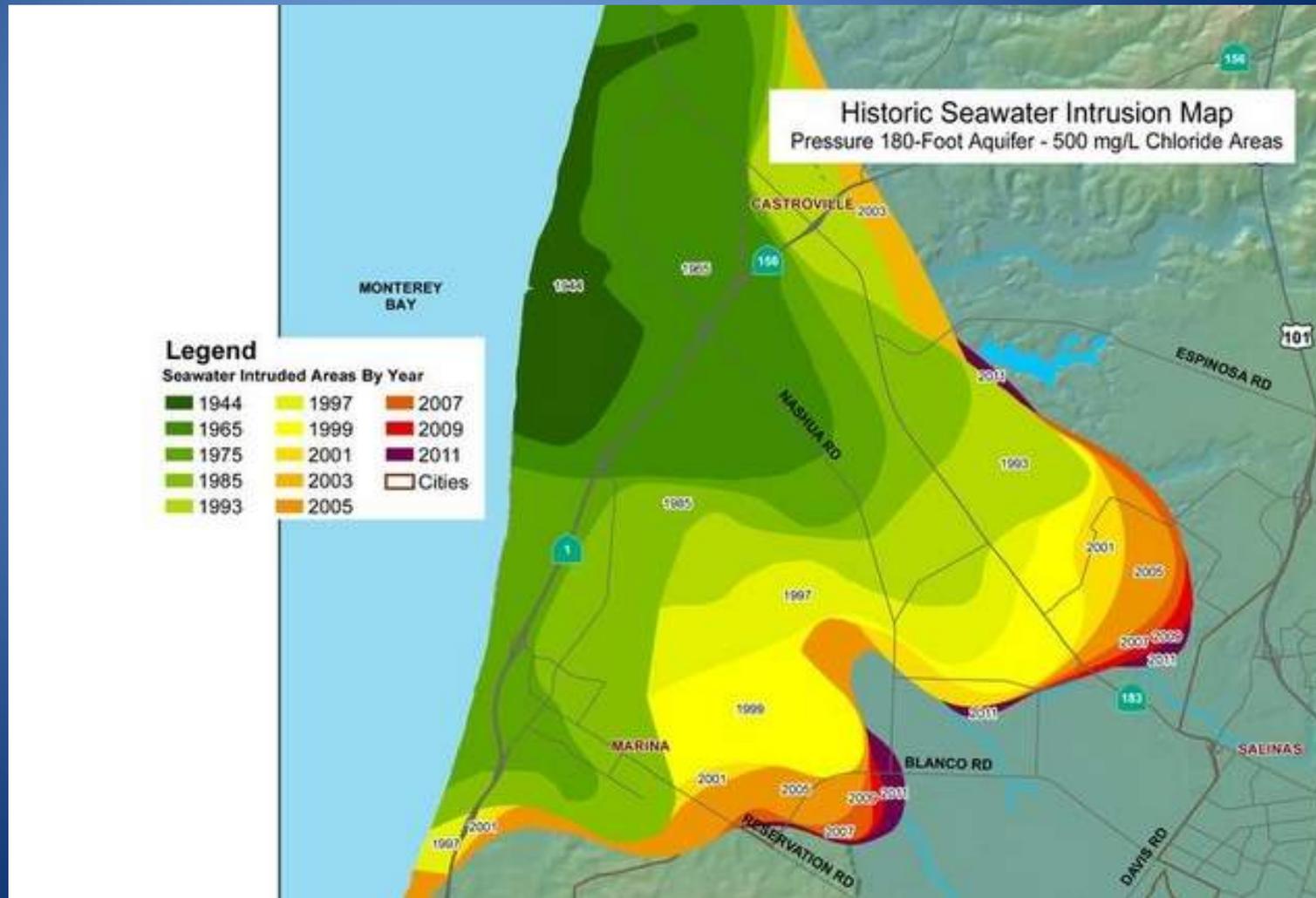


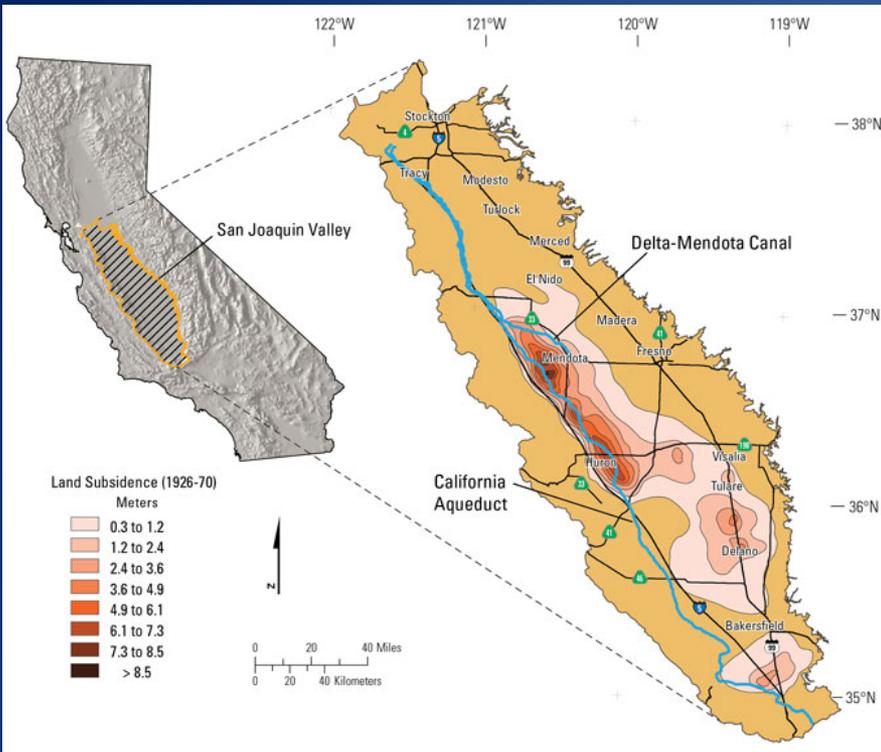
**Black Dots =
Groundwater Level
at Lowest Recorded**



Water Quality

- Seawater intrusion in coastal areas





Subsidence

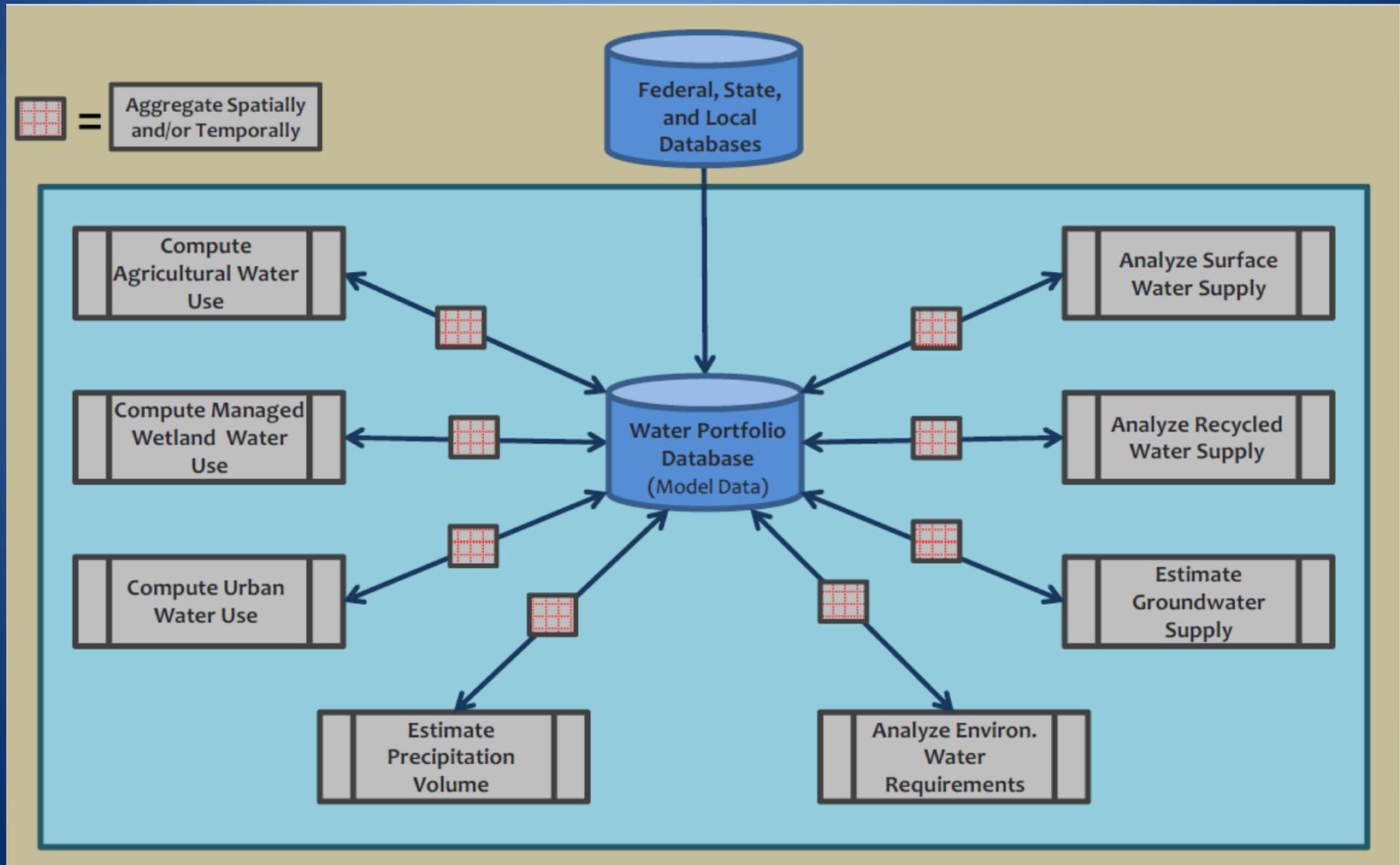
- Permanent loss of water storage
- Damage to infrastructure and water delivery systems



Ecosystem Impacts

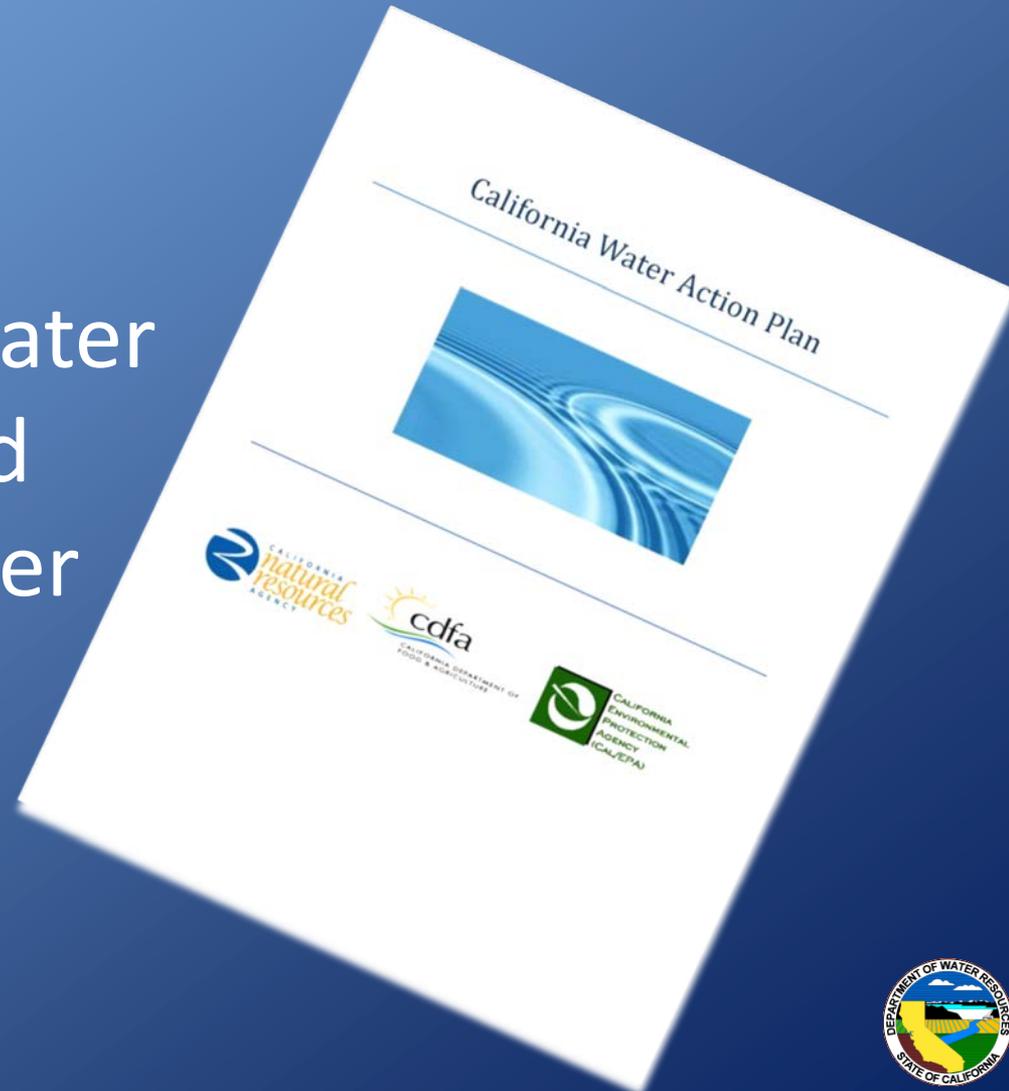


Water Balance is essential for sustainability

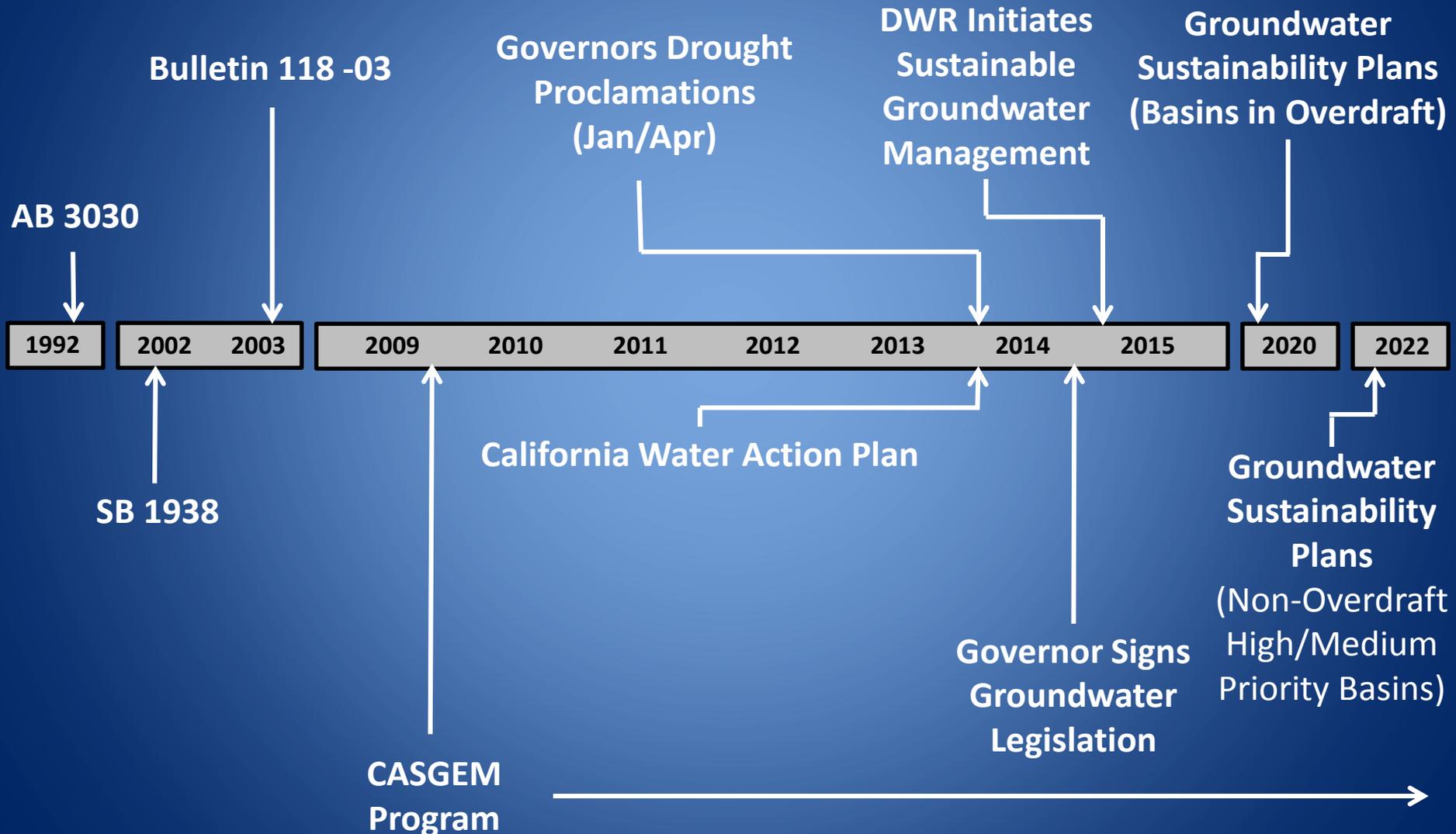


California Water Action Plan

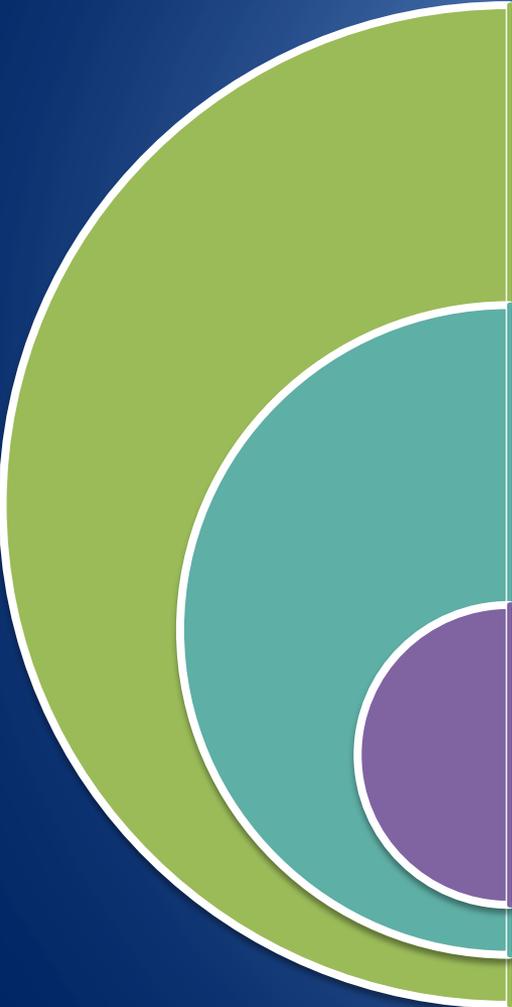
Action 6: Expand water storage capacity and improve groundwater management



California's Major Milestones toward Sustainable Groundwater Management



Sustainable Groundwater Management Act of 2014



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 Milestones for Success

Groundwater Sustainability Agencies

- Formation by June 30, 2017
- Only local agencies can be GSAs

Groundwater Sustainability Plans

- January 31, 2020 for critically overdrafted basins
- January 31, 2022 for all other high and medium priority basins
- Multiple GSPs in a basin must coordinate

Groundwater Sustainability

- 20-year implementation period
- 50-year planning horizon

GSA Interactive Map

This interactive map shows the location of local agencies that have elected to become Groundwater Sustainability Agencies (GSAs). The boundaries of the GSAs are based on information submitted to DWR by those local agencies. While DWR makes every effort to provide accurate information, DWR has not reviewed the GSA boundary information contained in this map and makes no warranties as to the suitability of this map for any particular purpose. Where multiple local agencies have claimed the same portion of a groundwater basin, the areas of overlap are indicated by a darker color within the GSA boundaries.

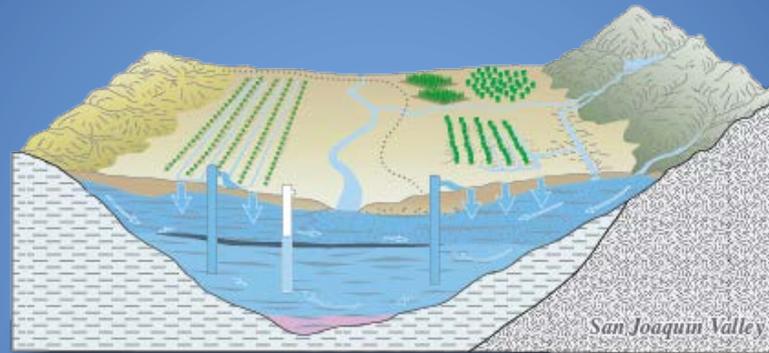
In addition to GSA boundaries, the interactive map application shows the following: (1) Bulletin 118-2003 groundwater basins; (2) CASGEM basin prioritization; (3) adjudicated areas listed in Water Code § 10720.8 (full list available soon); and (4) local agencies listed in Water Code § 10723(c) (available soon).

If you have questions related to GSAs or have comments related to the interactive map please contact Mark Nordberg at Mark.Nordberg@water.ca.gov. The GSA Interactive Map was last updated on August 10th, 2015.

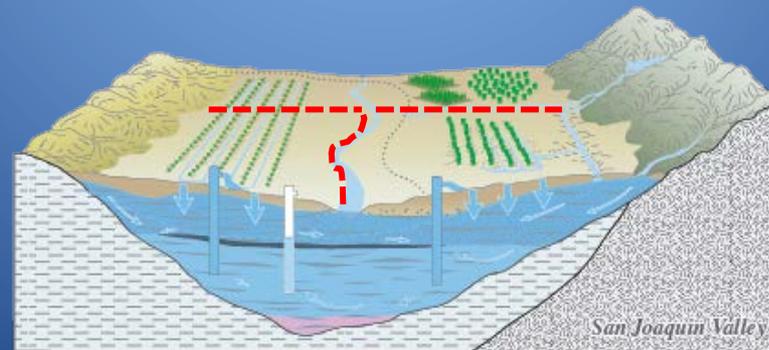


Groundwater Basins and Subbasins

Scientific

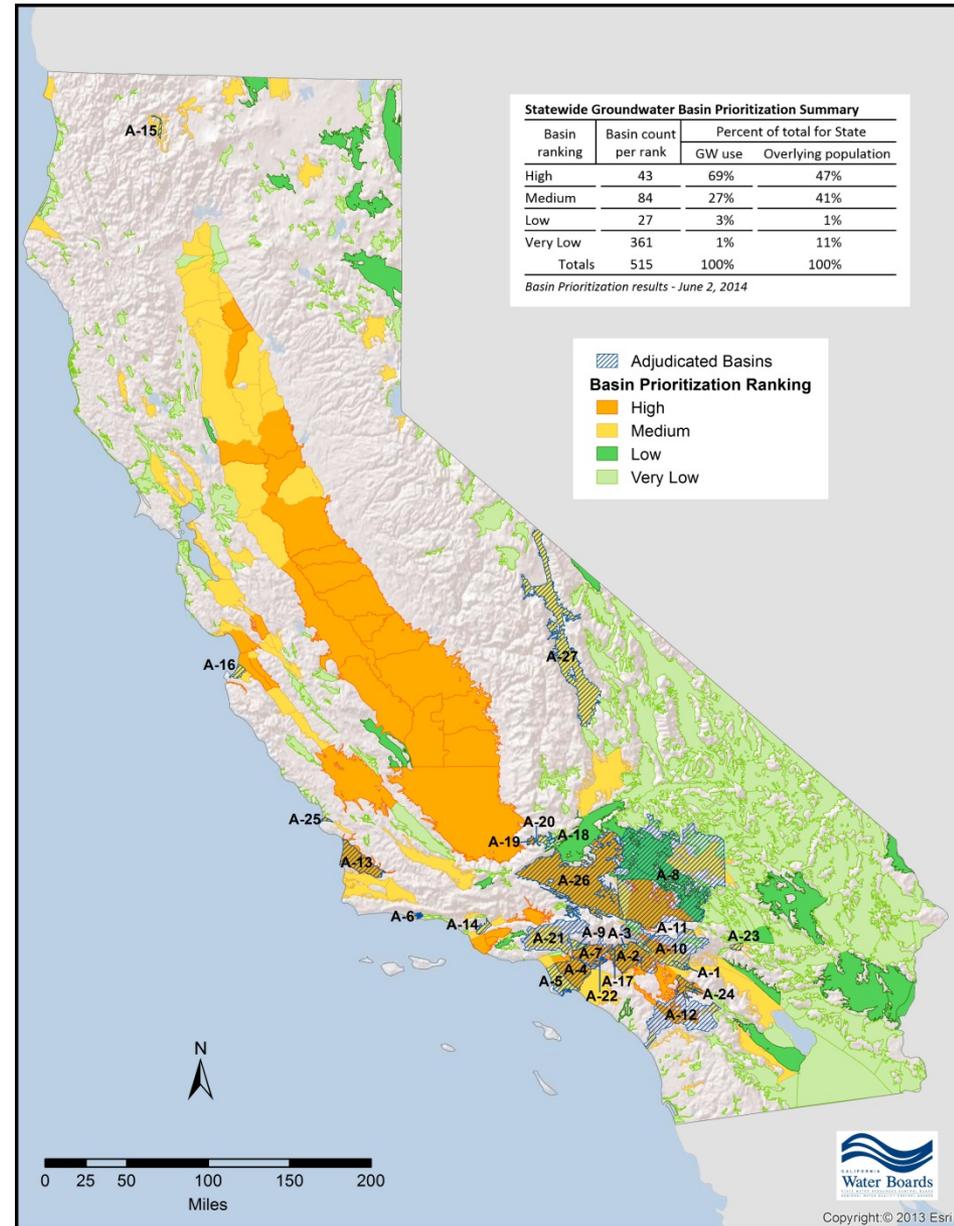


Jurisdictional



Basin Prioritization

- Requires GW sustainability plans in high- and medium-priority basins
- Does not require adjudicated basins



Groundwater Sustainability



*Undesirable Results:
Significant and unreasonable...*

Lowering of
Groundwater
Levels

Reduction of
Groundwater
Storage

Seawater
Intrusion

Water Quality
Degradation

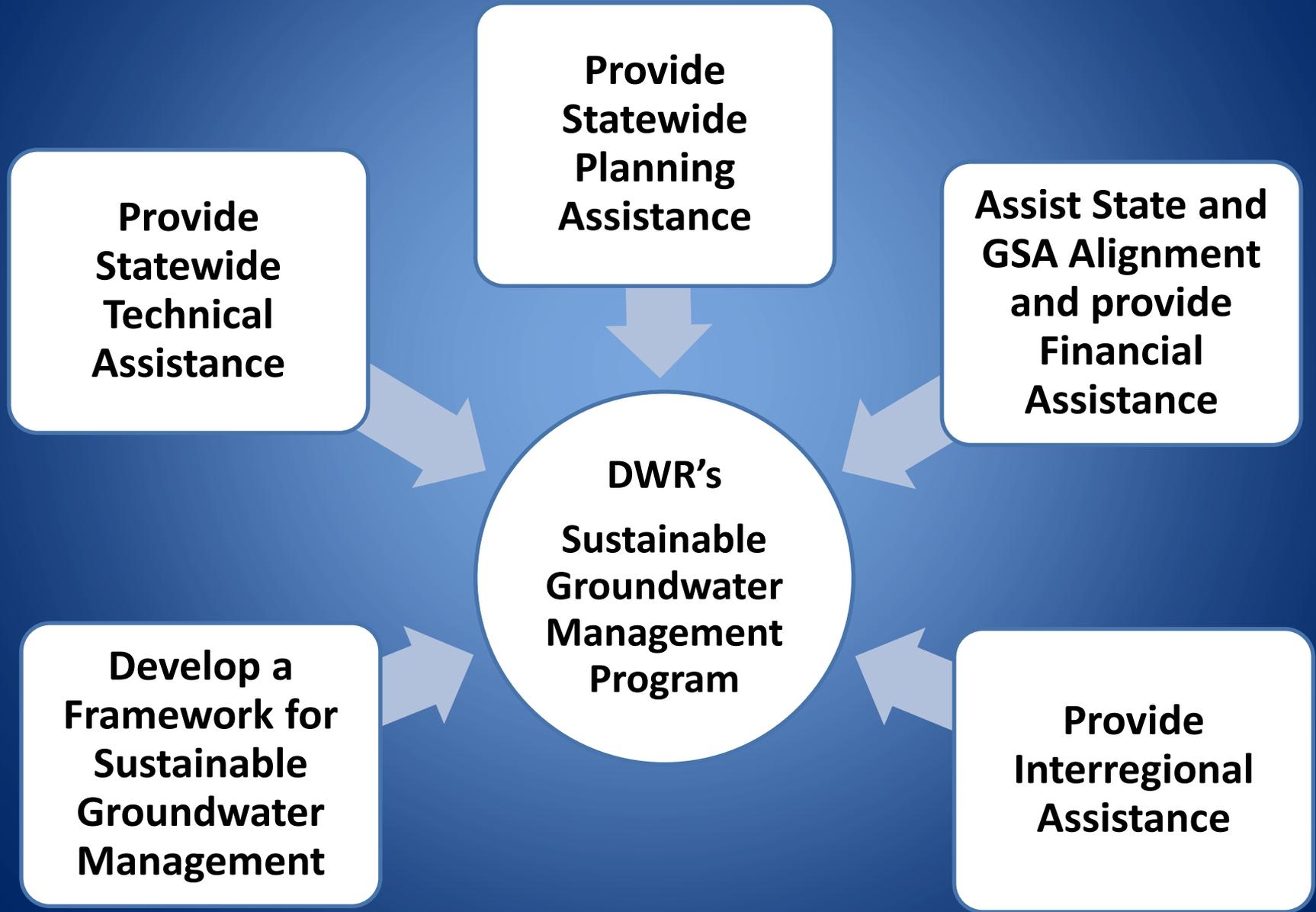
Land
Subsidence

Depletions of
Surface Water

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 not manage their groundwater sustainably, the State will intervene until the local agencies develop and implement sustainable groundwater management plans

DWR's Sustainable Groundwater Management Program

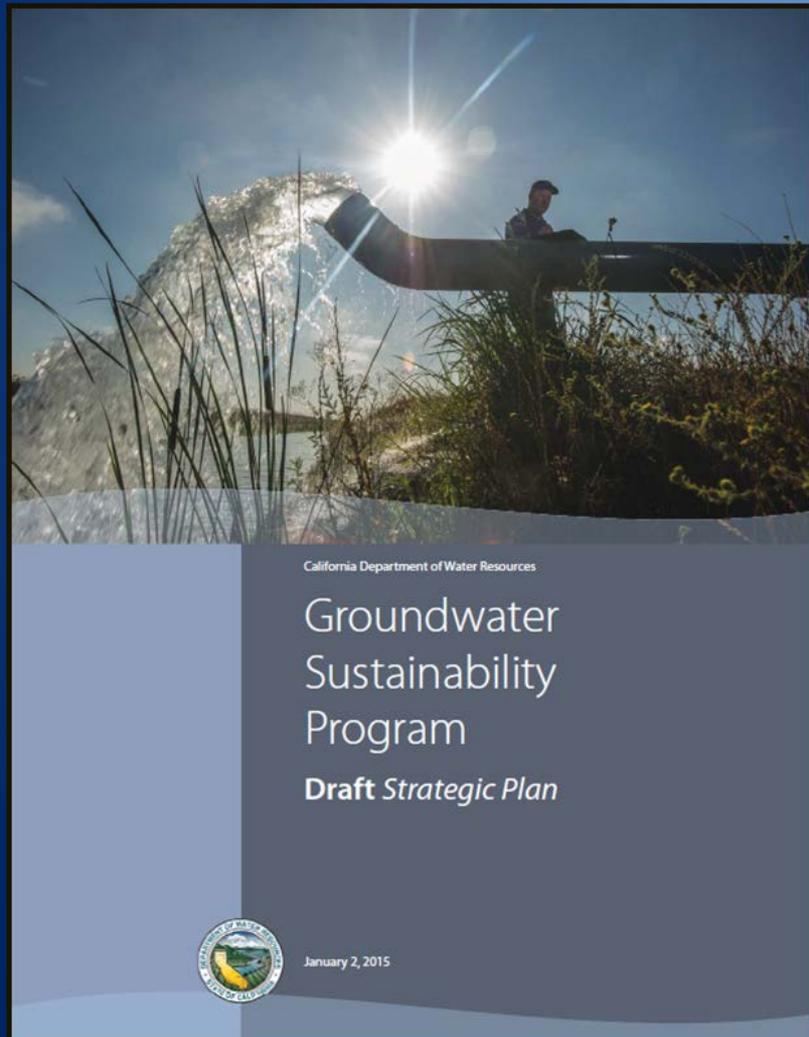


DWR's Implementation of SGMA

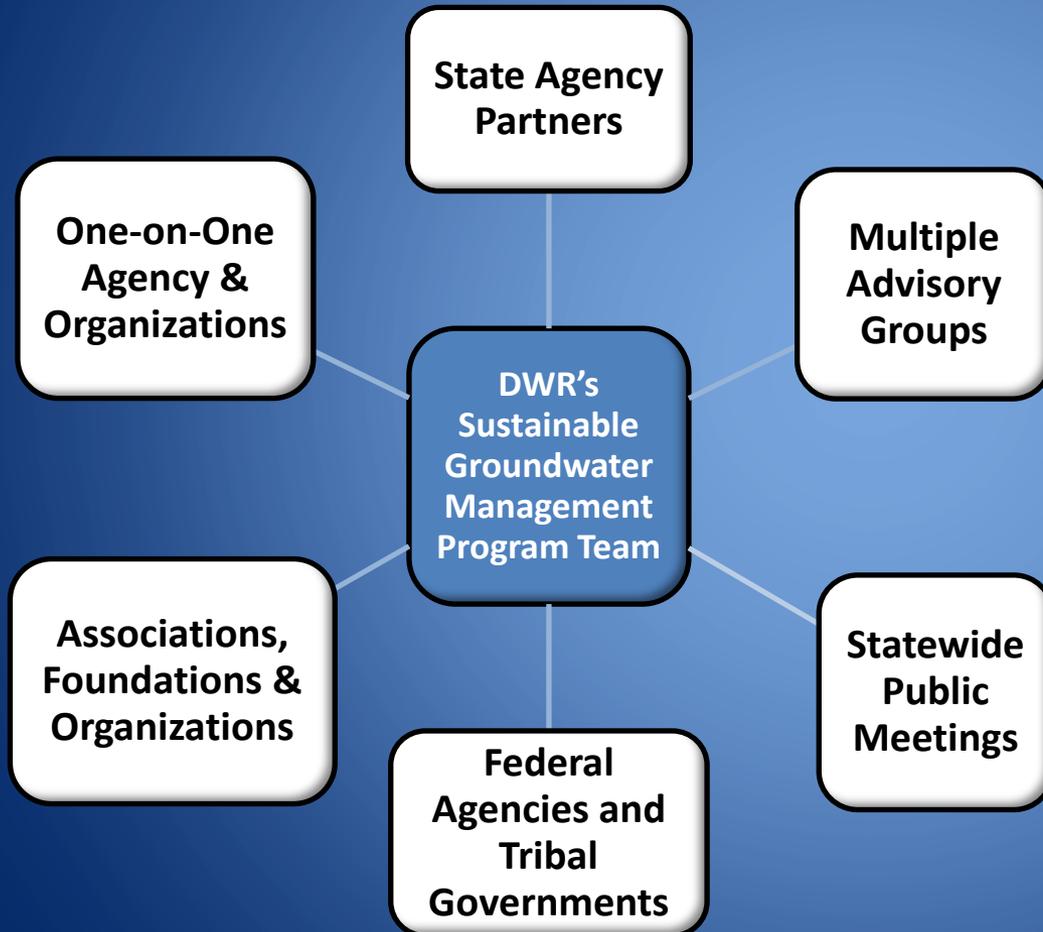
SUSTAINABLE GROUNDWATER MANAGEMENT (SGM) PROGRAM

- Describes DWR's roles and responsibilities
- Outlines actions from the California Water Action Plan
- Presents DWR's groundwater sustainability goals, objectives, and actions

<http://water.ca.gov/groundwater/sgm/index.cfm>



SGM Communication and Outreach

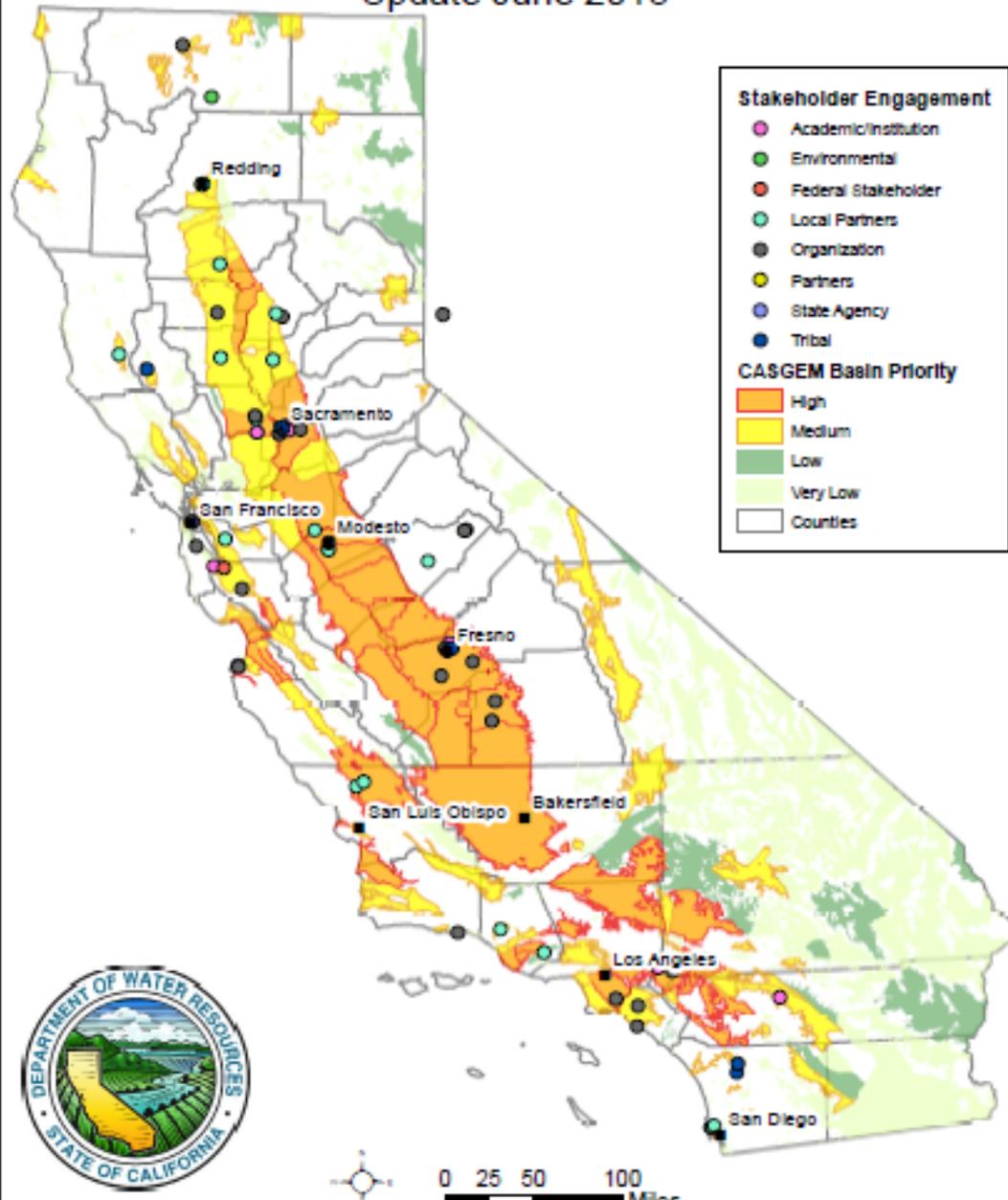


ADVISORY GROUPS

- Practitioners Advisory Panel
- Tribal Advisory Group
- Non-Governmental Organizations
- Association of California Water Agencies
- Northern California Water Association
- San Joaquin Tributaries Authority
- San Luis & Delta Mendota Water Authority
- Central Coast Area
- RCRC & CSAC
- Agricultural Community
- Tulare Lake Hydrologic Group

DWR Sustainable Groundwater Management Program Engagement

Update June 2015



More than 100 events

SGMA 101

Interagency Website DWR Website SWRCB Website

Communication & Outreach Tools



California Groundwater

HOME ABOUT GROUNDWATER LEGISLATION TIMELINE COMPLIANCE MAP

Sustainable Groundwater Management



For the first time in California history, the Sustainable Groundwater Management Act (SGMA) requires all groundwater basins to adopt groundwater management plans that are designed to ensure a sufficient and reliable water supply regardless of weather patterns. California's groundwater management plans will provide a buffer against drought, ensure a sufficient water supply, and sustainable groundwater management. The California Groundwater website offers links and news from

SGMA Toolbox

SGM Sustainable Groundwater Management

Introduction

The Department of Water Resources (DWR) has developed the Sustainable Groundwater Management (SGM) Program. DWR's SGM Program responsibilities include: (1) developing regulations to ensure groundwater sustainability; (2) for evaluating and implementing Groundwater Sustainability Plans; (3) identifying basins subject to critical conditions of overdraft; (4) developing groundwater replenishment; and (5) publishing best management practices.

Announcements

NEW Groundwater Sustainability Plan (GSP) Draft
DWR has published Discussion Papers on all of the GSPs. The discussion papers can be submitted to sgmps@dwr.ca.gov. Information meetings are available [here](#).

NEW GSA notification received
DWR has received a notification of formation of a Groundwater Sustainability Agency (GSA).

Sustainable Groundwater Planning Grant Program
DWR has released draft Guidelines and Proposal Solicitation for the Sustainable Groundwater Planning Grant Program. Find more information [here](#).

Groundwater Sustainability Program D

CA.gov | Help | Accessibility



CALIFORNIA DEPARTMENT OF WATER RESOURCES

HOME NEWSROOM & EVENTS ISSUES ABOUT US

CA.gov | Help | Accessibility

Search

DWR California

Groundwater

Introduction

Groundwater resources play a vital role in maintaining California's economic and environmental sustainability. During an average year, California's 515 alluvial groundwater basins and subbasins contribute approximately 38 percent toward the State's total water supply. During dry years, groundwater contributes up to 46 percent (or more) of the statewide annual supply, and serves as a critical buffer against the impacts of drought and climate change. Many municipal, agricultural, and disadvantaged communities rely on groundwater for up to 100 percent of their water supply needs. Groundwater extraction in excess of natural and managed recharge has caused historically-low groundwater elevations in many regions of California.

DWR has a long-standing history of collecting and analyzing groundwater data, investigating and reporting groundwater conditions, implementing local groundwater assistance grants, encouraging integrated water management, and providing the technical expertise needed to improve statewide groundwater management practices. In addition, DWR is responsible for implementing the Sustainable Groundwater Management Act (SGMA), the California Statewide Groundwater Elevation Monitoring (CASGEM) Program, and characterizing California's groundwater basins through updates to Bulletin 118.

The Sustainable Groundwater Management (SGM) Program

To implement the increased responsibilities given to DWR by the 2014 Sustainable Groundwater Management Act (SGMA), DWR has expanded its existing local assistance programs in the Division of Integrated Regional Water Management (DIRWM) and has developed a Strategic Plan for the Sustainable Groundwater Management (SGM) Program. [More info...](#)

GROUNDWATER HOME

- SUSTAINABLE GROUNDWATER MANAGEMENT
- GROUNDWATER INFORMATION CENTER
- CASGEM
- BULLETIN 118



SGM Immediate Actions

Develop Emergency Regulations - Basin Boundary Revisions

Draft Regulations Posted (July 17, 2015)

Public Comments Closed (Sept 4, 2015)

Final Regulations Due - January 2016

Identify Basins Subject to Critical Conditions of Overdraft

Draft list posted (Aug 19, 2015)

Public Comments Closed (Sept 25,
2015)

Develop Emergency Regulations - (GSPs)

Working with advisory groups /public meetings

Draft Regulations Tentative (Dec '15/Jan '16)

Final Regulations Due - June 2016

Update Basin Prioritization

Used existing - January 2015

Re-prioritization following basin
boundary revisions in 2017

Groundwater Sustainability Agency Formation

26 as of September 28, 2015

Senate Bill 13 – Requires Complete Notifications and No Overlapping GSAs

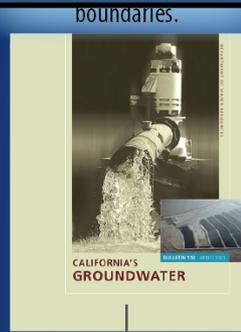
Develop Emergency Regulations - Basin Boundary Revisions

Draft Regulations Posted (July 17, 2015)

Public Comments Closed (Sept 4, 2015)

Final Regulations Due - January 2016

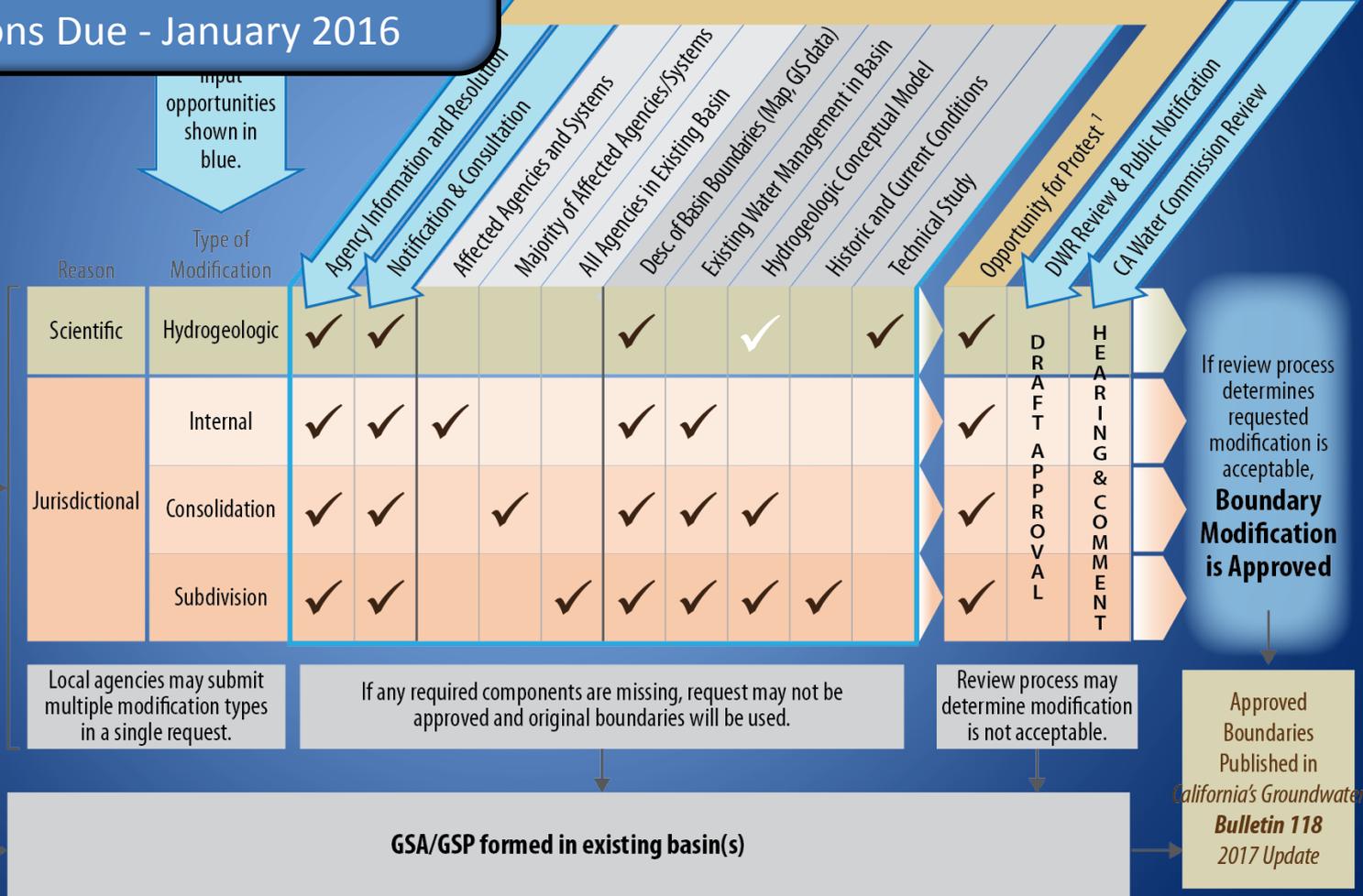
Required Components of Submittal		
Information required is dependent upon type of modification.		
(1) Local Info	(2) Local Support	(3) Technical Information



Boundary modification desired by local agency?

NO

YES



Critically Overdrafted Basins

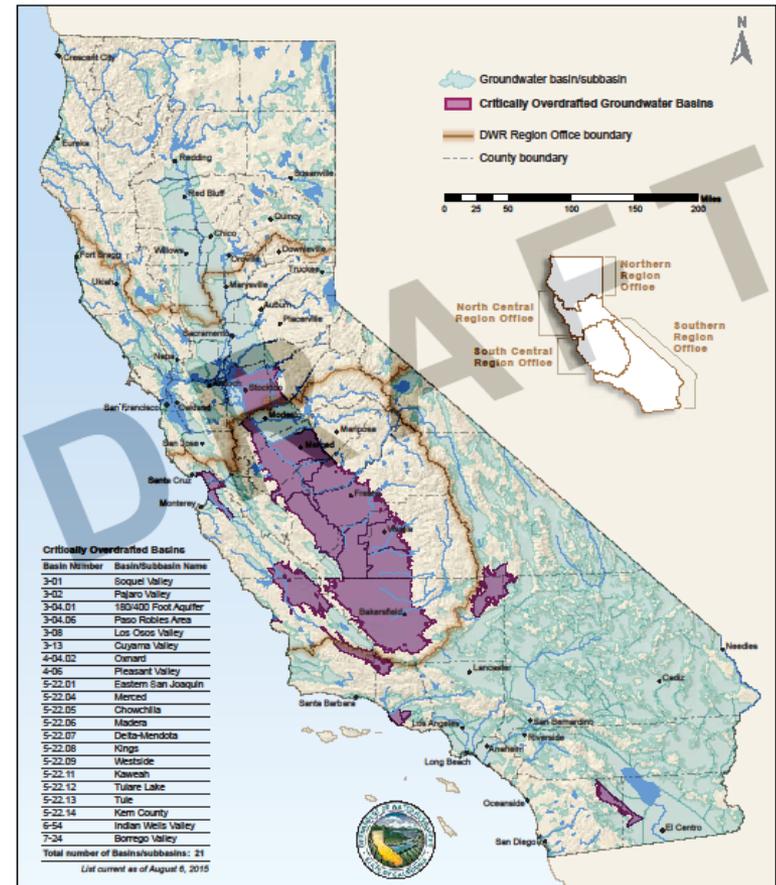
- GSPs required by 2020

Identify Basins Subject to Critical Conditions of Overdraft

Draft list posted (Aug 19, 2015)

Public Comments Closed (Sept 25, 2015)

Critically Overdrafted Groundwater Basins – August 6, 2015 Draft



SGMA Basin Prioritization

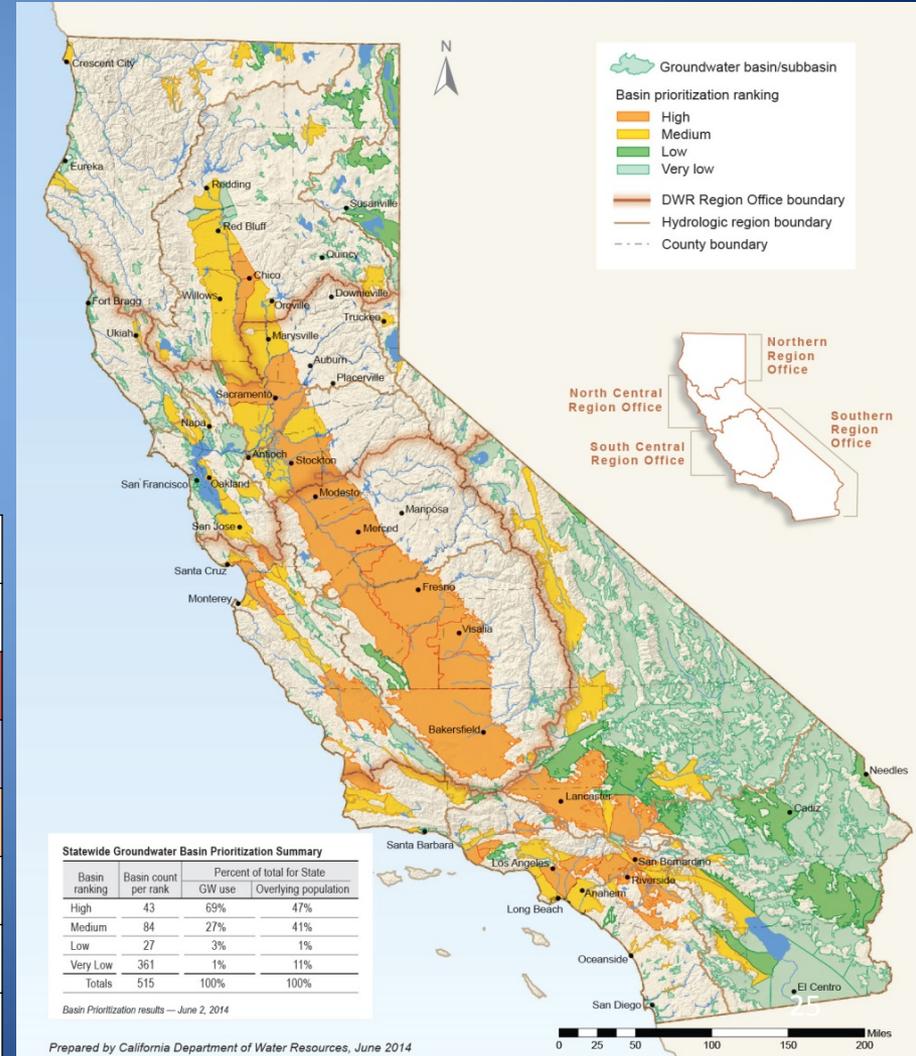
Update Basin Prioritization

Used existing - January 2015

Re-prioritization following basin boundary revisions in 2017

BASIN RANKING	BASIN COUNT	PERCENT OF TOTAL	
		GW USE	POPULATION
High	43	69%	47%
Medium	84	27%	41%
Low	27	3%	1%
Very Low	361	1%	11%
Totals	515	100%	100%

Basin Prioritization Results – June 2, 2014



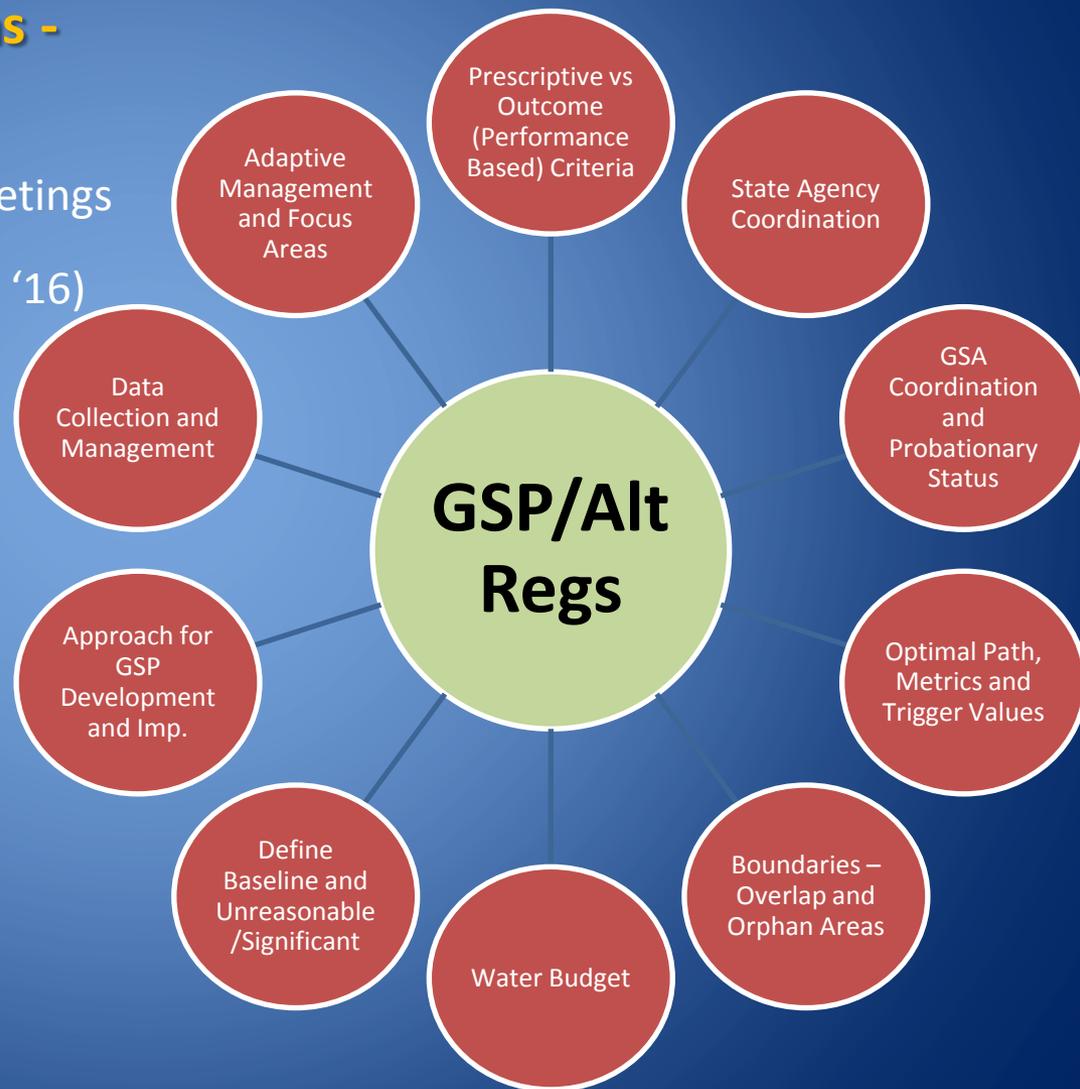
Groundwater Sustainability Plans (GSPs) and Alternatives

Develop Emergency Regulations - (GSPs)

Working with advisory groups /public meetings

Draft Regulations Tentative (Dec '15/Jan '16)

Final Regulations Due - June 2016



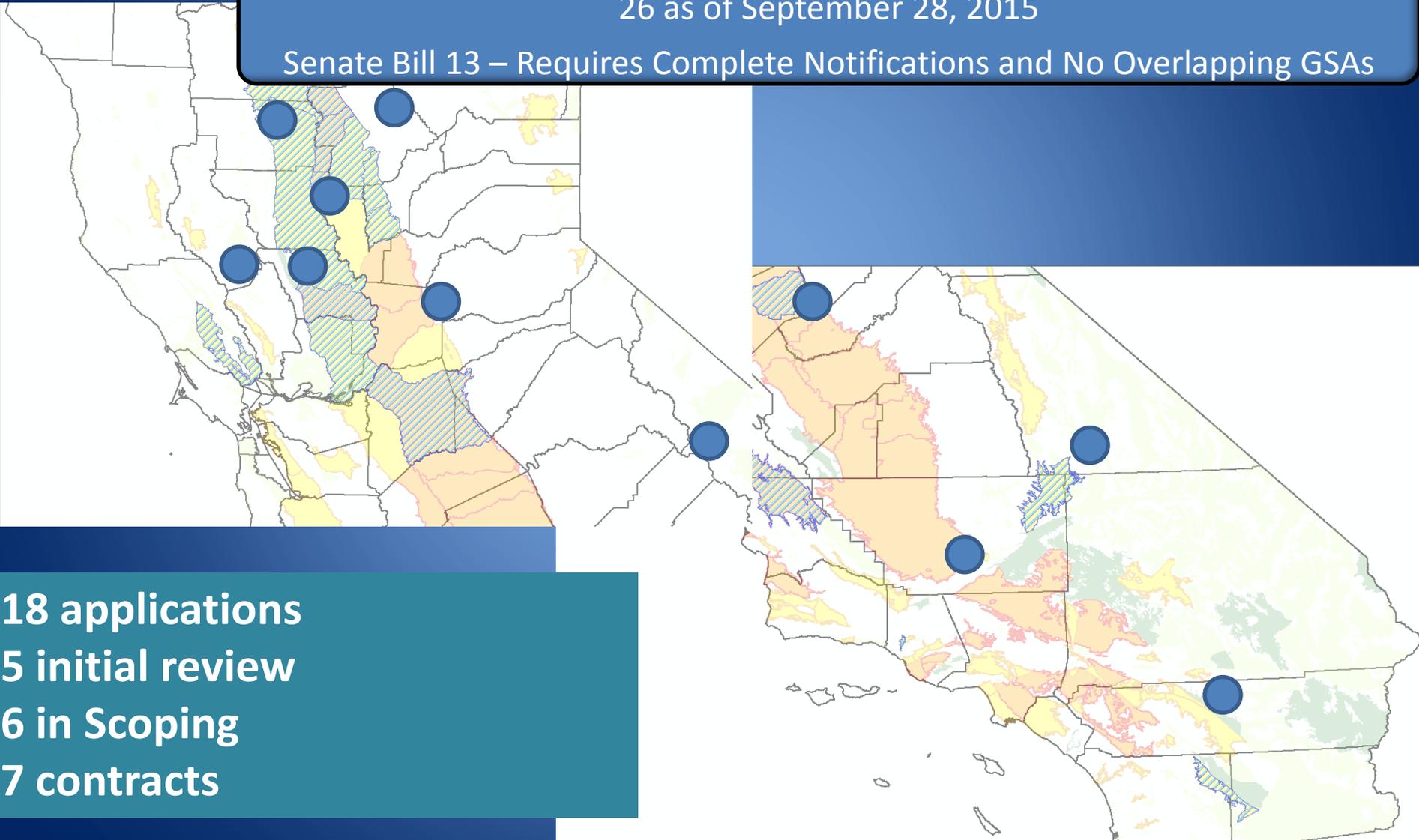
Assistance to Locals

Facilitation Support Service

Groundwater Sustainability Agency Formation

26 as of September 28, 2015

Senate Bill 13 – Requires Complete Notifications and No Overlapping GSAs

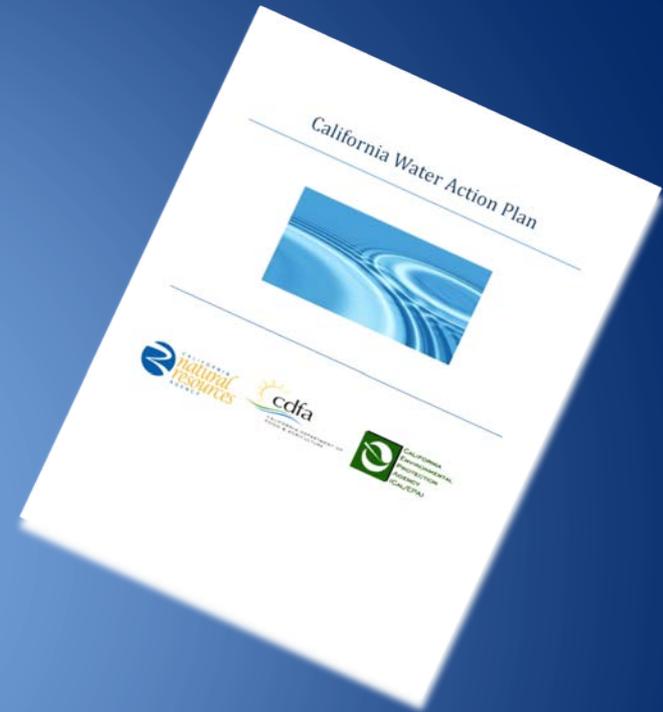


18 applications
5 initial review
6 in Scoping
7 contracts

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: http://www.waterboards.ca.gov/water_issues/programs/gmp/

