

Forum on Groundwater Management & Policy

The Sustainable Groundwater Management Act

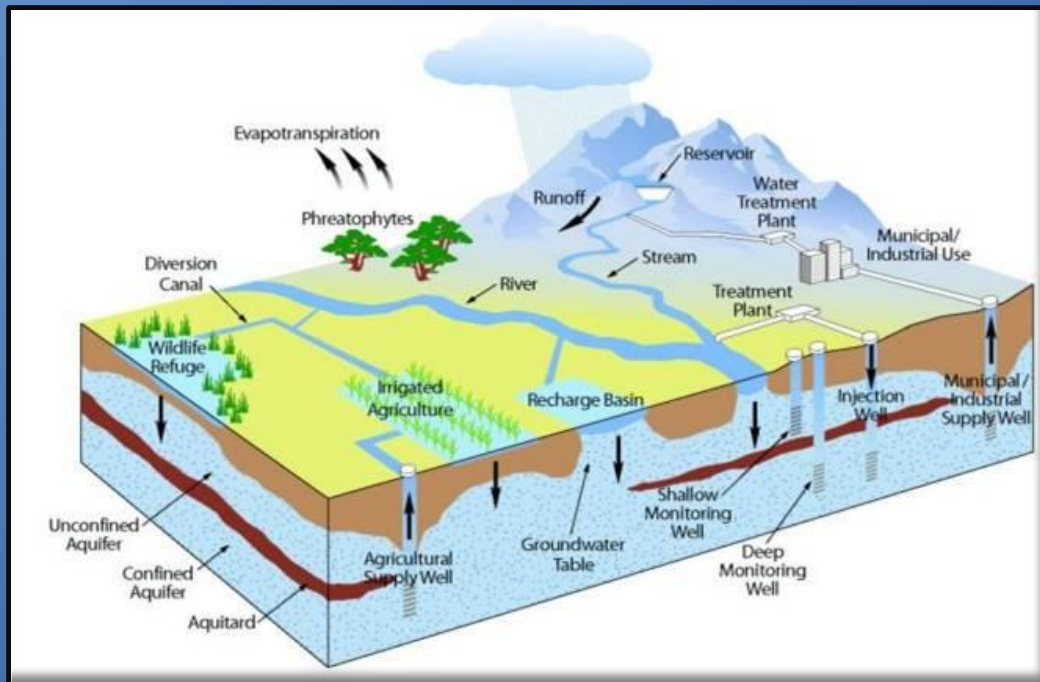
November 17, 2015

David Gutierrez
 CA Department of Water Resources

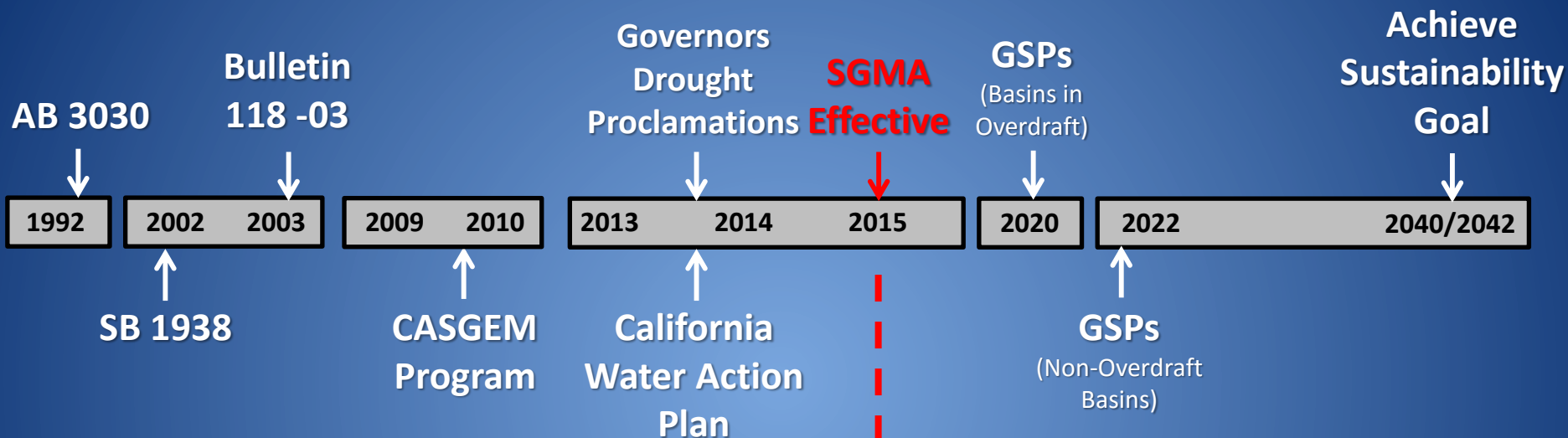


California Water Action Plan

Action 6: Expand water storage capacity and improve groundwater management



California's Major Groundwater Milestones



Voluntary Groundwater Management

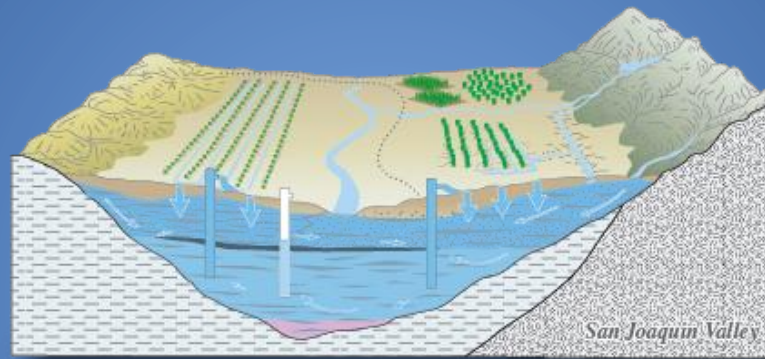
- Service Area Planning
- Minimal Implementation
- Variable Authority
- Grant Incentives

Required Groundwater Management

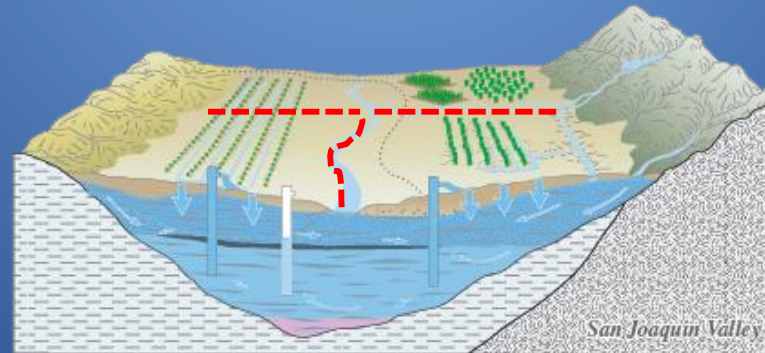
- Entire Basin Planning
- Required Implementation
- GSAs have new:
 - Authorities
 - Responsibilities
- State Backstop

Groundwater Basins and Subbasins

Scientific



Jurisdictional



SGMA Basin Prioritization

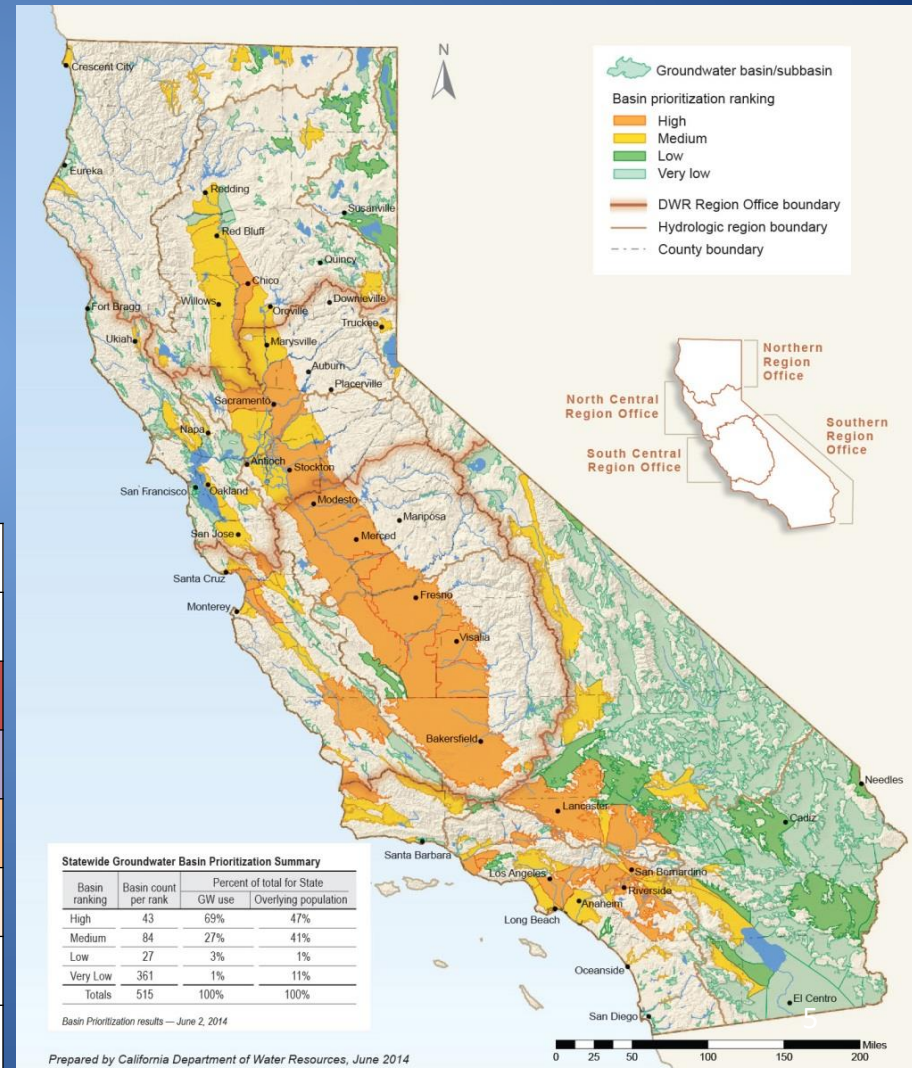
Update Basin Prioritization

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



*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

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

- GSA Formation by June 30, 2017
- Only local agencies can be GSAs
- 53 GSAs as of Sept. 7, 2015

Groundwater Sustainability Plans

- January 31, 2020 for critically overdrafted basins
- January 31, 2022 for all other high and medium priority basins
- Basins with multiple GSPs must coordinate through agreements

Groundwater Sustainability

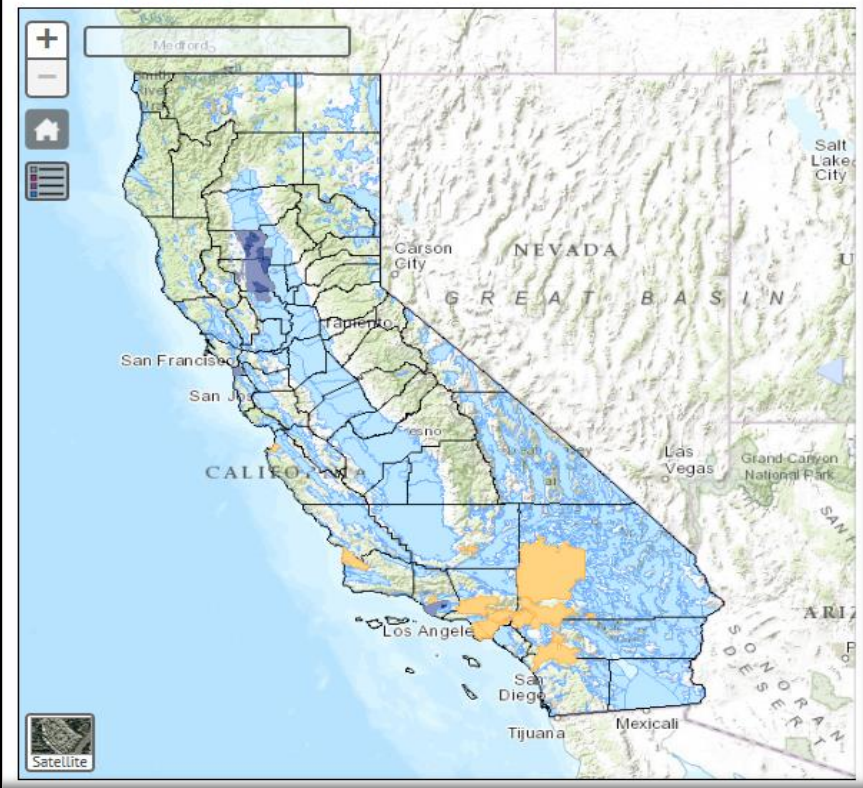
- 20-year implementation period
- 50-year planning horizon

GSA Interactive Map

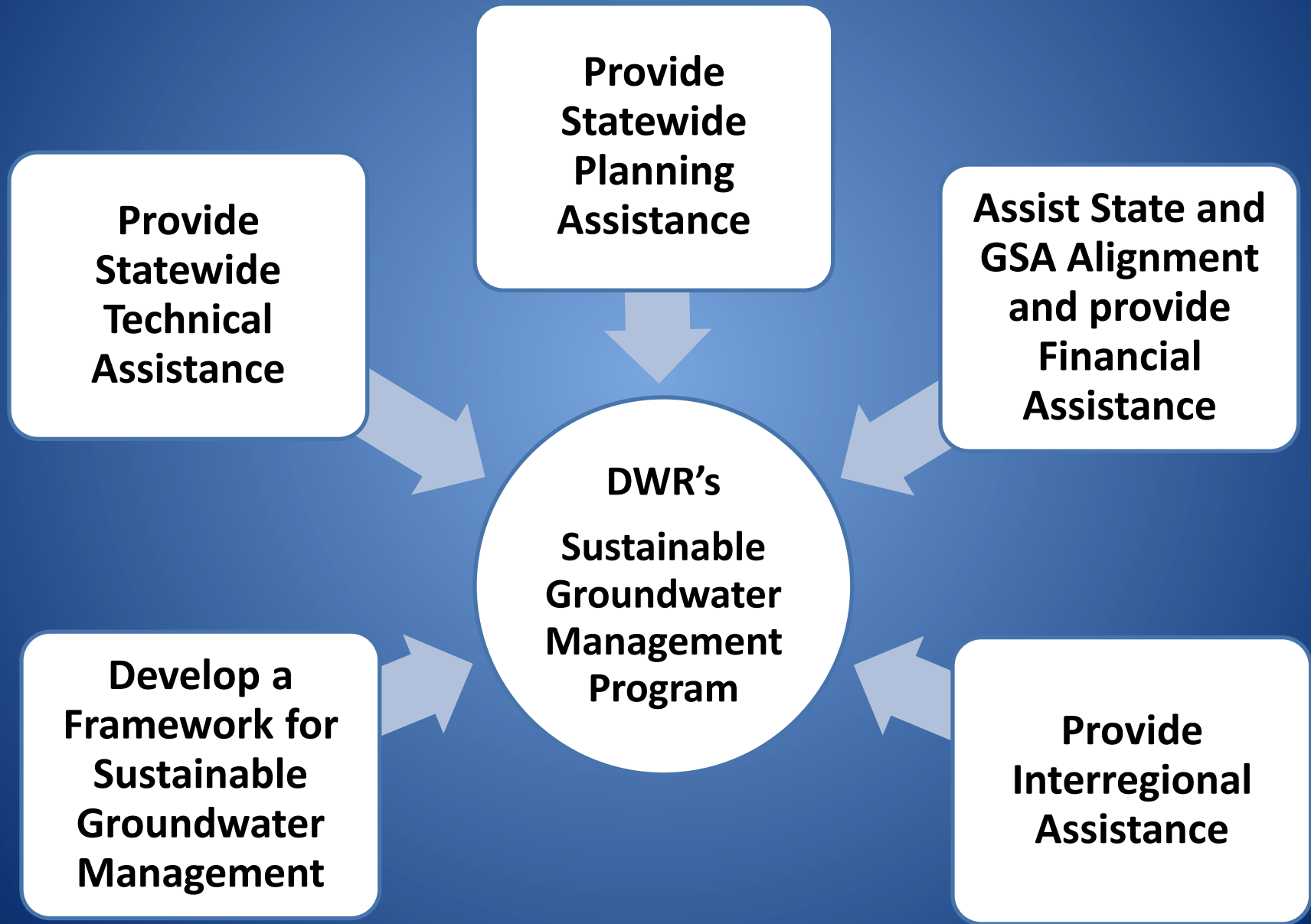
This interactive map shows the location of local agencies that have elected to become Groundwater Sustainability Agencies (GSAs). The boundaries of the GSAs are based on information submitted to DWR by those local agencies. While DWR makes every effort to provide accurate information, DWR has not reviewed 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).

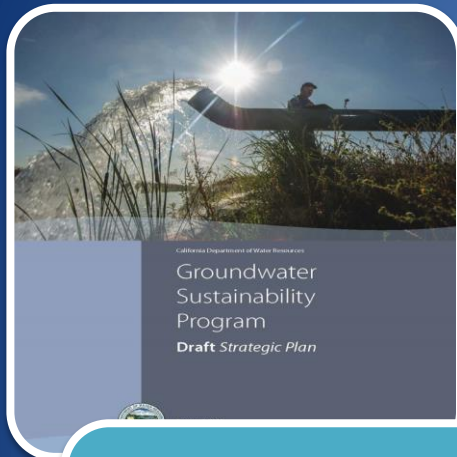
If you have questions related to GSAs or have comments related to the interactive map please contact Mark Nordberg at Mark.Nordberg@water.ca.gov. The GSA Interactive Map was last updated on August 10th, 2015.



DWR's Sustainable Groundwater Management Program



Communication and Outreach - Phases



SGMA 101

- SGMA Overview
- Roles and responsibilities
- Strategic Plan

Sep 2014 – Mar 2015



Draft Regulations

- Basin Boundary
- GSP
- Critically Overdrafted Basins

Apr – Sep 2015



Local Outreach

- Engagement
- Identify champion agencies
- GSA formation

Oct 2015 – Jun 2016

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 Sustainable Groundwater Management Act (SGMA) provides a buffer against drought, ensures 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 compliance with the Act for evaluating and implementing Groundwater Sustainable Groundwater Management (SGM) basins subject to critical conditions of overdraft; (2) identifying basins subject to critical conditions of overdraft; (3) identifying basins subject to critical conditions of overdraft; (4) identifying basins subject to critical conditions of overdraft; and (5) publishing best management practices.

Announcements

Water 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](#).

Water GSA notification received
DWR has received a notification of formation of a Groundwater Sustainability Plan (GSP) for the 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

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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)

Regulations Completed (Nov 16, 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

Senate Bill 13 – Requires Complete Notifications and No
Overlapping GSAs

Provide Facilitation Services

Advisory Groups

Partners

- California Water Commission
- State Water Board

Statewide Groups

- Practitioners Advisory Panel
- Non-Governmental Organization
- ACWA
- Counties (RCRC & CSAC)
- Ag Communities

Regional Groups

- Norther California Water Association
- San Luis & Delta-Mendota Water Authority
- San Joaquin Tributaries Authority
- Central Coast Area
- Tulare Lake HR Group

Tribal Advisory Group

The “Backstop” State Board Intervention

After	Intervention Trigger
June 30, 2017	Areas without a GSA begin reporting well locations and extraction data to SWRCB; can begin probationary basin designation 180 days later.
Jan. 31, 2020	Can begin probationary basin designation in critically overdrafted basins with no GSP or where DWR finds the GSP is inadequate
Jan. 31, 2022	Can begin probationary basin designation in other high/medium priority basins without a GSP or where DWR finds the GSP is inadequate
Jan. 31, 2025	Probationary basin designations where DWR finds GSP is inadequate and significant depletions of interconnected surface waters

In all triggering events, intervention is the result of failure by locals to create a GSA or adopt and implement a GSP

State Board Can Act as a Basin Manager

Develop fees to support basin management

```
graph TD; A[Develop fees to support basin management] --> B[Designate probationary basins]; B --> C[Probationary basins lead to interim sustainability plans]; C --> D[Interim plans manage basins until local efforts come up to speed];
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Designate probationary basins

Probationary basins lead to interim sustainability plans

Interim plans manage basins until local efforts come up to speed

State Intervention is Not The Final Step

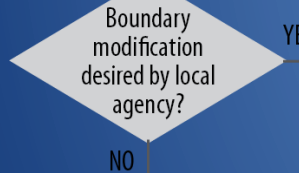
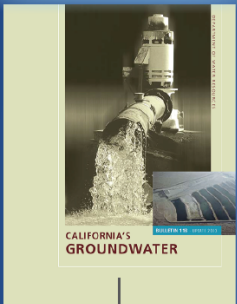
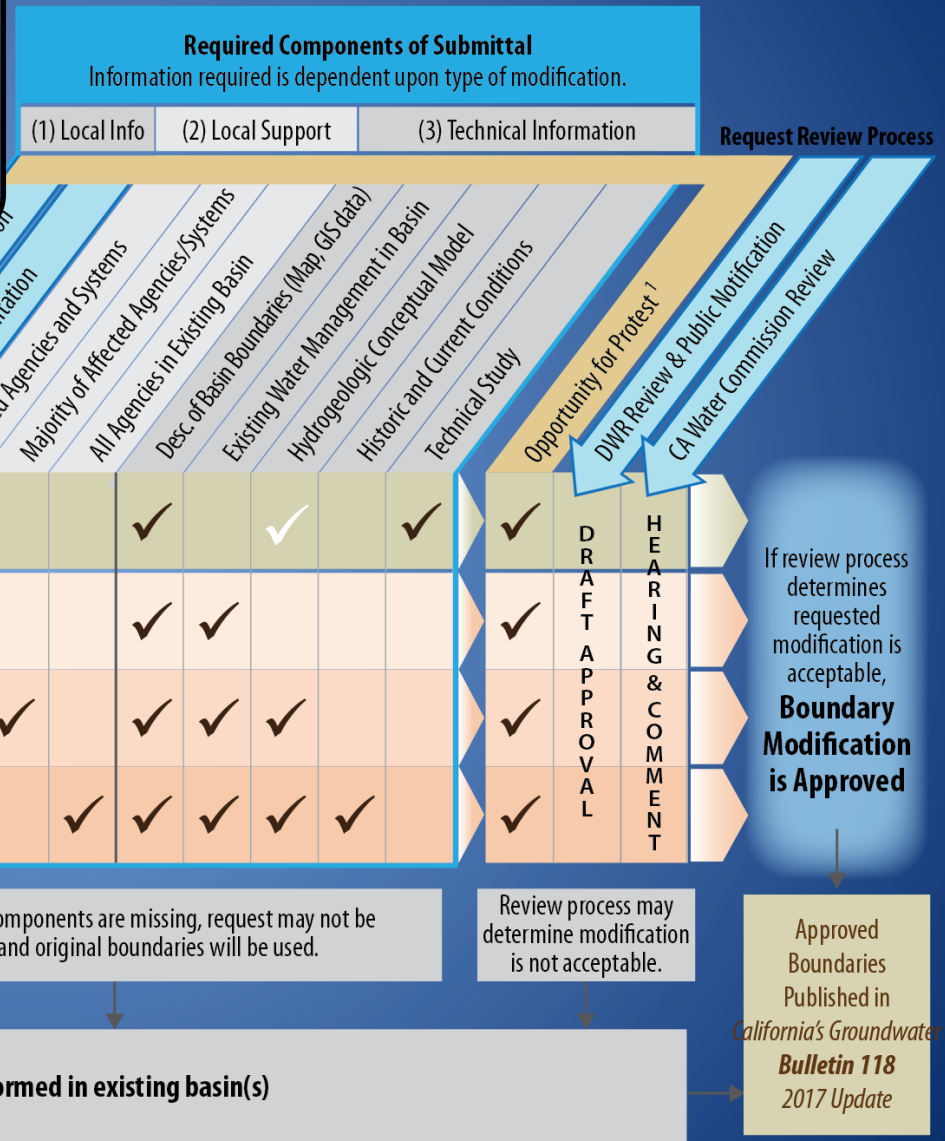
- State intervention is temporary, and basin water users would still be required to develop their own plan for their basin.
- State intervention would focus on “demand management” with limited options for solving overdraft problems.
- After reimbursing the state, basin water users would still be required to fund their own solution for managing the basin.
- A basin adjudication after January 1, 2015 would still be required to comply with all the requirements of SGMA.

Develop Emergency Regulations - Basin Boundary Revisions

Draft Regulations Posted (July 17, 2015)

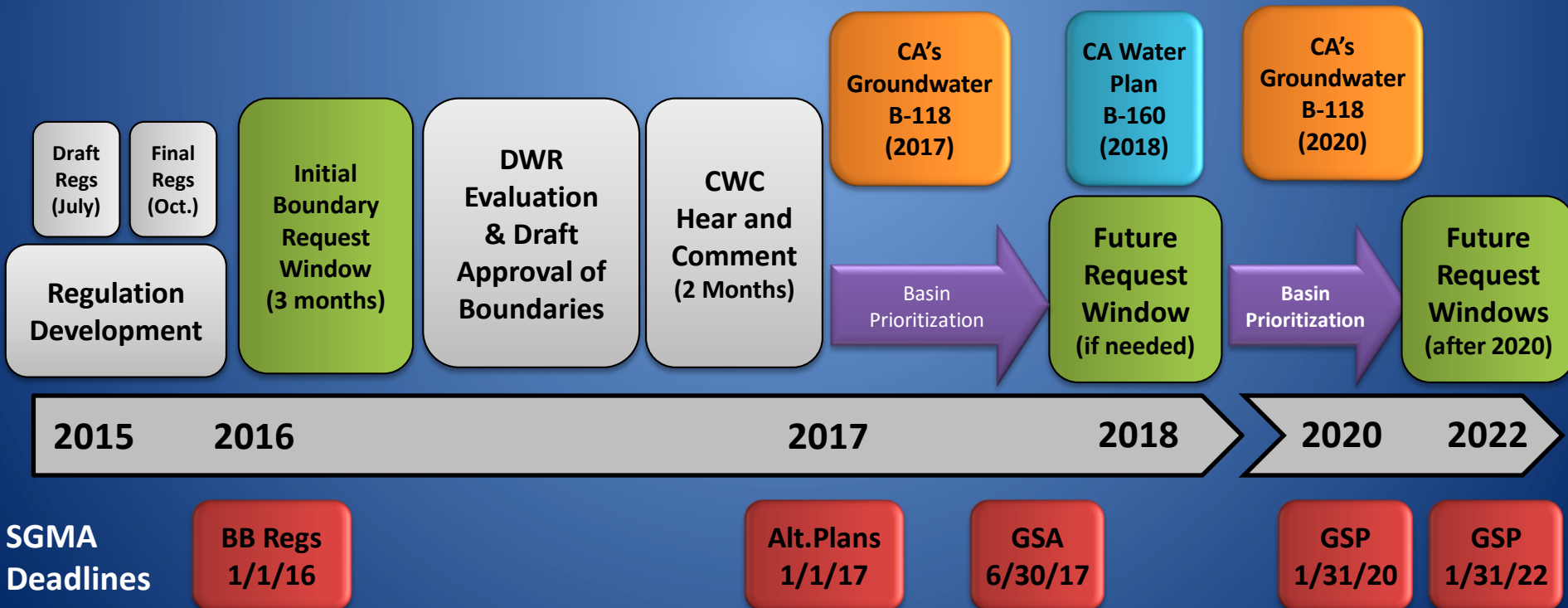
Final Regulations Complete (Nov, 2015)

Final Regulations Due - January 2016



Boundary Modification Opportunities

- Initial Boundary Modification Request “Window” of 3 months.
- Future Request “Windows” Linked to B-118 updates or more frequent if needed.



Groundwater Basin Boundary Resources

1. DWR Basin Boundary Modification Website (Informational)

http://www.water.ca.gov/groundwater/sgm/basin_boundaries.cfm



SGM Sustainable Groundwater Management

Basin Boundary Modifications

The Sustainable Groundwater Management Act (SGMA) established a process for local agencies to request that the Department of Water Resources (DWR) revise the boundaries of existing groundwater basins or subbasins, including the establishment of a new subbasin. California's existing groundwater basin and subbasin boundaries are defined in DWR's Bulletin 118-Update 2003 and are also available for viewing on the Groundwater Basin Boundary Assessment Tool.

The Basin Boundary Emergency Regulation was developed through an extensive stakeholder outreach process and was adopted on October 21, 2015. The provisions of the emergency regulation go into effect on November 16, 2015.

How to Submit Basin Boundary Modification Requests

DWR has developed a Basin Boundary Modification Request System for use by local agencies to submit initial notification and basin boundary modification requests. The system also provides public access to view basin boundary modification information.

Important Note - One of the first steps in the basin boundary modification process is initial notification of a potential basin boundary modification. This process is described in Section 343.9 of the regulation and on the Basin Boundary Modification Request System.

When to Submit Basin Boundary Modification Requests

The following is the anticipated schedule and next steps for basin boundary modifications:

Events	Schedule*
Basin Boundary Regulation Effective	November 16, 2015
Basin Boundary Modification Reporting System Available For Submission of Initial Notification (Pursuant to Section 343.9) of Potential Basin Boundary Modifications	November 16, 2015
Basin Boundary Modification Instructional Webinar (Details Available Soon)	December 17, 2016
Basin Boundary Modification Request Submission Period Opens	January 1, 2016
Last Date to Submit Basin Boundary Modification Requests Within the Initial Submission Period	March 31, 2016

*All dates are subject to change.

GROUNDWATER HOME

SUSTAINABLE GROUNDWATER MANAGEMENT

- Basin Boundary Modifications
 - Boundary Assessment Tool
 - Modification Request System
- Groundwater Sustainability Agencies
 - Notices of Intent Table
 - GSA Formation Table
 - GSA Interactive Map
- Groundwater Sustainability Plan Regulations
 - Best Management Practices
- Critically Overdrafted Basins
 - Public Comments
- Initial Basin Prioritization
- Communication and Outreach
 - Advisory Groups
 - Statewide SGMA Calendar
 - Region Office Contacts
 - Subscribe for Email Updates
- Resources
 - SGM Archive

2. DWR Basin Boundary Assessment Tool (Informational)

<https://gis.water.ca.gov/app/bbat/>



Groundwater Basin Boundary Assessment Tool

DWR Boundary Assessment | **Boundary References** | Geology References

Boundary References

- County Boundaries
- Region Office Service Areas
- Hydrologic Regions
- Prop 1 Funding Areas
- Regional Water Quality Control Board Boundaries
- Tribal Lands
- Military Installations, Ranges, and Training Areas
- CDPW Lands
- Regional Flood Planning Boundaries
- Reclamation Districts
- CASGEM Designated Monitoring Entities as of 10-19-15
- CASGEM Groundwater Basin Prioritization
- Groundwater Management Plans
- IRWM Regions
- Disadvantaged Community Block Groups
- Disadvantaged Community Tracts
- Disadvantaged Community Places
- Water Agencies
- Bulletin 118 Groundwater Basins
- Watersheds

Boundary References

Click on features in the map or see below for more information:

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Below are brief descriptions to the layers contained in the map:

County Boundaries This layer depicts the boundaries of California's Counties as developed by CAL FIRE.

Region Office Service Areas This layer depicts the coverage Area of DWR's Region Offices. [View info.](#)

Hydrologic Regions This layer depicts the 12 areas representing the major California watersheds and is used by a variety of DWR programs including the CA Water Plan. [View info.](#)

Prop 1 Funding Areas This layer depicts the 22 funding areas called out in Proposition 1. [View info.](#)

Regional Water Quality Control Board Boundaries This layer depicts the boundaries of the 9 Regional Water Quality Control Boards. [View info.](#)

Tribal Lands This layer depicts Tribal Lands in the State of California. This layer includes: Historical location of Indian land which was once held in Trust for a Terminated Tribe and/or the location of a landless Federally Recognized Tribe, Indian land currently held in Trust by the United States Government, Indian land currently held in Trust by the United States Government and known as a Public Domain Allotment, Indian land currently held in Trust by the United States Government but resides in the Nevada or Arizona Jurisdiction. [View info.](#)

Military Installations, Ranges, and Training Areas This layer depicts major military installations, ranges, and training areas in California. [View info.](#)

Groundwater Basin Boundary Resources

3. DWR Basin Boundary Modification System (Operational)

Local Agency Tools

- Submit Initial Notification
- Submit Boundary Requests

Public Tools

- Table of Boundary Modification Requests
- Map of Boundary Modification Requests

<http://sgma.water.ca.gov/basinmod/>

CA.GOV Department of Water Resources
Basin Boundary Modification Management System

Welcome to the Basin Boundary Modification Request System. The Sustainable Groundwater Management Act (SGMA) established a process for local agencies to request that the Department of Water Resources (DWR) revise the boundaries of a groundwater basin or subbasin, including the establishment of a new subbasin. This tool is for use by local agencies to request basin boundary modifications and for the public to access basin boundary modification information.

Registration and login are required to submit a basin boundary modification request, but are not required to view submitted information.

The system accepts voluntary basin boundary modification requests from local agencies, pursuant to DWR's [Basin Boundary emergency regulation](#). Additional information is available about the [existing Bulletin 118 groundwater basins](#) and an [interactive map](#) is available to help visualize the Bulletin 118 groundwater basins and other relevant political, geologic, and geographic boundaries.

- Upon submission, you will receive an email acknowledging receipt of your initial notification or modification request.
- For assistance with the Basin Boundary Modification System, please email the administrator at Timothy.Godwin@water.ca.gov.

Basin Boundary Regulations Became Effective November 16, 2015

STEP 1:
Within 15 days of a local agency's decision to explore boundary modification, the relevant local agency shall notify DWR by completing the Initial Notification

STEP 2:
Local Agencies can submit a Basin Boundary Modification Request starting January 1 through March 31, 2016

Local Agency Submissions Tools

Click Here to Submit Initial Notification (Pursuant to Section 343.9)

Upcoming Basin Boundary Modification Request Submission Period January 1, 2016 through March 31, 2016

Public and Interested Party Tools

View List of Submitted Initial Notifications

View Map of Submitted Initial Notifications

View List of Submitted Modification Requests

View Map of Submitted Modification Requests

If you are interested in being informed when Basin Boundary Modifications related Actions or any other SGM Program actions are made, please subscribe to email listserv here: <http://www.water.ca.gov/groundwater/sgm/subscribe.cfm>

Critically Overdrafted Basins

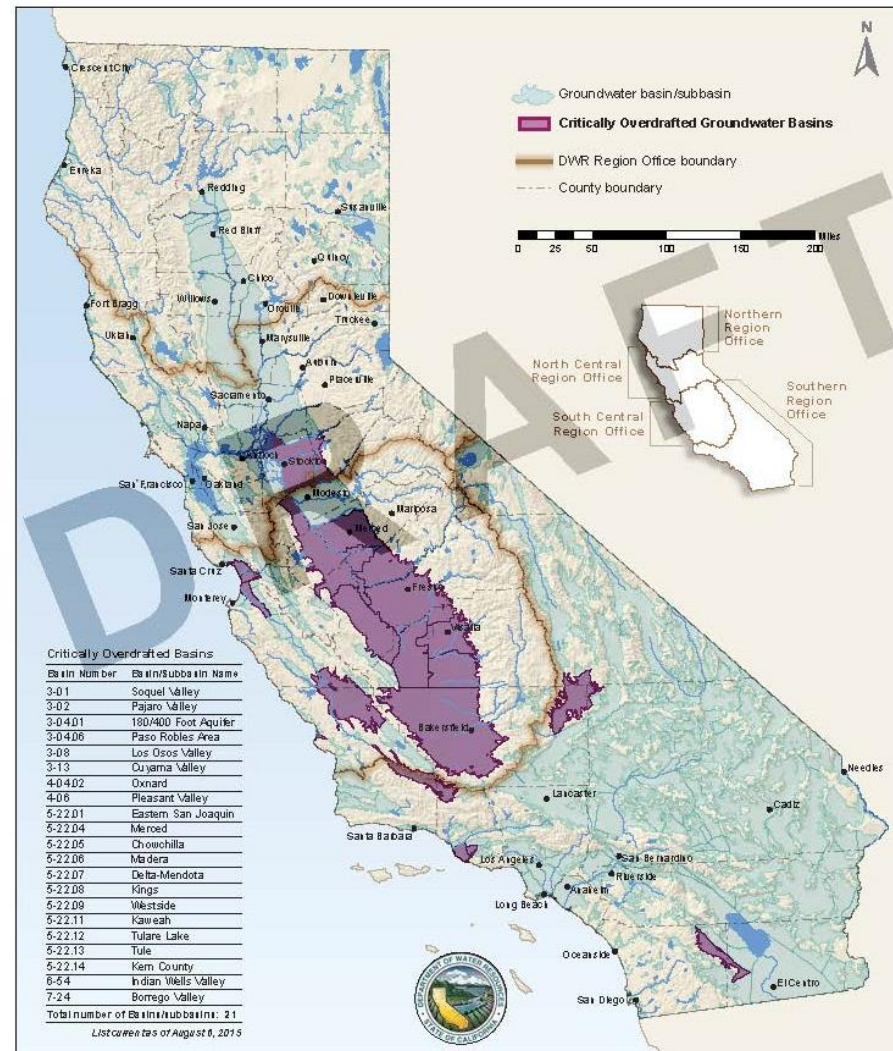
- GSPs required by 2020

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



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



Paths To Sustainability

- Three Options (§ 10727)

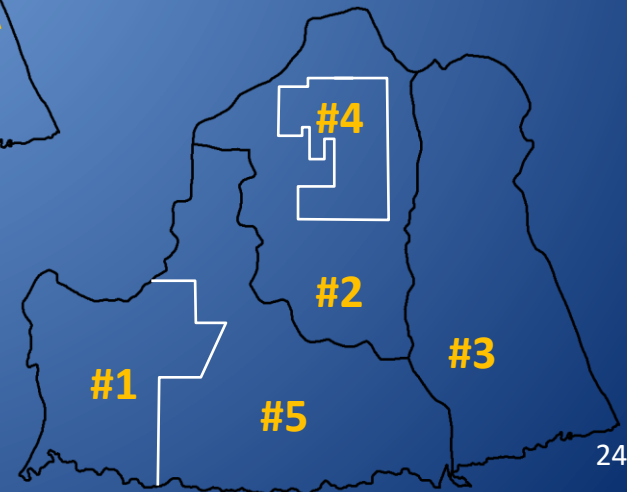


One GSA
One GSP

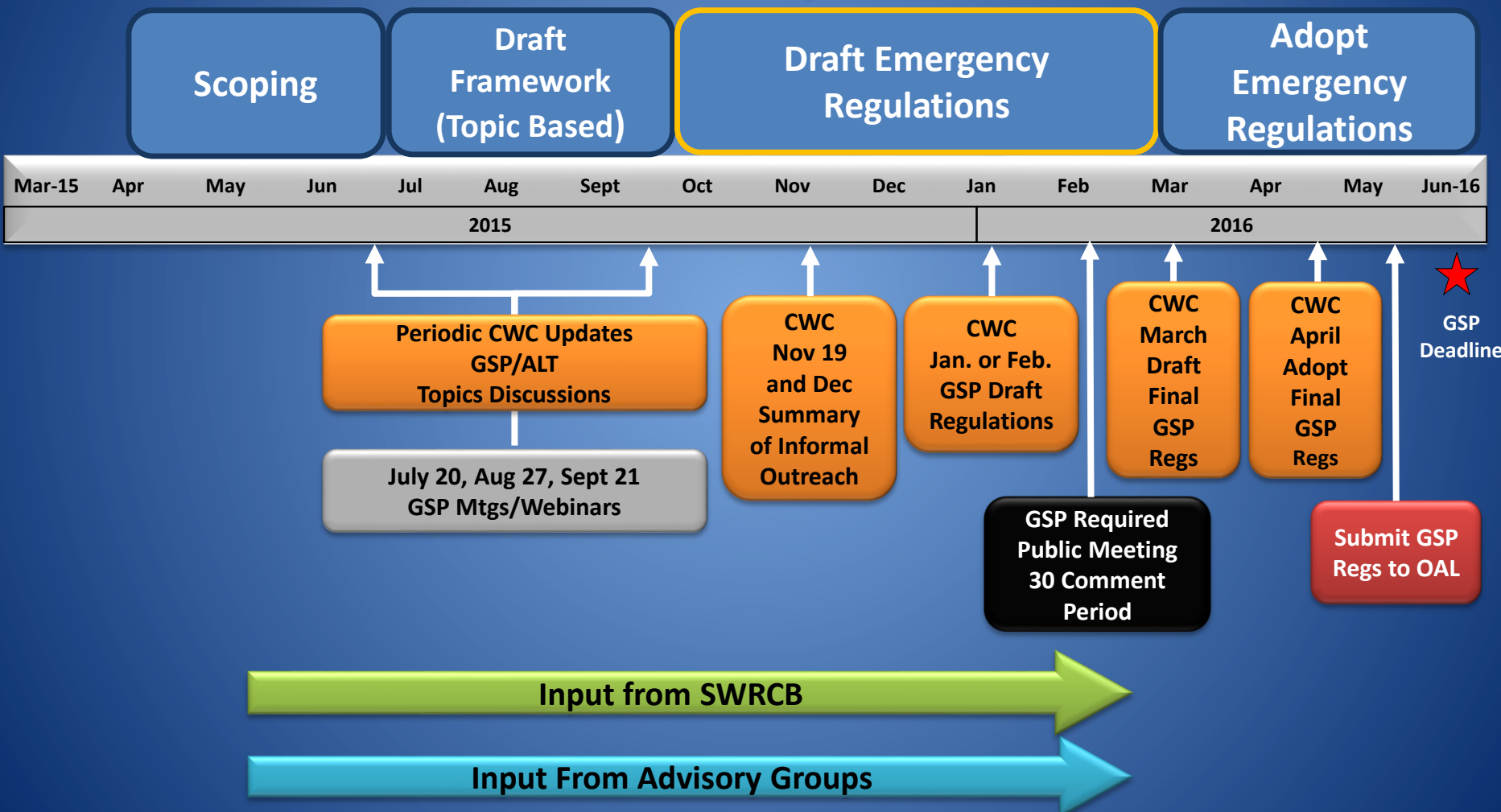


Many GSAs
One GSP

Many GSAs
Many GSPs with a
Coordination
Agreement



Groundwater Sustainability Plan (GSP) Emergency Regulations – Detailed Timeline



Dates and Durations are Subject to Change

Potential Regulation Components

Overview

Potential Regulation Content

Stakeholder Input

Governance & Coordination

"Who is managing & participating"

Governance
Coordination
Land Use

All Topics

6 - Coordination Agreements

7 - State Agency Coordination

8 - Water Budgets and Coordination

3 - Land Use & County Involvement

Basin Setting

"What are the current conditions"

Basin Conditions

2- Pre SGMA Conditions and Undesirable Results

SGM Planning

"How will GW be managed & measured"

Sustainability Goal (Sustainable Yield, SGM)
Measurable Objectives & Undesirable Results
Monitoring Plan

1 - Measurable Objectives

2- Pre SGMA Conditions and UR's

8 - Water Budgets and Coordination

10 - Adaptive Mgt. and Focus Areas

1 - Measurable Objectives

2- Pre SGMA Conditions and UR's

9 - Data Collection, Mgt., & Reporting

Evaluation

"Reporting, Evaluation, & Adaptive Management"

Implementation & Reporting

9 - Data Collection, Mgt., & Reporting

10 - Adaptive Mgt. and Focus Areas

Equivalent GSPs

Alternative GSPs & Fringe Areas

4 - Alternative GSP

5 - Boundaries, Overlapping & Unmanaged Areas

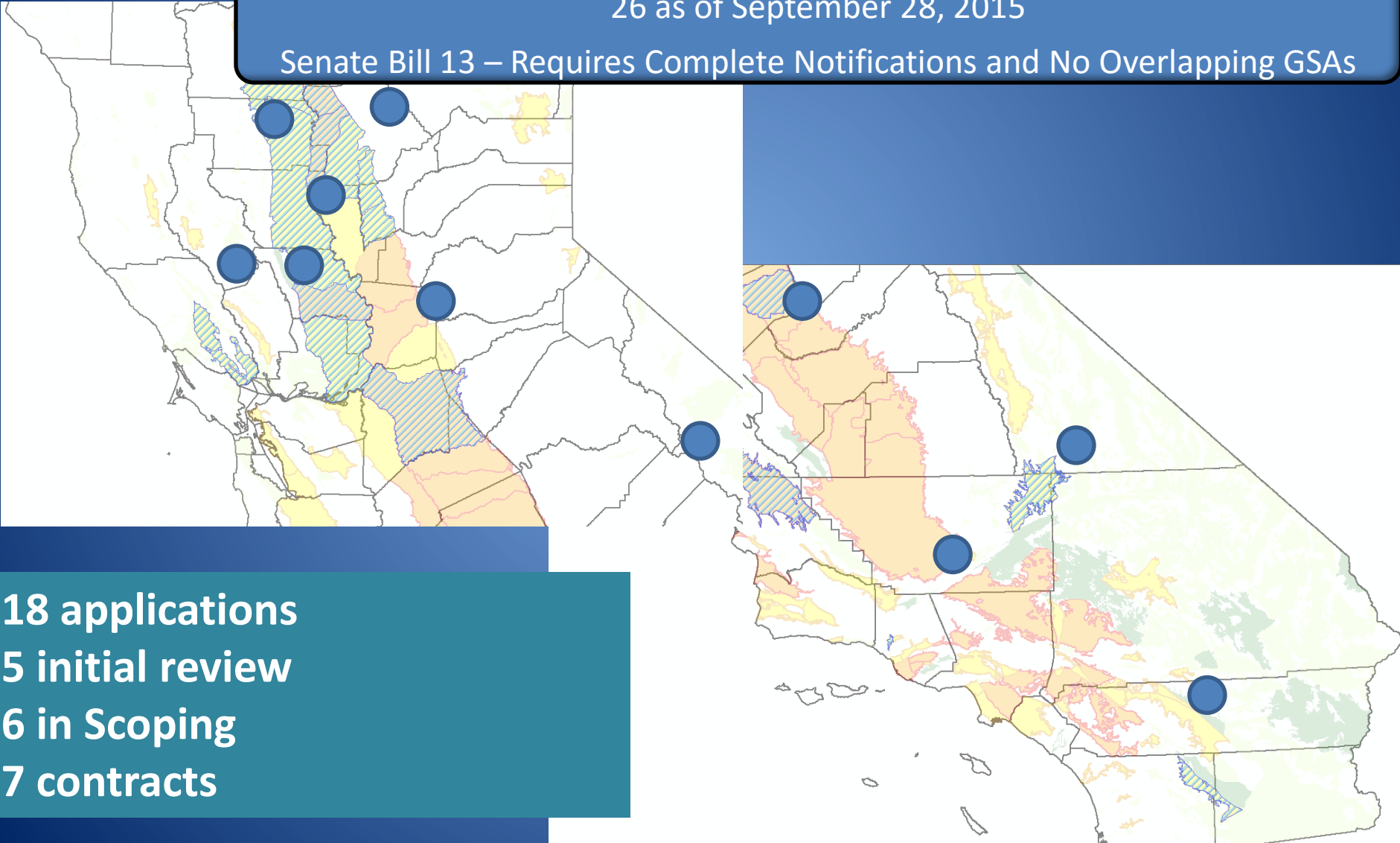
Assistance to Locals

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/

