# Sustainable Groundwater Management Act (SGMA)

## North Coast Resource Partnership

**Mary Randall**
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April 16, 2015

# How familiar are you with SGMA?

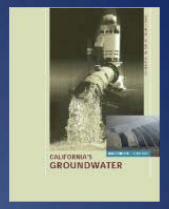
- First you every heard of it
- Some limited knowledge
- Pretty familiar
- You could give this presentation in your sleep

# Outline

- Acronyms/Definitions
- Background
- SGMA overview
  - Rural Communities
  - Timeline
  - Establishing GSAs
  - Federal reserve rights
  - Key messages
- DWR Strategic Plan
- Basin Boundaries and GSP Regulations

# Acronyms/Definitions

**DWR**: Department of Water Resources




**B-118**: Bulletin 118 – California's Groundwater

**CASGEM**: California Statewide Elevation Monitoring

**SGMA**: Sustainable Groundwater Management Act

**GSA**: Groundwater Sustainability Agency

**GSP**: Groundwater Sustainability Plan

**BMPs**: Best Management Practices

**SWRCB**: State Water Resources Control Board (Board)

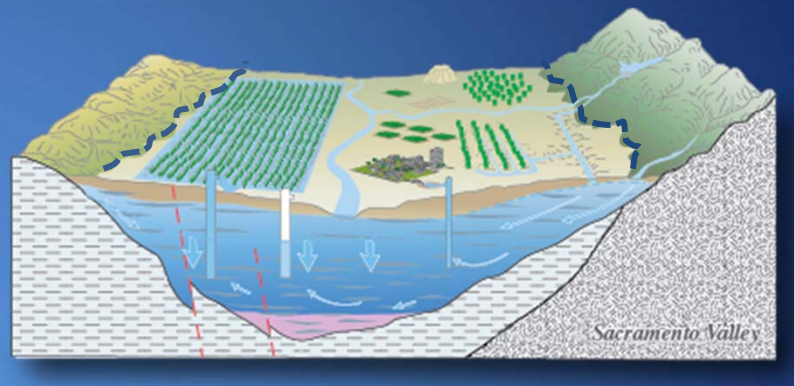
**RWQCB**: Regional Water Quality Control Boards

**CWC**: California Water Code (Code) or California Water Commission

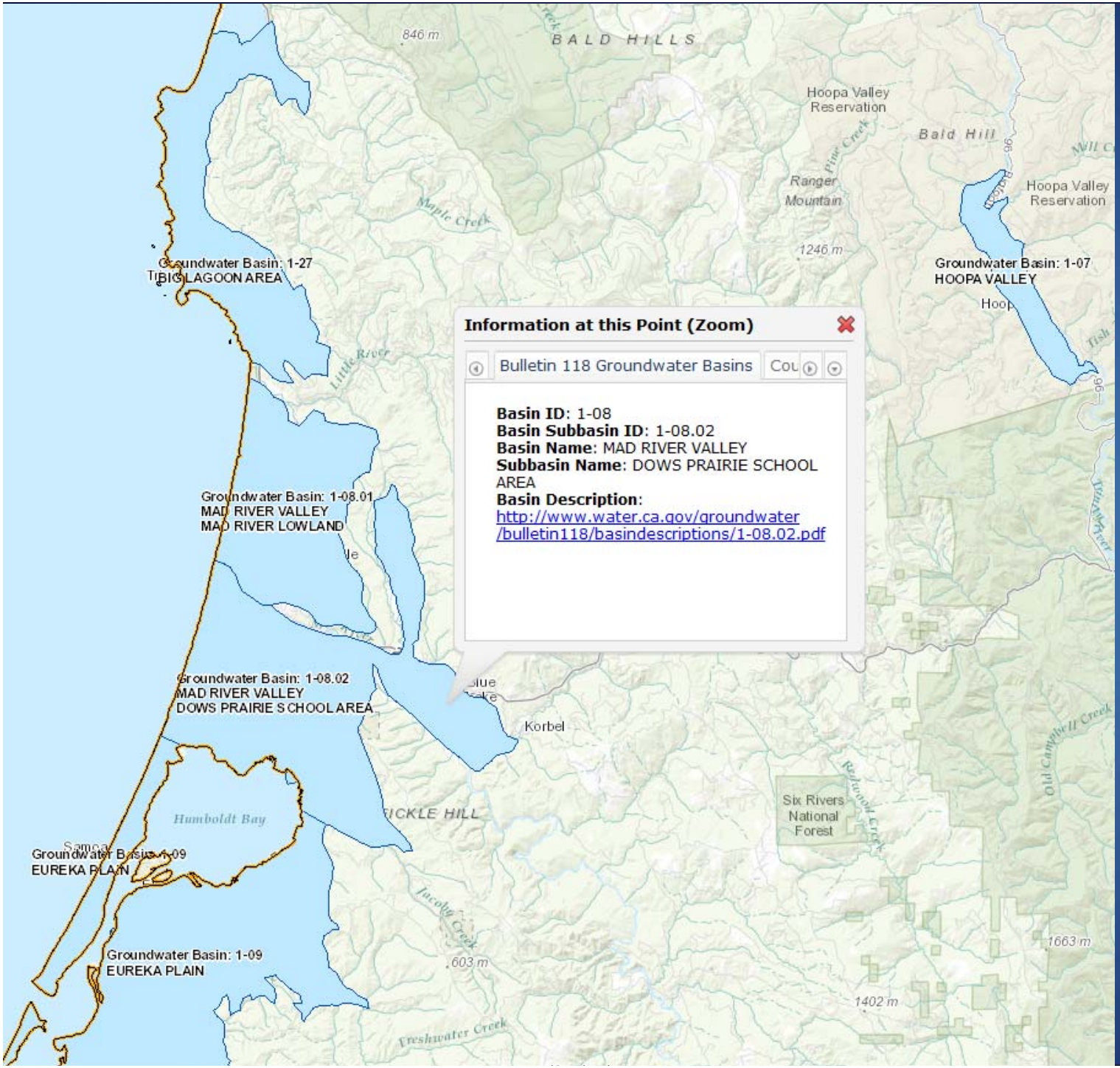
**GMP:** Groundwater Management Plan

# ***SGMA:*** "Basin" means a groundwater basin or subbasin identified and defined in **Bulletin 118.**

- ***Groundwater Basin*** – An alluvial aquifer or a stacked series of alluvial aquifers with reasonably well-defined boundaries in a lateral direction and having a definable bottom.
- ***Groundwater Subbasin*** – A **subbasin** is created by dividing a groundwater basin into smaller units using geologic and hydrologic barriers or institutional boundaries.

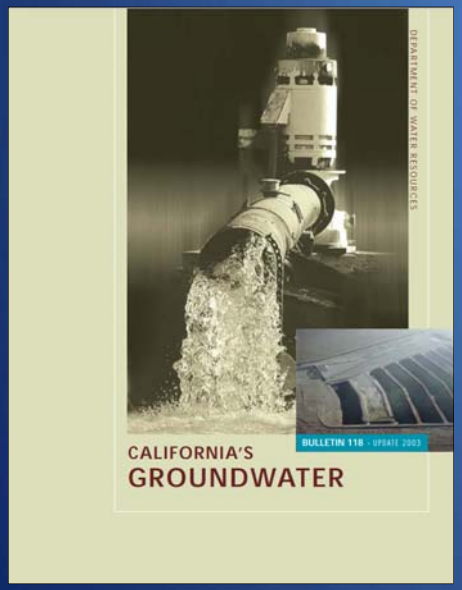


**Modified from Faunt, 2009**

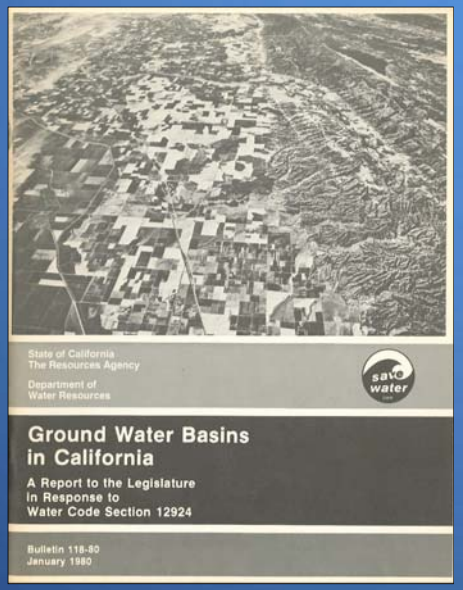

Information at this Point (Zoom)
Bulletin 118 Groundwater Basins
Basin ID: 1-08
Basin Subbasin ID: 1-08.02
Basin Name: MAD RIVER VALLEY
Subbasin Name: DOWS PRAIRIE SCHOOL AREA
Basin Description:
http://www.water.ca.gov/groundwater/bulletin118/basindescriptions/1-08.02.pdf
Groundwater Basin: 1-27
BIG LAGOON AREA
Groundwater Basin: 1-08.01
MAD RIVER VALLEY
MAD RIVER LOWLAND
Groundwater Basin: 1-08.02
MAD RIVER VALLEY
DOWS PRAIRIE SCHOOL AREA
Groundwater Basin: 1-09
EUREKA PLAIN
Groundwater Basin: 1-07
HOOPA VALLEY
BALD HILLS
Hoopa Valley Reservation
Bald Hill
Ranger Mountain
Maple Creek
Little River
Korbel
Six Rivers National Forest
Humboldt Bay
Jacoby Creek
Freshwater Creek
Old Campbell Creek
846 m
1246 m
603 m
1402 m
1663 m

# CA Groundwater Basins

- Groundwater basins are defined in Bulletin 118 using the best available data
- Revisions to basin boundaries have occurred with B-118 updates. (Water Code 12924)

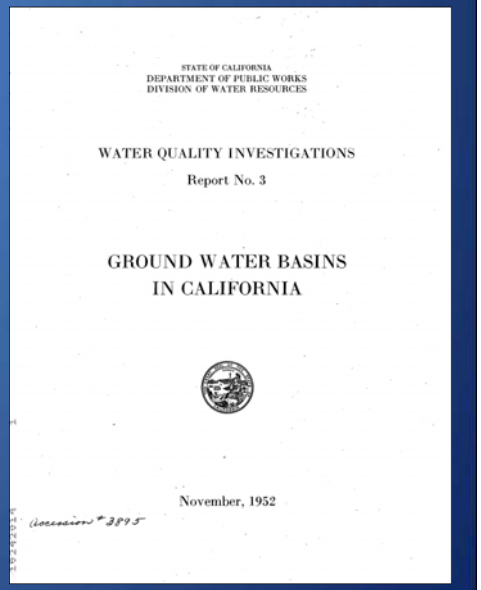



Bulletin 118-2003



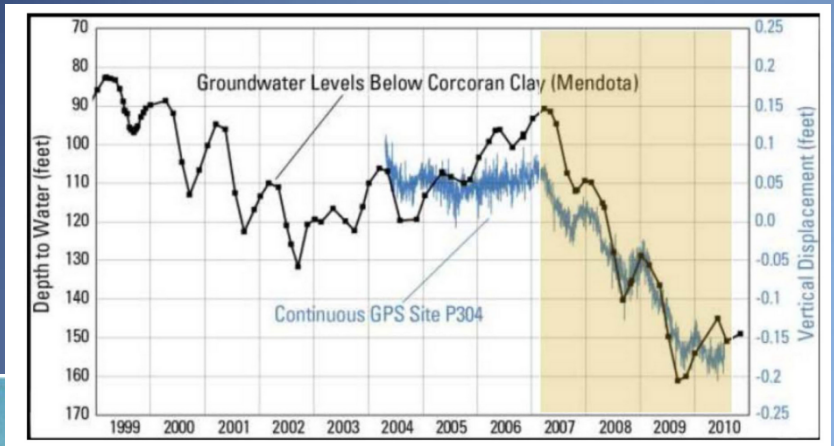

Bulletin 118-1980

Bulletin 118-1975

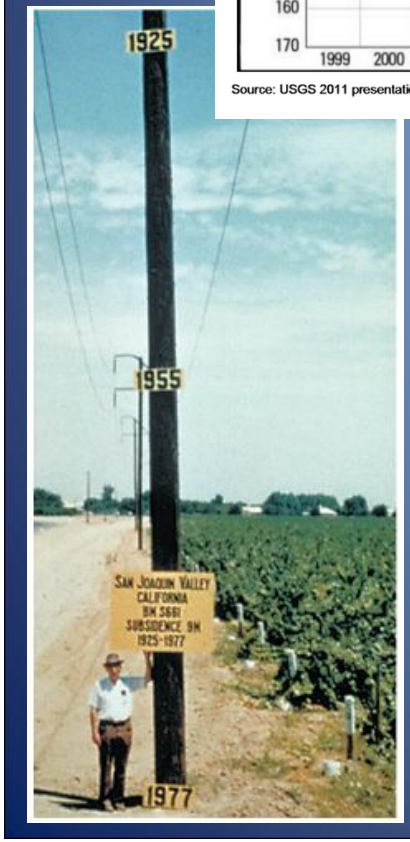


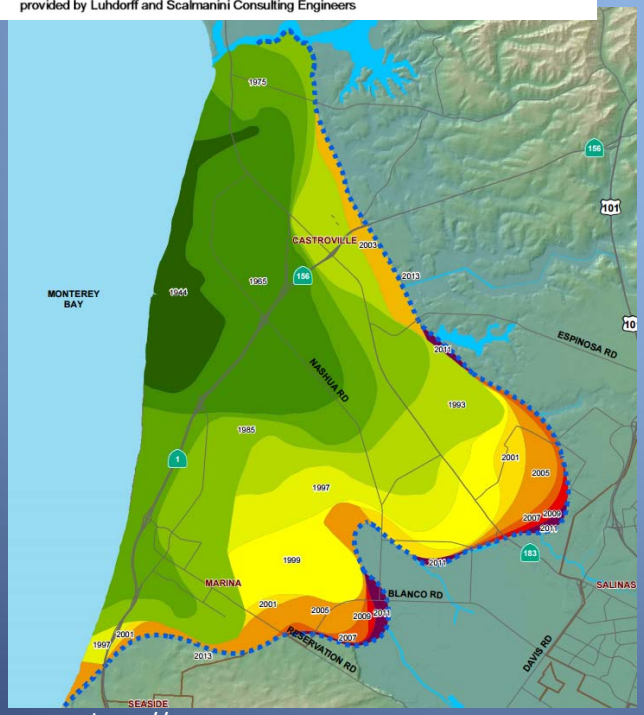

1952

**<u>SGMA Undesirable Results</u>: Chronic lowering of groundwater levels, reduction of groundwater storage, seawater intrusion, degraded water quality, land subsidence and depletions of interconnected surface waters.**

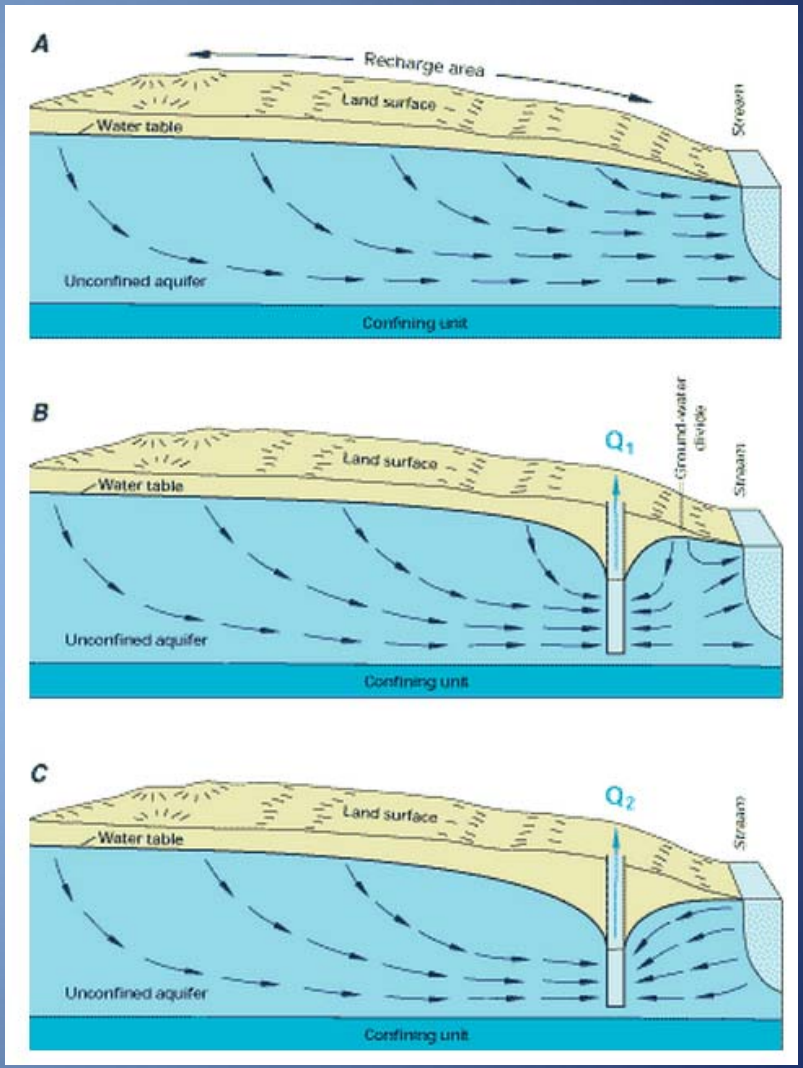



Source: USGS 2011 presentation on Central Valley subsidence. Land surface elevation data from UNAVCO Station 304; depth to water data provided by Luhdorff and Scalmanini Consulting Engineers




http://www.mcwra.co.monterey.ca.us




http://pubs.usgs.gov/circ/circ1186/html/gw_effect.html

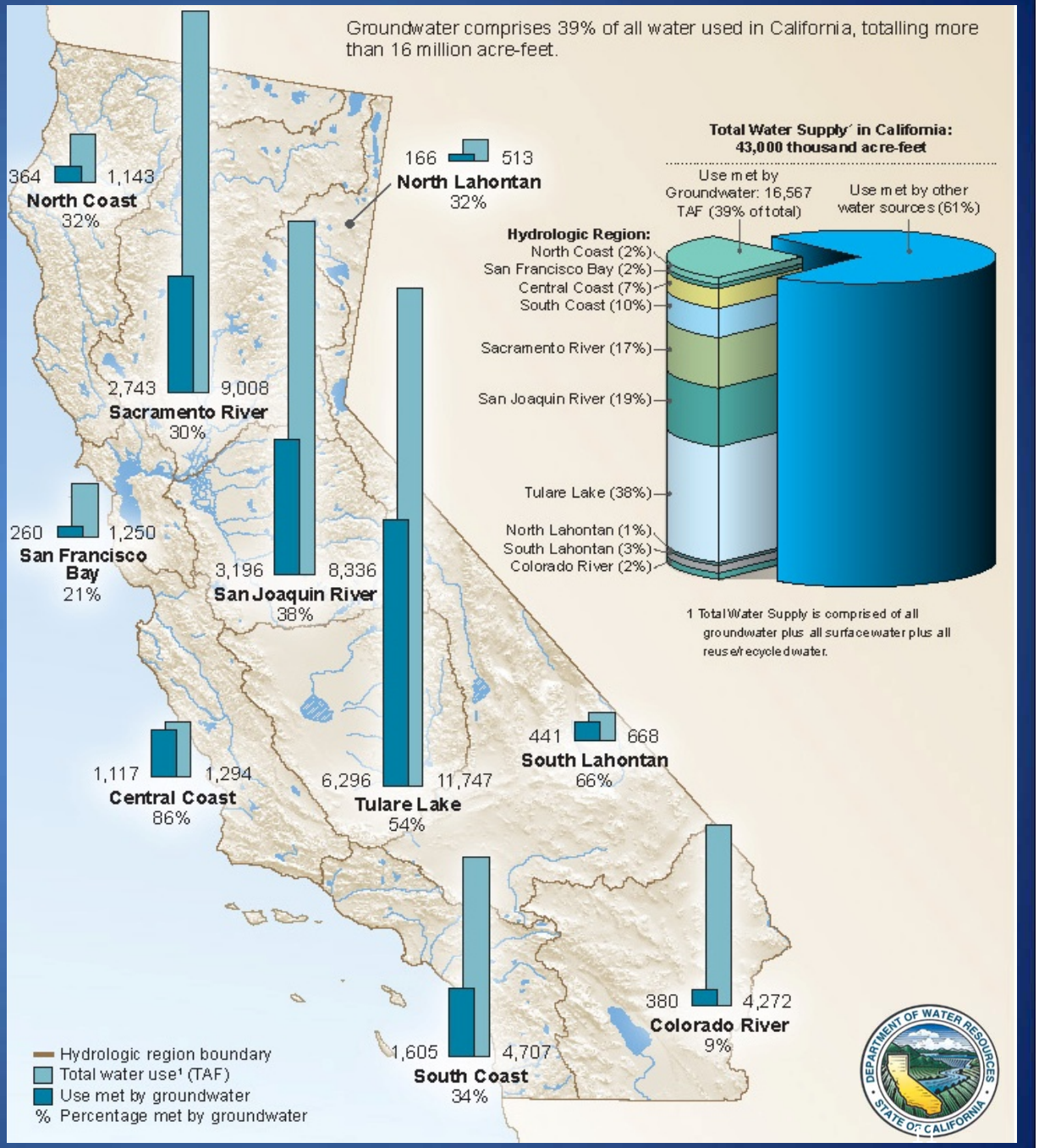
# Background

# Statewide Groundwater Use

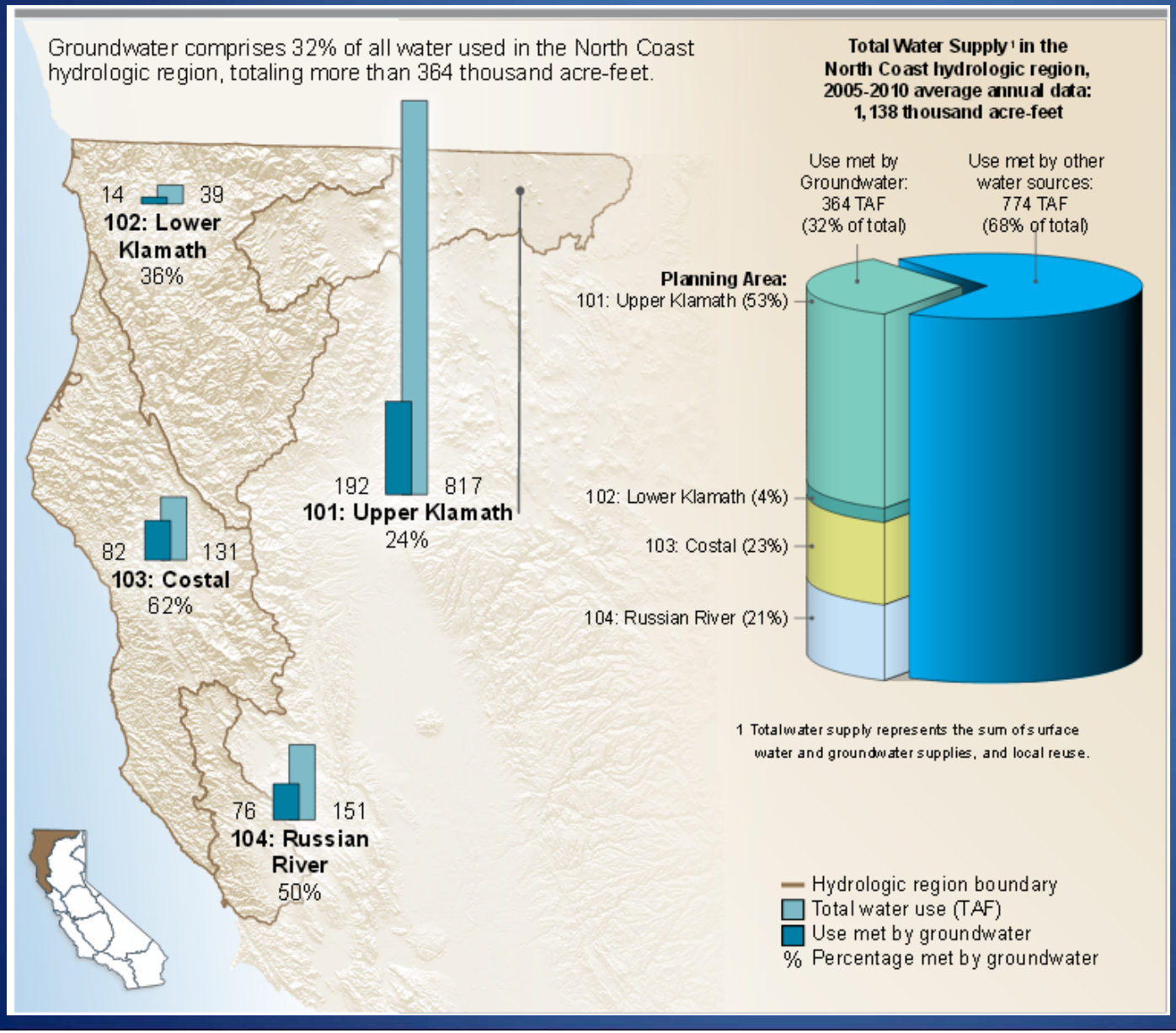
**2005 – 2010**
**Average Annual Use**

**Total Supply: 43 MAF/yr**

**GW Use: 16.5 MAF/yr**
**39% of total supply**



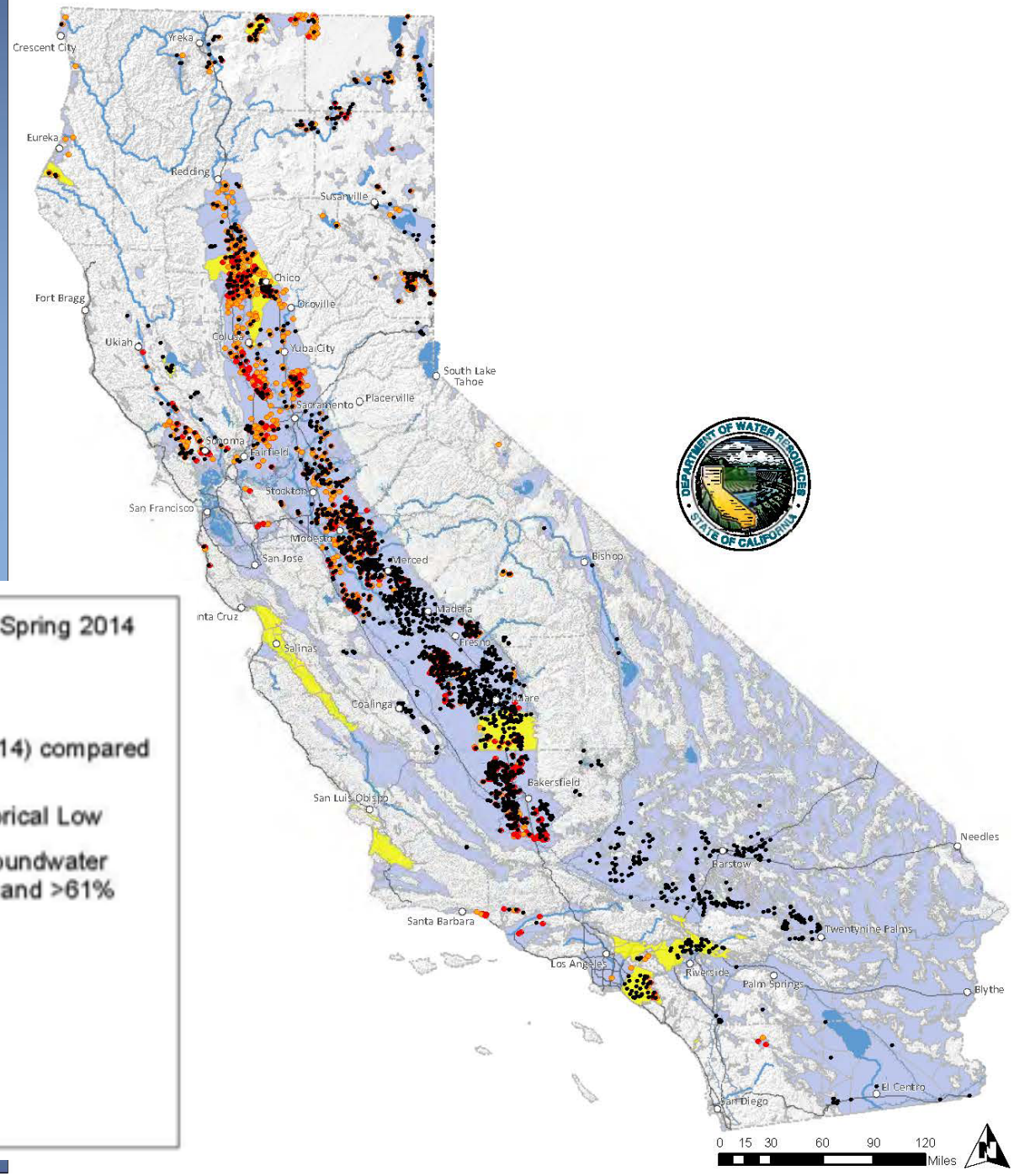
# North Coast Hydrologic Region Groundwater Use vs Total Water Supply by Planning Area




**Total Water Supply: 1,138 TAF**

**Use met by GW: 364 TAF ~32%**

# Black Dots = Groundwater Level at Lowest Recorded




Change in Groundwater Levels*-Spring 2010 to Spring 2014

- Decrease 2.5 to 10 feet
- Decrease > 10 feet

Current Drought Low (Spring 2008 to Spring 2014) compared to Historical Low (Spring 1900 to Spring 1998)

- Current Drought Low deeper than Historical Low

Basin with Moderately High to High Groundwater Reliance (use >0.61 acre-feet per acre and >61% total supply)

Groundwater Basin

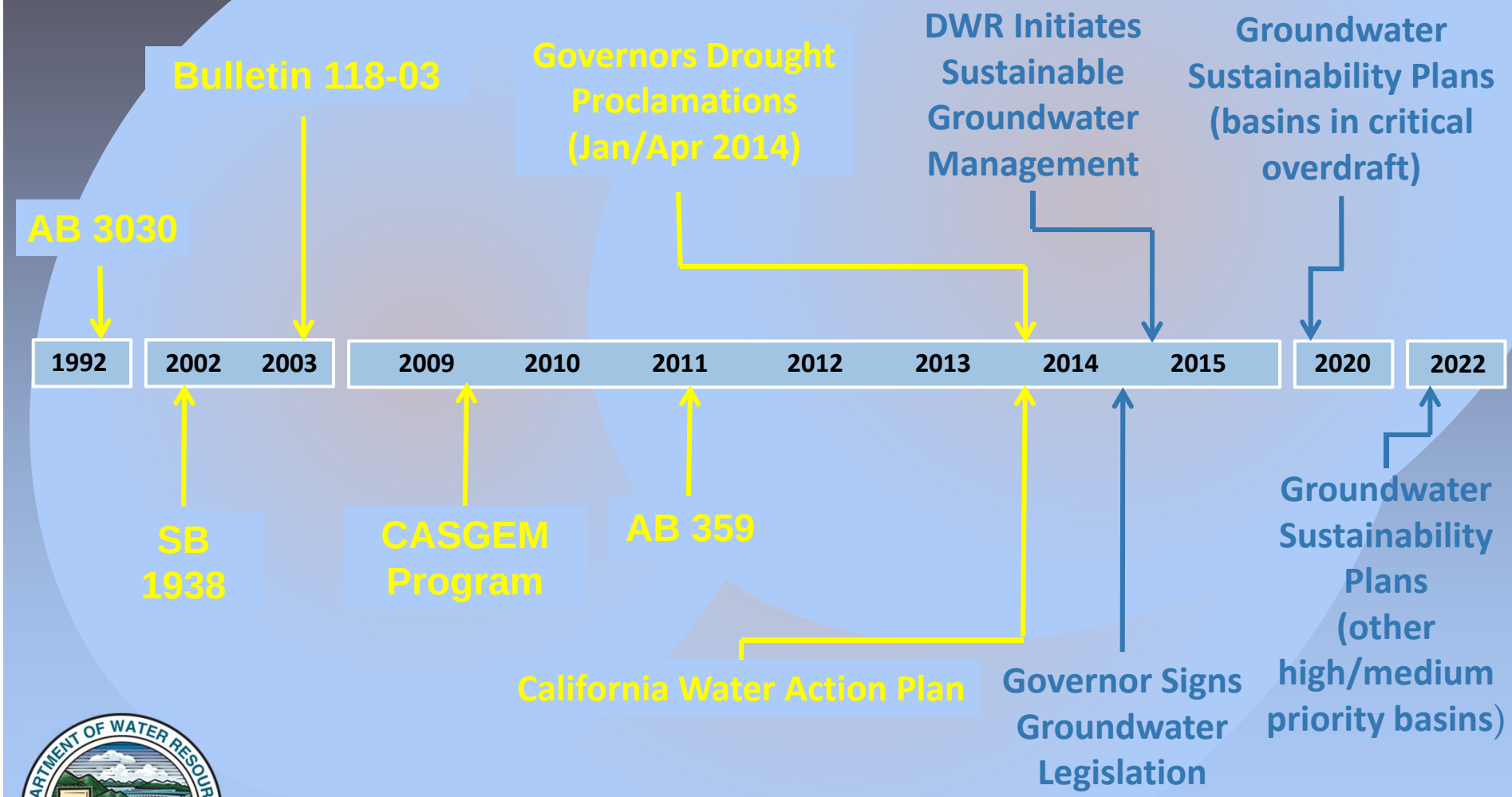
Hydrologic Region Boundary

County Boundary

Major Highway

Major Canal

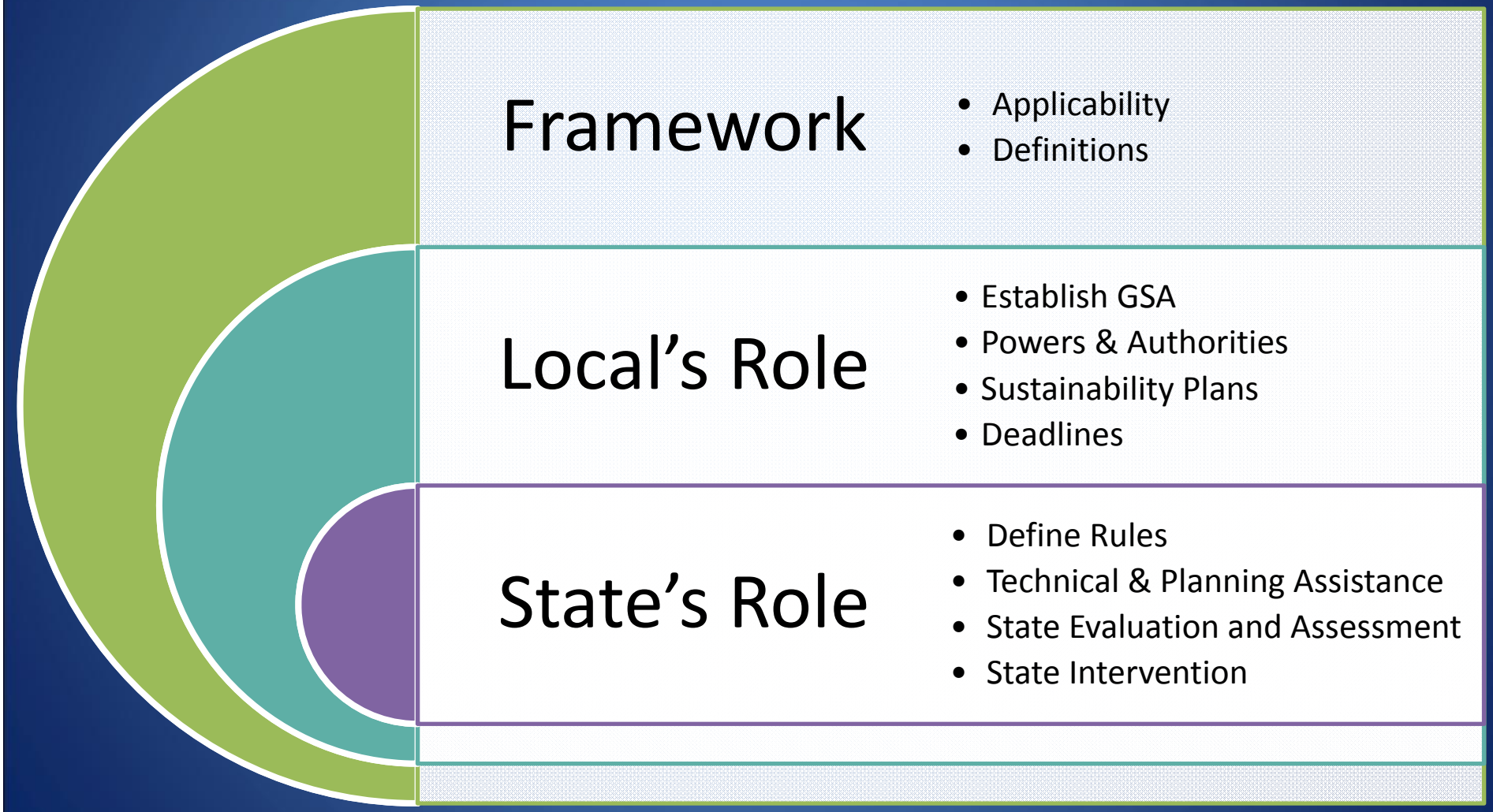
# California's Major Milestones toward Sustainable Groundwater Management



# The Sustainable Groundwater Management Act (SGMA)

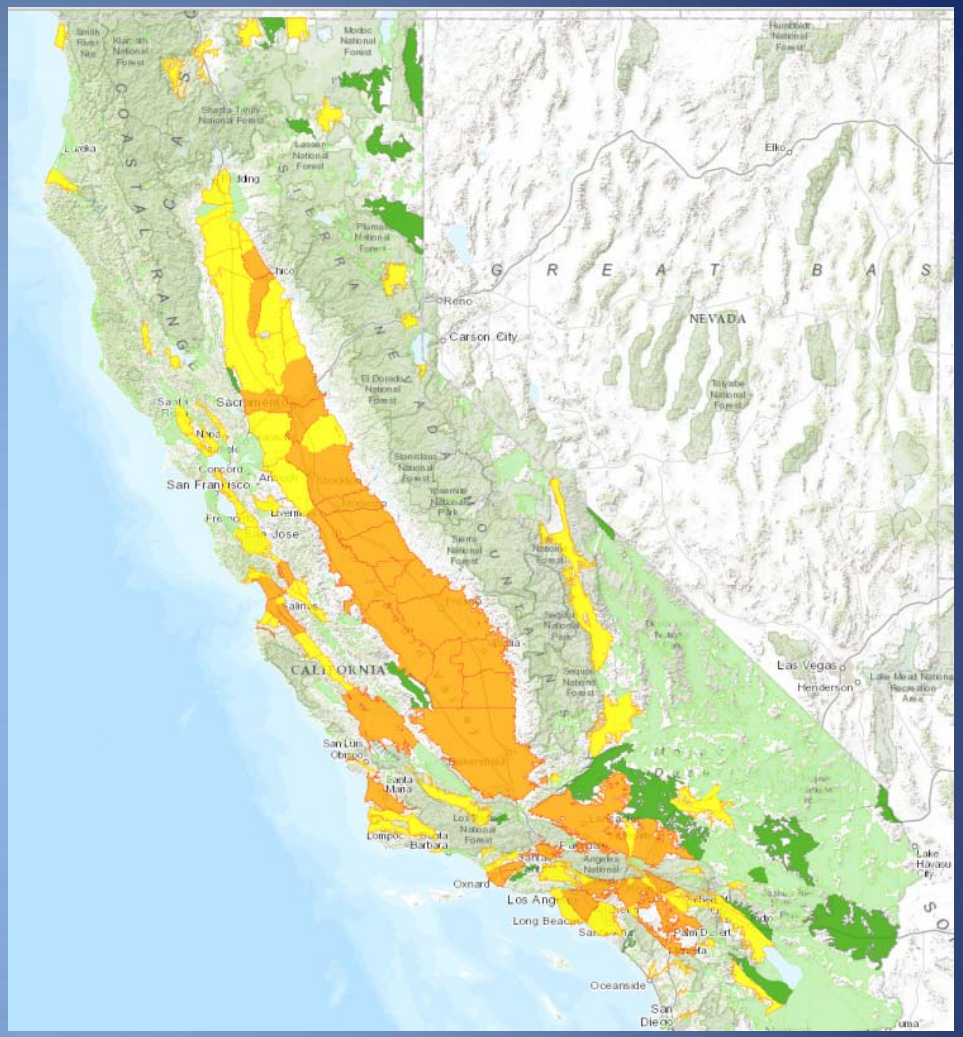
"A central feature of these bills is the recognition that groundwater management in California is best accomplished locally."
-Governor's signing message

# Sustainable Groundwater Management Overview



# SGMA

- High and medium priority basins (non adjudicated)
- GSA – June 30, 2017
- GSP – 2020 or 2022
- State backstop (Water Board)
  - Meant to be interim
  - only if milestones not accomplished at local level
- Defines time frame for accomplishing goals



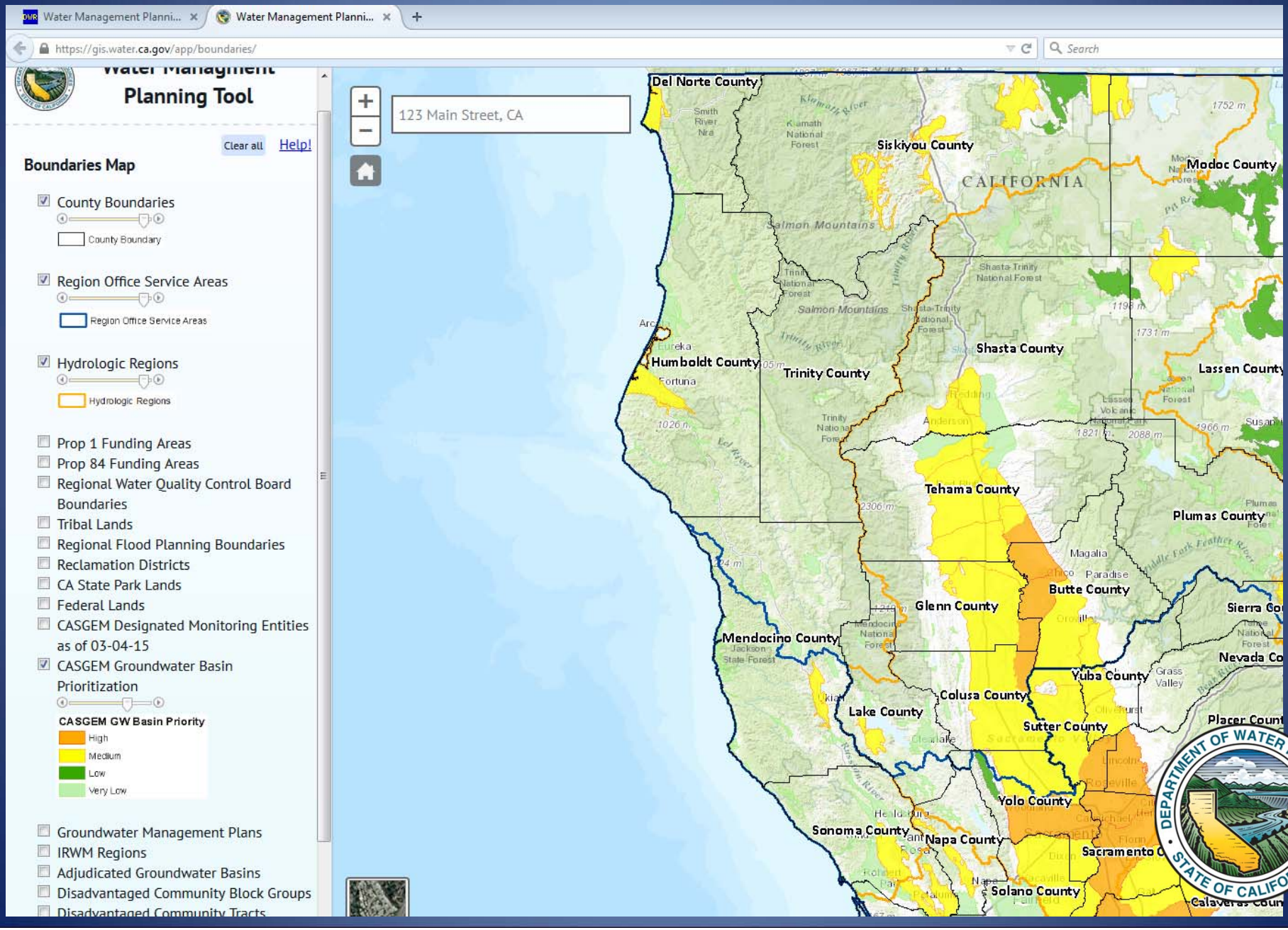
# New Local Management Tools

- Empowers GSAs to:
  - Register groundwater wells
  - Measure extractions
  - Require reports
  - Manage extractions
  - Assess fees

- Exempts local groundwater sustainability plans from CEQA

- Establishes "sustainability goal" over time to guide management

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



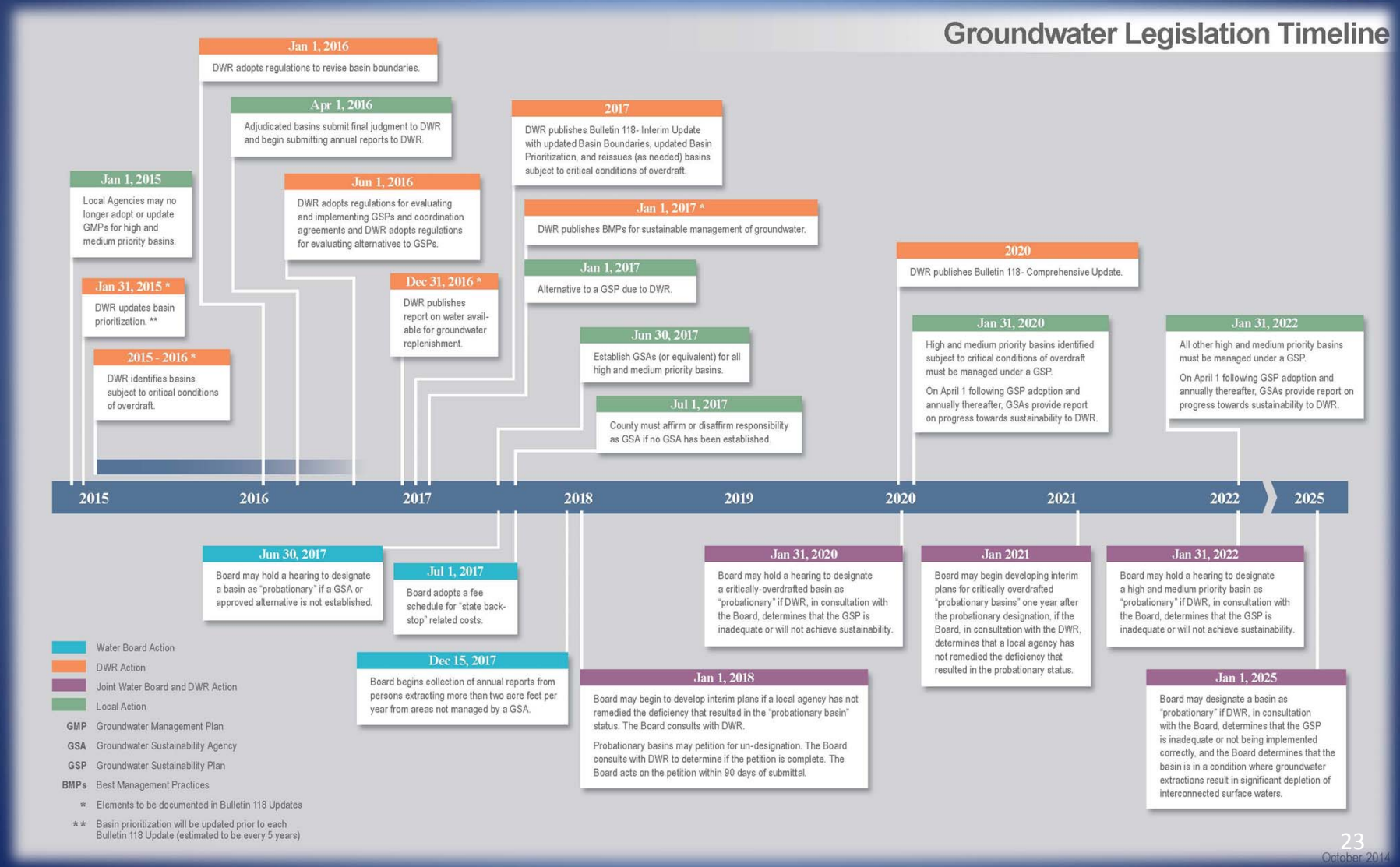
# SGMA & Rural Communities

# Rural Communities

- SGMA applies to ALL non adjudicated medium and high priority basins (no waivers)
- Participation will require commitment of resources
- Failure to participate may have unwanted consequences
- Grants will be available starting next fiscal year for planning and projects
- DWR will provide facilitation and technical assistance

# SGMA Timeline

# Legislation Timeline



# Time Frame for Success

| Time | Action | |
|---|---|---|
| June 30, 2017 | Formation of GSAs | ☑ |
| January 31, 2020 | Completion of GSPs in critically overdrafted basins | ☑ |
| January 31, 2022 | Completion of GSPs in all other high and medium priority basins | ☑ |
| 20-year implementation period | Implementation of GSPs under local management | ☑ |

**These actions shield local regions from State intervention**

# Backstop – State Water Board Intervention

| After | Cause of Intervention |
|---|---|
| June 30, 2017 | No GSA |
| January 31, 2020 | In critically overdrafted basins, no GSP or GSP is inadequate |
| January 31, 2022 | In other basins, no GSP or GSP is inadequate and basin is in long-term overdraft |
| January 31, 2025 | GSP is inadequate and significant depletions of interconnected surface waters |

**In all triggering events, intervention is the result of a failure by the locals to take action.**

# Phases to Implement Groundwater Legislation and Achieve Sustainable Groundwater Management

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

# 2015

- No changes to GMPs (medium & high priority basins)
- Update basin prioritization
- Identify basins subject to critical conditions of overdraft

| | |
|---|---|
| | Water Board Action |
| | DWR Action |
| | Joint Water Board and DWR Action |
| | Local Action |
| GMP | Groundwater Management Plan |
| GSA | Groundwater Sustainability Agency |
| GSP | Groundwater Sustainability Plan |
| BMPs | Best Management Practices |
| * | Elements to be documented in Bulletin 118 Updates |
| ** | Basin prioritization will be updated prior to each Bulletin 118 Update (estimated to be every 5 years) |

# 2016

- Adopt regulations to revise basin boundaries (Jan 1)
- Submit final adjudicated basin judgments to DWR
- Adopt GSP regulations (June 1)
- Publish water available for replenishment report (Dec 31)

| | |
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# 2017

- Publish BMPs (Jan 1)
- Alternative to GSPs due (Jan 1)
- Publish B118 Interim Update
- Establish GSAs (June 30)
- If no GSA, may designate as probationary basin (June 30)
- No GSA - County affirms or disaffirms GSA responsibility (July 1)
- Adopt fee schedule (July 1)
- Collect annual reports (Dec 15)

| | |
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# 2018

- Develop interim plans for probationary basins
- Petition to un-designate probationary basin
- Evaluate and act on petitions

| | |
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# 2020

- Publish B118 Comprehensive Update
- GSP required if basin in critical overdraft (Jan 31)
- Submit progress report for critically overdrafted basins by April 1
- If GSP inadequate (or can't achieve sustainability), then critically overdrafted basin may be designated probationary (Jan 31)

| | |
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# Beginning in 2021

- After basin designated probationary for 1 year, State Water Board may begin developing interim GSP, after consulting with DWR

- After GSP adoption, submit annual progress report to DWR by April 1

| | |
|---|---|
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# 2022

- GSPs required for all other high and medium basins (Jan 31)
- If GSP inadequate (or can't achieve sustainability), then high and medium basins may be designated probationary (Jan 31)
- Submit progress report by April 1 (and annually thereafter)

| | |
|---|---|
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# 2025

- Basins may be designated probationary if GSP is inadequate (or not implemented correctly), and groundwater extractions result in significant depletion of interconnected surface waters (Jan 1)

| | |
|---|---|
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| | Local Action |
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# Every 5 Years after GSP Adoption

- Review and assess implementation of GSP
- If GSP is inadequate (or basin can't achieve sustainability), then basin may be designated probationary

| | |
|---|---|
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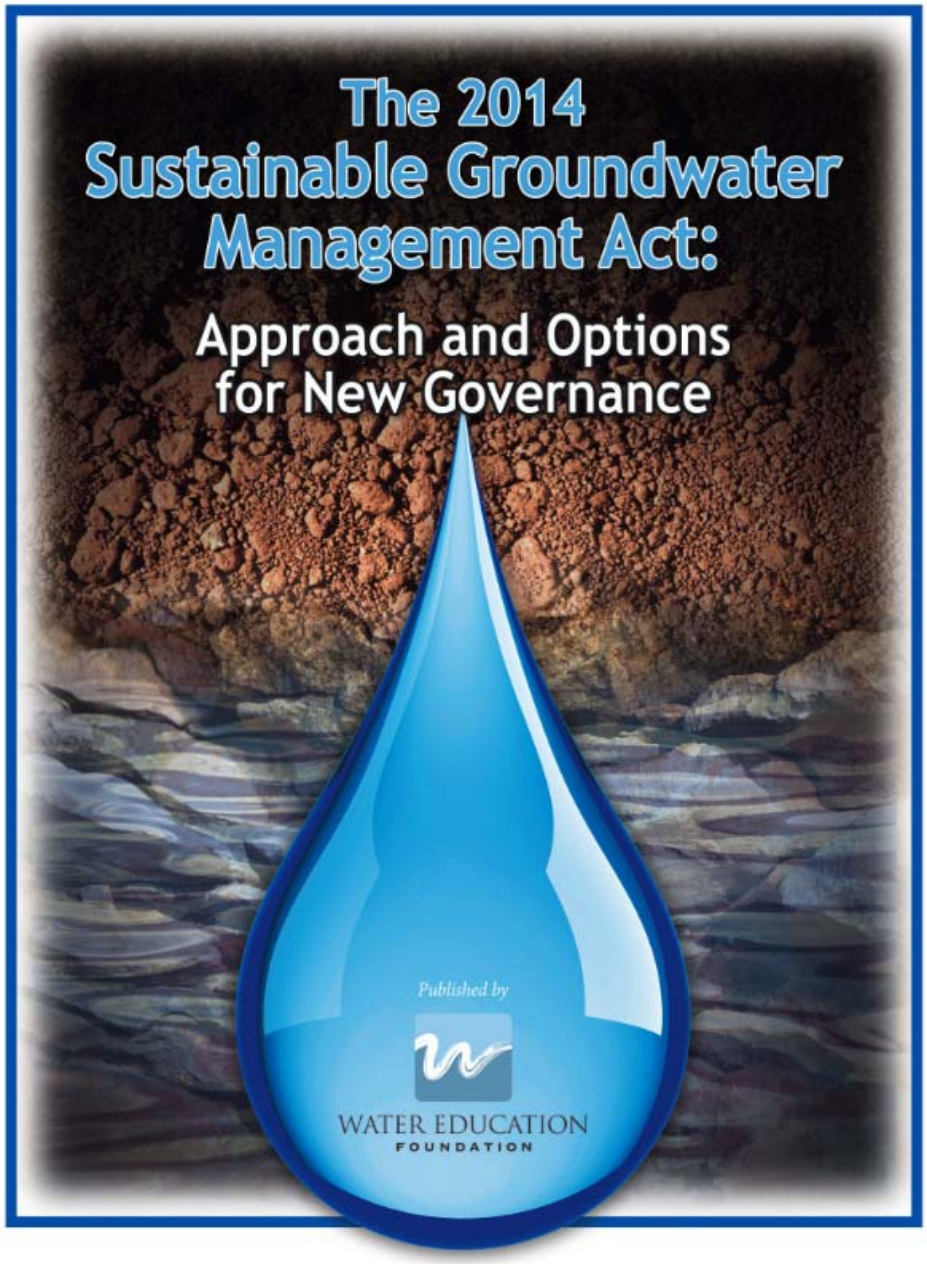
# Establishing GSAs




Water Education Foundation:

## Approaches and Options for New Governance

1. Identify basins
2. Identify and work with local agencies
3. Understand your basin and available resources
4. Identify and involve key stakeholders in your area
5. Evaluate tasks and authorities and who wants to do what
6. Evaluate and propose governance model



http://www.water.ca.gov/cagroundwater/docs/WEFSGMA-Approaches_and_Options_for_New_Governance_00282995xA1C15.*pdf*

# Establishing GSAs

- Local Agency or combination of Local Agencies
  - Single GSA, Single GSP
  - Multiple GSAs, Single GSP
  - Multiple GSAs, Multiple GSPs with "Coordination Agreement"
- 15 "Exclusive" local agencies designated as GSAs within statutory boundary
- Publication of Notice and Public Hearings
- Establish and maintain an interested persons list
- Consider all interests of beneficial uses and users of groundwater (specific information identified in SGMA)
- Notice of Intent to DWR to post with proposed boundaries

# Tribal Federal Reserve Rights

# Tribes Participation in SGMA*

- **Federally recognized tribes may participate through a Joint Powers Authority or other agreement with local agencies in the basin.**
- **Participating tribes are eligible to conduct planning, financing, and management under SGMA, including eligibility for grants and technical assistance.**
- **Exercise of regulatory authority, enforcement, or collection of fees needs to be pursuant to the tribe's authority and not pursuant to the authority granted under SGMA**
- **Federally reserved water rights to groundwater shall be respected in full.**

*Refer to Water Code: 10720.3 for full text

# SGMA Key Messages

# Key Messages

- Groundwater is best managed at the local or regional level, and strong local/regional governance and strategic planning are essential for success.
- The State's role is to provide assistance to enable local and regional agencies to sustainably manage their water resources, and to intervene if necessary until local sustainable groundwater management plans are developed and implemented.

# Key Messages (continued)

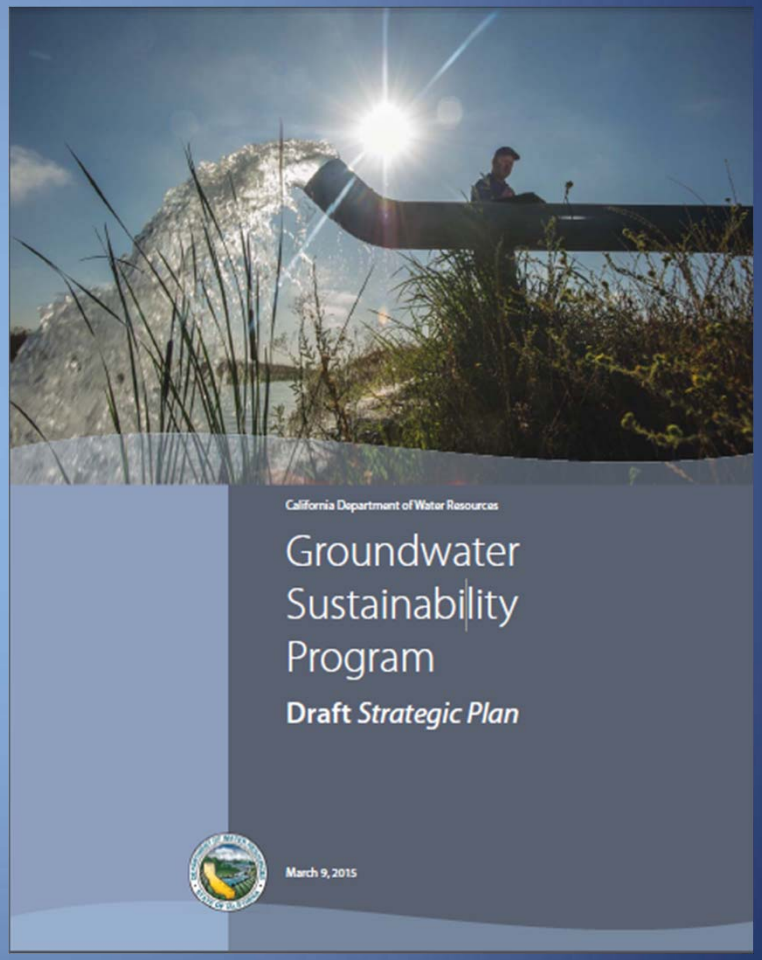
- Strong and effective State agency alignment and coordination are required to support local/regional efforts
- Sustainable groundwater management can only be achieved in the context of regional and statewide water balance, accounting for all sources of supply as well as demands
- It will take decades to fully achieve sustainable water management and a phased approach is necessary, with accountability checks to measure progress.

# DWR Strategic Plan

# DWR's Draft Strategic Plan

- Current GW Conditions
- Legislation & Other Drivers
- Success Factors
- Goal Objectives and Actions
- Communication and Outreach

Written comments due June 1, 2015




http://www.water.ca.gov/groundwater/sgm/pdfs/DWR_GSP_DraftStrategicPlanMarch2015.pdf

# Basin Boundary and GSP/ALT Regulations Process

# Basin Boundary and GSP/ALT Regulations Process

- Phases of Implementation

**Internal Project Scoping**

- Notify OAL
- Collection of Statewide Issues
- Coordinate with SWRCB

**Draft Principles for Regulations**

- Public Listening Sessions
- Input from Advisory Panels and Public

**Draft Emergency Regulations**

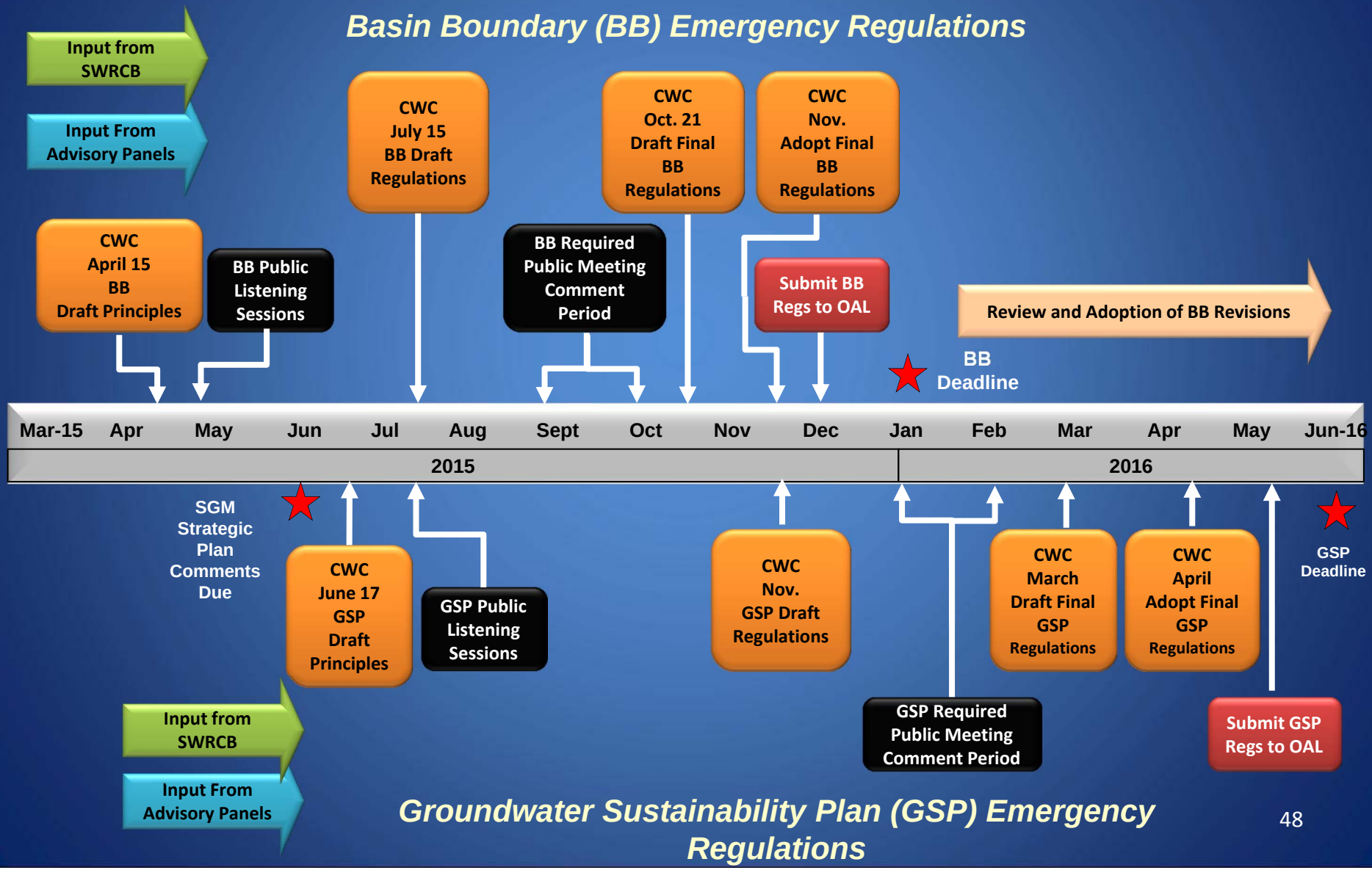
- Required Public Meetings
- Record and Evaluate Comments

**Adopt Emergency Regulations**

- CWC Approval
- Noticing and Submittal to OAL

Input and Feedback from the California Water Commission

# Basin Boundary and GSP/ALT Regulations Estimated Project Timeline



# Basin Boundaries Emergency Regulations

## Listening Sessions Schedule and Locations

**WILLOWS – Tuesday, April 28, 2015**

3:00pm to 5:00pm
Willows Memorial Hall
525 West Sycamore Street
Willows, CA 95988

**VISALIA – Wednesday, April 29, 2015**

3:00pm – 5:00pm
Visalia Convention Center - Charter Oak Ballroom, C/D
303 E Acequia Avenue
Visalia, CA 93291

**SAN BERNARDINO – Thursday, April 30, 2015**

1:00pm – 3:00pm
Feldheym Central Library – Bing Wong Lecture Hall
555 W 6th Street
San Bernardino, CA 92410

**WEBINAR – Friday, May 1, 2015**

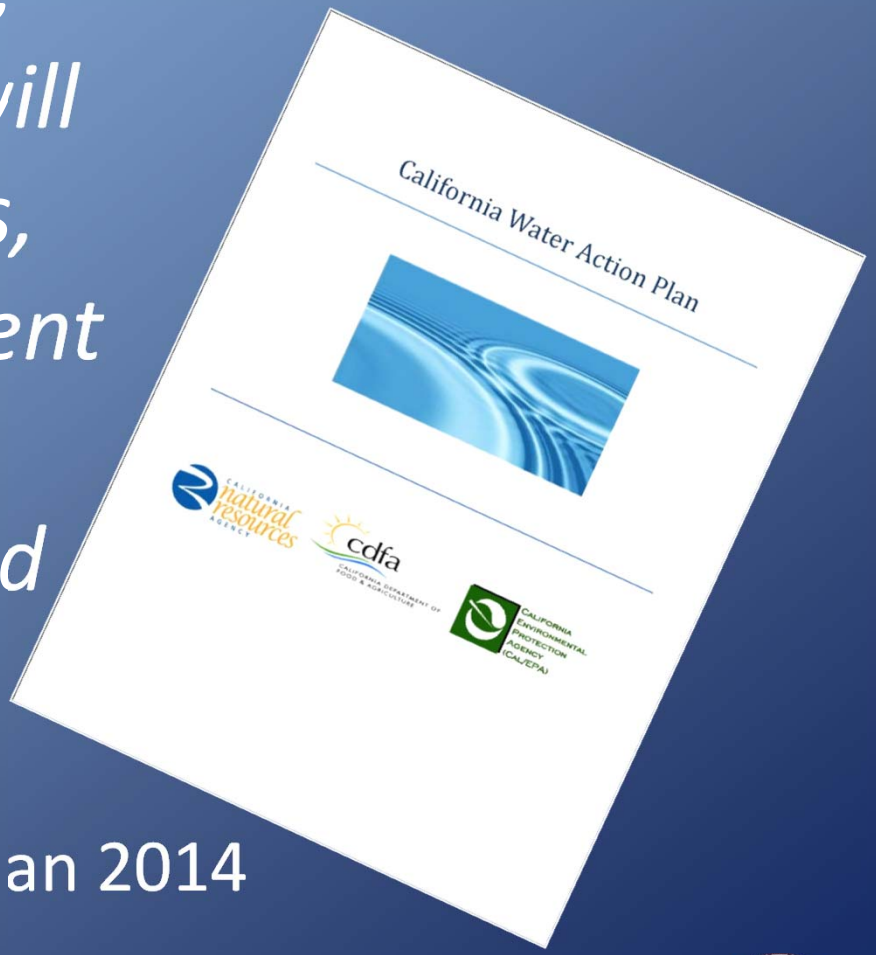
12:00pm – 2:00pm

Please follow the steps below and register at:
**resources.webex.com/resources/J.php?MTID=mb4b27cb9e3e8ef55cfab15807587940e**

On the Meeting Information page, select "Register" and complete the required information.
**Webinar reservations are limited, please register by Friday, April 24, 2015**

# Final Thought

*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

# Resources

- State:

  www.groundwater.ca.gov

- DWR:

  www.water.ca.gov/groundwater/

- SWRCB:

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