Change in Groundwater Levels

The Sustainable Groundwater Management Act

DWR's Sustainable Groundwater Management Program Implementation Progress Report

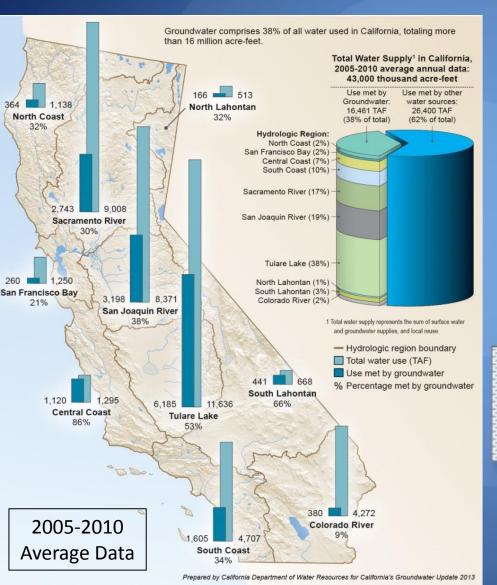
CSAC Agriculture, Environmental and Natural Resources Policy Committee

November 29, 2016

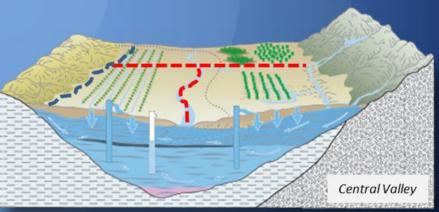
David Gutierrez

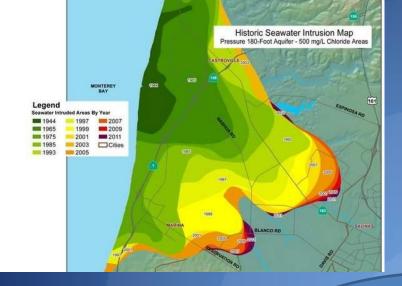
CA Department of Water Resources

What is Groundwater and why is it important?



- 38% of total water supply (statewide average)
- 60% during drought years
- Many communities are 100% reliant upon GW







Adverse Impacts



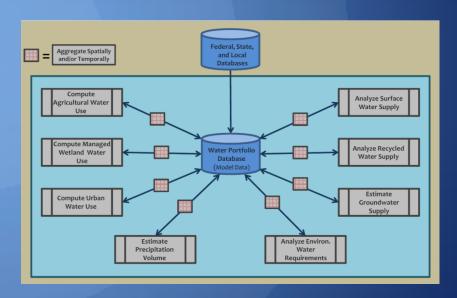


California Water Action Plan



Water Balance





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

DWR's Sustainable Groundwater Management Program

Provide Statewide Technical Assistance Provide
Statewide
Planning
Assistance

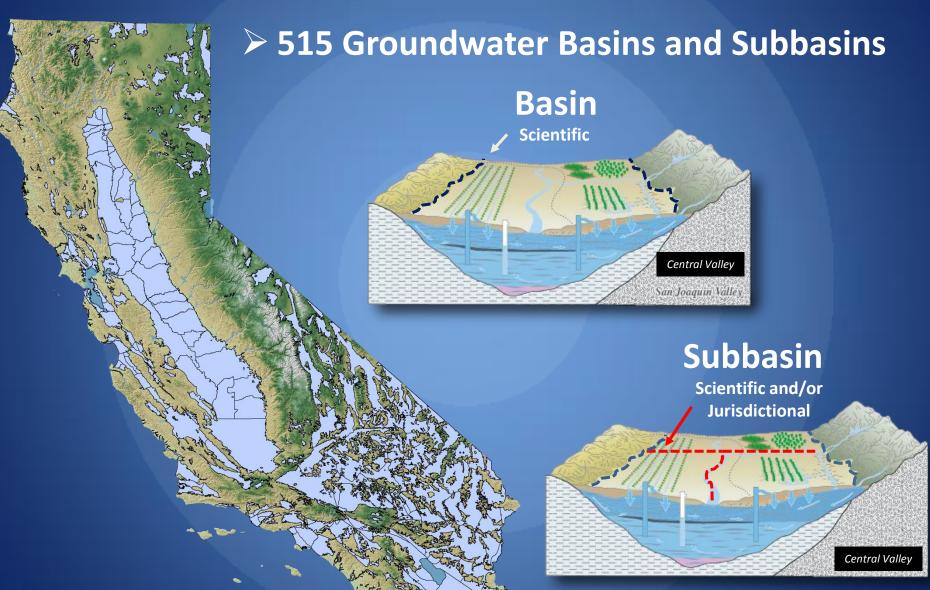
Cofforia Department of Water Resources
Groundwater
Sustainability
Program
Draft Strategic Plan

Assist State and GSA Alignment and provide Financial Assistance

Develop a
Framework for
Sustainable
Groundwater
Management

Provide Interregional Assistance

Applicability



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.



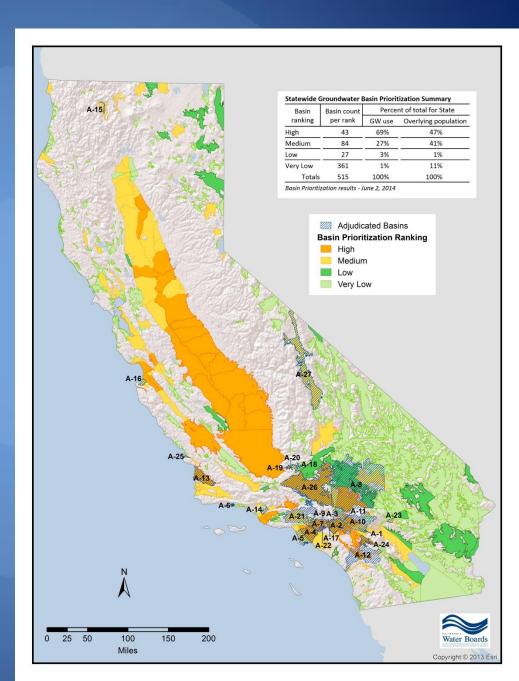
DWR's Near Term SGMA Responsibilities/Due Dates

- Initial Basin Prioritization: §10723.4
 - Completed by January 31, 2015
- Regulations for Modifying Groundwater Basin Boundaries: §10722.2
 - Completed by January 1, 2016
- / Identification of Critically Overdrafted Basins: §12924
 - Completed January 2016, Updated October 2016
- / Groundwater Sustainability Plan and Alternatives Regulations: §10733.2
 - Completed May 18, 2016
 - **Modifying Groundwater Basin Boundaries (Round 1)**
 - Completed October 11, 2016
- Water Available for Replenishment: §10729(c)
 - Due December 31, 2016
- Best Management Practices: §10729(d)
 - Due January 1, 2017
- **Bulletin 118**: §12924
 - Interim Update due January 2017;
 - Comprehensive Update due 2020

- Revised Basin Prioritization
 - Estimated mid 2017
- Alternatives Reviews
 - Begins January 1, 2017
- **Groundwater Sustainability**
 - **Agency Formation:** §10723
 - Due by June 30, 2017

Basin Prioritization

- Requires GW
 sustainability plans in
 high- and medium priority basins
- Adjudicated basin supply information

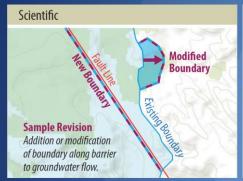


Basin Boundary Modifications

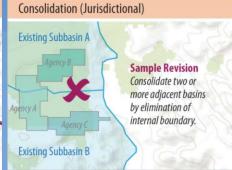
Article 3

Scientific

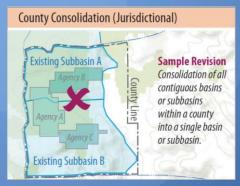
Jurisdictional











Basins Subject to Critical Overdraft

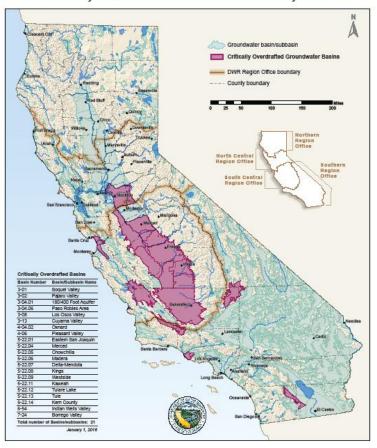
Identify Basins Subject to Critical Conditions of Overdraft

Draft Completed July 2015

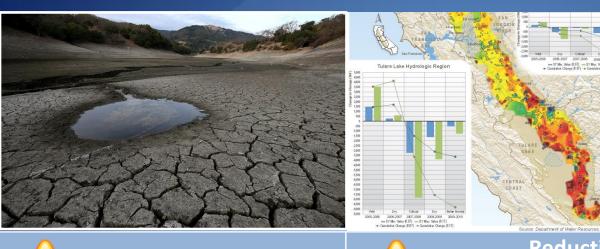
Public Comments September 1015

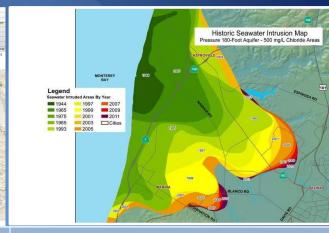
Completed January 2016

Critically Overdrafted Groundwater Basins - January 2016



GSPs and Undesirable Results







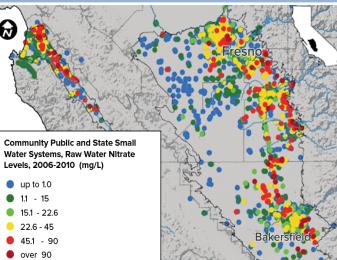
Lowering of GW Levels



Reduction of GW Storage



Seawater Intrusion









Water Quality Degradation

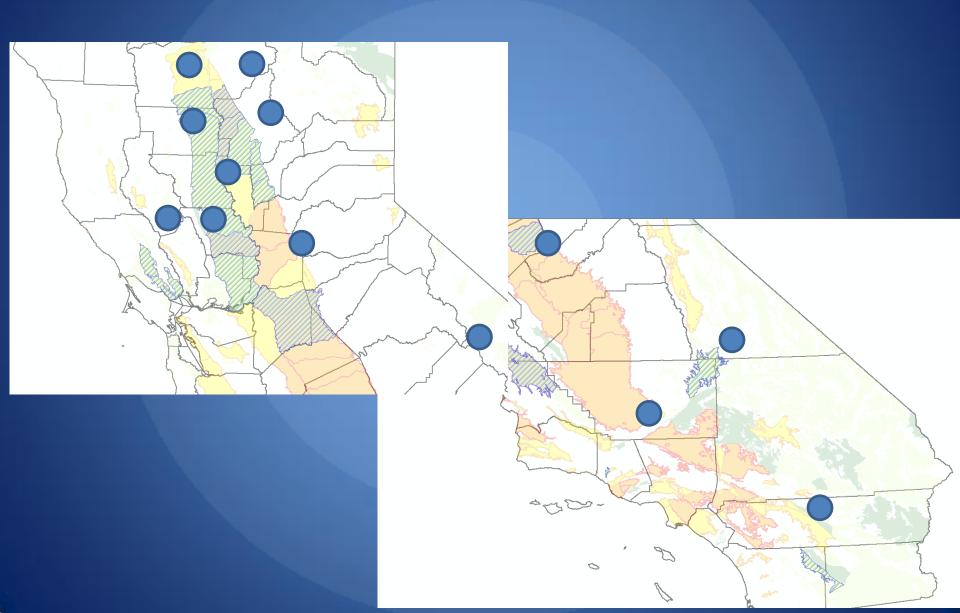


Land Subsidence



Depletion of Interconnected Streams

Facilitation Support Service



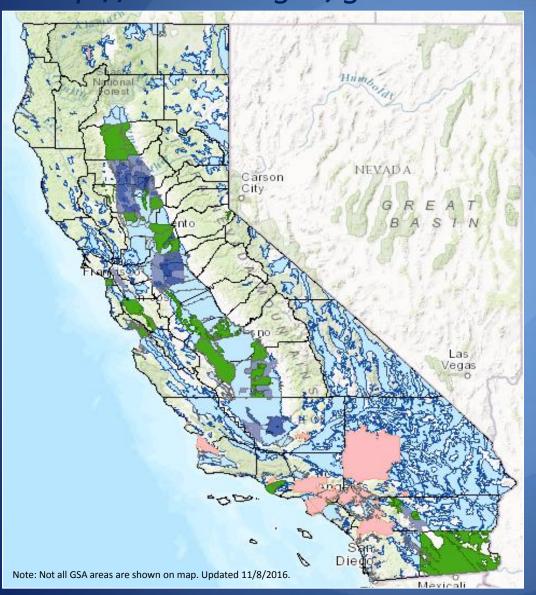
DWR's Near Term SGMA Responsibilities/Due Dates

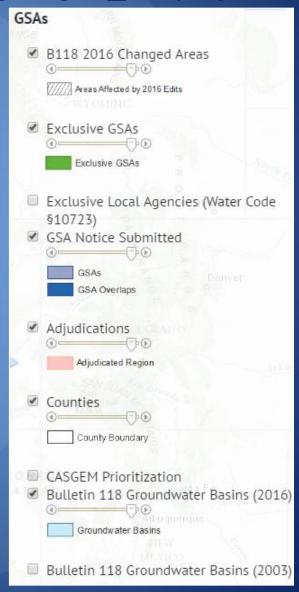
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Status of GSA Formations

http://water.ca.gov/groundwater/sgm/gsa_map.cfm





Tentative Draft Release Schedule (Dates and Documents)

Best Management Practices (BMPs)

- BMP 1: Monitoring Protocols, Standards, and Sites
- BMP 2: Monitoring Networks and Identification of Data Gaps
- BMP 3: Hydrogeologic Conceptual Model
- BMP 4: Water Budget
- BMP 5: Modeling

Guidance Documents

Oct 28

Oct 28

Mid Dec

Early Nov

- Preparation Checklist for GSP Submittal
- GSP Annotated Outline
- Establishing Sustainable Management Criteria
- Engagement with Tribal Governments
- Stakeholder Engagement and Communication

W.A.F.R. Estimates Concept

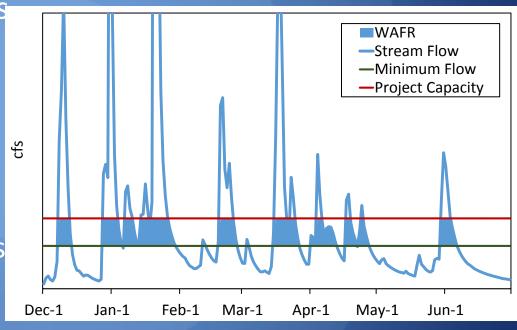
Instream Flow Requirements

- Existing Instream Flow Requirements
- Other Sources

Diversion Capacity of Project (s

- Water Rights (eWRIMS)
- Proposed Projects

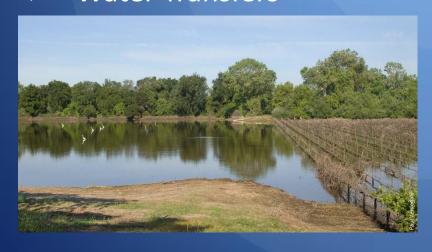
Simple Hydrograph



Roadmaps for Water Available and for Replenishment, by Method

Step by step roadmap with specific examples for:

- Surface Water
- Conservation
- Recycling
- Desalination
- Water Transfers











- > In-Lieu
- Active Recharge

Success Factors

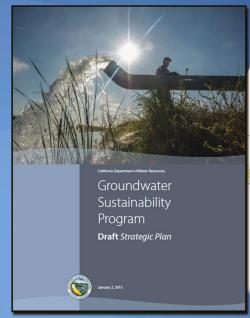
GSA formation

- Data gaps, acquisition and management
- Fact and Fiction Communication and Outreach
- Support and Assistance
- Overall Implementation and Decisions —
 Balancing supply and demand

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/