

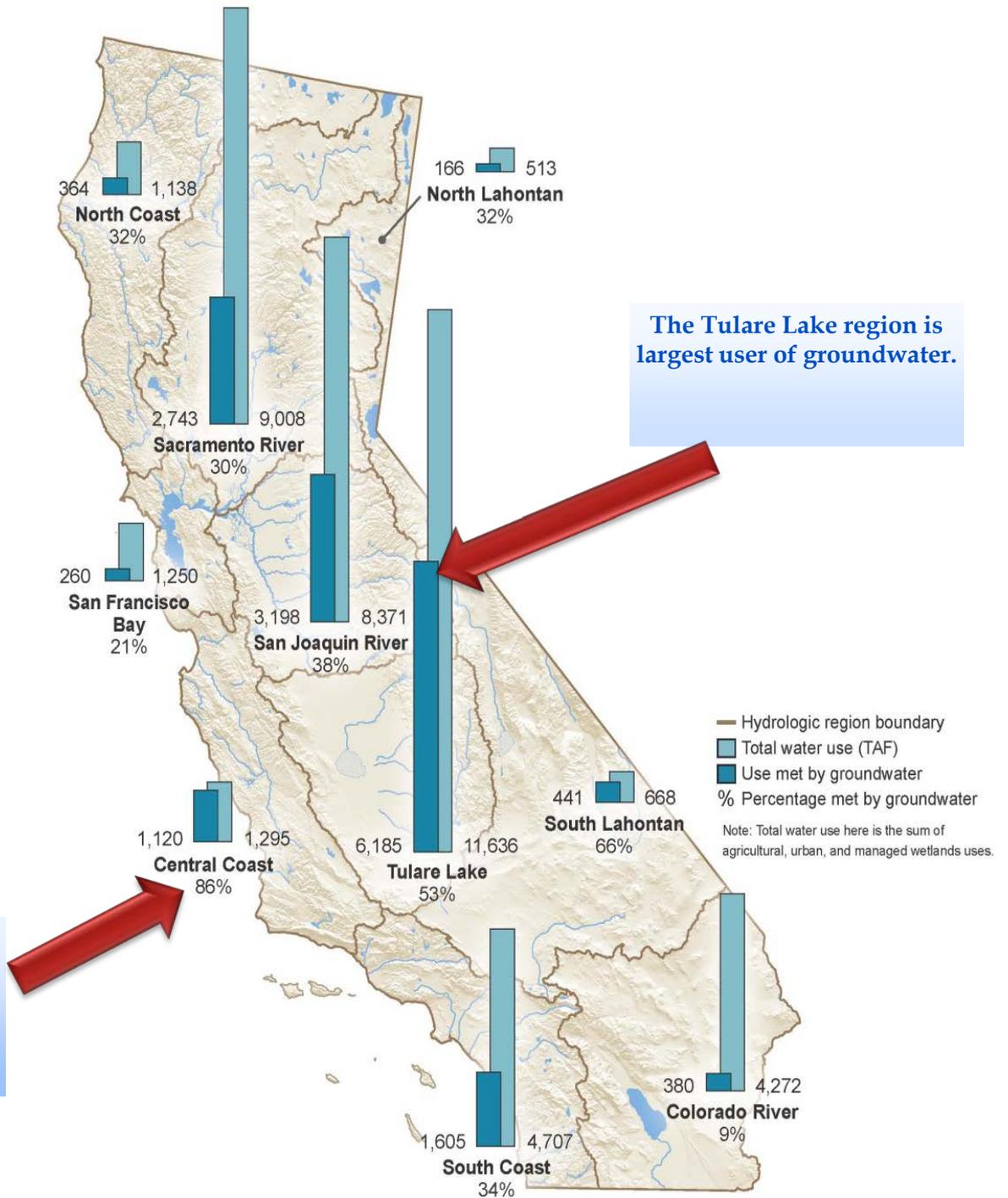
DWR's Role in Sustainable Groundwater Management

CA Department of Water Resources



Ground-water Supply in California

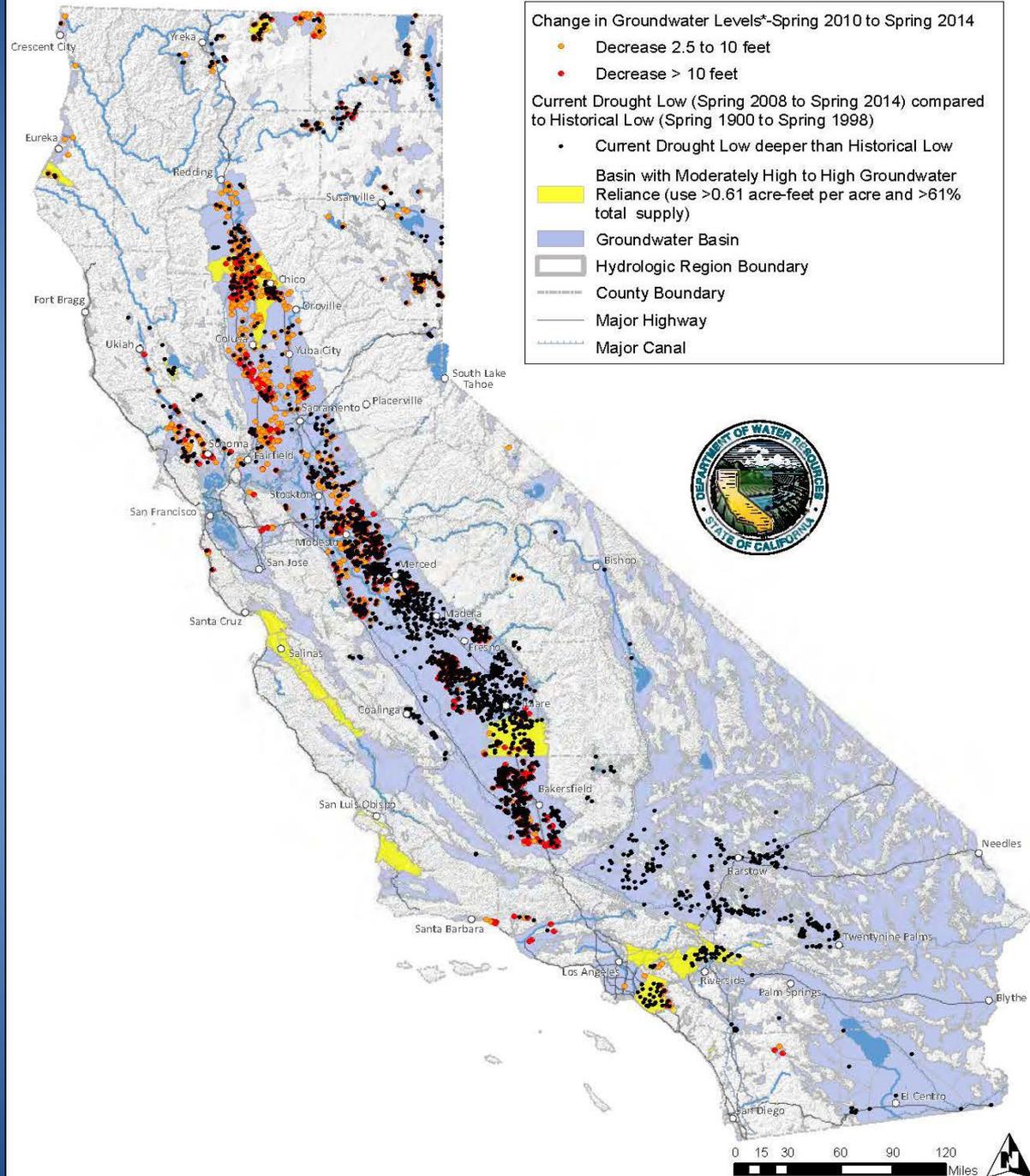
2005-10 Average

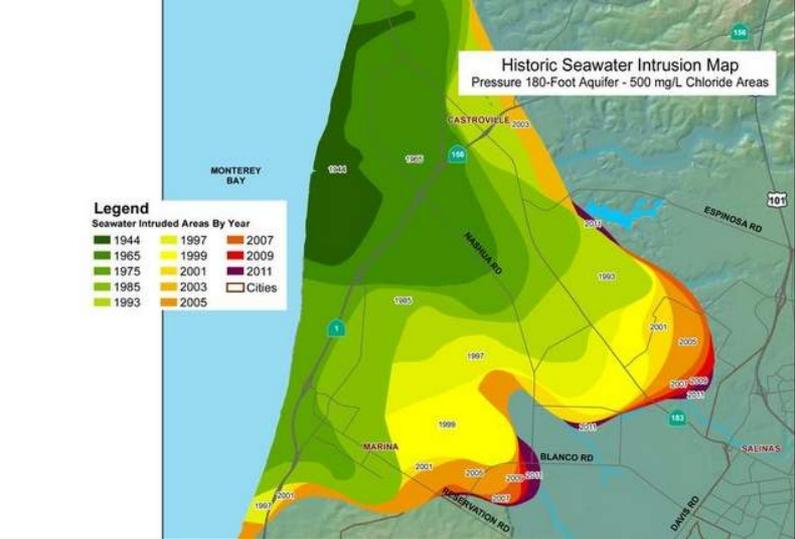


The Tulare Lake region is largest user of groundwater.

The Central Coast region is the most groundwater dependent.

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



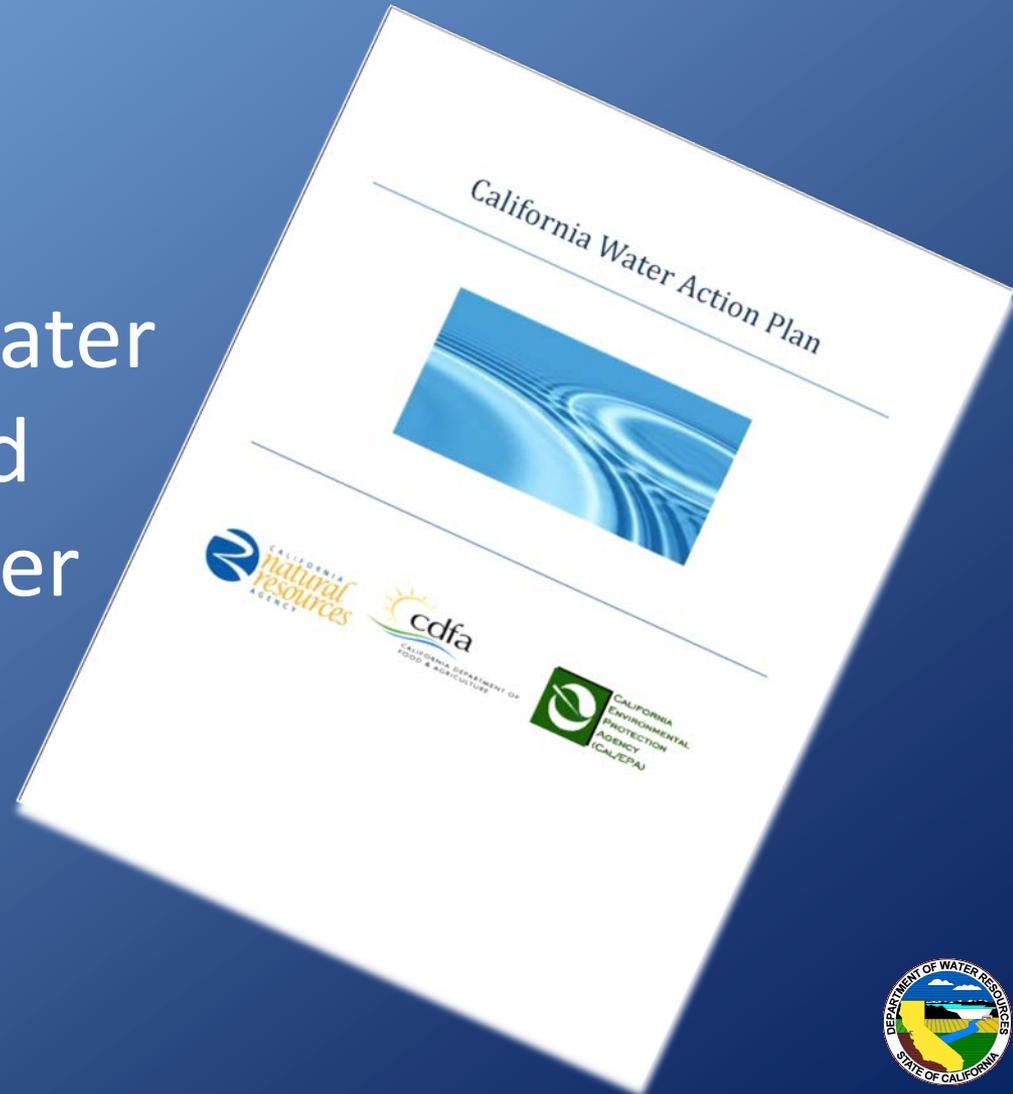


Adverse Impacts

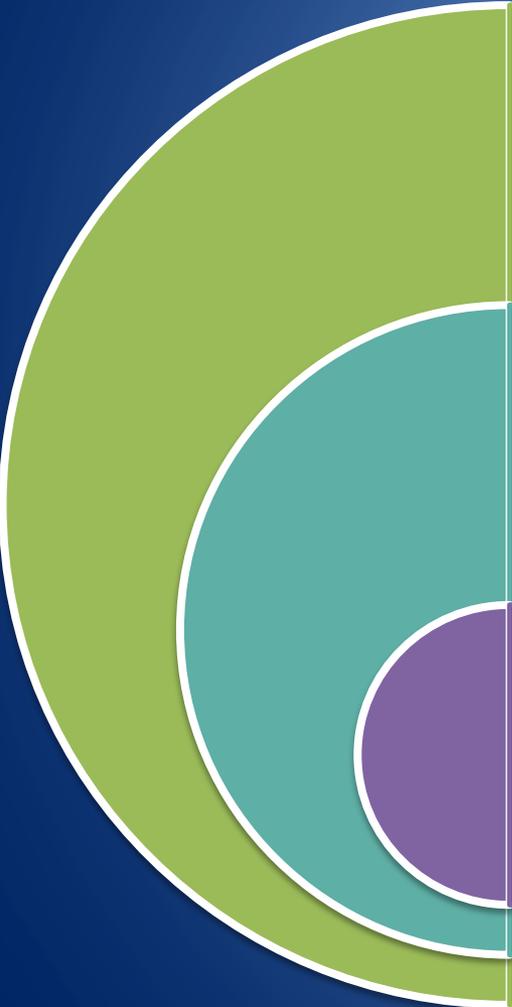


California Water Action Plan

Action 6: Expand water storage capacity and improve groundwater management



Sustainable Groundwater Management: Overview



Framework

- Applicability
- Definitions

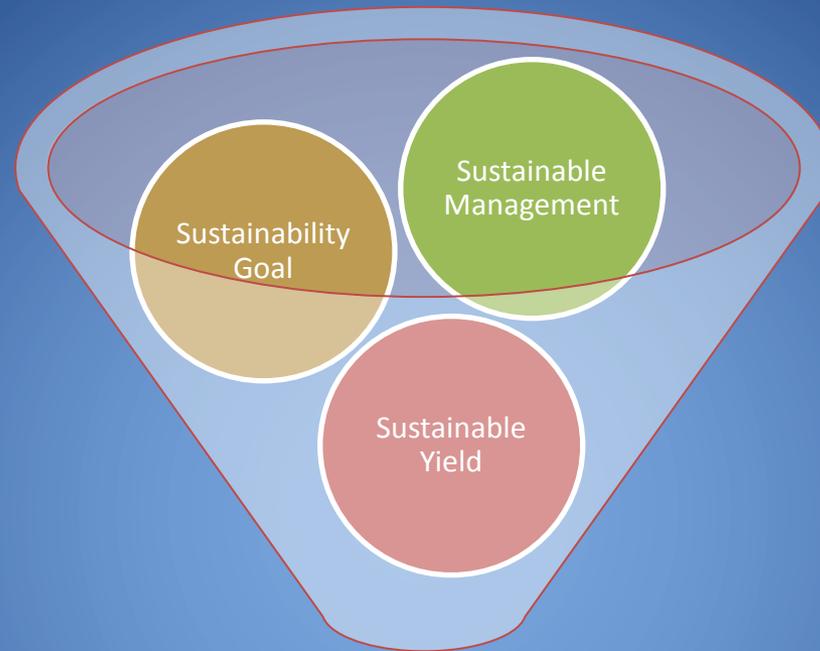
Local's Role

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

State's Role

- Basin Boundaries & Priorities
- Technical Assistance
- State Evaluation and Assessment
- State Intervention

Sustainability:



Prevent

“Undesirable Results”

Lowering of
Groundwater
Levels

Reduction in
Groundwater
Storage

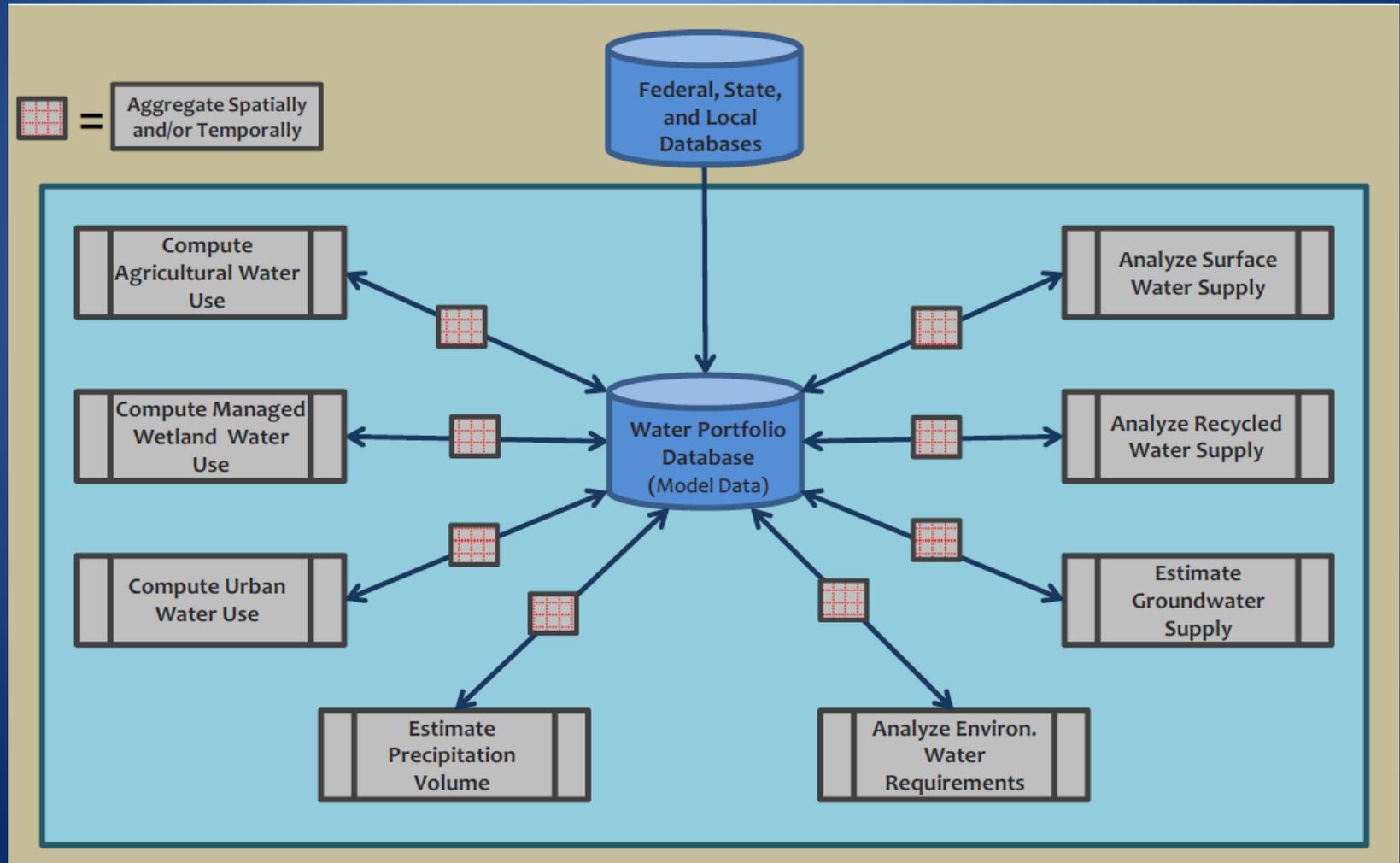
Seawater
Intrusion

Water
Quality
Degradation

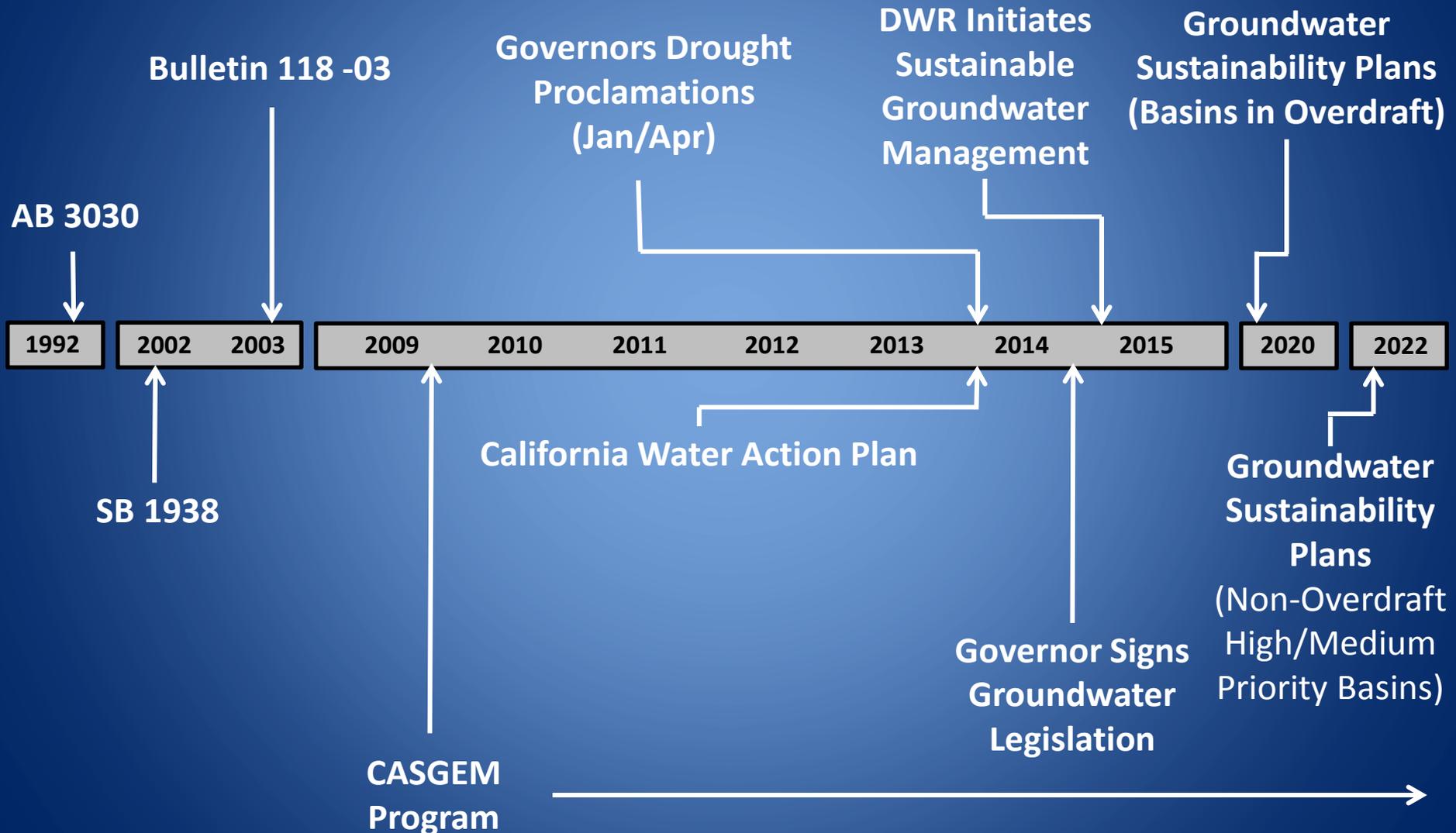
Land
Subsidence

Depletions of
Surface
Water

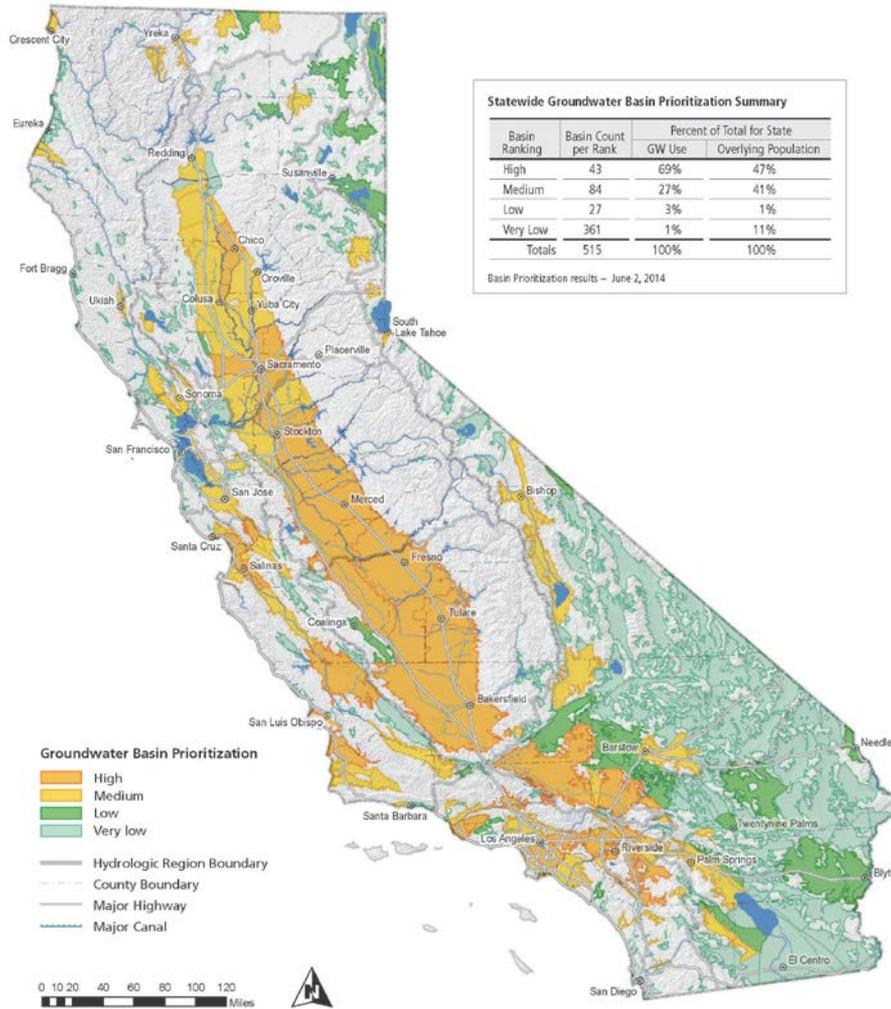
Water Balance is essential for sustainability



California's Major Milestones toward Sustainable Groundwater Management



CASGEM Basin Prioritization



Statewide Groundwater Basin Prioritization Summary

Basin Ranking	Basin Count per Rank	Percent of Total for State	
		GW Use	Overlying 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

126 High and Medium

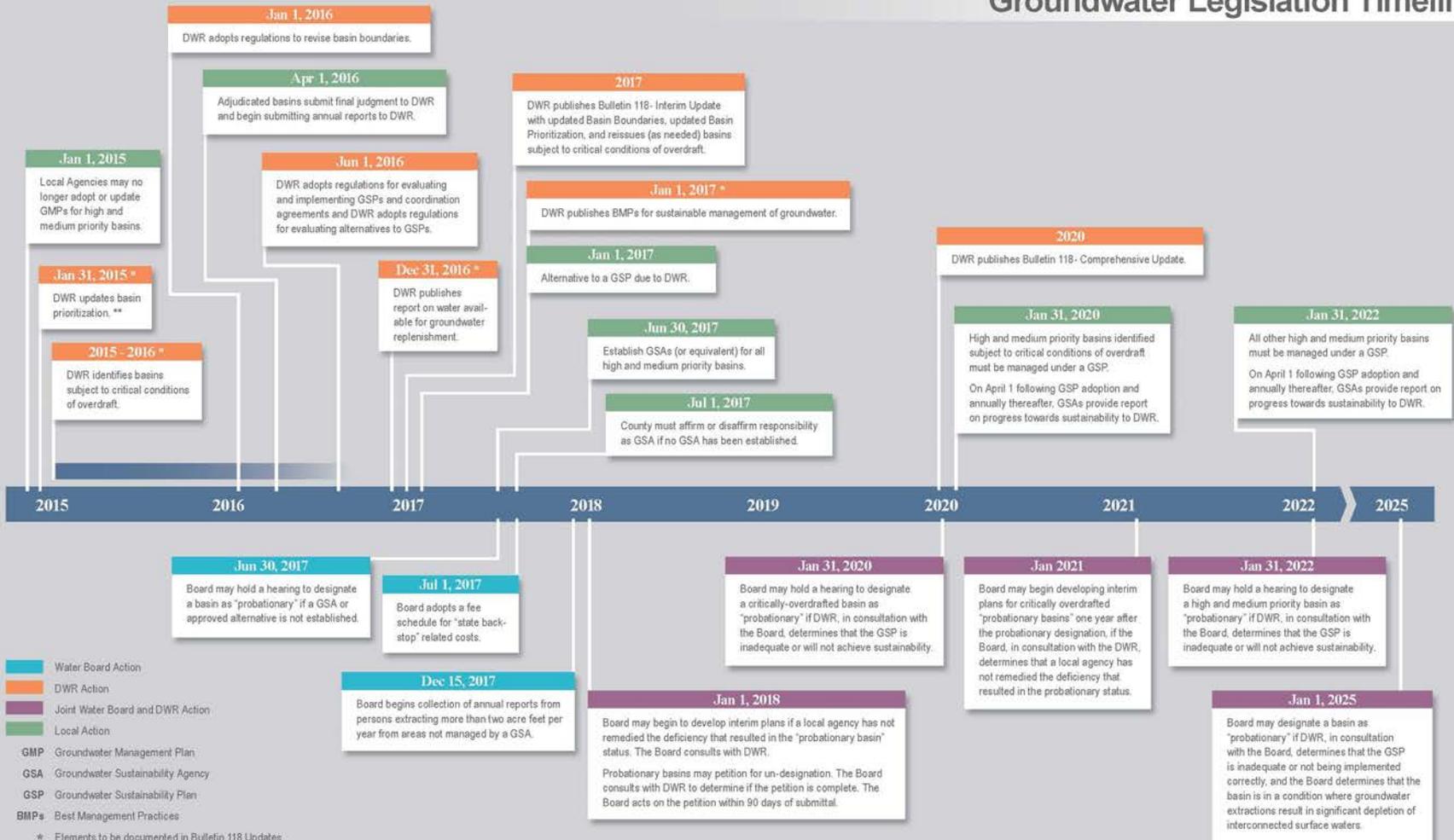
92% GW use

88% Population



Legislation Timeline

Groundwater Legislation Timeline



- 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)

Communication and Outreach



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**

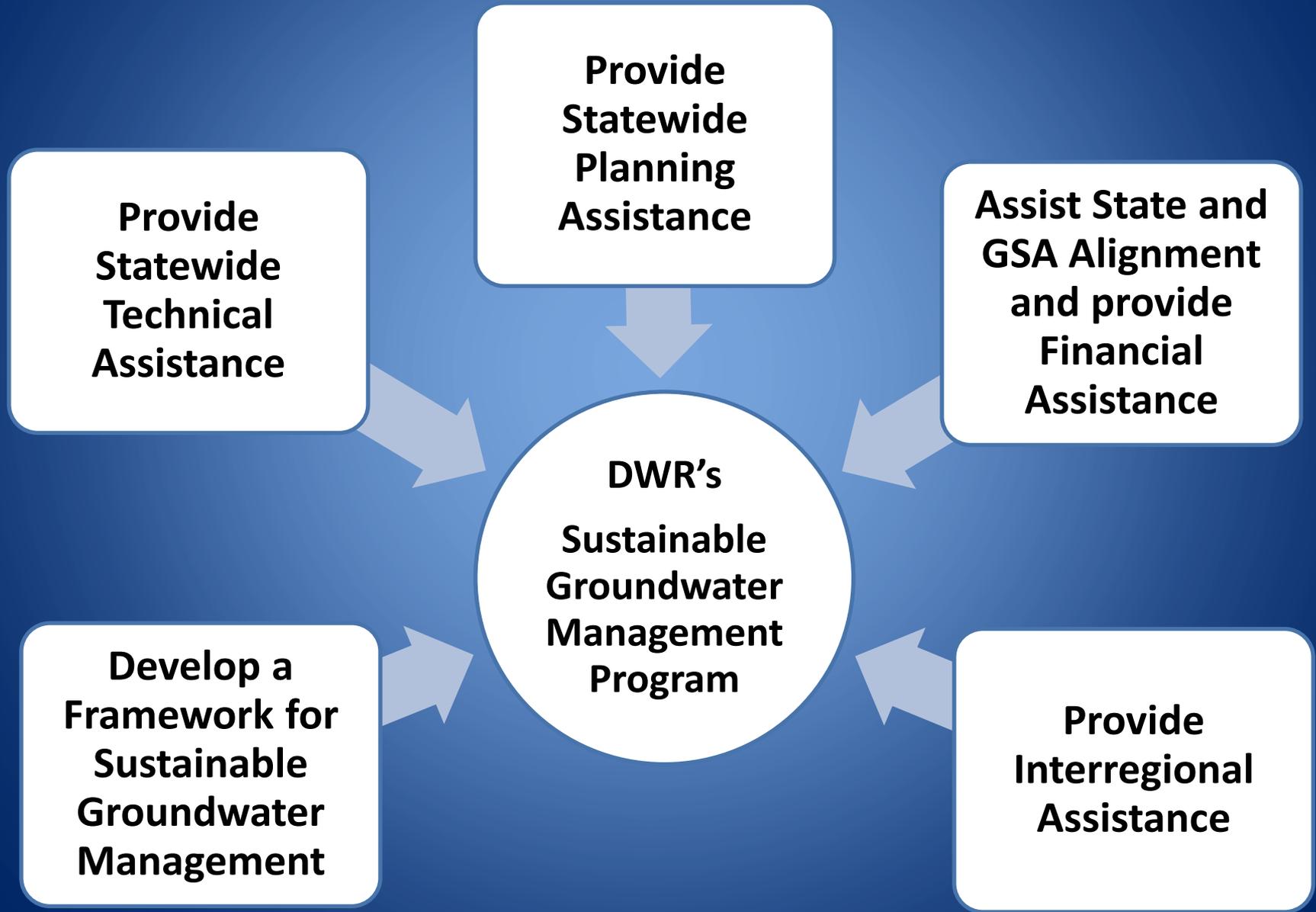
- **Strategic Plan**

- **Assistance to local agency communication**

Outreach

- **SWRCB**
 - Management Team
 - Communication Team
 - Data Team
 - Regulations Team
- **Water Commission**
 - Sub Committee
- **Technical Advisory Panel**
- **Leveraging Organizations**
- Tribal Governments
- Federal Agencies
- Public Listening Sessions

DWR's Sustainable Groundwater Management Program



**Provide
Statewide
Planning
Assistance**

**Provide
Statewide
Technical
Assistance**

**Assist State and
GSA Alignment
and provide
Financial
Assistance**

**DWR's
Sustainable
Groundwater
Management
Program**

**Develop a
Framework for
Sustainable
Groundwater
Management**

**Provide
Interregional
Assistance**

1. Develop a Framework for Sustainable Groundwater Management

DWR will support locally developed groundwater sustainability plans

- **Develop Comprehensive Water Budgets**
- **Update basin prioritization**
- **Publish Best Management Practices**
- **Develop and Adopt Regulations for Basin Boundary Revisions**
- **Develop and Adopt Regulations for Groundwater Sustainability Plan Assessment and GSP Alternatives**
- **Identify Basins Subject to Critical Conditions of Overdraft**
- **Evaluate Adequacy of Groundwater Sustainability Plans**

2. Provide Statewide Technical Assistance

DWR will
conduct
technical
activities to
improve
groundwater
management

- **Develop Groundwater Management Information System**
- **Collect Groundwater Quality Data**
- **Collect Groundwater Elevation Data**
- **Collect Subsidence Data**
- **Establish Well Standards**
- **Implement the CASGEM Program**
- **Promote Water Conservations**

3. Provide Statewide Planning Assistance

DWR will
conduct
planning
activities to
improve
groundwater
management

- **Publish 2017 - Bulletin 118 “Interim Update”**
- **Publish 2020 - Bulletin 118 “Comprehensive Update”**
- **Integrate Groundwater information into Bulletin 160**
- **Local Assistance for Recharge Projects**

4. Assist State and GSA Alignment and provide Financial Assistance

DWR will support local activities to improve alignment of groundwater management

- Alignment for management of groundwater programs
- Provide Financial Assistance
- Provide Education and Communication Assistance
- Provide Facilitation and Engagement Assistance

5. Provide Interregional Assistance

DWR will support projects and programs to improve interregional management

- **Assist in the Implementation of Storage and Conveyance projects**
- **Provide Information on Surface Water Reliability**
- **Advance Studies on Surface/Groundwater Interaction**
- **Provide Information for Water availability for Replenishment**

Immediate Actions

Developing
Regulations
for Basin
Boundaries

Updating
Basin
Prioritization

Identify
basins
subject to
conditions of
critical
overdraft

Developing
Regulations
for
Groundwater
Sustainability
Plans



Basin Priorities



Initial Groundwater Basin Prioritization under the SGM Act

The Sustainable Groundwater Management Act revised the Water Code to direct the Department of Water Resources (DWR) to develop the initial groundwater basin priority by January 31, 2015. DWR has concluded that the basin prioritization finalized in June 2014 under the California Statewide Groundwater Elevation Monitoring (CASGEM) Program will be the initial prioritization when the SGM Act goes into effect on January 1, 2015. The basin prioritization results are posted on the CASGEM website at http://www.water.ca.gov/groundwater/casgem/basin_prioritization.cfm.



The SGM Act applies to the 127 High and Medium priority groundwater basins, which account for approximately 96 percent of groundwater use in California.

DWR has determined that data is not readily available to allow reprioritization based on adverse impacts from local habitat and local streamflows prior to January 31, 2015. DWR will immediately begin to compile the habitat and streamflow data and develop a revised process to consider new information. The groundwater basin prioritization could change at a later date for some basins due to the consideration of impacts from local habitat and local streamflows in addition to potential changes to basin boundaries based on improved geologic information, correcting errors in the dataset, and requests from local agencies. However, any changes to basin priorities will not be officially changed until after the Bulletin 118 alluvial groundwater basin boundaries are updated in 2016. The basin prioritization update process will include public meetings or workshops to solicit data not available to DWR

and input on the process.

The June 2014 Final Statewide basin prioritization results are compiled into a [summary table](#). This list is organized by priority and includes the basin name, number, total score, Hydrologic Region, and DWR Region. More detailed information, associated maps, and description of the process are available [here](#).

GROUNDWATER HOME

SUSTAINABLE GROUNDWATER MANAGEMENT

- Groundwater Sustainability Agencies
- Initial Basin Prioritization

GROUNDWATER INFORMATION CENTER

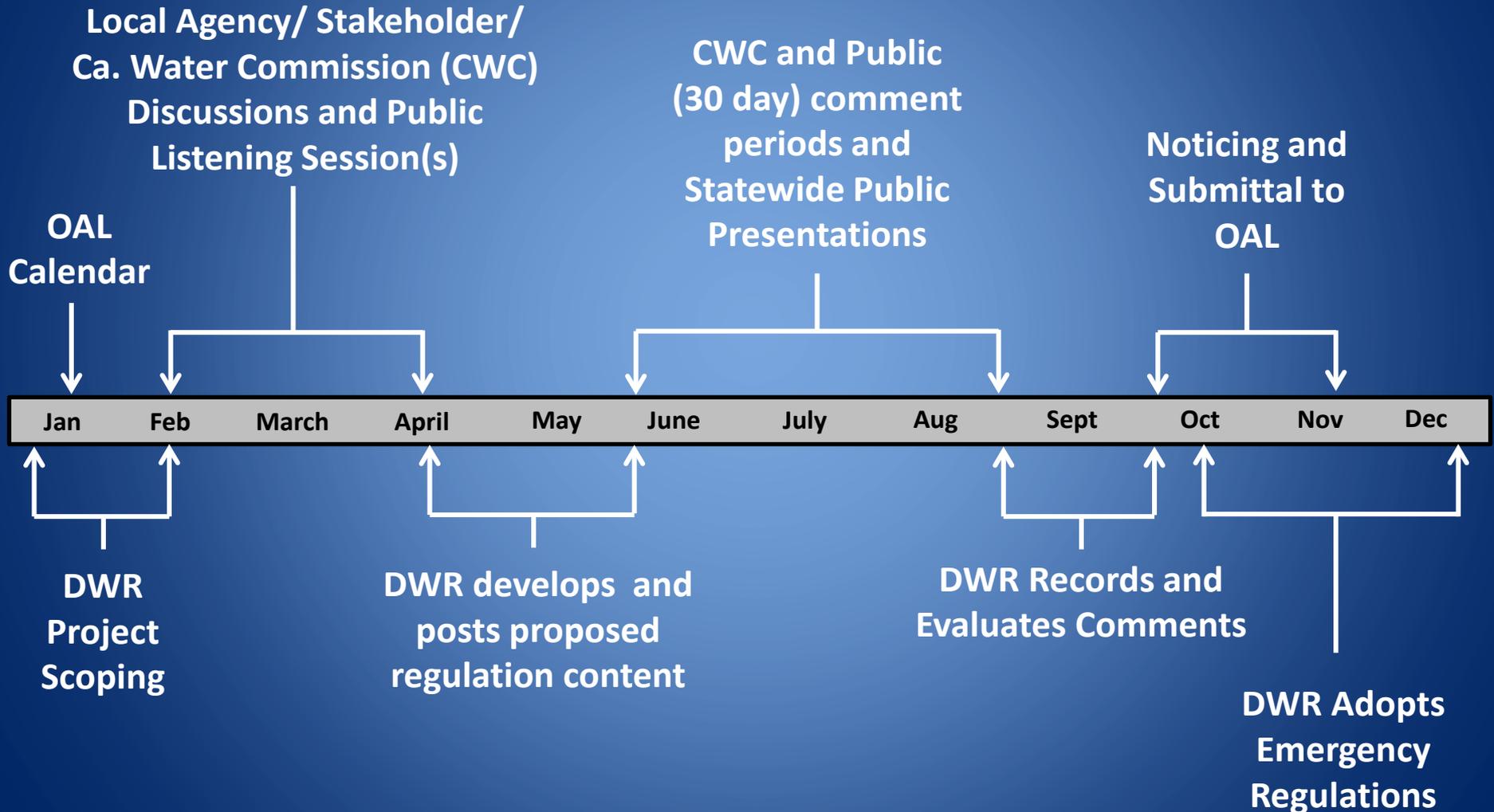
- CASGEM
- BULLETIN 118



- Initial priorities established June 2014
- Compiling habitat and streamflow data and evaluating methods to update priorities
- Will conduct extensive outreach
- Formalize priorities with next Bulletin 118

Basin Boundary Regulations

Estimated Project Timeline (2015)



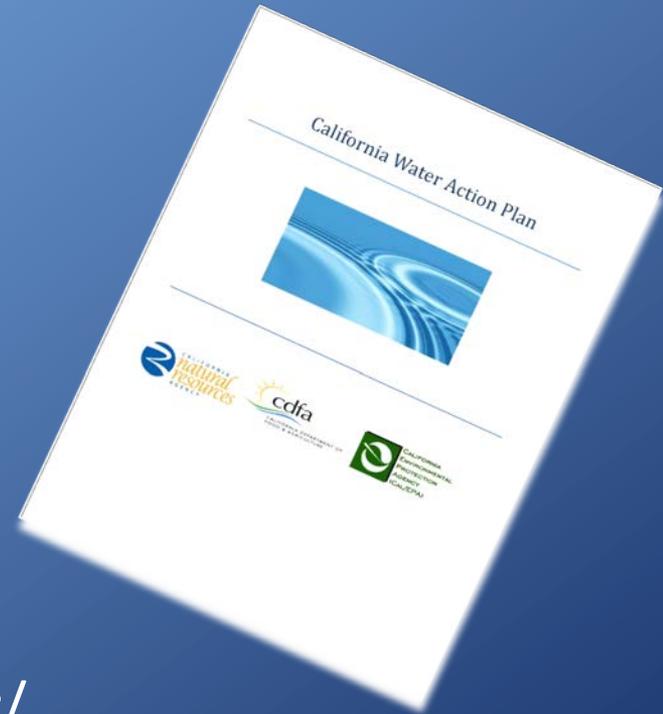
Establishing GSAs

- Local Agency or combination of Local Agencies
 - Single GSA, Single GSP
 - Multiple GSAs, Single GSP
 - Multiple GSAs, Multiple GSPs with “Coordination Agreement”
- Publication of Notice and Public Hearings
- “Exclusive” local agencies within statutory boundary
- Notice of Intent to DWR posted with proposed boundaries
- Consider all interests of beneficial uses and users of groundwater (specific information identified in act)

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://www.water.ca.gov/cagroundwater/>

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

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

