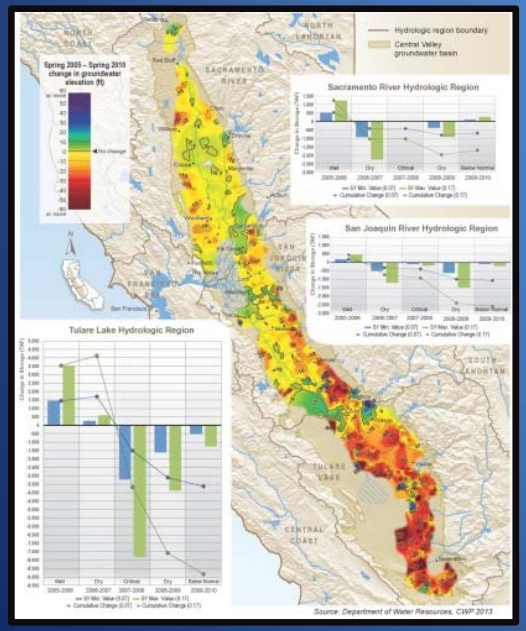
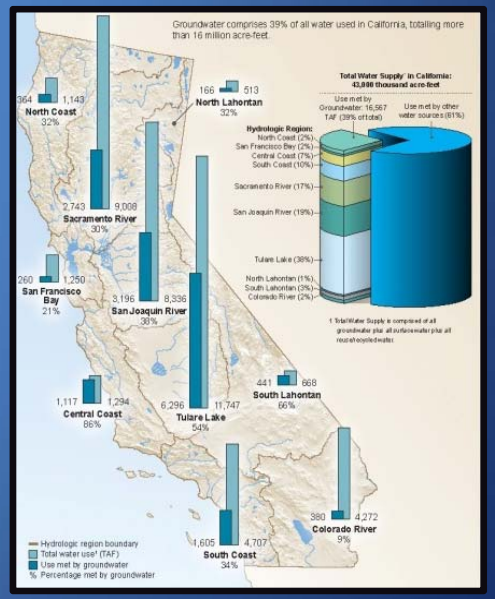
DEPARTMENT OF
WATER RESOURCES

Implementation of the Sustainable Groundwater Management Act

2015 Northern Sacramento Valley Water Dialogue





April 30, 2015

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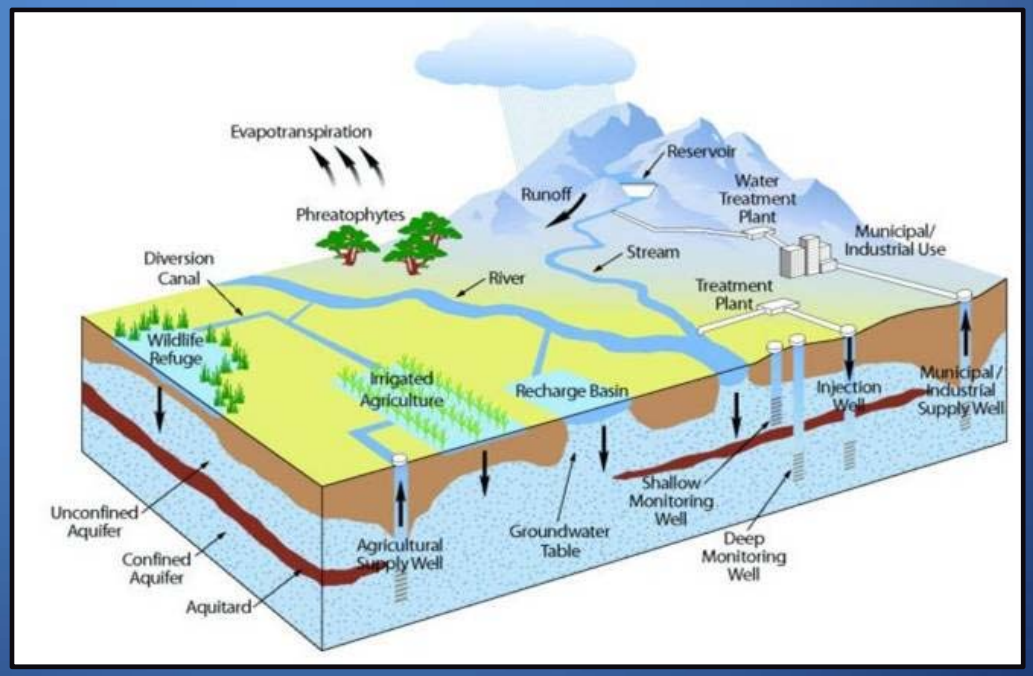
Presentation Overview:

- ***2014 Sustainable Groundwater Management Act***
- ***DWR Groundwater Sustainability Program***
- ***Near Term Actions…***



Sustainable Groundwater Management Act

Navigating the Acronyms

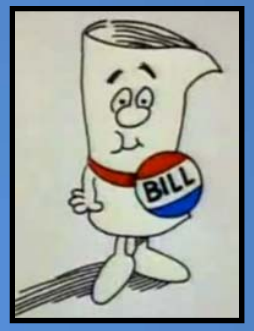
SGMA: *Sustainable Groundwater Management Act*

SGMP: *Sustainable Groundwater Management Program*

GSA: *Sustainable Groundwater Management Agency*

GSP: *Sustainable Groundwater Management Plan*

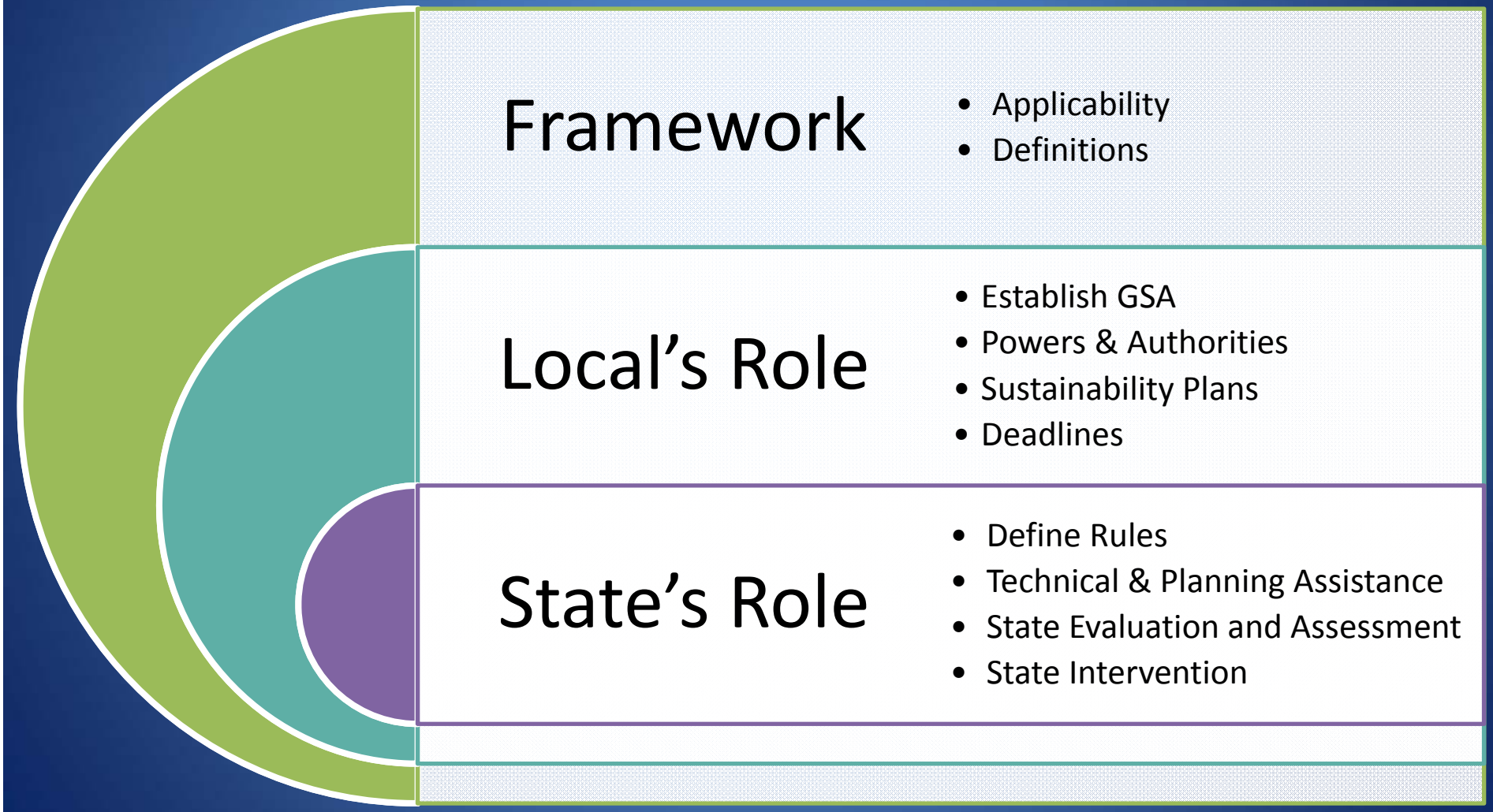
2014 Sustainable Groundwater Management Legislation



- **AB 1739: Dickinson**
- **SB 1168: Pavley**
- **SB 1319: Pavley**

Key Guiding Principle: ***Sustainable groundwater management is best achieved locally through the development, implementation, and updating of plans and programs based on the best available science.***

Sustainable Groundwater Management Act General Overview



SGMA Intended Outcomes/Expectations

Outcomes/Expectations:

- **To provide for the sustainable management of groundwater basins;**
- **To enhance local GW management consistent with existing rights;**
- **To avoid or minimize subsidence;**
- **To improve data collection and understanding about groundwater;**
- **To increase groundwater storage;**
- **To ensure that local agencies manage groundwater in a sustainable manner; and…**
- **To provide State intervention if local or regional agencies are not able to sustainably manage local groundwater resources.**

SGMA Expectations Driven by Upcoming Regulations and Key Definitions…

(WC § 10721)

Local Agency:

"A public agency that has water supply, water management, or land use responsibilities within a groundwater basin."

Sustainable Groundwater Management:

"The management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results."

Sustainable Yield:

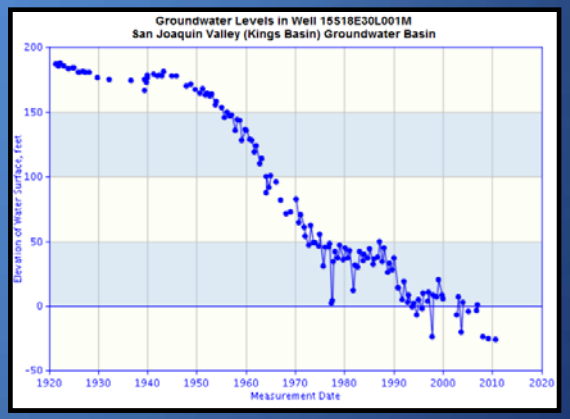
"The maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result. "

SGMA Expectations Driven by Upcoming Regulations and Key Definitions…

(WC § 10721)

Undesirable Results: One or more of the following…

1. ***Chronic lowering of gw levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon. <u>Overdraft during a drought is not sufficient</u>…***



Significant and unreasonable…

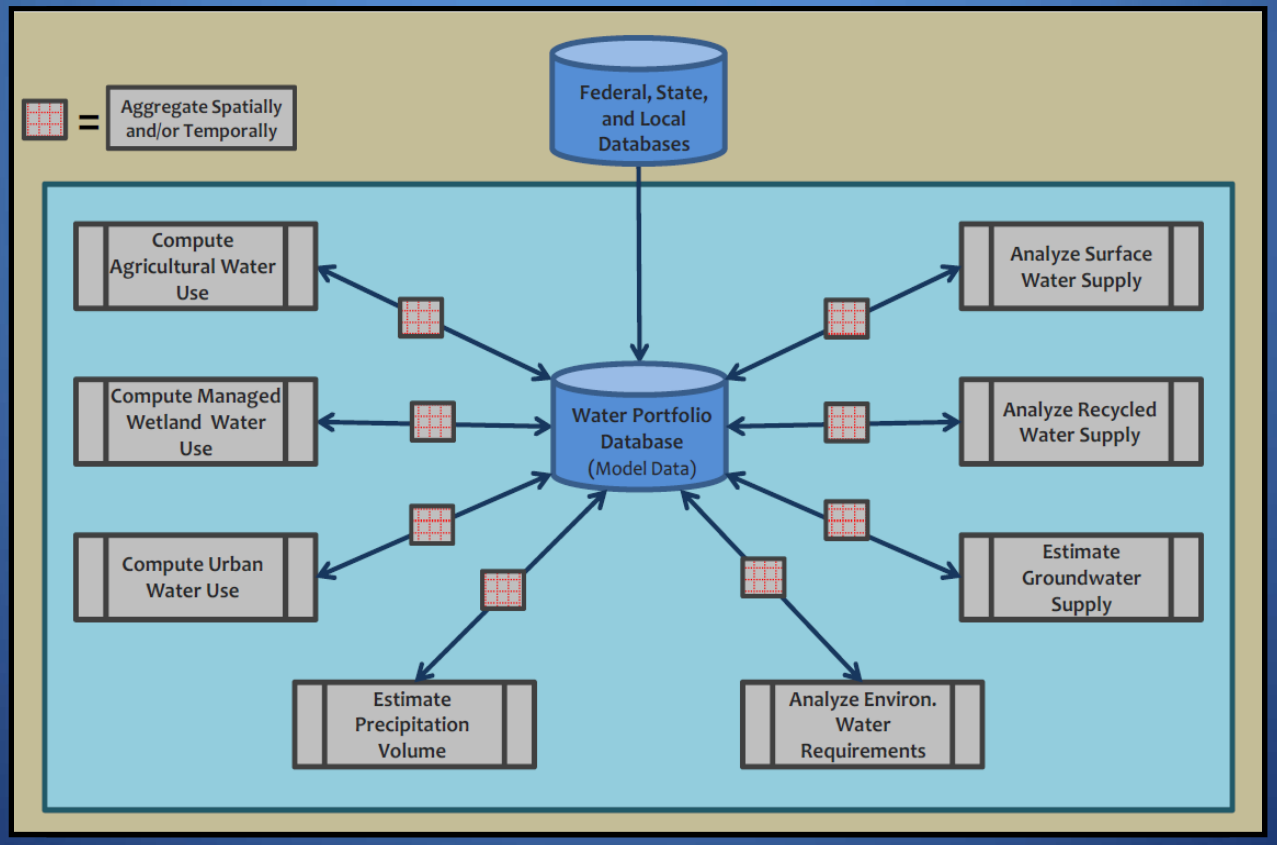
- **reduction of groundwater storage**
- **seawater intrusion**
- **degradation of water quality**
- **land subsidence**
- **depletions of interconnected surface water resulting in impacts on beneficial uses of the surface water**

Expectations Driven by Upcoming Regulations and Key SGMA Definitions…

(WC § 10721)

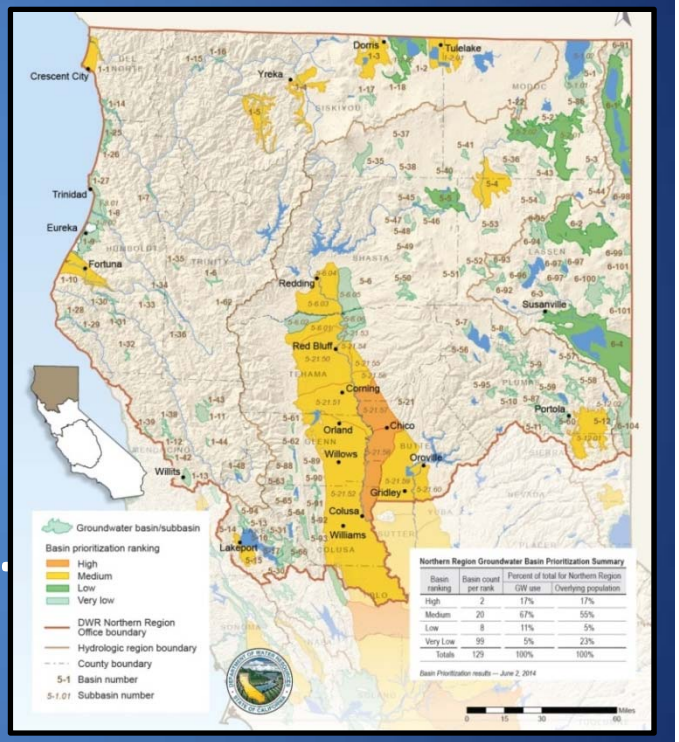
Water Budget:

"An accounting of the total groundwater and surface water entering and leaving a basin including the changes in the amount of water stored."



SGMA Requires that a GSPs be adopted for High and Medium groundwater basins

- **Limited to "high & medium priority basins" 127 out of 515 basins in the state**
- **Adjudicated basins are exempt, except for minimal reporting**
- **"Low & very low priority" basins are exempt, but are encouraged to adopt plans.**



*** Initial Basin Priority = June, 2014 Results**

Basin Priority will be updated to Include impacts to habitat and stream flow

June 2014 Basin Prioritization Results
http://water.ca.gov/groundwater/casgem/basin_prioritization.cfm

SGMA Establishes a timetable for Sustainable Management

- By 2017, local groundwater sustainability agencies (GSA) must be identified.
- By 2020, overdrafted basins must be covered by a groundwater sustainability plan (GSP). Other high & medium priority basins not in overdraft must have plans by 2022.
- By 2040, each high & medium priority basin must achieve sustainability, though this can be extended by 10 years for good cause.

SGMA Provides New Groundwater Management Authority and Tools

- **Provides a process for requesting Basin Boundary changes**
- **Authorizes creation of GSAs**
- **Empowers GSAs to:**
  - **Register groundwater wells**
  - **Measure extractions**
  - **Require reports**
  - **Manage extractions**
  - **Assess fees**
- **Exempts preparation of local GSPs from CEQA**
- **Establishes “sustainability goal” over time to guide management**

SGMA Allows for Flexibility in GSA Development

…with the expectation that GSA development will help achieve sustainable management implemented without undesirable results

Multiple Options for GSA Development: (WC § 10727.2)

1. ***Single GSA, Single GSP…Covering Entire Basin,***
2. ***Multiple GSAs, Single GSP…Covering Entire Basin,***
3. ***Multiple GSAs, Multiple GSPs, with "Single Coordination Agreement"***

******All Options Require Establishing a Common Understanding of the Basin***

SGMA Allows for Flexibility in GSA Development

Expectations for a GSAs to establish a Common Understanding increases with Multiple GSAs & Multiple GSPs over a single basin…

Coordination Agreement: ***GSAs must make sure individual GSPs utilize the same data, methodologies, and assumptions for individual GSPs.***

Coordinating Data…

- ***GW Elevation Data***
- ***GW Extraction Data***
- ***Surface Water Supply***
- ***Total Water use***
- ***Change in GW Storage***
- ***Water Budget***
- ***Sustainable Yield***

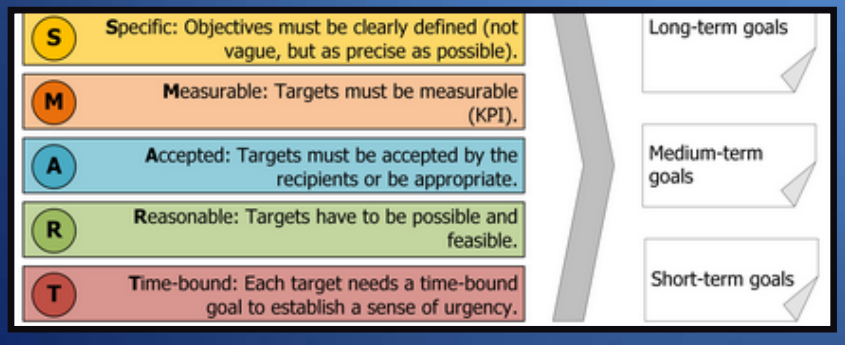
SGMA Provides for Tribal Participation

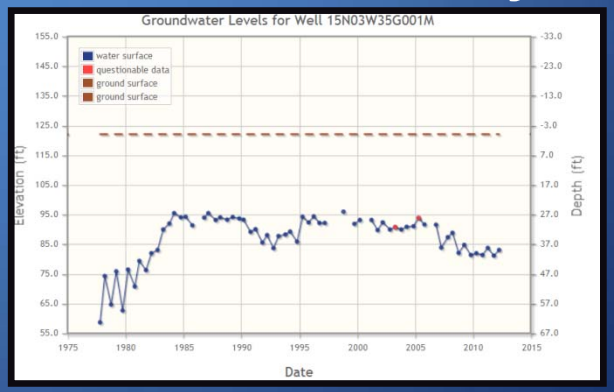
Water Code: 10720.3

- Federally recognized tribes may participate through a Joint Powers Agreement 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.

SGMA Establishes Some Basic Requirements for GSPs:

- **Description of physical setting**
- **Identification of groundwater conditions: (levels, quality, subsidence, groundwater – surface water interaction)**
- **Historic and projected water demands and supplies**
- **Maps: basin and agency boundaries, recharge areas.**
- **Measurable Objectives with Interim Milestones (every 5 yrs) to achieve sustainability in 20 yrs.**
- **Description of how GSP is given consideration in city and county General Plans**

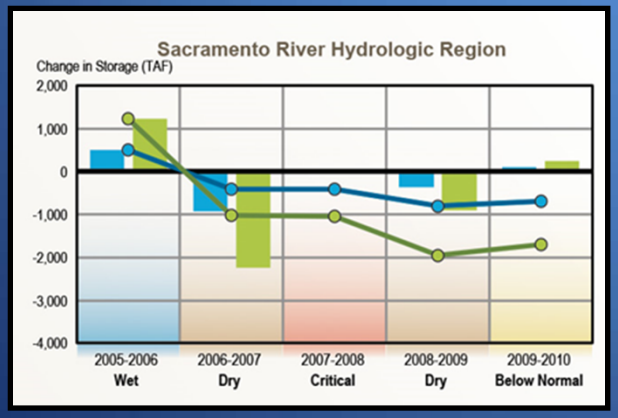


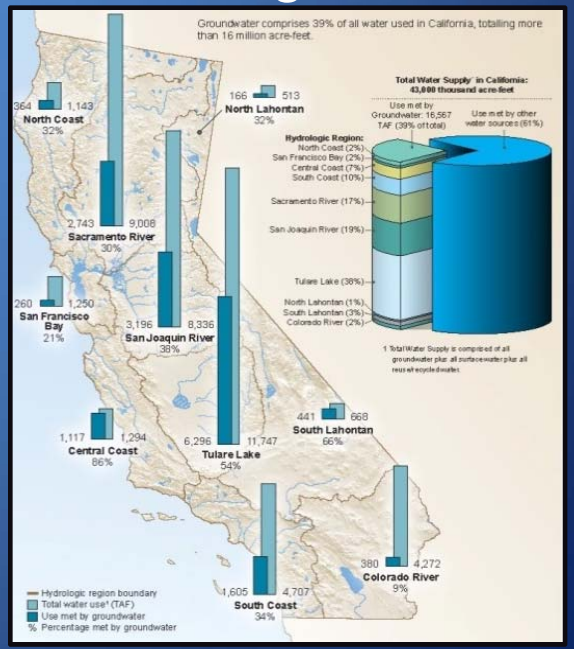


SGMA Establishes Basic Expectations for Annual GSA Reporting to DWR

GSA Annual Reporting Requirements to DWR… (WC §10728)

a) Groundwater elevation data
b) Annual aggregated data identifying groundwater extraction for the preceding water year
c) Surface water supply
d) Water supply available for use for groundwater recharge or in-lieu use
e) Total water use
f) Change in groundwater storage





SGMA Provides the Opportunity for Local Agencies to Adjust Basin Boundaries

Question for Potential GSAs: ***Are the existing boundaries appropriate for the governance and implementation of sustainable groundwater management or are adjustments needed?***

By January 1, 2016 DWR will develop Regulations and Criteria to Evaluate Proposed Basin Boundary Revisions: WC § 10722.2

Information Requirements

1. ***Will the proposed adjusted basin result in sustainable groundwater management?***

2. ***Has the necessary Technical Information/Justification been provided?***

3. ***Has the GSA Coordinated proposed basins changes with interested local agencies and public water systems within or adjacent to the basin?***

SGMA Provides DWR Authority to Develop Regulations for Review/Assessment of GSPs:

General GSP Expectations…

- ✓ ***Are the GSAs collecting, managing, and analyzing data appropriately to evaluate long-term sustainability?***
- ✓ ***Are basins with multiple GSPs coordinating effectively?***
- ✓ ***Does implementation of one GSP adversely affect the ability of an adjacent basin to implement their sustainability goals?***
- ✓ ***Is the GSP implementing their objectives, meeting their milestones, and achieving the sustainability goal within the basin?***
- ✓ ***Are corrective actions needed?***

SGMA Provides for State Oversight (backstop)… *if needed*

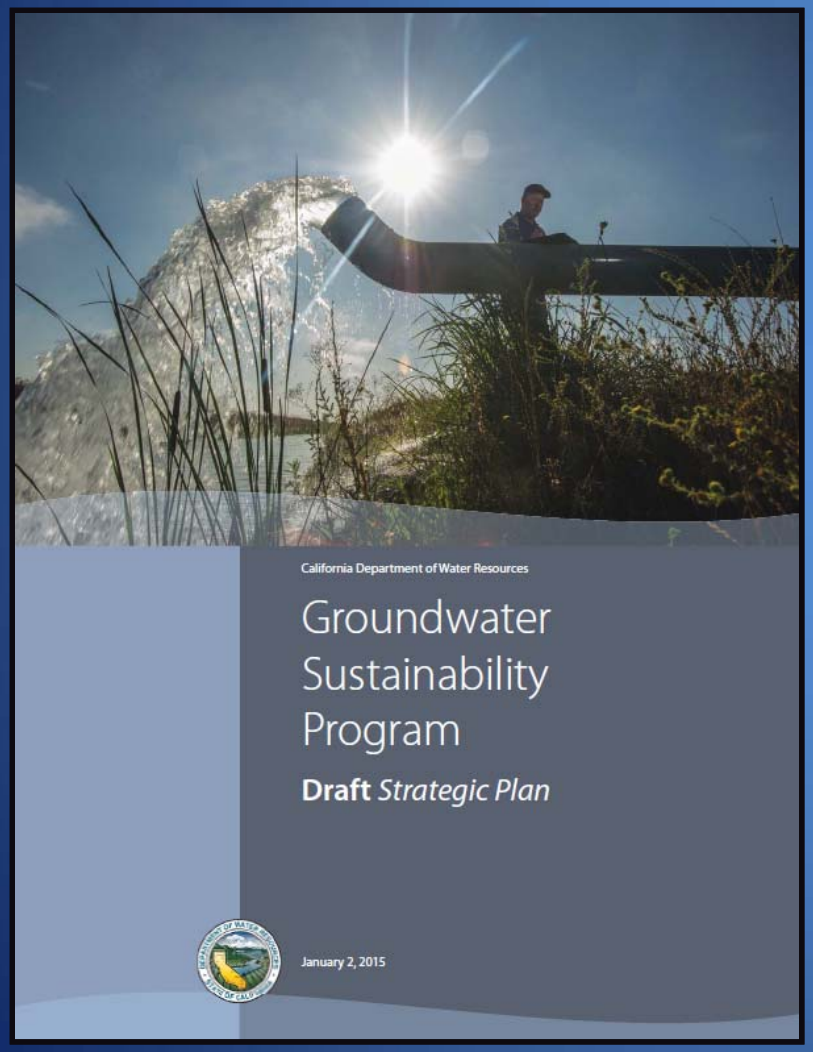
- DWR evaluates GSPs within two years of submission.
- State Water Board Intervention:
  - No governance structure for a basin after 2 ½ years
  - No plan after five years (overdrafted basins) or ten years (other basins)
  - Plan is inadequate and the basin has serious groundwater problems
  - Local agency has not adequately implemented the plan and the basin has serious groundwater problems
- State Board must return control to local agencies as soon as they adopt an adequate plan.
- State Board may limit its temporary control to the portion of the basin not being managed.

SGMA's Overall Expectations for GSAs and GSPs

Do the GSAs and GSPs demonstrate a good understanding of…

- ✓ **Local Issues and Interests?**
- ✓ **Aquifer Characteristics?**
  - ➢ **Occurrence and movement of GW (recharge & discharge)**
  - ➢ **Seasonal and long-term changes in GW levels**
  - ➢ **GW Demand vs Change in GW in Storage**
  - ➢ **Existing and Potential Subsidence**
  - ➢ **Hydrogeologic relationship between nearby basins…inflow, underflow, etc.**
- ✓ **Well infrastructure numbers & distribution (domestic, agricultural, public supply, monitoring.)?**
- ✓ **Well Permitting Oversight?**
- ✓ **Land use planning?**
- ✓ **Water Budgets?…and how they change under:**
  - ➢ **Existing and forecasted Supply & Demand (land use practices)**
  - ➢ **Changes in Supply Reliability (regulatory cutbacks vs changing hydrology/climate)**

DWR Implementation of the Sustainable Groundwater Management Program



Groundwater Sustainability Program Strategic Plan

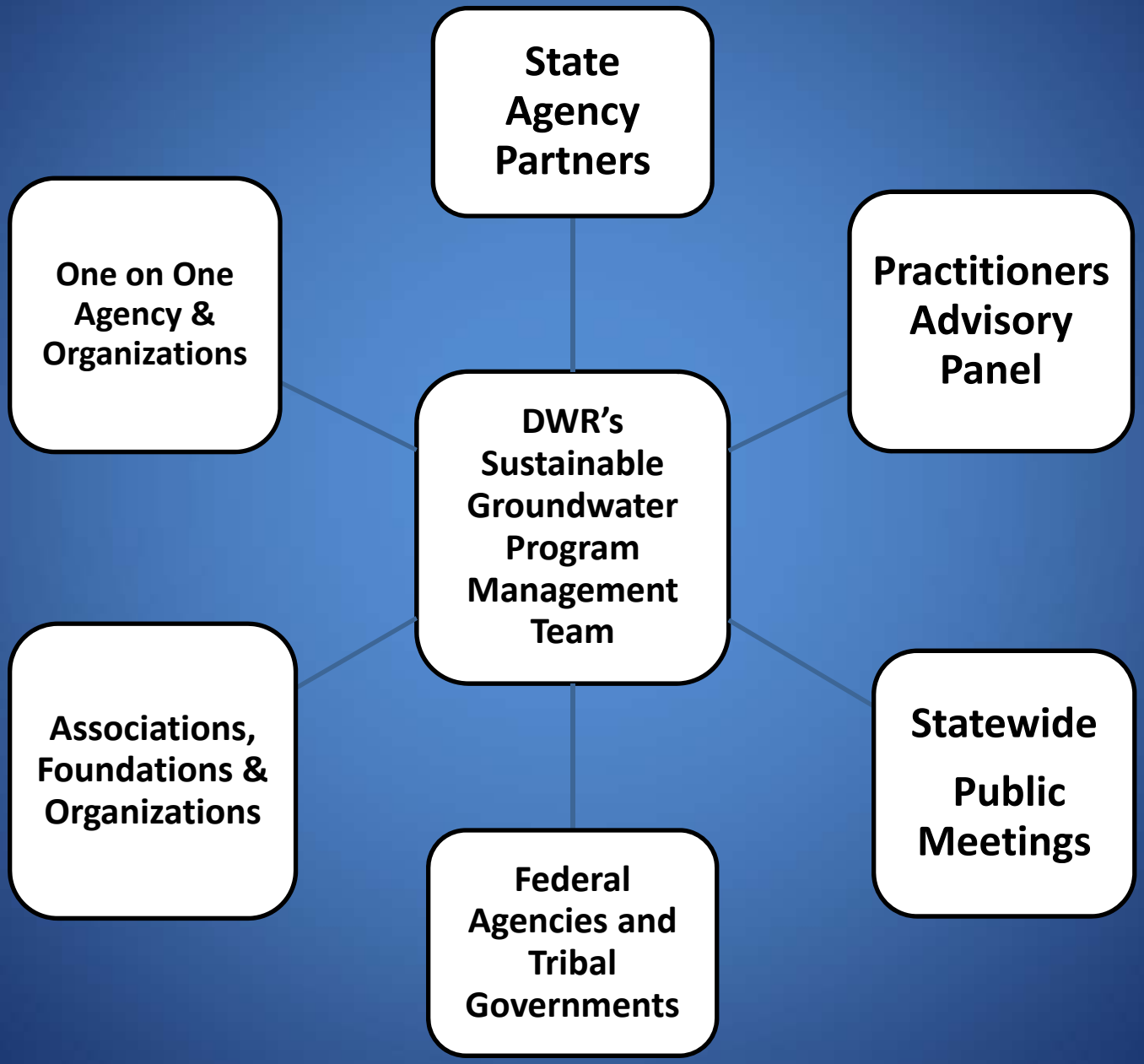
Describes DWR role and responsibilities under the Sustainable Groundwater Management Act and outlines related actions from the California Water Action Plan.

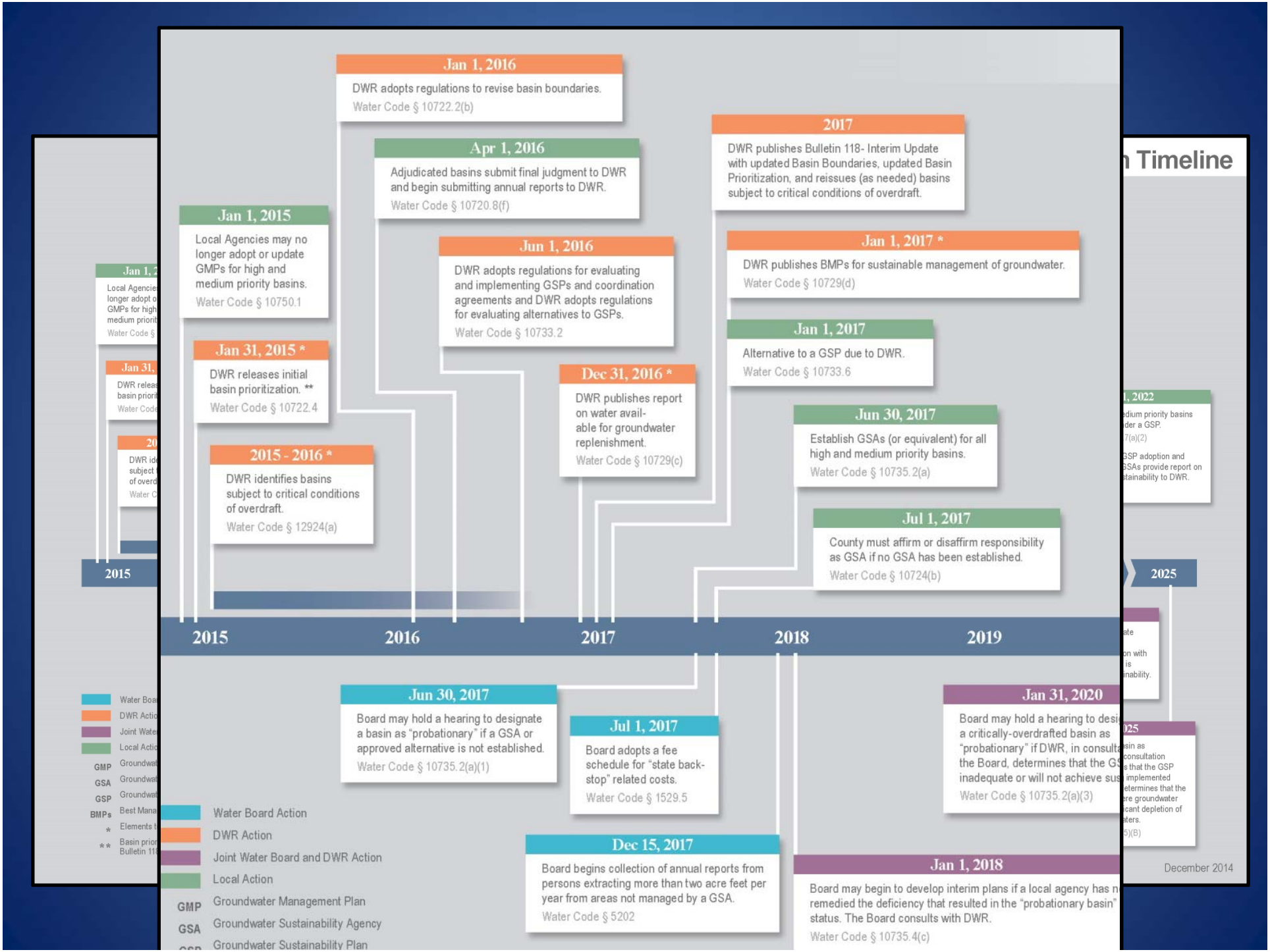
DWR Rollout: *Phased Implementation of Legislation to Achieve Sustainable Groundwater Management*

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

DWR's Sustainable Groundwater Management Program Objectives

Communication and Outreach




Jan 1, 2016
DWR adopts regulations to revise basin boundaries.
Water Code § 10722.2(b)
Apr 1, 2016
Adjudicated basins submit final judgment to DWR and begin submitting annual reports to DWR.
Water Code § 10720.8(f)
2017
DWR publishes Bulletin 118- Interim Update with updated Basin Boundaries, updated Basin Prioritization, and reissues (as needed) basins subject to critical conditions of overdraft.
Jan 1, 2015
Local Agencies may no longer adopt or update GMPs for high and medium priority basins.
Water Code § 10750.1
Jun 1, 2016
DWR adopts regulations for evaluating and implementing GSPs and coordination agreements and DWR adopts regulations for evaluating alternatives to GSPs.
Water Code § 10733.2
Jan 1, 2017 *
DWR publishes BMPs for sustainable management of groundwater.
Water Code § 10729(d)
Jan 31, 2015 *
DWR releases initial basin prioritization. **
Water Code § 10722.4
Dec 31, 2016 *
DWR publishes report on water avail-able for groundwater replenishment.
Water Code § 10729(c)
Jan 1, 2017
Alternative to a GSP due to DWR.
Water Code § 10733.6
2015 - 2016 *
DWR identifies basins subject to critical conditions of overdraft.
Water Code § 12924(a)
Jun 30, 2017
Establish GSAs (or equivalent) for all high and medium priority basins.
Water Code § 10735.2(a)
Jul 1, 2017
County must affirm or disaffirm responsibility as GSA if no GSA has been established.
Water Code § 10724(b)
2015
2016
2017
2018
2019
Jun 30, 2017
Board may hold a hearing to designate a basin as "probationary" if a GSA or approved alternative is not established.
Water Code § 10735.2(a)(1)
Jul 1, 2017
Board adopts a fee schedule for "state back-stop" related costs.
Water Code § 1529.5
Jan 31, 2020
Board may hold a hearing to desi a critically-overdrafted basin as "probationary" if DWR, in consulta the Board, determines that the GS inadequate or will not achieve sus
Water Code § 10735.2(a)(3)
Water Board Action
DWR Action
Joint Water Board and DWR Action
Local Action
GMP Groundwater Management Plan
GSA Groundwater Sustainability Agency
Dec 15, 2017
Board begins collection of annual reports from persons extracting more than two acre feet per year from areas not managed by a GSA.
Water Code § 5202
Jan 1, 2018
Board may begin to develop interim plans if a local agency has n remedied the deficiency that resulted in the "probationary basin" status. The Board consults with DWR.
Water Code § 10735.4(c)
Timeline
2025
December 2014

SGMA 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 Boundary and GSP & Alternative GSP Regulation Process for

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

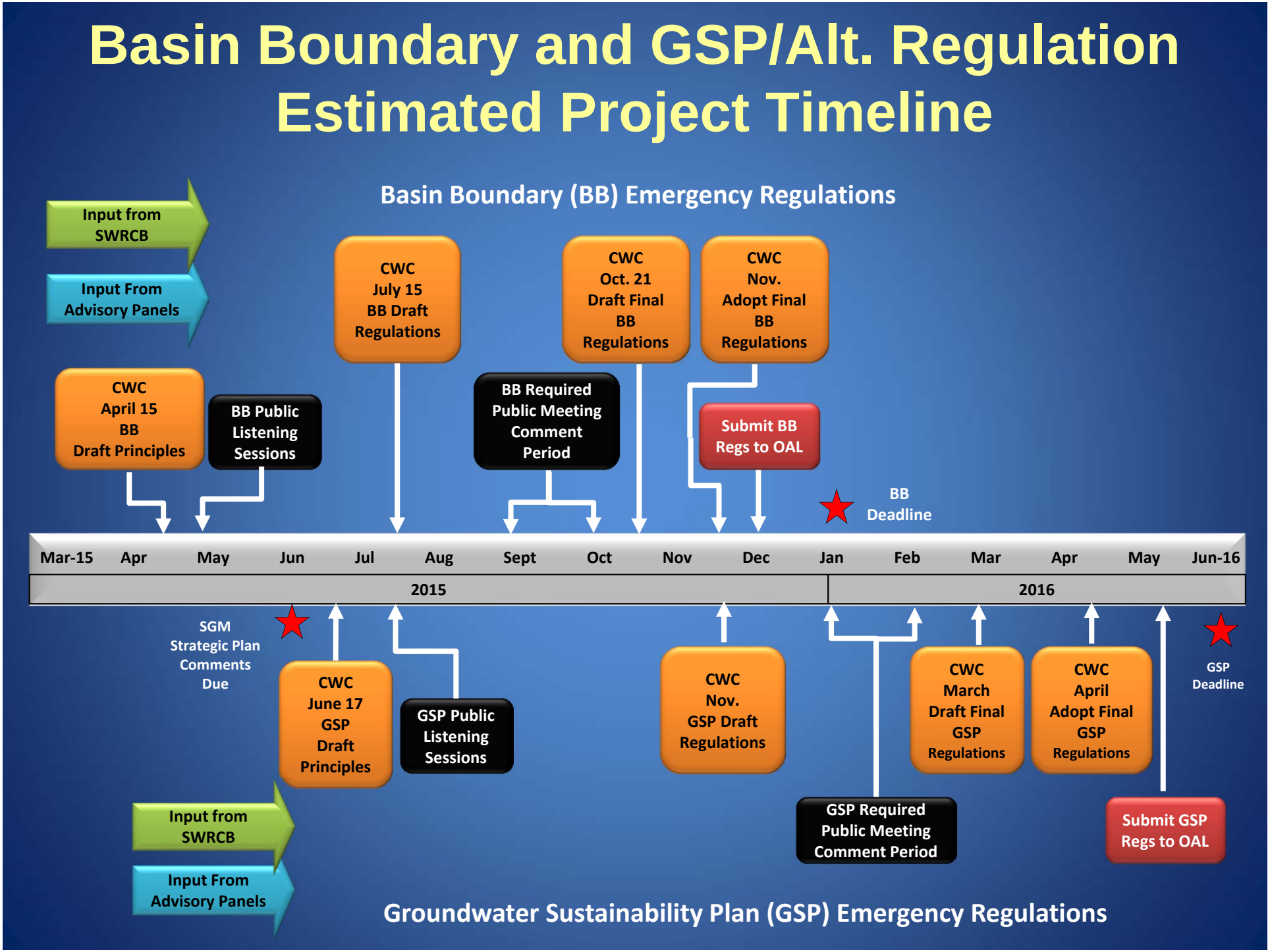
- Required Public Meetings
- Record and Evaluate Comments

Adopt Emergency Regulations

- CWC Approval
- Noticing and Submittal to OAL

Input and Feedback from the California Water Commission

Basin Boundary and GSP/Alt. Regulation Estimated Project Timeline



Basin Boundary and GSP/Alternative GSP Regulation Outreach

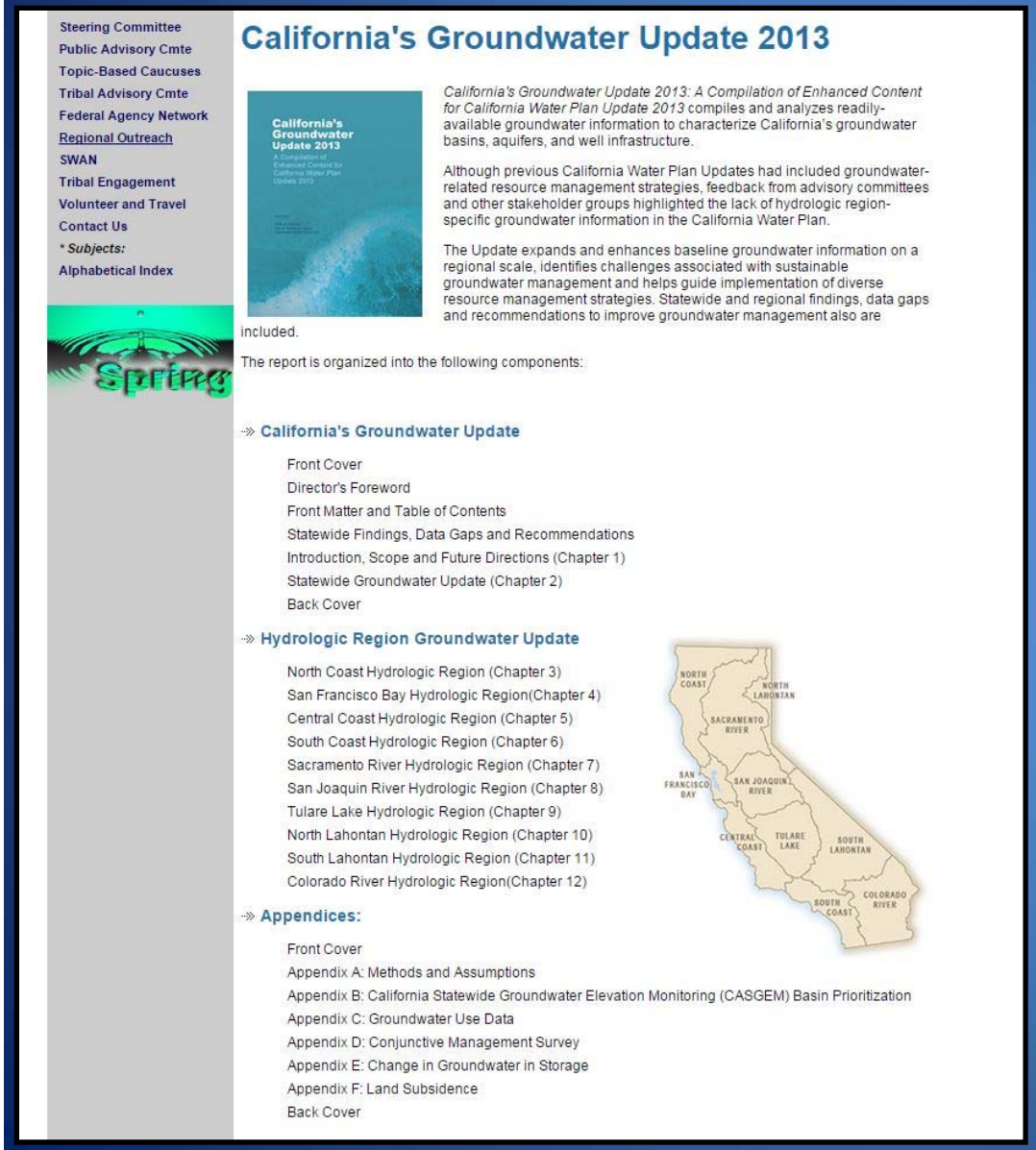
- Public Listening Sessions
  - April 28- Willows
  - April 29- Visalia
  - April 30- San Bernardino
  - May 1 – Webinar

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

- Develop Draft Regulation Content
  - April - July

California's Groundwater Update 2013

(http://www.waterplan.water.ca.gov/topics/groundwater/index.cfm)



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More Information…

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