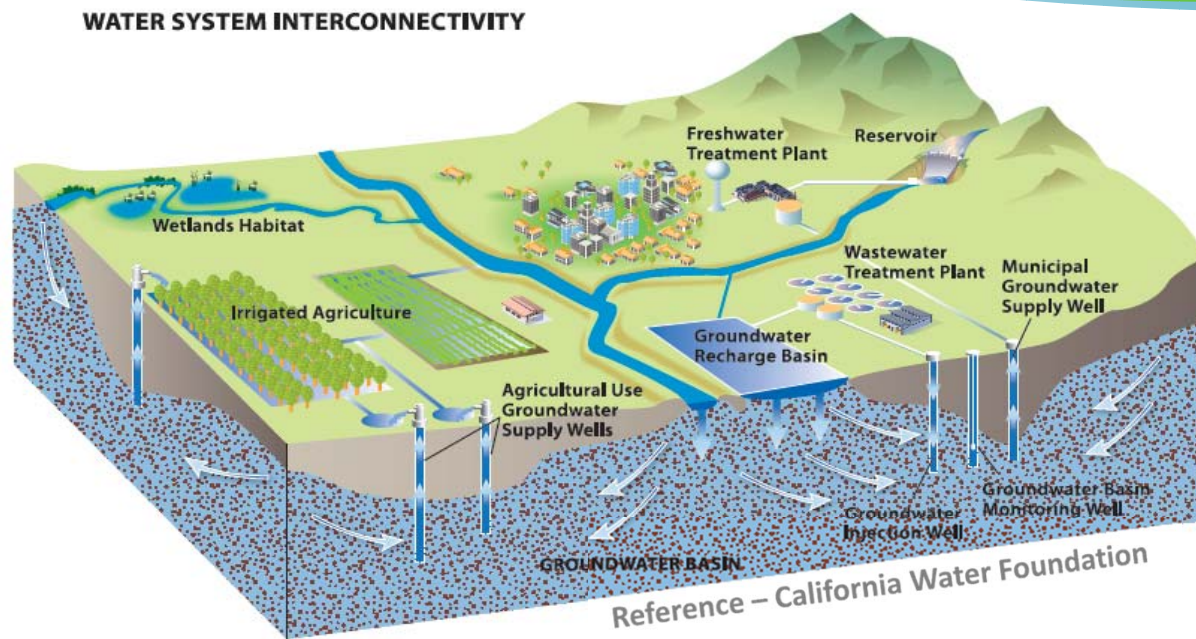


Workshop on Sustainable Groundwater Management Act



An Opportunity for Improved Groundwater Management Collaboration

UWCD Board of Directors - Fillmore, CA - April 1, 2015

5 Stages of Groundwater Management



- **Denial** - deny the reality of the situation...block out the words and hide from the facts...disbelief
- **Anger** – intense emotion...search for someone to blame
- **Bargaining** – need to regain control... “if only we had...”
...seek compromise...renegotiate the terms
- **Depression** – reaction to practical implications relating to the changing situation
- **Acceptance** – "It's going to be okay." "I can't fight it, I may as well prepare for it and be a part of it."

Presentation Overview

- What is groundwater management, then & now
- Framework: The Sustainable Groundwater Management Act (SGMA)
- The groundwater management planning process
- New Groundwater Sustainability Plans (GSPs)
- Groundwater management collaboration
- State agency roles

“SUSTAINABLE GROUNDWATER MANAGEMENT ACT”

- ◆ **SB1168, AB1739, & SB1319** passed by the Legislature and signed by the Governor;
- ◆ “*Groundwater Sustainability Agencies*” to direct local groundwater management activities at basin or subbasin level;
- ◆ Goal of groundwater sustainability in next 20 years with interim milestones in five year increments;
- ◆ Groundwater sustainability agency (GSA) can be a single local entity or combination of local entities that elects to assume this responsibility.
 - Local exceptions – *Fox Canyon Groundwater Management Agency (FCGMA)* and *Ojai Groundwater Management Agency* are deemed the exclusive local agencies within their respective statutory boundaries to be the GSA unless they elect to not assume the role

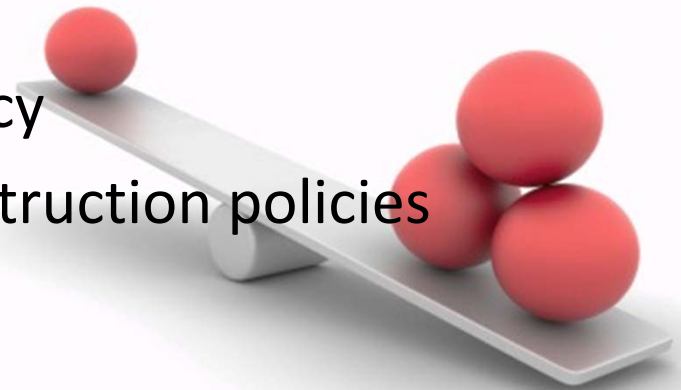
What is Groundwater Management?

Some Things Haven't Changed

- Existing Groundwater Management Plans under AB3030/SB1938 (Water Code §10753, et seq):
 - Plans grounded in science-based understanding of basin hydrology; include maps of basin & recharge areas
 - Focus typically on recharge enhancement, monitoring, conservation and wellhead protection
 - Include Basin Management Objectives (BMOs)
 - Makes basin eligible for state water funds

Groundwater Management Still About Balancing Supply and Demand

- Groundwater supply can be increased through recharge or supplemented with surface water
- Conjunctive management with surface water supplies can increase groundwater sustainability
- Managing groundwater demand
 - Conservation and water efficiency
 - Land use planning and well construction policies informed by GSPs
 - Limiting groundwater use



Groundwater Management Under SGMA

Many Things Have Changed

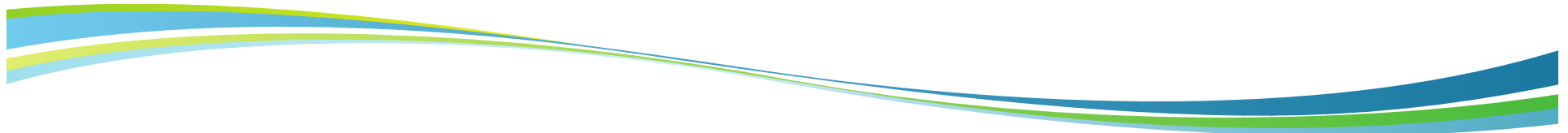
- Groundwater management no longer voluntary
- State will now review whether local GSPs achieve sustainability
- Plans must contain measurable objectives that will reach sustainability goal
- SGMA grants new and additional groundwater management authorities to Groundwater Sustainability Agencies (GSAs)
- State intervention in basin management now possible

SGMA Framework for Sustainability

- Emphasis on local control
- 20 years to achieve sustainability goal – milestones every 5 years
- State intervention only if locals do not act
- One element of comprehensive state policy initiative including:
 - Water conservation
 - Water recycling
 - Water storage
 - Safe drinking water
 - Wetlands/watershed restoration



Steps to Groundwater Sustainability



Step one

Local agencies must form local groundwater sustainability agencies (GSAs) in high- and medium-priority basins within two years

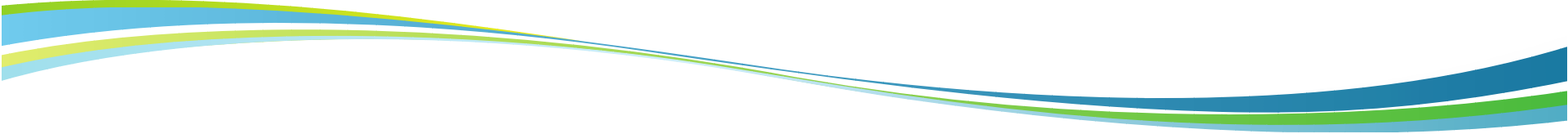
Step two

GSA's in high- and medium-priority basins must adopt groundwater sustainability plans (GSPs) within five to seven years, depending on whether in critical overdraft

Step three

Once plans are in place GSA's have 20 years to fully implement them and achieve the sustainability goal

Key Implementation Dates

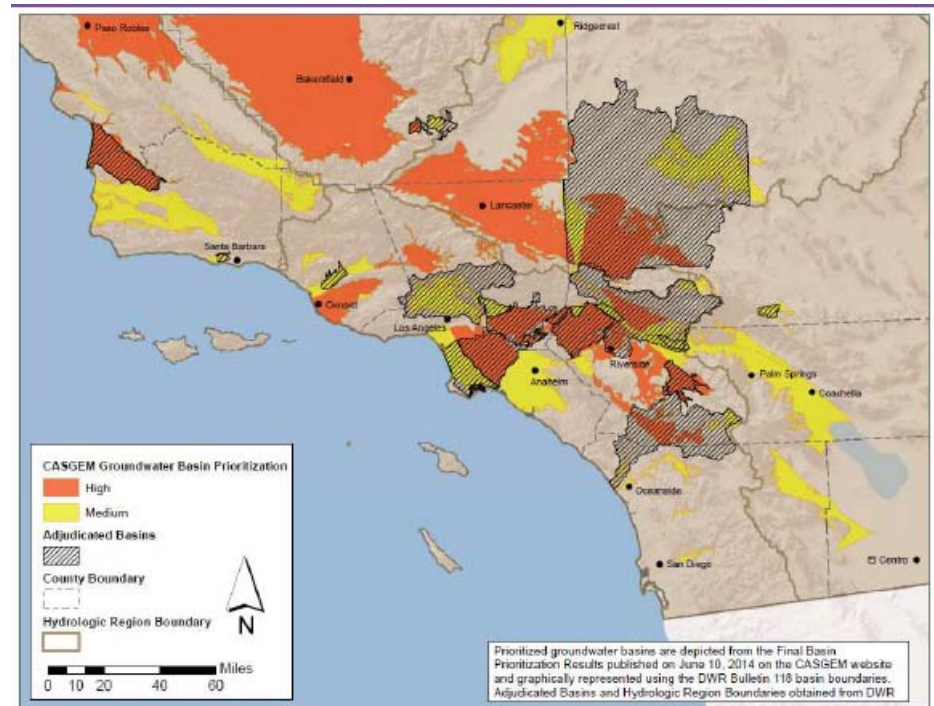


Time	Action
June 30, 2017	Formation of GSAs
Jan. 31, 2020	Completion of GSPs in critically overdrafted basins
Jan. 31, 2022	Completion of Plans in all other high/medium priority basins
20 years after adoption of plan	High- and medium-priority basins achieve sustainability

DWR may grant up to two, five-year extensions on implementation upon showing of good cause and progress

High-Priority and Medium-Priority Basins

- Priority designated by DWR per CASGEM June 2014 prioritization
- Criteria include population, irrigated agriculture dependent on groundwater, etc.
- 125 of 515 basins are high- or medium-priority basins statewide
- Implementation is elective but encouraged in low-priority basins



SUBBASIN/BASIN	<u>PRIORITY</u> Critical Overdraft *	Comments (CASGEM Prioritization)
Piru / Santa Clara River Valley	High *	GW Quality impacts: nitrates, storm runoff, leaking tanks, etc. (B-118). High Selenium and other inorganics, average TDS was 1450 mg/l (Ventura co 2011 annual gw report)
Fillmore / Santa Clara River Valley	Medium *	Many groundwater quality impairments in the basin; Nitrates problematic during dry periods; High TDS, etc. (B-118). REH - PubComm indicted WQ is localized and being managed
Santa Paula / Santa Clara River Valley	Medium *	Nitrates can fluctuate significantly in the basin, and above MCL. Other inorganics present above MCL. TDS is known to be high.
Mound / Santa Clara River Valley	Medium *	Some primary and secondary inorganic contaminants above the MCL (B-118).
Oxnard Plain (inc. Forebay) / Santa Clara River Valley	High *	Saline intrusion, nitrates, pesticides, and PCBs have impacted some water wells per (B-118).
na / Pleasant Valley	High *	PC - Discharge of poor quality GW from dewatering wells and effluent discharge from the wastewater treatment facility into the Arroyo Simi have led to rising water levels in the basin along with higher TDS and Chloride levels
na / Las Posas	High*	TDS is generally high in this basin. REH - Public Comment includes reports of subsidence, overdraft and saline intrusion (chloride from adjacent basin?)

Important Exceptions

- GSP requirement does not apply in pre-existing adjudicated basins
- Local agencies may petition DWR to use an existing groundwater plan as an “Alternative Plan” if it satisfies the objectives of the SGMA (§ 10733.6)
 - Must be submitted to DWR by January 1, 2017 and every 5 years thereafter
 - Must demonstrate sustainable management over a period of at least 10 years

Forming Groundwater Sustainability Agencies (by June 2017)

- Any *local agency* or combination of agencies overlying basin may elect to be a GSA
- *Local agency* is any public agency that does at least one of the following:
 - Water supply
 - Water management
 - Land use
- Counties are the default GSA in “unmanaged” areas
- Can be more than one GSA in basin



The Planning Process is a Public Process



- Public notice and hearing required to designate GSA
- Once established, GSA must consider “all interests of all beneficial uses and users of groundwater” including specific interests listed in §10723.2
 - List includes ag and domestic users, public & private water systems, tribes, environmental users and disadvantaged communities, among others
 - GSA must maintain “interested persons” list
 - Public hearing required to adopt GSP

New Management Responsibilities Under SGMA

Groundwater Sustainability Agencies (GSAs) are responsible for:

- Maintaining basin groundwater sustainability
- Submittal of annual reports to the Department of Water Resources including
 - Groundwater elevation data
 - Annual aggregated groundwater extraction data
 - Surface water supply used and available for groundwater recharge or in-lieu use
 - Total water use
 - Change in groundwater storage
- Conduct periodic review and assessment of the GSP, evaluating and responding to changing conditions
- Conduct public hearings regarding GSP adoption or amendment



What is Sustainable Groundwater Management?

Now defined in Water Code §10721:

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

- Chronic lowering of groundwater levels indicating a *significant and unreasonable* depletion of supply
- Reductions in groundwater storage
- Seawater intrusion
- Degraded water quality
- Land subsidence
- Surface water depletions that have adverse impacts on beneficial uses

GSA Authorities

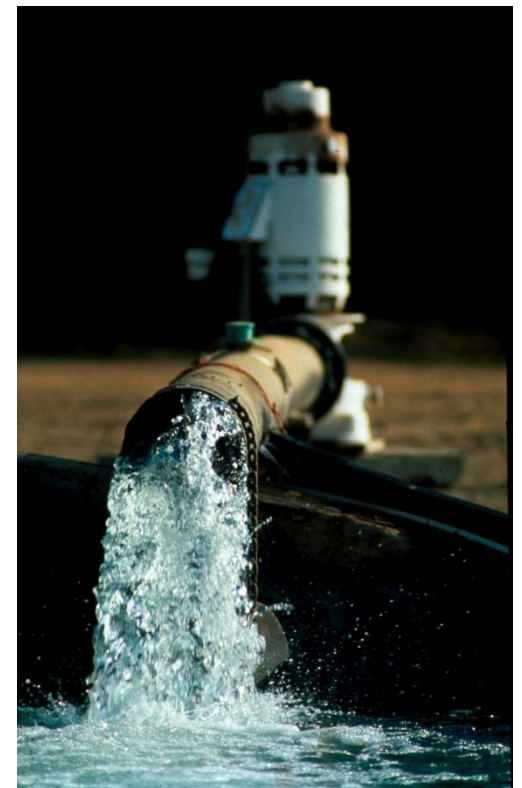
“...may perform any act necessary or proper to carry out the purposes...”
of this act, including, for example:

- Adopt rules, regulations, ordinances, and resolutions;
- Develop groundwater sustainability plan;
- Propose and collect fees;
- Monitor compliance and enforcement;
- Investigate, appropriate, and acquire surface water, surface water rights, groundwater, and groundwater rights into the GSA;
- Registration of groundwater extraction facilities (wells)
- Reporting of groundwater extractions to GSA;
- Provide for voluntary following program;
- Transport, reclaim, purify, desalinate, treat, or otherwise manage and control polluted water, wastewater, or other waters for subsequent use;
- Impose well spacing restrictions on new wells;
- Impose reasonable operating regulations on existing wells to minimize well interference, including requiring operating on rotation basis;
- Control groundwater extractions of new, existing, reactivated wells; and
- Authorize temporary and permanent transfers of groundwater extraction allocations.

New Groundwater Sustainability Plans

Options for new Groundwater Sustainability Agencies

- Create single GSP covering entire basin
- Multiple GSAs in one basin may prepare separate Plans, but must coordinate and use common data and methods
- Multiple GSAs group together as JPA / MOU / other legal arrangement and create single GSP
- DWR will review multiple GSPs together
- May be possible to use existing plan as “Alternative” under SGMA



Groundwater Sustainability Plans (GSPs)

- GW sustainability on 20 yr timeline with 5 yr interim progress points
- Encourage enhanced opportunities for conjunctive use of SW and GW
- Major technical components for each basin / subbasin include, for example:
 - ✓ Water supply sources (SW & GW) / Water demand (M&I, AG, ENV) / WQ / Beneficial water use / Environmental water use / GW pumping / GW recharge / GW elevations / Subsidence / Land use changes / Monitoring & enforcement pgms / Management alternatives / BMOs / Sustainable yield
- Measurable objectives/interim milestones to reach sustainability goal
- Adjudicated basins must submit annual reports to CA DWR

Department of Water Resources Role

- Designate basins as high, medium, low or very low priority
- Provide technical assistance
- Review GSPs initially and periodically for compliance with Act
 - Multiple plans within a basin must be evaluated collectively
- Evaluate whether one GSP adversely affects adjacent basin's ability to achieve sustainability goal



State Water Resources Control Board Role

- May intervene if GSA not formed or fails to adopt and implement compliant GSP by certain dates
- Designate “probationary status” if deficiencies not addressed
- Create interim plan for basin until local GSA is able to assume responsibility
- Probationary status requires a GSA to respond to SWRCB and describe how it intends to rectify deficiencies



What About Water Rights?

- Neither the SGMA nor Groundwater Sustainability Plans alter existing groundwater or surface water rights
- However, like other property rights, water rights can be regulated
- *“It is the intent of the Legislature to preserve the security of water rights in the state **to the greatest extent possible consistent with the sustainable management of groundwater.**”* [Water Code §10720.1]



Discussing Water Rights, A Western Pastime

What Could Go Wrong?

Answers Will Vary by Locality

- Will formation of GSAs turn into a “food fight”?
- Do local agencies have technical expertise and organizational capacity to take this on?
- How will sustainability planning be funded, especially in the startup phase?



What Could Go Wrong?

Answers Will Vary by Locality

- How will interested parties including rural well owners, agriculture & environmental users be represented?
- What level of impacts from groundwater withdrawals are acceptable?
 - How will impacts to surface water be addressed?
- How will tension between resource protection, competing water demands and water rights be resolved?
- Will local communities adapt to new restrictions? Will local politics adapt?

Next Steps – more to come...

Possible Updates:

- Follow-up Legislation
 - SGMA ministerial ‘clean-up’ language
 - Streamlined adjudication?
- Development of rules & guidelines by DWR

Resources



- Full version of SGMA statute and other resources
www.opr.ca.gov/docs/s_groundwater.php
- DWR Groundwater Information Center
www.water.ca.gov/groundwater/
- ACWA's Groundwater Sustainability Page
www.acwa.com/content/groundwater/groundwater-sustainability
- California Water Foundation Information /
Recommendations on Groundwater Sustainability
www.californiawaterfoundation.org



QUESTIONS?