

FEBRUARY 21, 2024

# Overview of the Sustainable Groundwater Management Act

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PRESENTED TO:

Assembly Committee on Water, Parks, and Wildlife  
Hon. Diane Papan, Chair

Assembly Budget Subcommittee No. 4 on Climate  
Crisis, Resources, Energy and Transportation  
Hon. Steve Bennett, Chair



LEGISLATIVE ANALYST'S OFFICE

# **Context for Sustainable Groundwater Management Act (SGMA)**

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## **Groundwater Is Important Component of State's Water Resources**

- Provides between 40 percent and 60 percent of statewide water supply, with reliance increasing during dry years. Provides up to 100 percent of water supplies in some regions.

## **Severe Groundwater Depletion in Some Areas of State**

- On average, California uses more groundwater each year than is replenished, causing certain underground basins to become gradually depleted, or “overdrafted.”
- Overdraft has led to serious impacts, including failed wells, deteriorated water quality, permanent collapse of underground basins, and land subsidence.

## **Before 2014, Groundwater Use Was Not Regulated on Statewide Basis**

- Contrasts with state's approach to monitoring and enforcing surface water rights.



# Overview of SGMA

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## SGMA Enacted in 2014

- Chapters 346 (SB 1168, Pavley), 347 (AB 1739, Dickinson), and 348 (SB 1319, Pavley) established SGMA in 2014.
- With the goal of achieving long-term groundwater sustainability by 2040, SGMA marks the first comprehensive statewide requirement to monitor and operate groundwater basins to avoid overdraft.
- SGMA's requirements apply to 94 out of the state's 515 groundwater basins. Currently, 29 basins are not subject to all of SGMA's requirements because they are adjudicated. The 94 basins, considered "high and medium priority," along with the 29 adjudicated basins, represent 98 percent of annual statewide groundwater pumping.
  - Of the 94 groundwater basins subject to regulation, 21 are considered critically overdrafted.

## SGMA Requires Groundwater to Be Managed Locally

- By 2017, local public agencies were required to form Groundwater Sustainability Agencies (GSAs) that are vested with broad management authority over their basins, including (1) defining basins' sustainable yield, (2) limiting extractions, and (3) imposing fees.
- SGMA requires GSAs to develop enforceable Groundwater Sustainability Plans (GSPs) defining practices that govern use of basins. GSPs for critically overdrafted basins were due to the Department of Water Resources (DWR) by January 2020 and for other basins by January 2022. Some agencies submitted alternative management plans based on existing plans they already had in place.

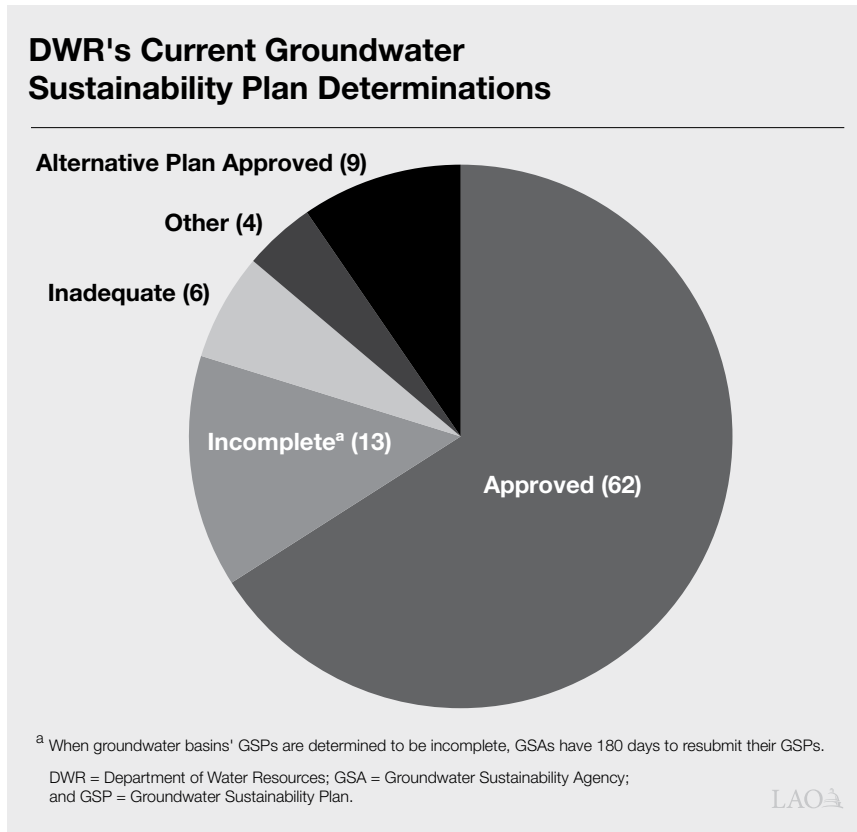
## SGMA Implementation Overseen by Two State Agencies

- DWR led the initial phases of implementation. Responsibilities have included defining and prioritizing basins, collecting and disseminating data, providing technical assistance, and administering local grants. DWR also reviews and assesses GSPs for compliance with SGMA; these reviews will take place every five years.



# Overview of SGMA

(Continued)



- State Water Resources Control Board (SWRCB) enforces the law and intervenes when local entities fail to comply, such as when DWR determines GSPs are inadequate to achieve sustainability in a basin. Intervention may include holding probationary hearings, imposing reporting requirements, issuing fees, assuming basin management responsibilities (including developing and implementing usage plans), and conducting enforcement actions.



# SGMA Requirements Phased in Over Several Years

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## Implementation Time Line for Major Sustainable Groundwater Management Act (SGMA) Requirements



**January 2015**

The Department of Water Resources (DWR) released initial basin prioritization. High- and medium-priority basins are subject to SGMA requirements.

**January 2016**

DWR identified final list of basins subject to critical conditions of overdraft. These basins face some expedited compliance deadlines.

**June 30, 2017**

Local agencies established groundwater sustainability agencies (GSAs).

**January 31, 2020**

GSAs from basins in critical overdraft had to adopt and begin implementing groundwater sustainability plans (GSPs). DWR reviewed plans for adequacy after adoption and required resubmission of plans it deemed incomplete.

**January 31, 2022**

GSAs from basins not in critical overdraft had to adopt and begin implementing GSPs. DWR was required to review plans for adequacy by January 2024.

**January 31, 2040**

GSAs from basins in critical overdraft must achieve sustainability goals.

**January 31, 2042**

GSAs from basins not in critical overdraft must achieve sustainability goals.

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# State Fiscal Support for SGMA Implementation

## State Has Provided More Than \$900 Million to Support SGMA Implementation

(In Millions)

	State Operations	Local Planning Grants	Local Implementation Grants	Totals
2014-15	\$7 <sup>a</sup>	—	—	\$7
2015-16	16 <sup>a</sup>	\$7 <sup>b</sup>	—	23
2016-17	18 <sup>a</sup>	52 <sup>b</sup>	—	70
2017-18	33 <sup>a</sup>	34 <sup>b</sup>	—	67
2018-19	48 <sup>c</sup>	46 <sup>d</sup>	—	95
2019-20	47 <sup>c</sup>	—	\$88 <sup>d</sup>	135
2020-21	45 <sup>c</sup>	—	—	45
2021-22	74 <sup>c</sup>	—	180 <sup>a</sup>	254
2022-23	48 <sup>c</sup>	—	116 <sup>a</sup>	164
2023-24	55 <sup>c</sup>	—	—	55
<b>Totals</b>	<b>\$391</b>	<b>\$139</b>	<b>\$384</b>	<b>\$914</b>

<sup>a</sup> General Fund.

<sup>b</sup> Proposition 1 (2014).

<sup>c</sup> General Fund and Proposition 68 (2018).

<sup>d</sup> Proposition 68.

## More Than Half of State Funding Has Gone to Support Local Agencies

- Planning grants (\$139 million) supported GSAs as they developed their GSPs.
- Implementation grants (\$384 million) supported a wide variety of projects that GSAs proposed to implement their GSPs. Examples include:
  - Developing recharge basins, expanding floodplains, and constructing conveyance; installing monitoring wells and developing well inventories; and developing or upgrading infrastructure to increase recycled water use.



# Funding for State Operations to Implement SGMA

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## Most State Operations Funding Has Supported DWR Staff and Activities

(Dollars in Millions)

Department	Total Funding 2014-15 to 2023-24	Authorized Positions, as of 2023-24
DWR	\$358 <sup>a</sup>	80 <sup>b</sup>
SWRCB	33 <sup>c</sup>	40
<b>Totals</b>	<b>\$391</b>	<b>120</b>

<sup>a</sup> \$270 million from the General Fund and \$88 million from Proposition 68 (2018).

<sup>b</sup> Additional positions are on loan to the Sustainable Groundwater Planning Grant Program from other programs.

<sup>c</sup> General Fund.

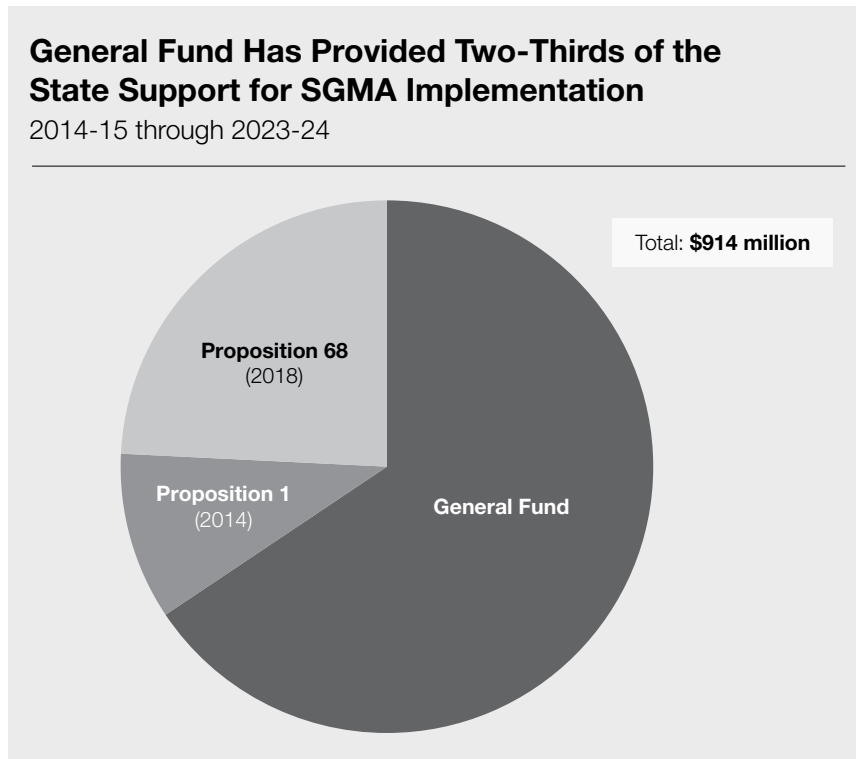
DWR = Department of Water Resources and SWRCB = State Water Resources Control Board.

- **DWR.** DWR currently has 80 authorized positions for SGMA (with associated annual funding of about \$40 million). It also has additional positions on loan from other DWR programs on a limited-term basis.
- **SWRCB.** SWRCB currently has about \$10 million in funding in 2023-24 and 40 authorized positions for SGMA activities. Some of this funding is limited-term and will expire. SWRCB will begin to use fee revenues as early as 2025-26 to support some state operations costs.



## Sources of Funding for SGMA Implementation

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- Bond funds supported some state operations activities (such as grants administration), funded local planning grants, and supported some of the implementation grants.
- Bond funds are mostly expended, leading to increased reliance on General Fund support since 2021-22.
- The Governor’s 2024-25 budget proposal includes previously authorized funding of about \$50 million from the General Fund (of which \$44 million is ongoing) for state operations activities. The proposal does not include any funding for local implementation.





# Issues and Questions for Legislative Consideration

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## Funding

- ***What Is the Appropriate Role for the State—as Compared to Local Groundwater Users—in Funding SGMA Implementation?***  
How much financial responsibility should groundwater users, particularly those responsible for overdraft and groundwater contamination, bear in implementing sustainability measures? What framework should guide the state in providing financial assistance to GSAs? How can the state target funding to ensure groundwater basins achieve sustainability along with other priority goals (such as reducing land subsidence, preventing dry domestic wells, and improving water quality)?
- ***What Funding Sources Should the State Use to Support Continued SGMA Implementation Activities?*** Given that currently authorized bonds are mostly expended, how much should the state rely on the General Fund versus consider another bond (which also relies on General Fund for repayment, but spreads out the cost over numerous years)? Which types of costs could reasonably be funded by bonds and which costs are more appropriate for the General Fund? Given the expected General Fund condition over the next several years, how should the Legislature weigh spending on SGMA implementation relative to its other budget priorities?
- ***Will Fee Revenues Be Sufficient to Cover SWRCB's Oversight and Management Activities?*** SWRCB can begin assessing fees for extraction or pumping of groundwater in unmanaged areas or from basins that are on probation. How much does SWRCB expect to raise in fees over the next several years and will that be sufficient to cover its administrative costs? Will state funds be required to supplement fee revenues?
- ***How Will Local Agencies Fund SGMA Implementation Activities?*** GSAs have authority to raise fees to pay for the various projects and activities needed to implement sustainability plans. Will this option be sufficient? How are fees being implemented currently and what implications are arising? What is the magnitude of funding needed?



# Issues and Questions for Legislative Consideration

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(Continued)

- ***How Can the State Help Ensure GSAs in Disadvantaged Communities Are Well-Positioned to Achieve SGMA Goals?*** To what degree are GSAs in disadvantaged communities facing both financial and technical hurdles in implementing sustainability plans? To what extent should the state focus its efforts and funding (when available) to aid these GSAs?

## Policy

- ***What Role Should the State Play in Addressing Economic Impacts to the Agricultural Sector?*** What effects are groundwater sustainability activities having on the state's farmers and farmworkers and how much responsibility should the state shoulder in assisting them? For example, what steps is the administration taking to help farmworkers transition into other jobs? What steps could the Legislature consider taking?
- ***How Can the State Minimize Air Pollution on Fallowed/Former Farmland?*** As farmland is taken out of production or fallowed, this could lead to an increase in toxic dust and air pollution in areas that already experience high rates of respiratory disease. How will the administration monitor these effects? Are GSAs requiring the incorporation of dust suppression measures on fallowed/former farmland? How are DWR and SWRCB considering these potential impacts in their oversight roles?
- ***Are Any Statutory Changes Needed to Smooth Implementation of SGMA?*** Now that SGMA implementation is well underway, have issues arisen that might merit additional legislative guidance and intervention? Should the Legislature consider adopting statutory changes to further the goals of SGMA, for example, to address the various legal challenges that have arisen against GSAs, to establish a groundwater trading framework, or to institute changes to water rights laws?



# Issues and Questions for Legislative Consideration

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- ***How Can the State Help Facilitate Groundwater Trading?*** As groundwater limits are put in place, water trades will become increasingly important to align remaining supplies with demands. What steps should the state consider taking to help facilitate these transactions? For example, DWR received \$900,000 in the 2023-24 budget to develop an implementation plan based on recommendations in the California Water Commission's 2022 white paper on the subject—what is the status of this plan?
- ***How Can the State Ensure Equitable Implementation of GSPs and Help Avoid Negative Consequences for Vulnerable Communities?*** Some community groups have raised equity concerns about how SGMA is being implemented in certain areas, including related to GSAs' board composition and GSPs' consideration of potential impacts on drinking water supply and quality. Do current statute and regulations adequately protect the interests of disadvantaged communities and residential well users? Do DWR's and SWRCB's oversight processes include sufficient focus on such considerations? How is the administration monitoring and regulating GSAs to ensure that agricultural groundwater pumping and future groundwater trading do not negatively affect communities that rely on wells for drinking water?

