

# The Ahwahnee Water Principles

A Blueprint for  
Regional Sustainability

## Managing California's Groundwater Smart Water, Smart Planning



Local Government Commission  
Leaders for Livable Communities

**Safe, clean water is essential to California**, its nearly 39 million residents, vibrant economy, and diverse natural ecosystems. California's supply of accessible, affordable water, however, is limited. Meeting all needs sustainably is one of the state's greatest challenges.

Groundwater provides more than one-third of the water used by all Californians each year (more than half in drought years). During California's drought cycles, excessive groundwater pumping causes overdraft, failing wells, water quality impairments, environmental harm, and irreversible land subsidence that damages infrastructure and diminishes underground storage capacity.

### Groundwater Sustainability

Managing and using groundwater in a way that can be maintained without causing undesirable results.

Maintaining our quality of life while accommodating continued growth requires careful planning and forward-thinking management of the state's water resources. **The Sustainable Groundwater Management Act is a step in the right direction.**

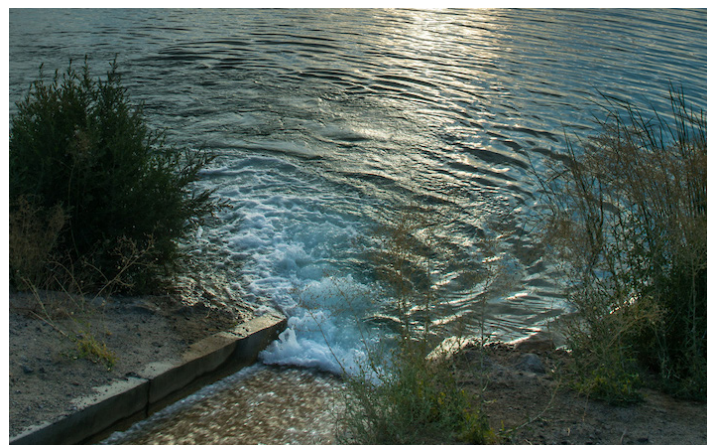


Photo Credit: Kelly M. Grow/ California Department of Water Resources

## New Law for a New Approach to Groundwater

In September 2014 Governor Brown signed into law the historic Sustainable Groundwater Management Act (SGMA).

SGMA establishes a statewide goal for achieving long-term groundwater sustainability through local implementation. The Act requires new "Groundwater Sustainability Agencies" (GSAs) to form locally and develop "Groundwater Sustainability Plans"(GSPs). GSAs must balance their groundwater budgets to prevent "undesirable results" from occurring.

The success of SGMA requires unprecedented alignment between water agencies and local governments.

California land-use planning and water management for the past century existed independent of one another. These sectors operate under different sets of regulations and governance structures, despite the inherent impact of land-use and water resources on each other. Water and land are both critically important shared resources; effective management of each requires cross-sector collaboration.

Forward-thinking communities understand that their land-use decisions seriously impact water resources. Where and how we grow – and how we manage our natural ecosystems – determines whether current and future demands for water supply are met. Groundwater in particular is highly dependent on land-use decisions. Local agencies can work together to set land-use policies that protect and maximize water resources.

### SGMA Affirms Four Core Themes:

- Groundwater is best managed at the local or regional level.
- The state should complement and support local sustainable management goals.
- Water rights should be protected.
- Groundwater basins at risk for harm are the priority.

### Land-Use Agencies Play an Important Role in Managing Groundwater.

Local governments have a responsibility to promote sound water stewardship in land-use planning, and smart land-use planning in water management. Groundwater resources cannot be managed effectively without the active participation of our land-use agencies.

Land-use planning agencies should participate in Groundwater Sustainability Agency formation to ensure groundwater sustainability through water and land-use.

### Groundwater Sustainability Agencies are Forming Now

Local public agencies with land-use authority have an important voice in shaping California's groundwater future. GSAs have authority impacting shared local government interests; particularly groundwater supply for communities, industry, agriculture, Tribes, and natural ecosystems.

SGMA provides requirements for land-use agency participation, and creates a new opportunity for integrated planning and management of our limited natural resources.

**Now is the time to engage.** Collaborating with local and regional water agencies to prepare a Groundwater Sustainability Plan (GSP) will ensure closer alignment of water and land-use decisions.

### What's Required

#### New Agencies, New Plans

Groundwater Sustainability Agencies must form along groundwater basins, not sociopolitical boundaries. Any local agency with water supply, water management, or land-use responsibilities can serve as a GSA: counties, cities, LAFCOs, school districts, COGs and MPOs are eligible.

Most groundwater basins are shared by multiple overlying jurisdictions. Because each will be affected by the GSA's decisions, it is imperative that every jurisdiction participate in the process.

Ideally, all jurisdictions sharing the same aquifer – cities, counties, water agencies, tribes and special districts – will work together to jointly produce their Groundwater Sustainability Plan.

### SGMA Implementation Timeline

#### July 1, 2017

County must affirm or disaffirm responsibility as GSA if no GSA has been established.

#### September, 2014

SGMA signed into Law.

#### January 1, 2017

Alternative to a GSP due to DWR.

#### June 30, 2017

Establish GSAs for all high & medium priority sub-basins.

#### January 31, 2020

Critical Condition basins must have adopted and be managed by a GSP.

#### April 1, 2020

(and annually thereafter) GSAs provide report on progress towards sustainability to DWR.

#### January 31, 2022

All other high and medium priority basins must adopt and be managed by a GSP.

### Who's Responsible?

County Role <i>Water Code 10724</i>	All Local Agencies <i>Government Code 65350.5</i>
Presumed GSA for any portion of a groundwater basin not included in a GSA.	Notify GSA of any proposal to substantially amend a general plan.
Notify the California Department of Water Resources within 30 days to affirm or decline this responsibility.	Consider any adopted groundwater plan when amending the general plan, including GSA comments.

### State Role

If by June 30, 2017 a local agency failed to form a GSA or if overlapping GSAs exist within a groundwater basin, the State Water Resources Control Board has the authority to intervene (see timeline below). The Water Board's first steps will be to impose fees on all groundwater users, meter all groundwater use, and establish an interim Groundwater Sustainability Plan.

### Coordination and Collaboration

SGMA requires coordination between GSAs and land-use agencies to minimize conflict between jurisdictions within the same basin. Forward-thinking jurisdictions recognize the benefits of engaging early. Close coordination between GSAs, other local agencies and jurisdictions (including Tribes), and key stakeholders will ensure closer alignment of land-use planning decisions with water management.

Going beyond the legislation's minimum coordination requirements will help build local resilience through improved planning and opportunities for multi-benefit projects.

### Who Should be Involved?

- Cities
- Counties
- Tribes
- School Districts
- Other Special Districts
- Local Agency Formation Commissions (LAFCo)
- Council of Governments (COG)
- Metropolitan Planning Organizations (MPO)
- Integrated Regional Water Management Groups (IRWM)
- Community Stakeholder Organizations
- Watershed Groups
- Affordable Housing Groups
- Regional Collaboratives
- Climate Change/Adaptation Collaboratives

# Smart Water, Smart Planning

## Managing California's Groundwater

### A Sustainable Future For Groundwater

#### Leveraging Partnerships

Local governments play an important role in groundwater sustainability, to ensure all aspects of our diverse communities can thrive.

The way we plan, grow, and develop influences our groundwater quality and availability. Depleting and polluting our groundwater resources harms the natural ecosystems that support California's rich quality of life. Groundwater management decisions impact public health, transportation, economic development, land-use and community design.

Effective management solutions emerge from well-rounded, multifaceted understanding and broad collaboration. Local and regional governments contain a wealth of land-use planning knowledge, invaluable to sustainable groundwater management.

#### Create a task group.

- Bring together staff from across departments** (e.g., planning, economic development, public works, the agricultural commissioner's office, public health, environmental management, parks and recreation, transportation, water resources, affordable housing, etc.).
- Review the legislation** within the context of internal expertise.
- Determine how SGMA impacts your jurisdiction**, and how you can use it as an opportunity to improve planning.



#### Build regional partnerships for multiple benefits.

Creating a regional partnership helps identify common ground and overcome barriers to addressing complex issues associated with groundwater management. Think broadly to include all relevant partners for achieving groundwater sustainability.

### How to Participate in Your GSA

Lead Agency	Participating Agency	Interested Party
<ol style="list-style-type: none"> <li>Decide how to form a GSA:               <ol style="list-style-type: none"> <li>Single local agency as the GSA,</li> <li>Multiple GSAs, or</li> <li>Multiple agencies form one GSA under joint powers agreement (JPA) or memorandum of understanding (MOU).</li> </ol> </li> <li>Review notification requirements for forming a GSA.</li> <li>Search by county to find other potential lead agencies in your basin: <a href="http://www.water.ca.gov/groundwater/sgm/gsa_table.cfm">http://www.water.ca.gov/groundwater/sgm/gsa_table.cfm</a></li> </ol>	<ol style="list-style-type: none"> <li>Search by county to find potential GSAs in your basin: <a href="http://www.water.ca.gov/groundwater/sgm/gsa_table.cfm">http://www.water.ca.gov/groundwater/sgm/gsa_table.cfm</a></li> <li>Contact the lead (filing) agency to determine GSA structure.</li> <li>Submit request for membership in GSA.</li> <li>Attend GSA formation meetings.</li> </ol>	<ol style="list-style-type: none"> <li>Search by county to find potential GSAs in your basin: <a href="http://www.water.ca.gov/groundwater/sgm/gsa_table.cfm">http://www.water.ca.gov/groundwater/sgm/gsa_table.cfm</a></li> <li>Submit written "demonstration of interest" to GSA.</li> <li>Follow plan preparation, meetings, draft plans, maps, etc. via notice from GSA.</li> <li>Participate as directed by GSA in Groundwater Sustainability Plan development.</li> <li>Contact a DWR advisory group: <a href="http://water.ca.gov/groundwater/sgm/advisory.cfm">http://water.ca.gov/groundwater/sgm/advisory.cfm</a></li> </ol>

**January 31, 2040**

Critical Condition basins must achieve groundwater sustainability.

2030

2032

2034

2036

2038

2040

2042

**January 31, 2042**

All other high and medium priority basins must achieve groundwater sustainability.

*"We need to put territorial boundaries and personal ego aside, and become a cohesive group to find a well suited compromise for all of us so we can conserve as much of this precious resource as possible."*

- James Vineyard, Atwater City Council Member

## Actions for Groundwater Sustainability

RECHARGE ↑	DEMAND ↓
<p>Identify &amp; protect priority recharge areas:</p> <ul style="list-style-type: none"> <li>Adopt code/ordinances for multi-benefit groundwater recharge zoning.</li> <li>Use stormwater alternative compliance for stormwater capture and percolation.</li> <li>Include recharge areas in open-space &amp; working lands ordinance.</li> </ul>	<p>Actively implement and enforce city Water Efficient Landscape Ordinance (WELO).</p>
<p>Prioritize stormwater capture for infiltration by coordinating Stormwater Resource Plan and GSP.</p>	<p>Restrict or revise county well drilling permits for new wells to ensure groundwater availability.</p>
<p>Identify and prioritize infill / new development areas NOT appropriate for recharge.</p>	<p>Approve new development projects ONLY when proven, reliable water sources exist.</p>
<p>Evaluate alternative water supply available for groundwater recharge.</p>	<p>Create a Groundwater Ordinance.</p>
	<p>Adopt budget-based or tiered water rates; impose fines for water waste.</p>
	<p>Aggressively seek and repair leaks in water delivery system.</p>
	<p>Expand water use efficiency and landscape upgrade rebate/financing programs.</p>

## Act Now

There are plenty of actions that your jurisdiction can take right now to ensure closer alignment of land-use planning and water management.

Don't wait until your GSA is finalized or the Groundwater Sustainability Plan is developed.

Achieving sustainability relies on two objectives: decreasing water demand and increasing groundwater recharge. Local land-use authorities play a critical role in these actions.

**Under SGMA, sustainability is achieved by preventing 6 defined undesirable results from becoming significant and unreasonable:**



Surface Water Depletion



Reduction of Storage



Degraded Quality



Seawater Intrusion



Land Subsidence



Lowering GW Levels

Graphic Credit: California Department of Water Resources

## Plan With Groundwater In Mind

Aligning land-use and water management planning documents now will prepare jurisdictions to integrate the new Groundwater Sustainability Plans (GSP) into their general plans. Engaging in the GSA early brings land-use considerations to the forefront of the planning process.

### Add Water to General Plan Updates

SGMA requires local agencies to "consider" the GSP when making updates or amendments to a General Plan. However, GSAs have until January 1, 2020 or 2022<sup>1</sup> to complete their GSPs.

Many municipalities are currently updating their general plans in accordance with the Governor's Office of Planning and Research update to the General Plan Guidelines.

**Now is the time to incorporate water management into planning documents.** Adopting a water element into the general plan or incorporating water sustainability concepts into each element is a highly effective strategy for alignment and long-term resilience.

### Adopt Ahwahnee Water Principles

The Ahwahnee Water Principles are guidelines for sustainable land-use that improves water resource reliability (including groundwater). Adopting the Principles into planning documents encourages sound water stewardship in new and redevelopment decisions.

The Principles encourage mixed-use designs that limit urban runoff, protect open lands and greenfields, and preserve land for recharge and groundwater quality. Low impact development and drought-tolerant landscape designs enable groundwater recharge while improving water quality and providing quality-of-life benefits.

Cross-agency communication is critical to the success of SGMA. Integrating water management and land-use planning will achieve groundwater sustainability while enabling communities to thrive. Conversations must occur early and often to create shared understanding of the overall groundwater picture and determine mutually beneficial solutions.

## Resources And Support

The California Department of Water Resources offers technical support and financial assistance opportunities to local governments. Check out: <http://www.water.ca.gov/groundwater/>

- Groundwater Information Center
- California Statewide Groundwater Elevation Monitoring

Other State agencies and NGOs have a wealth of resources available to guide SGMA implementation:

- NGO Groundwater Collaborative (Clean Water Fund)
- OPR General Plan Guidelines
- Local Government Commission Sustainable Groundwater Management Resources

<https://www.lgc.org/groundwater/>

1. (2020 for critically overdrafted basins, 2022 for all other high- and medium-priority basins)