



Association  
of California  
Water Agencies  
*Since 1910*  
Leadership • Advocacy  
Information • Service

# Recommendations for Achieving Groundwater Sustainability

---

*Prepared by the Association of California Water  
Agencies*

*April 2014*

---

# Recommendations for Achieving Groundwater Sustainability

---

## I. Introduction and Background

The Association of California Water Agencies (ACWA) has prepared these recommendations in response to growing concern about potentially unsustainable groundwater level declines, local subsidence and degraded groundwater quality in some subbasins and widespread recognition that further action is required to promote and achieve groundwater sustainability throughout California.

Most groundwater basins in the state are under sound local and regional management; some, however, are not. Local control of groundwater continues to be the most effective form of management, even in areas where sustainability concerns have emerged and must be addressed. Existing authorities and requirements for managing groundwater basins provide a strong foundation, but achieving more sustainable management requires additional tools to augment that foundation. The Brown Administration also has recognized the need for additional tools, noting in its California Water Action Plan (January 2014) that sustainable groundwater management can be improved by ensuring “that local and regional agencies have the incentives, tools, authority and guidance to develop and enforce local and regional management plans that protect groundwater elevations, quality and surface water-groundwater interactions.”

In many areas, including parts of the San Joaquin Valley, overdraft has been and continues to be exacerbated by a significant reduction in available surface water supplies over the past two decades. The inability of the State Water Project and the federal Central Valley Project to reliably deliver contracted water supplies has eliminated a substantial amount of surface water that once played a key role in recharging groundwater basins. In many cases, demand for groundwater is directly related to the reliability and availability of surface water supplies. The loss of reliable surface water supplies means that past investments in local and regional water systems – and the agricultural, urban and environmental water uses long supported by conjunctive management of surface water and groundwater resources – are now at risk.

To be sure, there are instances where unchecked new groundwater demands in unmanaged areas are putting new stresses on groundwater resources, sometimes with devastating effects on other users within the same basin or even in a neighboring basin that is being well managed. Like the loss of surface water supplies, this presents an untenable situation that simply must not go unaddressed.

This document outlines ACWA’s suggested approach for achieving groundwater sustainability and identifies incentives, tools and authorities required to implement that approach. The recommendations

provided here are focused primarily on basins and subbasins defined by the Department of Water Resources' California Groundwater Bulletin 118.

Fractured bedrock and other settings that fall outside of basins and subbasins defined by Bulletin 118 are not the focus of these recommendations. Groundwater extractions in these settings typically are site-specific or condition-specific and lack connection to areas covered by a local or regional groundwater management plan. As such, they present unique issues and warrant special consideration outside the scope of this document.

ACWA's recommendations build on the Association's Board-adopted Groundwater Management Policy Principles (March 2009) and ACWA's landmark document, "Sustainability from the Ground Up: A Framework for Groundwater Management in California" (April 2011), which provided an in-depth look at groundwater management in California and recommended proactive steps to advance groundwater sustainability.

ACWA recognizes that various legislative changes are needed to provide the authorities necessary to implement many of these recommendations. Given the importance and complexity of state policy in this area, any necessary changes should be proposed and considered through the normal legislative process for policy bills, as opposed to through the budget trailer bill process. The policy bill process will provide more time for thoughtful deliberation on the legislation and will allow for increased transparency and stakeholder input.

Implementing the following recommendations will significantly improve groundwater management capabilities where they are deficient, accelerate the achievement of sustainability by local and regional entities, and guide enhanced state support where needed.

## II. Policy Objectives for Achieving Groundwater Sustainability

The following policy objectives must be advanced simultaneously to ensure groundwater sustainability in California.

- 1) **Enhance Local Management.** Groundwater basins should continue to be managed by local and regional agencies with input from local stakeholders through a local or regionally-developed and administered Groundwater Management Plan (GMP).
- 2) **Establish Mandatory Minimum Groundwater Management Plan Requirements and Increased Authorities.** Local groundwater management planning must become uniformly consistent with or functionally equivalent to requirements laid out in SB 1938 (Machado, 2002) (Water Code Section 10753 et seq.). Additionally, Section III below identifies sustainability timeframes (Recommendation 1) and additional tools and authorities (Recommendation 5) needed to advance sustainable management.

- 3) **Avoid or Minimize Subsidence.** In areas where groundwater pumping is resulting in subsidence at levels causing damage or risk of damage to overlying infrastructure that affects parties outside of an existing management area, additional land use planning, engineering, capital improvement and monitoring and reporting requirements -- including possible pumping restrictions in the impacted area -- should be implemented by the local or regional groundwater management agency.
- 4) **Assess Groundwater Connection to Surface Waters.** GMPs should include an evaluation of the relationship the surface water source has to groundwater levels and quality in the subbasin or basin and identify the impacts, if any, on the surface water source and its related public benefits.
- 5) **Improve Data Availability.** Many groundwater management agencies currently monitor and collect groundwater data to implement successful groundwater management strategies to address overdraft conditions or concerns. Consistent with their GMPs, groundwater management agencies should collect appropriate management data and make it publicly available both locally and to the state through the Department of Water Resources' (DWR) California Statewide Groundwater Elevation Monitoring (CASGEM) program.
- 6) **Increase Groundwater Storage.** Storing surface water in underground storage basins is necessary to optimize use of the state's limited and highly variable water supplies. This need will only increase with climate change. California must take aggressive steps to develop significant new groundwater storage and conjunctive use projects, including potential state funding for local project capital costs.
- 7) **Remove Impediments to Recharge.** Coordinated and planned use of surface water, recycled water, stormwater and groundwater resources to maximize the availability and reliability of water supplies is an essential management method. Policies that are impediments to groundwater recharge should be evaluated and revised as necessary.
- 8) **Do No Harm.** In many areas of the state, sustainable local and regional groundwater management is being accomplished successfully. Contemplated changes to groundwater management statutes and other potential requirements should not impose additional undue burdens or mandates in these areas.
- 9) **Reassess Surface Water Reallocations.** Actions by the State Water Resources Control Board (SWRCB) to reallocate surface water supplies to dedicated instream uses and water quality certification requirements have affected and will continue to affect to a significant degree the management and sustainability of groundwater basins in areas that previously relied on that surface water. Consequently, implications for groundwater management should be considered

explicitly when the SWRCB undertakes its balancing of beneficial uses of water in the broad public interest.

10) **Provide State Financial and Technical Assistance.** The state, through DWR, should provide significant new financial assistance and technical support to local and regional agencies for improving or developing GMPs. Developing management capacity in currently unmanaged areas should be the first priority.

11) **Provide a “Backstop.”** SWRCB authority should be applied only where local agencies are unwilling or unable to sustainably manage the groundwater resource despite having the tools and authorities to do so and when an appropriate period of time has passed (considering the unique management issues and geology/hydrology of the subbasin or basin) without demonstrated progress toward sustainability. The SWRCB should intervene as a last resort, in carefully prescribed circumstances and for limited duration, and should restore local control at the earliest opportunity.

### III. Recommended Administrative and State Legislative Actions

ACWA recommends the following administrative and state legislative actions to help achieve the above policy objectives. Actions should be prioritized to address critical, rapidly deteriorating basins or subbasins through a combination of capacity building, technical assistance and financial support. New requirements and new local and regional authorities should be established where needed to initiate and implement effective GMPs.

#### 1. Adopt State Definition of “Sustainable Groundwater Management”

The state should adopt a definition of “sustainable groundwater management” in statute. ACWA recognizes this is a complex issue that must take into account spatial and time scale considerations, multiple resource management objectives and stakeholder perspectives.

In its 2011 Groundwater Framework, ACWA developed the following definition of sustainability in the context of groundwater:

#### ACWA 2011 Definition of “Sustainability”

*Actively managing the resource at the local level in a way that satisfies the needs of both the environment and the economy while ensuring the continued health of the basin.*<sup>1</sup>

ACWA also agrees with and has cited the following definition developed by the United States Geological Survey (USGS):

---

<sup>1</sup> ACWA (2011). *Sustainability From the Ground Up: Groundwater Management in California – A Framework* p.7

United States Geological Survey: “Sustainability of Groundwater Resources”

*Development and use of groundwater in a manner that can be maintained for an indefinite time without causing unacceptable environmental, economic, or social consequences.*<sup>2</sup>

Sustainability by nature implies a perpetual timeframe. In this context, ACWA recommends the following updated definition to underscore that sustainable groundwater management requires a long-term and continuous investment in effective planning and implementation.

Proposed State Definition of “Sustainable Groundwater Management”

*“Sustainable groundwater management” is the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing unacceptable related environmental, economic or social consequences through the development, implementation and updating of plans and programs based on the best available science, monitoring, forecasting and use of technological resources.*

Local or regional GMPs should be required to develop subbasin or basin-relevant indicators and performance metrics that could be used by DWR and the SWRCB to evaluate objectively the plans’ ability to achieve progress toward “sustainable groundwater management.”

## **2. Prioritize Unmanaged Basins or Subbasins**

The state must identify and prioritize action based on the severity of groundwater threats in basins and subbasins that are not currently being managed by local or regional agencies. DWR should be directed to identify those basins or subbasins that are designated as “medium” or “high” priority based on the CASGEM basin prioritization study (2013) and that are not currently being managed by a local or regional groundwater management agency or that are not currently covered by a comprehensive (meaning complete coverage of the basin or subbasin) local or regional GMP (or functional equivalent). DWR also should identify other specific areas where groundwater use is creating damage or significant risk of damage to overlying infrastructure (conveyance, transportation, flood channels, distribution systems, etc.) external to that of the management agency that is not being addressed currently and where groundwater management assistance may be warranted.

## **3. Adopt Uniform Minimum Requirements for Groundwater Management Plans and Implementation**

The state should adopt uniform minimum requirements for GMPs for all basins or subbasins (with the exception of adjudicated basins or subbasins). Existing local and regional GMPs in basins or subbasins statewide should be reviewed and updated by the local or regional groundwater management agency to meet the following requirements:

---

<sup>2</sup> Alley, W.M., Reilly, T.E., and Franke, O.L. (1999). *Sustainability of Ground-Water Resources: U.S. Geological Survey Circular 1186.*

- a) **Planning Boundary.** The optimum unit for groundwater management should be a subbasin as defined by DWR Bulletin 118. Preferably, each subbasin should be covered by only one GMP. Where multiple existing plans cover different portions of a subbasin or basin, they should demonstrate coordination such that the goals and basin management objectives of respective GMPs are complementary in their contribution to basin sustainability and do not conflict or impede management activities of neighboring groundwater management agencies. All lands overlying the subbasin should be subject to the provisions of the locally-adopted GMPs. A groundwater management planning agency should be authorized to incorporate into its existing GMP neighboring areas overlying its subbasin not already covered by another GMP. A subbasin boundary may be adjusted to address hydrologic conditions and other features of the subbasin, based on a technical analysis supporting the boundary adjustment and in consultation with adjacent subbasin groundwater management agencies and DWR. If groundwater users in a portion of a subbasin outside of the jurisdictional boundary of a groundwater management agency choose not to participate in a GMP, they should be required to prepare an individual GMP and be subject to SWRCB intervention as described in Recommendation 7 in this section.
- b) **Plan Standards.** GMPs should satisfy SB 1938 (Water Code Section 10753 et seq.) standards or their functional equivalent, including basin management objectives associated with groundwater quantity and quality, as well as subsidence and monitoring programs that meet the sustainability objective discussed above. Existing GMPs that do not meet SB 1938 standards should be required to be updated to satisfy them.
- c) **Compliance Requirements.** GMPs in basins or subbasins designated by DWR as “medium” or “high” priority based on the CASGEM basin prioritization study should be updated and adopted by local and regional agencies within five years of establishment of the mandatory minimum standards. GMPs should not be required in “low” priority basins or subbasins but should be encouraged and supported. GMPs should be required if a “low” priority basin or subbasin is subsequently reclassified as “medium” or “high.” GMPs should include an implementation schedule and best management practices and tools to ensure local and regional agencies can verify progress toward achievement of quantifiable basin management objectives, resulting in sustainable groundwater management.
- d) **Sustainability Timeframe.** GMPs should be developed to ensure that sustainable groundwater management (defined above) will be achieved over a specific timeframe, which must be long enough to be feasible and provide for implementation success (groundwater moves extremely slowly), yet short enough to spur committed action. GMPs should include an analysis demonstrating that implementation of the basin management objectives should achieve sustainable groundwater management in the basin or subbasin within 20 years. GMPs should include a planning and implementation horizon of at least 50 years. Extensions beyond the 20-year sustainability timeframe may be necessary in some instances based on particular circumstances; but in no case should an extension exceed 10 years (30 years total).

- e) **Groundwater Extraction Prohibition.** Extraction of groundwater for newly developed lands (including agricultural plantings) outside of groundwater management areas is a significant issue. Unless covered by a GMP, groundwater extractions for new development (commercial, multi-family residential or industrial) or new plantings of permanent crops should be prohibited in “medium” and “high” priority groundwater subbasins. (This provision should not apply to single-family domestic wells.) As discussed below, this requirement should be administered through a locally-administered well permitting process.
- f) **Technical Review and Approval.** GMPs should be subject to technical review for adequacy by DWR and should be approved, conditionally approved or determined to be inadequate and returned for revision within six months. GMPs that are determined to be inadequate should be revised and resubmitted to DWR within six months. For GMPs that continue to be determined to be inadequate, the SWRCB should intervene and impose an adequate GMP (after a public hearing) as necessary to ensure progress toward sustainability of the subbasin or basin. (See Recommendation 7 below.)
- g) **Performance Reporting.** Performance reports for all GMPs comparing current status to basin management objectives should be submitted to DWR annually. Summaries of monitoring data should be made available regularly to DWR’s CASGEM program and locally to basin or subbasin stakeholders through web-based applications or similar methods.
- h) **Performance Review.** GMPs and performance reports for subbasins identified through CASGEM as “medium” and “high” priority areas should be subject to review by the SWRCB on a periodic basis (every five years) to ensure that they are meeting performance metrics and are progressing toward or have achieved sustainable groundwater management.

#### 4. Develop Best Management Practices

DWR should be directed to develop a best management practices (BMPs) guidebook that would provide a “toolbox” for local and regional groundwater management agencies to facilitate completion of effective GMPs and provide a template for evaluation of their adequacy. This BMPs guidebook should be developed using a robust and inclusive stakeholder process (similar to the process already in place to develop guidance for preparation of Urban Water Management Plans or Agricultural Water Management Plans). Example BMPs from existing successful GMPs should be considered, along with best practices proposed by groundwater management professionals, associations, academia and other sources.

GMPs would not be required to incorporate all of the identified BMPs. The local or regional groundwater management agency would select BMPs for inclusion in the GMP that would result in a sustainably-managed subbasin or basin. Additionally, the local or regional agency could develop or adopt alternative practices that would result in a sustainably-managed basin or subbasin.

The BMPs guidebook should include, but not be limited to, the following elements:

- a. **Illustrative Quantifiable Basin Management Objectives.** Methods for developing quantifiable basin management objectives relevant to the conditions of a particular subbasin, which could include but not be limited to: groundwater quantity assessment and monitoring, annual operational parameters for exercising the subbasin, drought management, aquifer recharge (both direct and indirect) and storage, groundwater quality, percolation capability or injection levels, land subsidence and characterization of surface water-groundwater relationships based on subbasin-specific hydrological analysis.
- b. **Subbasin Boundary Adjustment.** Methods for conducting subbasin interconnectivity analysis and adjusting subbasin boundaries. This could be similar to the Integrated Regional Water Management (IRWM) boundary determination and acceptance process administered by DWR.
- c. **Groundwater Monitoring.** Methods for implementing groundwater monitoring programs for groundwater elevation, extraction, aquifer recharge, change in storage and water quality.
- d. **Well Permitting.** Administrative methods for well permitting, well construction and well abandonment.
- e. **Groundwater Recharge.** Protocols for evaluating and implementing spreading basin and storage projects, for example: stormwater capture and related potential treatment and recharge projects, on-farm return systems, multi-objective flood control and habitat restoration projects and other methods to increase groundwater supplies.
- f. **Sustainability Indicators.** Methods to develop and apply locally relevant sustainability indicators that can be used to demonstrate sustainable groundwater management (as defined above).
- g. **Overdraft Measures.** Taking into account that some groundwater management agencies “exercise” their basins and utilize regular groundwater withdrawals and drawdown (“managed overdraft”) as tools within a comprehensive multi-source, multi-year planning horizon, methods should be identified to develop locally relevant measures of “overdraft” and “critical condition of overdraft.” DWR Bulletin 118 definitions provide reasonable guideposts for consideration. The definition of “overdraft” in Bulletin 118 is “the condition of a ground water basin where the amount of water extracted exceeds the amount of ground water recharging the basin over a period of time,” and “critical condition of overdraft” is defined as water management practices that “would probably result in significant adverse overdraft-related environmental, social, or economic effects.”
- h. **Public Review Process.** Protocols for conducting open, inclusive and transparent stakeholder and public review processes in the development, implementation and administration of a GMP.

- i. **Governance Structures.** Examples of governance structure options that could be used to prepare and manage GMPs based on the specific conditions and needs of the basin or subbasin, or where joint governance or coordination of multiple GMPs is necessary or preferable. In the latter instance, governance options may include, but are not limited to, a Joint Powers Authority (JPA), a Memorandum of Understanding (MOU) among existing agencies, an IRWM planning group, a newly created special district, any of which may include a locally-authorized Watermaster, or some other appropriate local or regional governance entity.
- j. **Data Collection and Reporting.** Protocols and standards for conducting adequate data collection and reporting of groundwater elevations, water quality, subsidence levels and surface water-groundwater relationships to verify progress toward basin management objectives. The BMPs should include recommended quality control and quality assurance protocols.
- k. **Demand Management.** Examples of potentially applicable demand management programs including, but not limited to, use of irrigation and water use efficiency technology, land retirement programs, conservation easements and related incentives, pumping restrictions, tiered allocation of usable groundwater and closer integration with demand management programs contained in Urban Water Management Plans or Agricultural Water Management Plans of agencies within GMP areas.

## 5. Enhance Local and Regional Agency Authority

Local and regional groundwater management agencies need enhanced authority to successfully implement their GMP basin management objectives to achieve sustainable groundwater management. Although some types of local or regional groundwater agencies or forms of governance are currently authorized and already may be using some of the following authorities, this is generally the exception rather than the rule. Local and regional groundwater management agencies statewide should be granted all of the following authorities and be empowered to select the ones they determine to be necessary and most effective to implement their GMPs.

- a) **Groundwater Management Fees.** Groundwater management agencies need to fund required planning and administrative activities, data collection and reporting, acquisition of supplemental water for replenishment, acquisition of lands or easements to reduce demand, and implementation of BMPs. Local or regional agencies should be granted authority to impose fees or assessments based on estimates or reports of groundwater use or other means in compliance with existing state law. Legislation may be needed to address current barriers to imposing local groundwater-related fees. (See Recommendation 6.)
- b) **Groundwater Allocation and Extraction Limits.** The rights of individuals to pump groundwater should be subject to responsible management regulations by groundwater management agencies in much the same way that the use of property is subject to land use regulations by

cities and counties. Groundwater management agencies should be authorized to monitor or estimate groundwater use within a basin or subbasin and impose allocation programs or pumping restrictions in time or amount, create exemptions for small or disadvantaged users, or to develop tiered pricing or other market-based means to implement basin management objectives and ensure sustainable groundwater management. Allocation and extraction limits may raise a significant issue with respect to groundwater rights and legal priorities among groundwater users. Further legal analysis and discussion of such issues is necessary to ensure these tools and authorities can be implemented in a legally defensible manner.

- c) **Well Permitting.** Some local or regional groundwater management agencies manage well permitting programs. In other cases counties manage well permitting programs that may or may not be implemented cooperatively with groundwater managers. Where well permitting programs are lacking or need significant improvement to provide essential management information to implement GMPs and basin management objectives, local or regional groundwater management agencies should be authorized to assume or cooperatively manage well permitting responsibilities. Existing well permitting programs may need to be expanded and adequately funded to ensure that location, well depth, water quality and production information is collected and well construction specifications and well abandonment standards are enforced. New well permits should be conditioned upon receiving a water availability determination and “will serve” letter (see “e” below).
- d) **New “Summary Proceeding” Enforcement Capability.** Along with new responsibilities and authorities to manage groundwater, local or regional groundwater management agencies should be granted new enforcement authority. Enforcement should be focused and limited to those instances where landowners or other groundwater users are in violation of groundwater management requirements, have been issued time-limited corrective notices and have been given a reasonable period to comply. In these cases, the landowner should be subject to a “summary proceeding” such as authorized by California Code of Civil Procedure, Part 3, Title 3 to enforce property-related violations. This provision could be amended to add a new chapter, “Summary Proceedings Associated with Violation of Basin or Subbasin Groundwater Regulation,” which would be instituted to obtain appropriate judicial review, judgment and writ of execution (with service and return by appropriate sworn law enforcement personnel in cooperation with the groundwater management agency) resulting in cessation of the groundwater extraction and use pending the completion of required corrective measures and payment of monetary damages, attorney fees and costs of the proceeding.
- e) **Water Availability Determinations.** Currently, new development projects are required to secure “will serve” letters from local water agencies, and larger projects are subject to Water Availability Determinations to show that sufficient water is available as part of the land use approval process. This requirement should be expanded. Land use agencies should be required to consider protection of prime groundwater recharge areas and consult groundwater

management agencies regarding any significant groundwater-dependent development, including new permanent crop plantings, in order to obtain “will serve” letters and Water Availability Determinations.

- f) **GMP Consistency Determinations.** County and city general plans are currently required to consider the Urban Water Management Plans of water agencies within their jurisdictions. This requirement should be extended to GMPs for the basins or subbasins within their jurisdictions. In addition, groundwater management agencies should be authorized to issue “GMP Consistency Determinations” for all new proposed industrial, residential or agricultural development (including introduction of permanent crops) that may have a significant effect on groundwater resources. “GMP Consistency Determinations” should be used by the lead agency to inform project environmental impact assessments and discretionary land use approvals. Where new proposed groundwater use is determined to be inconsistent with the GMP and to impede attainment of sustainable groundwater management, it should be presumed to have a “significant adverse impact on the environment” under CEQA and either be mitigated or be subject to a Statement of Overriding Consideration by the lead agency.
- g) **Expedited LAFCO Formation Assistance.** In basins or subbasins in which there is no existing local and regional groundwater management agency, the applicable Local Area Formation Commission should be authorized to provide special technical assistance and an expedited timeline to facilitate the formation of such an agency. This process also should apply to existing groundwater management agencies that are required or seek to annex into their jurisdictions unmanaged lands overlying the subbasin or basin managed pursuant to their GMPs. The cost to provide this expedited agency formation assistance should be included in the new agency’s administrative budget and assessment fees and reimbursed to the LAFCO within one year of the creation of the new agency.

## 6. Ensure Adequate Funding

The SWRCB and DWR should coordinate available funding and resources from the Governor’s proposed budget to identify basins or subbasins lacking coverage by an existing comprehensive GMP (see Recommendation 2, above).

For basins or subbasins in which there are existing local or regional groundwater management agencies to prepare or revise and implement GMPs, required funding should be predominantly based on local or regional fees or assessments, assuming successful implementation of Recommendation 5a., regarding funding. Local or regional groundwater management agencies also should continue to supplement their funding through grants or loans from existing state and federal funding programs (especially if the basin or subbasin includes disadvantaged communities that are dependent upon groundwater that fails to meet public health standards).

ACWA opposes the imposition of a statewide water user fee or “public goods charge” but stands ready to work with the Administration to identify alternative ways to help ensure adequate funding for local and regional groundwater management agencies to implement their GMPs. ACWA acknowledges the constraints local agencies face in raising fees for needed groundwater management investments (e.g. Proposition 218) and is committed to a dialog about sustainable and integrated financing.

Finally, an additional funding source may be created during development of a new proposed state water bond, if approved by California voters. Significant bond funding could be targeted to create an incentive for development of new groundwater storage projects in basins or subbasins that have adopted GMPs and sustainability indicators that demonstrate sustainable groundwater management.

### **7. Provide for State Backstop Authority When Local Action Has Not Occurred or Has Been Insufficient**

In those instances where there is no groundwater management agency in a basin or subbasin and where the local or regional entity does not develop or implement a compliant GMP within defined timelines, or where the local or regional entity fails to meet performance objectives set forth in an approved GMP, the SWRCB should hold a hearing for each basin or subbasin and invite affected local, regional and other stakeholders to present information to inform SWRCB decision-making regarding whether corrective action is necessary and likely to be most effective under the specific circumstances.

Based on the results of the hearing, the SWRCB should either 1) issue an order to a qualified local or regional agency that includes a compliance schedule for completion and implementation of a GMP that will result in progress toward sustainability; or 2) assign to a qualified third party the responsibility to develop and implement a compliant GMP under contract to the SWRCB and subject to final approval by the SWRCB. In either case, the SWRCB should be given authority to assess a fee sufficient to cover the cost of SWRCB administration, and any work by a third-party contractor. The fee should be collected by the local agency, and it should be clear that the fee is a “property-related fee.”

During this period of plan development, the SWRCB should order that groundwater extraction be reduced throughout the subbasin as necessary to preserve the potential for achieving sustainable groundwater management within a 30-year timeframe. The SWRCB should be required to hold a hearing to develop a protocol or allow for alternatives to achieve the same reduction in demand to facilitate recovery of the basin.

SWRCB should return management to a new or existing qualified local or regional agency as soon as practicable after a reasonable demonstration of willingness, organization and financial capacity has been made.

### **8. Remove Impediments to Water Supply Reliability**

Sustainable groundwater management in California depends on creating more opportunities for robust conjunctive management of surface water resources. Many groundwater basins facing unsustainable overdraft conditions have depended on previously reliable surface water supplies that are no longer available. A significant number of these areas have lost surface supplies that were once conjunctively

managed but have now been reallocated to serve instream or other regulatory requirements in response to various judicial, state and federal mandates. Climate change will only intensify the need to recalibrate and reconcile surface and groundwater management strategies.

As an illustration, water conveyed through the Delta for delivery to areas on the west side of the San Joaquin Valley and the Tulare Basin has been greatly reduced over the past 20 years due to a variety of regulatory actions. Those deliveries – and deliveries to Southern California and parts of the Bay Area, as well -- were designed in part to remedy overdraft conditions recognized many years ago. Both the state and federal governments, as operators of the State Water Project and the federal Central Valley Project, respectively, have reduced the reliability and average amount of deliveries and thus have severely diminished the supplemental supplies historically available and incorporated into plans for conjunctive use in these areas. Similar changes and resulting ramifications have occurred in some portions of the east side of the San Joaquin Valley as well. The SWRCB and the Administration cannot divorce groundwater conditions and management from overall state water policy. Any public trust balancing by the SWRCB must weigh the value of surface water for groundwater replenishment and recharge to promote the state's interest in groundwater sustainability.

The SWRCB and DWR should identify ways to reduce impediments and regulatory barriers to facilitate more water transfers, increase stormwater and recycled water recharge, and provide significant funding and technical assistance to develop projects that restore conjunctive balance by facilitating new surface and groundwater storage and conveyance projects statewide.

#### **IV. Statement of Commitment**

ACWA and its member agencies have demonstrated a history of strong leadership in confronting and embracing needed changes to manage our groundwater resources in California. ACWA is committed to working with the state and with urban and agricultural water users, growers and landowners, environmental and disadvantaged community interests, and other stakeholders on an effective approach to promote and achieve sustainable groundwater management throughout California.



## ACWA Groundwater Sustainability Task Force

---

Randy Record, Chair	Eastern Municipal Water District
David Orth, Vice Chair	Kings River Conservation District
Roland Sanford	Hidden Valley Lake Community Services District
Stan Wangberg	Anderson-Cottonwood Irrigation District
Bill George	El Dorado Irrigation District
Rob Roscoe	Sacramento Suburban Water District
Jill Duerig	Zone 7 Water Agency
Matthew Hurley	Angiola Water District
William Taube	Wheeler Ridge-Maricopa Water Storage District
Michael Touhey	Upper San Gabriel Valley Municipal Water District
Craig Ewing	Desert Water Agency
Gary Arant	Valley Center Municipal Water District
Greg Zlotnick	San Luis & Delta-Mendota Water Authority
Thad Bettner	Glenn-Colusa Irrigation District



# ACWA Board of Directors 2014-2015 Roster

John A. Coleman, ACWA President, 5  
 Kathleen J. Tieggs, ACWA Vice President, 9  
 Randy Record, Immediate Past President, 9  
 Aldaron Laird, Region 1 Chair  
 Judy Mirbegan, Region 1 Vice Chair  
 Eric Larrabee, Region 2 Chair  
 Walter Cotter, Region 2 Vice Chair  
 Robert Dean, Region 3 Chair  
 Bill George, Region 3 Vice Chair  
 Mike Hardesty, Region 4 Chair  
 Robert Roscoe, Region 4 Vice Chair  
 Dick Quigley, Region 5 Chair  
 David Hodgins, Region 5 Vice Chair  
 Dave Orth, Region 6 Chair  
 Matthew Hurley, Region 6 Vice Chair  
 William Taube, Region 7 Chair  
 David Bixler, Region 7 Vice Chair  
 Stephen Cole, Region 8 Chair  
 Michael Touhey, Region 8 Vice Chair  
 Harvey R. Ryan, Region 9 Chair  
 Craig Ewing, Region 9 Vice Chair  
 Peer Swan, Region 10 Chair  
 De Ana Verbeke, Region 10 Vice Chair  
 Linda Ackerman, Federal Affairs Cmte. Chair, 10  
 Gary Arant, Energy Cmte. Chair, 10  
 Angelique Ashby, Membership Cmte. Chair, 4  
 Paul Bartkiewicz, State Legislative Cmte. Chair, 2  
 Thad Bettner, Water Management Cmte. Chair, 2  
 Jill Duerig, Water Quality Cmte. Chair, 5  
 Daniel Hentschke, Legal Affairs Cmte. Chair, 10  
 Shauna Lorance, Personnel & Benefits Cmte. Chair, 4  
 Jo MacKenzie, Local Government Cmte. Chair, 10  
 Joe Parker, Finance Cmte. Chair, 3  
 Sue Stephenson, Communications Cmte. Chair, 5  
 Greg Zlotnick, Groundwater Cmte. Chair, 6  
 Thomas A. Cuquet, ACWA/JPIA Vice President, 2

East Bay MUD, Director  
 Cucamonga Valley WD, Director  
 Eastern MWD, Board Vice-President, Director, MWD First Vice Chair  
 Humboldt Bay MWD, Director  
 Hidden Valley Lake CSD, Director  
 Western Canal WD, Board President, Director  
 Browns Valley ID, General Manager  
 Calaveras County WD, Director  
 El Dorado ID, Director  
 Reclamation District #2068, General Manager  
 Sacramento Suburban WD, General Manager  
 Zone 7 WA, Director  
 Scotts Valley WD, Director  
 Kings River CD, General Manager  
 Angiola WD, General Manager  
 Wheeler-Ridge-Maricopa WSD, Outside Consultant  
 Kaweah River Power Authority, Director  
 Newhall County WD, General Manager  
 Upper San Gabriel Valley MWD, Director  
 Elsinore Valley MWD, Director  
 Desert WA, Director  
 Irvine Ranch WD, Director  
 Helix WD, Vice President, Director  
 Municipal Water District of Orange County, MWD Representative, Director  
 Valley Center MWD, General Manager  
 City of Sacramento, City Council, Vice Mayor / Councilmember  
 Yuba County WA, Outside Counsel  
 Glenn-Colusa ID, General Manager  
 Zone 7 WA, General Manager  
 San Diego County Water Authority, General Counsel  
 San Juan WD, General Manager  
 Vista ID, Director  
 Placer County WA, Director of Financial Services  
 Dublin San Ramon SD, Community Affairs Supervisor  
 San Luis & Delta-Mendota WA, Delta and Special Projects Administrator  
 South Sutter WD, Director

## COUNCIL OF PAST PRESIDENTS

James H. Blake  
 Bette Boatman  
 Randy Fiorini

E.G. "Jerry" Gladbach  
 Gene C. Harris  
 Paul Kelley

John E. Kidd  
 Glen D. Peterson  
 Randy Record

Last updated: January 28, 2014