

DARK CLOUDS OVER CALIFORNIA: The Sustainable Groundwater Management Act of 2014

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He will give the rain for your land in its season, the early rain and the later rain, that you may gather in your grain and your wine and your oil. And he will give grass in your fields for your livestock, and you shall eat and be full.

Deuteronomy 11:14-15

Therefore, thus says the Lord God: I will make a stormy wind break out in my wrath, and there shall be a deluge of rain in my anger, and great hailstones in wrath to make a full end.

Ezekiel 13:13

Over the high coast mountains and over the valleys the gray clouds marched in from the ocean. The wind blew fiercely and silently. And gradually the greatest terror of all came along. They ain't gonna be no kinda work for three months. In the barns, the people sat huddled together; and the terror came over them, and their faces were gray with terror. The children cried with hunger, and there was no food. And where a number of men gathered together, the fear went from their faces, and anger took its place.

John Steinbeck, The Grapes of Wrath

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Executive Summary

During 2014, the California Legislature passed and Governor Brown signed into law three bills that together represent the most significant groundwater legislation in state history: Senate Bills 1168 and 1319 (Pavley) and Assembly Bill 1739 (Dickinson), known as the Sustainable Groundwater Management Act of 2014 (Act). This white paper describes the contents and implications of the Act for groundwater users in California.

Overview of the Act

The Act applies to groundwater found within 515 basins delineated by the California Department of Water Resources (DWR) across the state. DWR has categorized each of those basins as high, medium, low or very low priority, and the 127 basins designated as high or medium priority are the source of approximately 90 percent of all groundwater produced in the state. Groundwater found in fractured bedrock or other geological formations outside the boundaries of a basin is not covered by the Act. In addition, the Act does not apply to 26 basins that have been subject to prior court adjudication, mostly in Southern California.

For the first time in California law, the Act authorizes the establishment of "groundwater sustainability agencies." A groundwater sustainability agency is not a type of new, independent agency, but a designation that one or a combination of existing local agencies may elect to confer on themselves. The Legislature expressly designated 15 agencies with prior groundwater management roles to be the exclusive sustainability agency within their boundaries. In addition, a group of local agencies may jointly form a sustainability agency through execution of a joint powers or other agreement. Sustainability agencies will be the primary actors for groundwater management in the future, subject to evaluation and potential intervention by the state.

The Legislature has granted broad discretionary powers to sustainability agencies, including authority to allocate groundwater supplies between users within their boundaries and regulate, limit or suspend groundwater extractions. An agency may adopt rules, regulations, ordinances and resolutions related to groundwater management, and has broad powers regarding groundwater monitoring and the construction and operation of new and existing wells. A sustainability agency may impose fees to fund the cost of a sustainability program, including permit fees, groundwater extraction fees and fees imposed as ad valorem property taxes.

A sustainability agency must adopt a groundwater sustainability plan for each high and medium priority basin by January 31, 2022. If DWR has designated a basin as being subject to critical conditions of overdraft, the sustainability plan must be adopted by the earlier date of January 31, 2020. All plans must be submitted to DWR, which will review them for adequacy. If a sustainability agency is not established for the entire area of a high or medium priority basin by July 1, 2017, or a sustainability plan has not been adopted by the deadlines above, or DWR has determined that a sustainability plan is inadequate, the State Water Resources Control Board (SWRCB) may declare

the basin to be a probationary basin and adopt an interim plan of the SWRCB's own creation. Alternatively, an agency may propose a management strategy that does not meet the requirements of a sustainability plan, if the strategy would achieve the sustainability goals of the basin.

Conclusions and criticisms

Selected conclusions and criticisms regarding the Act include the following:

- The definition of sustainability includes a generally adequate 50-year planning period, but the Act does not define sustainability in terms of the triple goals of maintaining strong water supplies, the environment and the economy. In addition, the Act does not require sustainability agencies to address climate change or variability.
- The Act gives primary control over groundwater to local public agencies. Disputes are likely
 given the multitude of local agencies within most groundwater basins and the inherent
 conflict of interest created by granting one type of groundwater user authority over other
 users.
- The power of a sustainability agency to impose permit fees, groundwater extraction fees and ad valorem property taxes will provide important funding for sustainability programs and projects. That power may be abused, however, and an unscrupulous local agency may use its fee authority to collect significant sums from groundwater users.
- The Act does not adequately recognize or protect groundwater rights and investments. A sustainability agency or the SWRCB may unduly restrict the exercise of groundwater rights through its sustainability plan or rules and regulations.
- The Act does not prohibit sustainability agencies from taking certain actions against public policy, including water protectionism and anti-trading rules. Those actions may prevent the full and flexible development of the groundwater resources of the state for the benefit of all its citizens.
- Following the Act, future development of water supplies in California is likely to focus on development of groundwater in low and very low priority basins, water recycling and the desalination of brackish groundwater and seawater. Water use efficiency will remain an important focus, but will require improvement in conjunctive use of water supplies through water markets and trading to realize the full benefits.
- The clear winners of the Act are local agencies, while clear losers include public utilities, mutual water companies and agricultural groundwater users, especially in the Central Valley. Those parties are likely to bring numerous per se and as applied challenges to the Act, based on alleged violations of due process, equal protection and property rights.

While the Act has a laudable purpose of achieving sustainable groundwater resources for California, there are many negative features of the Act for groundwater users, especially those who are not local public agencies. The title of this white paper, *Dark Clouds Over California*, reflects the concern of those groundwater users, both urban and agricultural, for whom it is unclear if the Act will bring the steady rain of water security to California, or only the violent storm of legal uncertainty and upheaval.

DARK CLOUDS OVER CALIFORNIA: THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT OF 2014

Wes Strickland, Esq.

During 2014, the California Legislature passed and Governor Jerry Brown signed into law three bills that dramatically reshape the regulation of groundwater in the state: Senate Bills 1168 and 1319 (Pavley) and Assembly Bill 1739 (Dickinson). Together, the laws mandate statewide measurement and reporting of groundwater extractions for the first time and establish new authority for local agencies to adopt groundwater sustainability plans, with oversight and potential intervention by the state government if local agencies do not act. Most significantly, the statutes empower local agencies to limit the extraction of groundwater by landowners and other groundwater users.

This white paper discusses the legal background of California groundwater, the formation of new groundwater sustainability agencies, the preparation and adoption of groundwater sustainability plans, state evaluation and intervention in basin management, extraction reporting requirements and the implications of the new law for water rights and land use planning. It also offers critical commentary on the new law from the perspective of groundwater users. The title of this paper, *Dark Clouds Over California*, reflects the concern of those water users, both urban and agricultural, to whom the Sustainable Groundwater Management Act of 2014 both promises more secure water supplies and threatens legal uncertainty and upheaval.

1 Common law of groundwater

Groundwater law in California has primarily been created by the courts, through the precedential case law system of the common law. After initially refusing to determine rights in groundwater due to the mysterious nature of the underground resource, the courts began to develop the law in the early 1900s in parallel with the science of hydrogeology. The courts came to recognize three primary types of groundwater rights: overlying, appropriative and prescriptive.

Overlying rights are part and parcel of land, and give the owner of land the right to extract and use groundwater that lies beneath their parcel for any purpose, including irrigation, industrial and domestic uses. They do not give the owner a right to sell groundwater to others or to export the water for use outside the basin. A water utility may use overlying rights to serve groundwater to overlying customers, if landowners within the service area execute agency agreements in favor of the utility.

Appropriative rights are not based on land ownership, but the extraction and beneficial use of groundwater. In fact, appropriative rights may only be formed by a person who does not own the land from which groundwater is extracted, sells the produced water to others without an agency agreement or exports the water for use outside the basin. Because appropriative rights are formed by use, they can also be lost by nonuse for a period of five years or longer.

DARK CLOUDS OVER CALIFORNIA

If a shortage of groundwater occurs, all overlying landowners share in the available supply on an equal basis. Appropriative right holders may only extract and use groundwater that is surplus to the needs of overlyers. Between themselves, appropriators have rights based on their chronology of use under the principle of "first in time, first in right." If all groundwater producers collectively take more groundwater than is recharged to the basin over the long term, a condition known as "overdraft," and there are adverse impacts to the basin such as declining water levels, decreased water quality or land subsidence, then the basin enters a condition of adversity between all interested persons. If that adversity lasts for a period of longer than five years, then all overlying and appropriative rights are transformed into prescriptive rights based on their pumping during the initial five-year period. Like appropriative rights, prescriptive rights may be lost through non-use for a period of five years.

Once a groundwater shortage occurs, it is common that one or more groundwater users will petition a court to adjudicate all rights in the basin or subbasin. The court will determine the rights of every party who owns land or produces groundwater in the basin and will enter a judgment or decree enforcing those rights. The court may adopt a physical solution, which allows the parties to undertake one or more physical improvements that increase the overall yield of the basin, so that restrictions on pumping can be lessened or avoided. Common physical solutions include the conjunctive use of surface water, groundwater and recycled water, importation of supplemental water supplies, enhancement of recharge, groundwater storage, water use efficiency improvements and the construction of seawater intrusion barriers in coastal basins.

2 Prior groundwater management laws

In California, groundwater is primarily found in alluvial basins. The California Department of Water Resources (DWR) has delineated 515 separate basins or subbasins within the state. Groundwater resources and usage are unevenly distributed, with 127 basins being the source for approximately 90 percent of all groundwater produced in the state.¹ Since 1975, DWR has published descriptions of all basins within the state in its Bulletin 118 series of reports.²

Prior to 2014, the California Legislature made few adjustments to the common law of groundwater rights. Most significantly, the permitting authority of the State Water Resources Control Board (SWRCB) has always been limited to surface water, and that board does not have any jurisdiction over groundwater. Limited regulation of groundwater by the state is summarized below.

- In 1955, the Legislature mandated the annual reporting of groundwater extractions within Los Angeles, Riverside, San Bernardino and Ventura Counties, due to historical conditions in that heavily urbanized area of Southern California.³
- On several occasions, the Legislature adopted acts establishing agencies in specific areas with special groundwater management powers.⁴
- In 1992, pursuant to Assembly Bill 3030, the Legislature gave local agencies limited authority to adopt and implement groundwater management plans. Such plans could include the establishment of basin management objectives, monitoring, groundwater replenishment and actions to control seawater intrusion, mitigate overdraft or regulate the migration of contaminated groundwater, but could not limit groundwater extractions.⁵

 In 2009, the Legislature established the California Statewide Groundwater Elevation Monitoring (CASGEM) Program and tasked DWR with gathering information on groundwater levels in the state.⁶ Individual well owners were not required to provide information on groundwater levels or production, and entities that assumed responsibility for local administration of the CASGEM Program have relied on voluntary participation.

In order to apply DWR's efforts most effectively, the Legislature required the agency to prioritize each groundwater basin by a set of statutory factors, including: the current and expected future population overlying the basin; the number of public and private wells that draw from the basin; irrigated acreage overlying the basin; the degree to which persons overlying the basin rely on groundwater as their sole or primary source; and any negative conditions affecting the basin, such as overdraft, subsidence, seawater intrusion or water quality degradation.⁷ DWR published its final prioritization of all groundwater basins on June 10, 2014, ranking each basin in order and establishing four general categories: high priority (43 basins), medium priority (84), low priority (27) and very low priority (361).⁸

In addition to the state, cities and counties have the authority to regulate certain aspects of groundwater extraction and use within their boundaries, pursuant to their police power. Few cities or counties have used that authority extensively, although some have required groundwater extraction permits or prohibited the export of groundwater from the county or a single basin or subbasin within the county. Water protectionism is a common feature of local management in California and other jurisdictions that do not regulate the resource on a statewide or broader basis.

3 Impetus for groundwater reforms

California has been experiencing drought for the past three years, from 2011 through 2014. At the worst point during the summer of 2014, 100 percent of the state was in severe to exceptional drought conditions, including most coastal urban areas and all of the Central Valley.⁹ As surface water supplies were limited due to low precipitation and drawdown of surface storage reservoirs, many water suppliers and individual water users produced greater quantities of groundwater to meet their needs. A number of reports were issued at the federal, state and local levels during 2014, which indicated that groundwater levels were declining in many parts of California and the western United States.

Much of the recent attention on groundwater has been on the Central Valley, especially the San Joaquin Valley and Tulare Lake portions. Agricultural water users in those areas have suffered from a zero percent allocation from the Central Valley Project in 2014, and many growers were forced to make a difficult choice between drilling new groundwater wells to supply permanent crops such as nut and fruit trees, or allowing those crops to die. Similar groundwater pressures have received attention in 2013 and 2014 in the Paso Robles Basin in San Luis Obispo County.

Unlike surface water rights, groundwater rights tend to be owned and exercised by individual landowners rather than organizations such as the U.S. Bureau of Reclamation, DWR or water districts. The diffused nature of groundwater decisions prompted interest by the Legislature to encourage coordinated management of the resource. The Legislature also determined that local areas may need incentives to act—and penalties for the failure to act—leading to the establishment of a system for state evaluation of and intervention in local management. The new laws are described in the following sections of this white paper.

4 Application of the Sustainable Groundwater Management Act

The main body of the new legislation is found in the Sustainable Groundwater Management Act (Act).¹⁰ The Act governs the establishment of sustainability agencies and the adoption of sustainability plans, as well as state evaluation of and intervention in local management. The Act applies to groundwater found within the 515 basins delineated by DWR and relies on the prioritization of basins previously established under the CASGEM Program.¹¹ DWR is required to renew its prioritization of each basin by January 31, 2015 and anytime it updates Bulletin 118, considering the purposes of the Act.¹²

A local agency may request that DWR revise the official boundaries of a basin or establish a new subbasin, subject to regulations to be adopted by DWR by January 1, 2016.¹³ The regulations must address how DWR will evaluate the likelihood that the proposed basin could be sustainably managed, whether the proposed basin would limit the sustainable management of adjacent basins, and whether there is a history of sustainable management in the proposed basin.¹⁴ Based on the Act, the requesting agency must provide information that demonstrates the proposed basin can be sustainably managed, defines the boundaries and conditions of the proposed basin and shows the agency consulted with other interested local agencies and public water systems about the request.¹⁵ If DWR determines that the basin boundaries should be revised, it may do so based on its own investigation or information provided by others.¹⁶

Groundwater found within fractured bedrock outside of a basin or in an unsaturated geological formation is not covered by the Act,¹⁷ although it may be managed by local agencies pursuant to their other powers.¹⁸ Water flowing underground within known and definite channels is legally classified as surface water in California, is comprehensively regulated by the SWRCB, and may not be regulated by local governments due to state preemption.¹⁹ Thus, the Act only applies to the traditional legal category of "percolating groundwater."

The Act does not apply to the 26 basins that have been adjudicated by a court,²⁰ with an additional three basins poised to join that list once their adjudications have been completed.²¹ Either the watermaster or a local agency must provide DWR with a copy of the final court judgment, order or decree in each adjudication by April 1, 2016.²² Likewise, the watermaster or a local agency must submit any future amendment to a judgment, order or decree within 90 days of its entry by the court.²³ There is no provision related to basins that may be adjudicated in future, but it should be expected that the parties involved in an adjudication would seek legislative exemption. In order to gain an exemption, the adjudication may be required by the Legislature to demonstrate that the resulting management is similar to that which would occur under the Act.

5 Formation of groundwater sustainability agencies

For the first time in California law, the Act authorizes the establishment of "groundwater sustainability agencies." A groundwater sustainability agency is not a new, independent agency, but a designation that one or a combination of existing local agencies may elect to confer on themselves. These sustainability agencies will be the primary actors for groundwater management in the future, subject to evaluation and potential intervention by the state.

Any local agency may designate itself to be a groundwater sustainability agency. For purposes of the Act, a "local agency" is defined as "a local public agency that has water supply, water management, or land use responsibilities within a groundwater basin."²⁴ That definition has four

parts: (i) the agency must be local, as opposed to a state agency; (ii) it must be a governmental agency, as opposed to a private entity; (iii) the agency must have some type of water supply, water management or land use responsibility; and (iv) the boundaries of the agency must overlie the basin to be managed. Thus, rather than creating a new set of agencies to manage groundwater supplies in local areas across the state, the Legislature has awarded new powers to existing agencies.

An agency that elects to become a sustainability agency must publish notice of intent in a local newspaper of general circulation once per week for two successive weeks.²⁵ After publishing notice, the agency must hold a public hearing to consider the action in each county overlying the basin.²⁶ The agency must also submit a notice of intent to become a sustainability agency to DWR within 30 days, which will post the notice to its website within 15 days of receipt.²⁷ The notice to DWR must identify the basin or portion of a basin that the agency intends to manage,²⁸ other groundwater sustainability agencies operating within the basin, a copy of the resolution forming the new agency,²⁹ a copy of any new bylaws, ordinances or authorities adopted by the agency, and an explanation of how the agency will consider the interests of all beneficial uses and users of groundwater from the basin.³⁰ If no other notice has been filed with DWR for the same area, the noticing agency will be presumed to be the exclusive groundwater sustainability agency 90 days following its notice.³¹ An agency that has become a sustainability agency may withdraw from managing a basin by notifying DWR of that election.³²

The Legislature expressly designated certain agencies to be the groundwater sustainability agency within their boundaries, unless that agency opts out of the responsibility.³³ Each of the agencies had previously been created by the Legislature with certain powers to manage groundwater, and the Act adds the authority conferred on a sustainability agency to their other powers. Such an agency may not, however, take an action inconsistent with any prohibition or limitation contained in its principal act, unless the governing body of the agency makes a finding that the agency is unable to sustainably manage the basin without the prohibited authority.³⁴ The agencies are:

- Alameda County Flood Control and Water Conservation District, Zone 7;
- Alameda County Water District;
- Desert Water Agency;
- Fox Canyon Groundwater Management Agency;
- Honey Lake Valley Groundwater Management District;
- Long Valley Groundwater Management District;
- Mendocino City Community Services District;
- Mono County Tri-Valley Groundwater Management District;
- Monterey Peninsula Water Management District;
- Ojai Groundwater Management Agency;
- Orange County Water District;
- Pajaro Valley Water Management Agency;
- Santa Clara Valley Water District;
- Sierra Valley Water District;
- Willow Creek Groundwater Management Agency.³⁵

A combination of local agencies may elect to jointly form a sustainability agency through execution of a joint powers or other agreement.³⁶ Although an investor-owned water utility regulated by the California Public Utilities Commission may not be a member of a joint powers authority, it may participate in a sustainability agency if the local agencies approve, pursuant to a side agreement.³⁷ A

mutual water company is legally authorized to join a joint powers authority, and thus would be able to participate in a sustainability agency directly.³⁸ Individual groundwater users within a basin may be able to participate in the governance of a sustainability agency or its management activities via an appropriate type of agreement.

The Act provides that the federal government or a federally recognized Indian tribe may voluntarily participate in a groundwater sustainability plan or program, through a joint powers authority or other agreement with local agencies in the basin. A tribe is eligible to fully participate in planning, financing and implementing a plan, and may receive grant funds and technical assistance from DWR.³⁹

If no local agency elects to become a groundwater sustainability agency for an area within a basin, the county will be presumed to have that role.⁴⁰ The county is supposed to notify DWR of its assumption of the role,⁴¹ although in practice there may be some delay as the county attempts to convince another agency to designate itself. If the county notifies DWR that it will not act as the groundwater sustainability agency,⁴² and no local agency has been designated as the sustainability agency for all or part of a basin by June 30, 2017, the SWRCB may declare the basin a probationary basin subject to state intervention, as discussed in Section 10 below.⁴³

6 Powers of a groundwater sustainability agency

As the primary actors for future groundwater management, the Legislature has granted broad powers to sustainability agencies, which those agencies may exercise in their discretion. Each of the powers granted is permissive rather than mandatory in nature, other than the power to adopt a groundwater sustainability plan in high and medium priority basins, as discussed in Section 7. Even in those priority basins, the manner in which groundwater will be managed is largely put in the hands of the relevant sustainability agencies. Thus, the Act gives considerable discretion to local agencies to create bespoke management regimes for each basin. That feature allows well-run sustainability agencies flexibility to accomplish the purposes of the Act, but also hands poorly-run agencies considerable rope to harm themselves and others.

The Act gives each groundwater sustainability agency power to adopt rules, regulations, ordinances and resolutions according to the procedural requirements of its principal act.⁴⁴ In order to enforce those rules, a sustainability agency may conduct investigations related to the need for groundwater management, preparation of a groundwater sustainability plan, fees, compliance and enforcement,⁴⁵ and inspect the property or facilities of any person to determine whether the purposes of the Act are being met and whether the person is in compliance with any requirements, upon obtaining consent or an inspection warrant from a court.⁴⁶

A sustainability agency has broad powers regarding groundwater monitoring and reporting. An agency may require that all persons and entities register their groundwater wells,⁴⁷ equip all wells with meters or other measuring devices (with the cost of purchase and installation borne by the owner or operator of the well),⁴⁸ and file an annual statement reporting the total extraction of groundwater during the previous water year.⁴⁹ The sustainability agency may also require a person to report underground storage of surface water within the basin.⁵⁰ The powers of a sustainability agency to require metering and reporting of groundwater extractions do not, however, apply to a "de minimis extractor" that produces less than two acre-feet per year for domestic use.⁵¹ In the absence of metered data, an agency may estimate groundwater extractions by any reasonable method.⁵²

A sustainability agency has the authority to regulate the construction of new wells and operation of both new and existing wells. An agency may impose spacing requirements on new groundwater wells, and adopt reasonable operating regulations on existing wells to minimize well interference.⁵³ The agency may also limit construction of new wells, enlargement of existing wells or the reactivation of abandoned wells.⁵⁴

Most significantly, a sustainability agency may regulate, limit or suspend extraction of groundwater from individual or multiple wells. General extraction limits may be based on allocation of groundwater supplies within a basin.⁵⁵ The Act does not provide guidance regarding the basis for a sustainability agency imposing an allocation on water users within a basin. Thus, it is unknown whether an agency could base its allocation on land ownership, population, historical extraction or some other factor or combination of factors. It is also not clear from the Act that a sustainability agency must apply or respect the common law rules of groundwater rights, as summarized in Section 1. In practice, sustainability agencies may follow at least the general principles of groundwater rights, because stakeholders will likely be able to reach consensus on that basis more easily, and right holders are likely to apply political pressure in favor of their rights.

The Act requires a groundwater allocation to be consistent with the city or county general plan, unless there is insufficient sustainable yield in the basin to serve a land use designated in that general plan.⁵⁶ This requirement could allow a city or county to establish water use priorities in its general plan that derogate common law groundwater rights. In future, landowners and other groundwater users will need to critically review general plan documents for potential impacts to their groundwater rights, and the adoption of a general plan may trigger the need for groundwater right holders to file an adjudication.

Once a sustainability agency has adopted an allocation pursuant to a rule, regulation, ordinance or resolution, a person who extracts groundwater in excess of their allocation is subject to a civil penalty of up to \$500 per acre-foot of excess extraction, in addition to any groundwater extraction fee that may be due.⁵⁷

Once an allocation has been established, a sustainability agency may authorize groundwater users to implement temporary or permanent transfers of their allocations,⁵⁸ or to carry over their allocations from one year to the next.⁵⁹ Transfers are subject to city and county ordinances, and may only be implemented if the total quantity of groundwater extracted from the basin during the water year is consistent with the groundwater sustainability plan.⁶⁰

The Act gives sustainability agencies authority to undertake projects to promote the purposes of the statute. In order to accomplish such projects, an agency may acquire, hold, use and dispose of real property of any kind, including land, water rights, infrastructures, buildings and easements,⁶¹ and construct, operate and maintain works or improvements, either inside or outside the agency boundaries.⁶² An agency may appropriate and acquire surface water or groundwater rights, import surface water or groundwater into the basin, and conserve and store such waters within the basin. Such a program may not interfere with a pre-existing conjunctive use or storage program operated by another person or agency, unless the sustainability agency determines that the other program interferes with implementation of a groundwater sustainability plan.⁶³ An agency may also purchase, deliver, transfer or exchange water or water rights with any person,⁶⁴ and may reclaim, purify, desalinate, treat, manage, control and transport polluted water, wastewater or other waters for subsequent use.⁶⁵

A sustainability agency, as well as DWR, is authorized to provide assistance to any person or entity that extracts or uses groundwater, to promote water use efficiency or generally protect groundwater resources.⁶⁶ In addition, a sustainability agency may adopt and administer a program for fallowing of agricultural lands.⁶⁷ A fallowing program could be used to reduce the overall level of groundwater extractions from a basin. Such a program would normally be voluntary in nature, but as governmental agencies, almost all sustainability agencies would have the power of eminent domain to purchase agricultural lands for the purpose of fallowing.

A sustainability agency has common legal powers, such as to initiate, intervene in, defend and compromise legal actions or proceedings.⁶⁸ An agency has the general power to perform any act necessary or proper to carry out the purposes of the Act.⁶⁹ The powers given to an agency pursuant to the Act are in addition to its other powers, and the Act does not limit any powers of an agency that are derived from another statutory source.⁷⁰

In exercising its authority, a sustainability agency must consider the interests of all beneficial uses and users of groundwater from the basin, including:

- Agricultural users;
- Domestic well owners;
- Municipal well operators;
- Public water systems;⁷¹
- Local land use planning agencies;
- Environmental users of groundwater;
- Surface water users;
- The federal government;⁷²
- Native American tribes;
- Disadvantaged communities;⁷³ and
- Any responsible entity under the CASGEM Program.⁷⁴

There are no further instructions on how a sustainability agency is to "consider" these interests, or what appeal right a water user or other person might have if they believe an agency is not properly considering their interest. These provisions are likely to cause considerable difficulty in application.

Procedurally, an sustainability agency must follow the rules set forth in its organic act for any action. In addition, any person may request to be placed on a list of persons interested in the activities of the agency. The agency must provide notice to the list of meetings and the availability of draft plans, maps and other relevant documents.⁷⁵ Actions of a groundwater sustainability agency are generally subject to judicial review under the Code of Civil Procedure, Section 1085.⁷⁶

The Act does not authorize a sustainability agency to impose any requirement on the state or any agency, department or officer of the state, but provides that the state will work cooperatively with the sustainability agency on a voluntary basis.⁷⁷ In practice, a local agency may need the assistance of elected legislators or statewide officials to persuade state agencies to cooperate. State agencies should agree to participate in sustainability programs to the same extent as other groundwater users, for the sake of effective and equitable groundwater management.

7 Groundwater sustainability plans

As is apparent from its title, the purpose of the Act is to achieve sustainable management of groundwater in the state. "Sustainable groundwater management" is defined in the Act as the management and use of groundwater in a manner that can be maintained during a planning and implementation horizon of 50 years without causing undesirable results.⁷⁸ That 50-year period is notably longer than prior water management laws that focused on a shorter 20-year time span.⁷⁹

The new definition of sustainable groundwater management represents organic growth from past discussion of the concept by DWR and the courts. For example, the related term "sustainable yield" is defined in the Act as 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 an undesirable result.⁸⁰ The term "safe yield," as used by DWR in the 2003 Update to Bulletin 118, was defined as "the amount of groundwater that can be continuously withdrawn from a basin without adverse impact."⁸¹ That definition was in turn based on prior groundwater adjudications. There is continuity between the various definitions, while also incorporating the more modern language of sustainability.

For purposes of the Act, an undesirable result triggering nonsustainability would include:

- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion;
- Significant and unreasonable reduction of groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degraded quality, including migration of contaminant plumes;
- Significant and unreasonable subsidence that substantially interferes with surface uses; or
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.⁸²

The main tool by which a sustainability agency is expect to achieve sustainable management is a groundwater sustainability plan. The Act requires that all basins designated by DWR as either high or medium priority must be managed under a sustainability plan no later than January 31, 2022,⁸³ and those basins that have been designated by DWR as being subject to critical conditions of overdraft must be managed by the earlier deadline of January 31, 2020.⁸⁴ If the priority of a basin is elevated to high or medium in future, local agencies have two years to establish a sustainability agency and five years to adopt a sustainability plan for the basin.⁸⁵ Basins designated as either low or very low priority are not subject to mandatory management, but are authorized and encouraged to adopt sustainability plans.⁸⁶

A sustainability plan may be a single plan covering the entire basin and developed by a single sustainability agency, a single plan developed and implemented by multiple agencies, or multiple plans implemented by multiple agencies and coordinated pursuant to a coordination agreement that covers the entire basin.⁸⁷ Coordination should ensure that several sustainability plans adopted within the same basin utilize the same data and methodologies related to groundwater elevation and extraction, surface water supplies, water use, change in groundwater storage, sustainable yield and basin water budget.⁸⁸ Ensuring consistency of data and methodologies may mean that the sustainability agencies involved will develop and use a shared groundwater model for the basin.

A sustainability plan must include a description of the physical setting and characteristics of the aquifer system within the basin, including: historical data related to the basin; groundwater levels,

groundwater quality, subsidence and groundwater-surface water interaction; historical and projected water supplies and demands; a map of the basin and the boundaries of sustainability agencies that overlie the basin; and a map identifying existing and potential recharge areas for the basin.⁸⁹

A sustainability plan must include monitoring of groundwater levels, groundwater quality, land subsidence and changes in surface water flows that impact groundwater in the basin.⁹⁰ The monitoring program must include a summary of monitoring locations, facilities, frequency, testing and protocols.⁹¹ The plan must address mitigation of overdraft, recharge and surface water supplies that have been used or are available for groundwater recharge or conjunctive use.⁹² Where appropriate, a sustainability plan must include provisions related to: water use efficiency improvements within the basin; control of seawater and other saline water intrusion; wellhead protection and recharge areas; replenishment of groundwater extractions; conjunctive use and underground water storage; rules for well construction, abandonment and destruction; migration of contaminated groundwater; and impacts on groundwater-dependent ecosystems.⁹³

A sustainability plan must include measurable objectives to achieve sustainability within 20 years, as well as interim milestones at each five-year increment.⁹⁴ The plan must describe how it will meet each objective, and how each objective is intended to achieve the sustainability goal for the basin.⁹⁵ Upon request by a sustainability agency and a showing of good cause, DWR may grant an extension of the 20-year deadline by up to five years. DWR may grant a second five-year extension if implementation work has begun.⁹⁶

A sustainability plan may incorporate, extend or be based on a groundwater management plan adopted pursuant to Assembly Bill 3030.⁹⁷ The plan may, but is not required to, address undesirable results that occurred prior to January 1, 2015.⁹⁸ After that date, all new or amended groundwater management plans for high or medium priority basins will be governed by the Act and must meet the full requirements of a sustainability plan.⁹⁹

Before initiating the development of a sustainability plan, the sustainability agency must provide public notice of the process it will follow and how the public may participate. The agency must also provide notice to any city or county within the area covered by the plan. An agency may engage the public by forming and consulting with an advisory committee of interested persons, which must include any entity serving as the reporting entity for the state CASGEM Program. While the Act does not mandate a particular public outreach process, a sustainability agency is required to "encourage the active involvement of diverse social, cultural and economic elements of the population within the groundwater basin."¹⁰⁰

Prior to adopting a sustainability plan, an agency must provide at least 90 days notice to each city and county within the area covered by the plan. The sustainability agency must consult with a city or county that requests consultation within 30 days of receipt of the notice, and must review and consider any comments provided by a city or county.

The sustainability agency must hold a public hearing for adoption or amendment of a sustainability plan.¹⁰¹ The public hearing would be subject to the normal procedures of the Ralph M. Brown Act.¹⁰² Preparation and adoption of a plan is not subject to the environmental review requirements of the California Environmental Quality Act (CEQA), although that exemption does not extend to specific projects that might be undertaken pursuant to a plan.¹⁰³ This is the same approach taken for the preparation and adoption of urban water management plans under CEQA.¹⁰⁴

Once it adopts a sustainability plan, a sustainability agency must submit the plan to DWR for review,¹⁰⁵ post the plan on its own website and provide electronic notice of the adoption to any person who has requested electronic notification.¹⁰⁶ In addition, an agency may file a validation action to determine the validity of the plan.¹⁰⁷ The process for that action is the same as for other validation actions, except that the agency must wait between 180 and 240 days after adoption of the plan to file the action.¹⁰⁸ The suit must be filed in the county where the sustainability agency has its principal office.¹⁰⁹

Each agency that has adopted a sustainability plan must submit an annual report to DWR by April 1 of the following year. That report must include groundwater elevation data, change in groundwater storage, aggregated extraction data, information about surface water supplies and total water use in the covered area.¹¹⁰ An agency must periodically evaluate its adopted plan to determine if the plan should be updated, based on changed conditions in the basin or the need to modify management objectives.¹¹¹ The Act does not specify how often this review must occur, and a sustainability agency would have discretion to determine the frequency based on the circumstances of the basin covered and the nature of actions to be taken under the sustainability plan. However, DWR must review a sustainability plan at least once every five years, so a sustainability agency would likely be required to update its plan with the same frequency.¹¹²

DWR may provide technical assistance to an agency for preparation of a sustainability plan. While DWR is mandated to use its "best efforts" to provide assistance, its ability to do so will likely depend on funding and staffing levels at the agency.¹¹³ We can reasonably expect DWR to publish a guide for the preparation of sustainability plans, much like it has for urban water management plans and water supply assessments for new land development.

A sustainability plan may require certain actions to be taken by individual groundwater users or others. A person who violates a sustainability plan or a rule, regulation, ordinance or resolution of a sustainability agency is liable for a civil penalty of \$1,000 plus \$100 per day on which the violation continues if the person fails to correct the violation within 30 days of notice from the agency.¹¹⁴ An agency may bring an action in superior court to determine whether a violation has occurred and to impose such a civil penalty.¹¹⁵ Alternatively, the agency may impose a civil penalty administratively, after providing notice and the opportunity for a hearing.¹¹⁶ In determining the amount of a penalty, the court or agency shall consider all relevant circumstances, including the nature and persistence of the violation, the extent of harm caused by the violation, the length of time over which the violation occurred and any corrective action taken by the violator.¹¹⁷ Any penalty will be paid directly to the sustainability agency and used for groundwater management purposes.¹¹⁸

A sustainability agency may develop and submit to DWR a proposal for an alternative management strategy that does not comply with the Act's requirements for a sustainability plan, but nonetheless is expected to achieve the sustainability goals for the basin. An alternative management proposal may consist of a groundwater management plan pursuant to Assembly Bill 3030, management of a basin pursuant to an adjudication or an analysis demonstrating that active management is not necessary because the basin has been operated within its sustainable yield for at least 10 years.¹¹⁹ The last type of proposal must be supported by a report prepared and certified by a registered professional engineer or geologist.¹²⁰ In order to qualify for an alternative management strategy, a basin must be in compliance with the CASGEM Program.¹²¹

An agency that desires to pursue an alternative management strategy must submit its proposal to DWR by January 1, 2017 and every five years thereafter.¹²² DWR will review the proposal and assess whether it meets the requirements of the Act. DWR may recommend actions needed to correct any deficiencies identified in the proposal.¹²³

8 Financial authority

One of the most difficult issues for any groundwater management program is how to raise the funds necessary to pay for monitoring, development, recharge, storage and other types of projects. In order to address that issue, the Act gives a sustainability agency authority to impose fees to fund the cost of a groundwater sustainability program, including the preparation and amendment of a sustainability plan, investigation of groundwater conditions, compliance assistance, enforcement and program administration. Fees may include "permit fees and fees on groundwater extraction or other regulated activity,"¹²⁴ or may be imposed in the same manner as ordinary municipal ad valorem property taxes.¹²⁵ A fee may be imposed on either an owner or operator of a groundwater extraction facility. A local public agency is subject to groundwater fees to the same extent as any private person.¹²⁶

A sustainability agency may adopt a groundwater extraction fee to fund the costs of groundwater management under a sustainability plan.¹²⁷ An agency that had adopted a groundwater management plan pursuant to Assembly Bill 3030 prior to January 1, 2015 may also adopt a groundwater extraction fee to implement that plan.¹²⁸ The Act contains a non-exclusive list of the costs that may be covered by the fee, including: administration, operation and maintenance of facilities; acquisition of lands, property, facilities and services; supply, production, treatment and distribution of water; maintaining prudent financial reserves; and other activities necessary or convenient to implement the sustainability plan.¹²⁹

Groundwater extraction fees may include fixed fees and fees charged on a volumetric basis, and fees that increase based on the quantity of groundwater produced, the year in which groundwater production commenced or impacts to the basin.¹³⁰ Extraction fees may be based on the maximum production capacity of a groundwater well or the amount of water produced, if measured by a meter or other device.¹³¹ A sustainability agency may not impose a fee on de minimis extractors, unless the agency has also regulated such small users in its plan.¹³²

Prior to imposing or increasing a fee, the sustainability agency must hold a public meeting. Public notice of the meeting must include an explanation of the proposed fee or increase and include posting the notice to the agency's website and mailing notice to any person who has requested such notices. The agency must make the data upon which the fee is based available to the public at least 10 days prior to the meeting.¹³³ The agency must adopt or increase a fee by adoption of a resolution or ordinance.¹³⁴ An agency must impose an ad valorem tax by resolution, and present the resolution, a list of parcels and the amount to be collected from each parcel to the county auditor-controller and board of supervisors by August 1 of each year for collection.¹³⁵ Groundwater extraction fees must comply with the procedural and substantive rules of Proposition 218.¹³⁶

A sustainability agency that adopts a fee shall establish a date on which the fee is due and payable.¹³⁷ If an owner or operator of a facility does not pay a fee within 30 days of the due date, the owner or operator will be liable for interest at the rate of 1 percent per month plus a 10 percent penalty.¹³⁸ The agency may bring a suit to collect any delinquent fees, interest or penalties, and may seek attachment against the property of the defendant.¹³⁹ An agency may also order the owner or

operator to cease extraction of groundwater until the delinquent fees are paid, following a public hearing with at least 15 days written notice.¹⁴⁰ These remedies are in addition to any other methods of collection available to the agency.¹⁴¹

A person who opposes a fee imposed under the Act must challenge the relevant ordinance or resolution within 180 days.¹⁴² A person may pay a disputed fee under protest and bring an action to recover the protested amount.¹⁴³

The financial powers granted by the Act are in addition to other powers that an agency may have based on its organic statute or other laws.¹⁴⁴ The focus of the Act is on the power of a sustainability agency to impose fees on property owners or groundwater users within the area covered by a sustainability plan. In order to undertake significant capital projects, many agencies would need to borrow money through the issuance of bonds or some other means. The Act does not include any provisions related to borrowing, and an agency would need to rely on other statutes for that authority. We expect, however, that many agencies will use the revenue from groundwater fees as the basis for the issuance of revenue bonds.¹⁴⁵

9 State evaluation

As described in Section 2 above, groundwater has historically been managed at the local level, with the state assuming only an advisory role. The Act continues the preference for local action, declaring the intent of the Legislature "[t]o manage groundwater basins through the actions of local governmental agencies to the greatest extent feasible, while minimizing state intervention to only when necessary to ensure that local agencies manage groundwater in a sustainable manner."¹⁴⁶ The Act does, however, increase the involvement of the state in the adoption of regulations and evaluation of the adequacy of locally-prepared sustainability plans.

State evaluation of local groundwater management has been handed to DWR. That state agency has historically been involved with California groundwater only for the preparation of technical studies, including the Bulletin 118 series¹⁴⁷ and groundwater-related portions of the *California Water Plan*.¹⁴⁸ DWR does not generally act as a regulatory body, but primarily as the owner and operator of the State Water Project and as the state water planner. It remains to be seen how well DWR will perform its new regulatory duties.

The Act requires DWR to adopt regulations for evaluating and implementing groundwater sustainability plans and coordination agreements by June 1, 2016.¹⁴⁹ The regulations will identify the necessary components that sustainability agencies will include in a sustainability plan, based on the Act or otherwise deemed useful by DWR.¹⁵⁰ The regulations will also identify appropriate methodologies concerning hydrology, water demand, regulatory restrictions that affect the reliability of surface water supplies used in the basin, and the impact of those conditions on groundwater sustainability. The Act provides that the baseline for measuring unreliability and reductions of surface water supplies shall include the historic average reliability, although the concept of reliability is not limited to historical conditions.¹⁵¹ The regulations must also include standards for alternative management proposals.¹⁵²

The Act classifies the regulations to be adopted by DWR as emergency regulations not subject to the normal procedures of the Administrative Procedure Act,¹⁵³ such as approval by the Office of Administrative Law.¹⁵⁴ DWR must, however, conduct public meetings to receive and consider public

comments, with meetings to be held in Northern California, Southern California and the Central Valley.¹⁵⁵ DWR may periodically update the groundwater regulations.¹⁵⁶

DWR is required to prepare a report on the department's best estimate of water available for replenishment of groundwater in the state by December 31, 2016.¹⁵⁷ The results of that report may be helpful for sustainability agencies in the evaluation of specific basins and the preparation of sustainability plans, particularly for the identification of potential sources of recharge water. DWR is also required to publish a set of best management practices for sustainable management of groundwater by January 1, 2017. In developing those practices, DWR must hold public meetings in Northern California, Southern California and the San Joaquin Valley, and one public meeting of the California Water Commission.¹⁵⁸

An agency that adopts a sustainability plan must submit the plan to DWR for review.¹⁵⁹ If a basin is covered by more than one sustainability plan, the adopting agencies should hold their plans for submission to DWR at one time. The submission should then include all sustainability plans that cover the basin, the coordination agreement and an explanation of how the various plans will collectively satisfy the requirements of the Act.¹⁶⁰ DWR is required to post all submitted plans to its website, and any person may submit comments on a plan within 60 days of posting.¹⁶¹

DWR must review the groundwater sustainability plans adopted by sustainability agencies to determine whether each plan complies with the requirements of the Act and "is likely to achieve the sustainability goal for the basin covered by the groundwater sustainability plan."¹⁶² If more than one plan is adopted for a basin, DWR must determine whether the plans have been properly coordinated and collectively meet the requirements of the Act.¹⁶³ Finally, DWR must determine whether a sustainability plan adversely impacts the ability of an adjacent basin to achieve its sustainability goals.¹⁶⁴ DWR must complete its review of a plan within two years of submission and issue an assessment, which may include recommendations to address identified deficiencies.¹⁶⁵

DWR will also evaluate any alternative management proposals submitted by a sustainability agency to determine whether they satisfy the requirements of the Act.¹⁶⁶

Through the adoption of regulations and best management practices for sustainable groundwater management, as well as direct review of sustainability plans and alternative management proposals, DWR will have a significant role in management of California's groundwater in future. Despite the language included by the Legislature preferring local over state management, the DWR regulations and oversight are likely to enforce a moderate level of consistency between sustainability plans across the state. It will be important for groundwater users and local agencies to participate in the DWR rulemaking process for protection of their interests.

10 State intervention

In addition to the evaluation role given to DWR, the Legislature has required the SWRCB to actively intervene in local management of a groundwater basin under certain circumstances, namely, the occurrence of a "probationary basin." The SWRCB may designate a probationary basin if it makes one or more of the following findings:

 As of June 30, 2017, no local agency has elected to become a groundwater sustainability agency covering the entire basin area, and no agency has submitted an alternative management proposal that has been approved or is pending approval;¹⁶⁷

- As of January 31, 2020, no sustainability agency has adopted a plan covering the entire area of a basin that is classified as high or medium priority and subject to critical conditions of overdraft, and no agency has submitted an alternative management proposal that has been approved by DWR;¹⁶⁸
- After January 31, 2020, DWR has determined that a groundwater sustainability plan submitted for a basin that is classified as high or medium priority and subject to critical conditions of overdraft is inadequate, or the plan is not being implemented in a manner that will likely achieve the sustainability goal;¹⁶⁹
- As of January 31, 2022, no sustainability agency has adopted a sustainability plan covering the entire area of a basin that is classified as high or medium priority (regardless of whether the basin is subject to critical conditions of overdraft), and no agency has submitted an alternative management proposal that has been approved by DWR;¹⁷⁰
- After January 31, 2022, DWR has determined that a groundwater sustainability plan submitted for a basin that is classified as high or medium priority is inadequate, or the plan is not being implemented in a manner that will likely achieve the sustainability goal, and the SWRCB determines that the basin is in a long-term condition of overdraft;¹⁷¹
- After January 31, 2025, DWR has determined that a groundwater sustainability plan submitted for a basin that is classified as high or medium priority is inadequate, or the plan is not being implemented in a manner that will likely achieve the sustainability goal, and the SWRCB determines that groundwater extractions result in significant depletions of interconnected surface waters.¹⁷²

The SWRCB must exclude from probationary status any portion of a basin for which a sustainability agency demonstrates compliance with the sustainability goals of the Act.¹⁷³ In that case, the SWRCB may designate as probationary other portions of the basin.

For purposes of the Act, "condition of long-term overdraft" means the condition of a groundwater basin where the average annual amount of water extracted for a long-term period, generally 10 years or more, exceeds the long-term average annual supply of water to the basin, plus any temporary surplus. Overdraft during a period of drought is not sufficient to establish a condition of long-term overdraft if extractions and recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods.¹⁷⁴ The term "significant depletions of interconnected surface waters" means reductions in flow or levels of surface water that is hydrologically connected to the basin such that the reduced surface water flow or levels have a significant and unreasonable adverse impact on beneficial uses of the surface water.¹⁷⁵ This likely includes beneficial use of the surface water by fish, wildlife and the environment.¹⁷⁶

If the SWRCB designates a probationary basin due to the failure of local agencies to accept the responsibility of a sustainability agency or adopt a sustainability plan, those agencies will have 180 days to remedy the deficiency.¹⁷⁷ The SWRCB may appoint a mediator to assist in resolving disputes and leading to a remedy of the deficiency. The SWRCB may extend the 180-day period if it finds that a local agency is making substantial progress toward remedying the deficiency.¹⁷⁸ At the end of the remedy period, the SWRCB may develop an interim plan for the probationary basin.¹⁷⁹

If the SWRCB designates a probationary basin due to inadequacy of a sustainability plan, the SWRCB must identify the specific deficiencies. The SWRCB may direct DWR to assist the sustainability agency with correcting the deficiencies within 90 days.¹⁸⁰ The SWRCB may develop an interim plan for the probationary basin, if the deficiencies have not been corrected within one year of the SWRCB determination.¹⁸¹

An interim plan must include identification of the actions necessary to correct a condition of longterm overdraft or significant depletions of interconnected surface waters, a time schedule for the actions, and a description of the monitoring to be undertaken to determine effectiveness of the plan.¹⁸² The interim plan may include restrictions on groundwater extraction, a physical solution and the administration of rights to surface waters that are connected to the basin,¹⁸³ and must be consistent with water right priorities.¹⁸⁴ The SWRCB may issue a cease and desist order to prevent any person from violating the terms of the interim plan.¹⁸⁵ The SWRCB must include in its interim plan any groundwater sustainability plan, or any element of a plan, that complies with the sustainability goal for the basin or would help meet the goal. In its judgment, the SWRCB may incorporate the results of an adjudication into an interim plan,¹⁸⁶ or the SWRCB may reject an adjudication. Thus, the Act gives the SWRCB discretion to ignore court-adjudicated groundwater rights when crafting its own management for a probationary basin.

The SWRCB may rescind all or part of an interim plan if it determines, in consultation with DWR, that a new groundwater sustainability plan or adjudication is adequate to correct a condition of long-term overdraft or significant depletions of interconnected surface waters in the probationary basin.¹⁸⁷ The SWRCB will decide whether to rescind or amend an interim plan within 90 days of receiving a petition filed by a sustainability agency that has adopted a sustainability plan or a person authorized to file the petition by a judicial order or decree entered in an adjudication.¹⁸⁸ The SWRCB may also rescind or amend an interim plan in its own discretion.¹⁸⁹

The SWRCB may designate a probationary basin or adopt an interim plan only after notice and a public hearing.¹⁹⁰ The SWRCB may consider any studies performed by DWR of the basin, may request that DWR conduct additional studies, and may require any person who extracts or uses water from the basin to report on their usage.¹⁹¹ The SWRCB must post any DWR studies on its website and allow at least 30 days for the public to comment on those studies.¹⁹² Notice of the hearing must be posted to the SWRCB website at least 90 days before the hearing.¹⁹³ The SWRCB must also provide 90 days notice by mail or email to DWR and each city and county within the basin, and 60 days notice to all persons known by the SWRCB who extract or propose to extract groundwater from the basin.¹⁹⁴

The designation of a probationary basin or adoption of an interim plan is a quasi-legislative action and not subject to the Administrative Procedure Act or CEQA.¹⁹⁵ A decision or order of the SWRCB is subject to a petition for reconsideration and judicial review.¹⁹⁶

The Legislature directed the SWRCB to adopt a schedule of fees to recover the costs associated with administering the provisions of the Sustainable Groundwater Management Act. Recoverable costs include those incurred in connection with investigations, facilitation, monitoring, hearings, enforcement and administration.¹⁹⁷ The schedule will include a fee for participation by parties and petitioners in any proceeding before the SWRCB.¹⁹⁸ The fees are supposed to raise funds sufficient to pay for administration of the program,¹⁹⁹ and the SWRCB is authorized to spend money from its water rights fund to carry out the Act.²⁰⁰

11 Effect on groundwater policy and rights

The new groundwater law includes a number of legislative findings regarding the importance of groundwater to California and the risks from excessive groundwater extractions, including overdraft, failed wells, deteriorated water quality, environmental damage and irreversible land subsidence.²⁰¹ Additionally, the Legislature adopted new Water Code § 113, which provides that:

It is the policy of the state that groundwater resources be managed sustainably for long-term reliability and multiple economic, social, and environmental benefits for current and future beneficial uses. Sustainable groundwater management is best achieved locally through the development, implementation, and updating of plans and programs based on the best available science.

It is notable that the language speaks about the importance of groundwater to the state, and declares that management is best achieved locally, but does not clarify ownership or primacy of control of the resource between the state, local governments, water users and landowners. Previously existing laws declare all water within the state to belong to the people of the state, with only usufructuary rights given to water users,²⁰² but the new law contains no significant restatement or refinement of that concept. The only other related statement declares that:

A [local] groundwater sustainability agency has and may use the powers in this chapter to provide the maximum degree of local control and flexibility consistent with the sustainability goals of this part.²⁰³

Since the legislation empowers both local governmental agencies and the state (through DWR and the SWRCB) to regulate groundwater, it presents an ambivalent map of the locus of control over the resource. The tension between local and state control was considered and discussed at length by and among the legislators, attorneys and policy makers who drafted the legislation, and the omission of specific details was intentional. In our judgment, however, leaving a void on this question is as likely to create controversy as prevent it.

The Act declares in several provisions that it does not impact existing groundwater rights:

- "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."²⁰⁴
- "Nothing in this part modifies rights or priorities to use or store groundwater consistent with Section 2 of Article X of the California Constitution."²⁰⁵
- "Nothing in this part, or in any groundwater management plan adopted pursuant to this part, determines or alters surface water rights or groundwater rights under common law or any provision of law that determines or grants surface water rights."²⁰⁶
- It is the intent of the Legislature "[t]o respect overlying and other proprietary rights to groundwater, consistent with Section 1200 of the Water Code."²⁰⁷

• "The [SWRCB's] authority to adopt an interim plan under this section does not alter the law establishing water right priorities or any other authority of the board."²⁰⁸

The Act does not give a sustainability agency the power to make a binding determination of the water rights of any person or entity.²⁰⁹ The Act provides further that a limitation on groundwater extractions by a sustainability agency shall not be construed as a final determination of groundwater rights.²¹⁰ The only governmental body with that authority is a court or the SWRCB in a statutory adjudication.²¹¹ The Act states inconsistently that the SWRCB must adopt an interim plan for a probationary basin that is consistent with water rights, and the agency has discretion to ignore an adjudication of those same groundwater rights.²¹² The Act provides that the production of groundwater between January 1, 2015 and the date of adoption of a groundwater sustainability plan may not be used as evidence of, or establish or defend against, any claim of prescription.²¹³ Likewise, the extraction or use of groundwater rights.²¹⁴

The establishment of groundwater extraction allocations by a sustainability agency will effectively control the formation and protection of appropriative and prescriptive groundwater rights that are based on extraction and use. While an extraction allocation may not technically determine overlying rights, since those rights are part and parcel of land, a sustainability agency that does not award an allocation based on landownership will effectively prevent overlying right holders from exercising those rights. Thus, despite the Legislature's disclaiming any effect of the Act on groundwater rights, there are likely to be significant claims from groundwater users to that effect.

It should be remembered that the California Supreme Court considered and rejected a similar attempt to impose groundwater extraction allocations on a basis other than the common law of groundwater rights in *City of Barstow v. Mojave Water Agency.*²¹⁵ In the adjudication of the Mojave River Basin, a subset of the parties negotiated a physical solution that apportioned groundwater production rights based on rules that divided the basin into several subbasins and compelled each cascading subbasin to deliver a certain quantity of groundwater to the lower basins. The trial court then imposed the physical solution on both stipulating and nonstipulating parties, opining that the constitutional mandate of reasonable and beneficial use dictates an equitable apportionment of all water rights when a basin is in overdraft.²¹⁶ The Supreme Court reversed that decision, holding that although a court may use its equitable powers to implement a physical solution, it may not ignore the law of water rights.²¹⁷ That decision is likely to give groundwater users ammunition to challenge the Act, both on its face and as applied.

We predict that, despite the statements of the Legislature otherwise, the relationship between the authority of sustainability agencies to establish groundwater extraction allocations and adopt sustainability plans under the Act, and the common law of groundwater rights in California, will be subject to significant differences of opinion, ultimately resolved through litigation.

12 Groundwater monitoring and reporting

In addition to the Act, the new legislation contains requirements regarding the measurement and reporting of groundwater extractions. While a person who produces groundwater within a basin subject to a sustainability plan will be required to measure and report their extraction to the relevant sustainability agency, a gap could exist for persons who produce groundwater from basins where that authority has not been exercised by a local agency. Therefore, any person who extracts groundwater from a probationary basin,²¹⁸ or in an area of a basin that is not within the

management area of a sustainability agency after July 1, 2017,²¹⁹ must file a report with the SWRCB by December 15 of each year for the preceding water year, which extends from October 1 through September 30.²²⁰ This reporting requirement does not apply to a de minimis extractor or a person who reports their groundwater extractions to a court, watermaster or the SWRCB pursuant to another program.²²¹

The SWRCB may adopt emergency regulations concerning this program.²²² The SWRCB must prepare a form to be used for reporting, which shall include the name and address of the person who extracted groundwater, the basin, the place of extraction including the assessor's parcel number of the land on which the well is located, the well capacity, monthly records of groundwater extractions, the purpose of use, the place of use, the year in which extraction was commenced and other information deemed necessary for the reporting program.²²³

If a person fails to report their extractions, the SWRCB may investigate and determine the information that would have been required.²²⁴ The SWRCB must give the person notice of the investigation and 60 days in which to file a report without penalty.²²⁵ Failure to file an extraction report, making willful false statements in a report or tampering with a water measuring device are each punishable as misdemeanors or by administrative civil liability.²²⁶ A person who does not file a report will not obtain legal credit for their extraction of groundwater during the period of nonreporting.²²⁷ A properly filed report, on the other hand, does not by itself establish or constitute evidence of a right to extract or use groundwater.²²⁸

Californians have historically been able to maintain the privacy of information about their extraction and use of groundwater. For example, state law has required the filing of well completion reports with DWR since 1970, but those reports are not available for inspection by the public.²²⁹ The new legislation continues that practice by exempting the disclosure of personal information included in a report of groundwater extraction from the California Public Records Act, in the same manner as information concerning utility customers of local agencies.²³⁰ An agency preparing a sustainability plan should be able to access the information for that limited purpose and use the data as part of an aggregation that does not reveal any personal information in an identifiable manner.

13 Land use planning

The connections between land use planning and water supplies have been recognized in California for a number of years, and there are a number of statutes that require coordination between land use and water planning agencies. The 2014 legislation modifies some of the laws regarding that connection to account for the creation of groundwater sustainability agencies and the adoption of sustainability plans.

The new legislation requires that before a city or county adopts or substantially amends its general plan, it must review and consider any groundwater sustainability plan, adjudication of water rights and order or interim plan of the SWRCB related to a basin within the general plan area.²³¹ The city or county must refer the proposed general plan to any sustainability agency²³² and the SWRCB, if that agency has adopted an interim plan.²³³ That is in addition to the pre-existing legal requirement to refer the proposed general plan to any public water system that has at least 3,000 service connections.²³⁴ Once the proposed plan is received by a sustainability agency or the SWRCB, that agency must provide the city or county with the current version of its sustainability plan or alternative management strategy, any applicable court order, judgment or decree, maps of

groundwater recharge and percolation areas, extraction limitations, and a report on the anticipated effect of the proposed general plan on implementation of the groundwater sustainability plan.²³⁵

In the reverse direction, the Act declares that it does not supersede the land use authority of cities and counties,²³⁶ and a sustainability plan adopted pursuant to the Act must take into account the most recent planning assumptions stated on the general plans of overlying jurisdictions.²³⁷ The sustainability plan must also describe how its implementation may affect the general plan.²³⁸ These provisions are likely to cause sustainability agencies and groundwater users to closely watch the general planning process, to ensure that approved land uses will not adversely affect their sustainability plans or groundwater rights.

14 Commentary and criticisms

The Sustainable Groundwater Management Act of 2014 is the most significant legislation ever adopted concerning California groundwater. As described in the preceding sections, the Act will dramatically reshape the way in which groundwater is managed in future, and will have a large impact on groundwater rights and land use planning. This section provides commentary and criticisms of several features of the Act.

14.1 Defining sustainability

Groundwater is a part of the natural capital of California, serving a number of important economic, environmental and social objectives. It is imperative that California manage all its water resources, including groundwater, for long-term sustainability, so that the state may protect other environmental resources and have sufficient water to maintain a high quality of life and thriving economy for its citizens. A critical question is whether the Act defines sustainability in a way that will adequately protect groundwater resources for the citizens of California today and in future.

The definition of sustainability in the Act evaluates a long enough period of time—50 years—to measure the full impact of almost all groundwater programs, but a near enough period to make the analysis useful. The definition is missing any reference to the triple goals of maintaining strong water supplies, the environment and the economy.²³⁹ Sustainability plans and other groundwater management efforts should consider all three goals in order to achieve true water sustainability. The Act requires neither environmental review nor an economic analysis of sustainability plans; while the preparation of additional planning documents may add more cost and delay than value, a sustainability agency should nonetheless consider those factors in its planning process.

Notably missing from the definition of sustainability, the contents of sustainability plans or the evaluation criteria to be applied by the state is any reference to climate change or variability. The omission is surprising given the lead that California has taken on climate issues in other contexts, such as with the California Global Warming Solutions Act of 2006.²⁴⁰ The 50-year planning period under the Act is long enough to reach the mid-century projections that are common in climate studies. While it can be extremely difficult to determine the expected impacts of climate change on any particular groundwater basin in California, it will be important to consider future climate variability when establishing a water budget for a basin, including precipitation that falls as rain or snow, evapotranspiration of vegetation and sea level for coastal basins. It is possible that DWR will address climate change in the regulations to be developed under the Act, although doing so without a legislative mandate may subject the regulations to challenge.

Of course, the Act represents only one approach to achieving sustainability, which the Legislature has chosen to pursue at this time. There is already some discussion of future groundwater legislation, including the creation of a streamlined process for court adjudications. We recommend the Legislature be ready and willing to refine the Act and its definition of sustainability as the state gains implementation experience over the next few years.

14.2 Selection of groundwater sustainability agencies

As explained in Section 4 above, the Legislature has given primary groundwater management authority under the Act to local public agencies. That choice is consistent with the policy established in new Water Code § 113 that favors local over state management of groundwater resources, but leads to several potential concerns.

With 58 counties, 482 cities and more than 800 special districts that have some responsibility for water in California—many of them overlapping in their jurisdictions—there will be serious questions about which agency or agencies should assume the role of a sustainability agency for any given basin. Since the role comes with significant new powers, including the power to collect substantial fees, there is a real chance of power struggles erupting between various local agencies across the state. If multiple agencies propose to be the sustainability agency for an area, there is no process in the Act for resolution of the conflict. Although each agency must provide notice to DWR of its intent to become a sustainability agency, the Act does not establish a process or criteria for DWR or any other authority to decide between competing agencies. Such conflicts may require resolution by DWR, the courts or the Legislature itself.

A related problem will exist in large basins covered by more than one agency. Having multiple local agencies elect to become sustainability agencies, each for separate portions of a basin, may lead to fragmented management and potential conflicts between their sustainability plans and programs. Management of subareas of a basin by different agencies with differing goals, metrics or programs may result in thwarting some or all of their efforts, and raise legitimate equal protection claims for groundwater users.²⁴¹ Further compounding the problem is that local agency boundaries are rarely drawn on hydrogeological lines, so that the subareas to be managed by each do not have any rational basis.

In addition to the problems that may arise between local agencies, it is important to remember that a large number of California groundwater users are not public agencies, and thus are excluded from any direct role in groundwater management activities. While the Act allows nonagency groundwater users to participate in management of a basin through agreement, that would require approval of their involvement by local agencies. There is little requirement or incentive for an agency to involve or protect the interests of landowners, irrigators, domestic well owners, the federal government, Native American tribes or the environment, despite a vague statement in the Act that a sustainability agency must "consider" such interests.²⁴²

Giving groundwater management powers to local agencies that have existing water roles creates an inherent conflict of interest. Elected officials that govern a local agency have a fiduciary responsibility to serve the interests of voters within their agency, and it may be politically difficult for those officials to make unbiased decisions regarding groundwater management. The inherent conflict between a single agency acting as both groundwater regulator and user is likely to undermine the effectiveness of management in some basins.

14.3 Winner and losers

Any legislation can be said to assign winners and losers, as the change in law shifts power between different citizen groups. The clear winners of the Act are local agencies, which have been granted significant new powers to manage groundwater and collect fees, with few restrictions. While some have advocated a strong role for the state in groundwater management, as a general matter the state has not assumed the mantle, but deferred to local agencies. The clear losers of the Act are water purveyors that are not public agencies, i.e., public utilities and mutual water companies, and agricultural groundwater users. Given the significant control of groundwater that has been granted to local agencies, the Act can be said to effect a degree of municipalization or socialization of the resource.

The Act specifically and unfairly discriminates against public utilities and mutual water companies, which provide water service to approximately 5.5 million and 1.3 million people in California, respectively. Public utilities are regulated by the California Public Utilities Commission and have dedicated their assets, including groundwater rights, to public use for the benefit of their customers. Mutual water companies have not dedicated their groundwater rights to public use, but deliver water to their voting members at cost, similarly to local agencies. Because they are organized as private corporations rather than public agencies, however, neither type is eligible to serve as a sustainability agency. Based on that feature of the Act, 6.8 million Californians are placed at a disadvantage in the management and protection of groundwater rights on which they rely for service. This contrasts with the eligibility of public utilities and mutual water companies for funds from the water bonds to be issued pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014, which was approved by the voters as Proposition 1.²⁴³

The Act also neglects the interests of agricultural groundwater users. While those users will benefit from the sustainable long-term management of groundwater, the vast majority of agricultural users do not obtain groundwater supplies from a local agency, but through their own water rights. Since they are not authorized to directly participate in management planning, agricultural users are placed at a significant disadvantage. For those users, the Act may appear to constitute a confiscation of their water rights for the benefit of cities and other local agencies.

In order to participate in groundwater basin management to the greatest extent possible, a nonagency user should monitor the actions of agencies that are likely to seek designation as a sustainability agency. Although the deadline for that election is not until June 30, 2017, some agencies have already started the process.²⁴⁴ A user may file comments with DWR on the proposal submitted by any agency, although it is unclear how DWR will consider such comments.

Once a sustainability agency has been formed, a user should ask for notice of any groundwaterrelated action, including but not limited to adoption or amendment of ordinances, rules, regulations, resolutions, plans, allocations and fees. The user may participate in the public process required before any agency action and provide comments to DWR or the SWRCB as those state agencies provide oversight. In addition to providing comments and data during the administrative process, there may be procedural and substantive grounds for groundwater users to challenge sustainability agency actions through litigation. For at least the first decade of implementation, many provisions of the Act will be relatively uncertain in their interpretation, requiring groundwater users to be especially vigilant in monitoring their basins.

14.4 Key issues in groundwater sustainability plans

As the primary documents for groundwater management under the Act, there will be great focus on the preparation and implementation of sustainability plans. These plans will require significant work, normally involving the creation of a numerical model of the relevant groundwater basin. Due to the varying hydrogeologic conditions of each basin, every sustainability plan will be different. The approach in the Act of having sustainability agencies prepare the plans, followed by state-level review by DWR, allows the plans to respond to local conditions while meeting certain statewide standards. One weakness with that approach is that the local focus may fail to identify inter-basin solutions that would optimize the use of groundwater resources on a regional or statewide basis. It remains to be seen whether DWR will try to improve statewide coordination or will simply defer to local planning efforts.

One of the most difficult issues for sustainability plans is likely to be coordination of the efforts of multiple sustainability agencies within a basin. The best approach would be formation of a joint powers authority or similar joint planning process by multiple agencies, resulting in a single sustainability plan for each basin. That approach would be enhanced further by the inclusion of nonagency groundwater users, as discussed in Section 14.3 above.

The best model of a sustainability plan in California is the Basin Plan that was prepared as part of the Los Osos Basin adjudication in San Luis Obispo County. The author of this white paper had the privilege of writing that Basin Plan for a diverse group of stakeholders, including the county, a local water district, a public utility and a mutual water company. The Basin Plan contains measurable goals for achieving sustainability and a number of programs designed to accomplish those goals, including the improvement of urban water use efficiency and the distribution of groundwater extraction infrastructure across the basin. It may be helpful for other water managers may look to the Los Osos Basin Plan for an example of a plan that was successful in resolving disputes among the major groundwater users and would likely satisfy most, if not all, the requirements of the Act for a sustainability plan.²⁴⁵

Given the significant burdens associated with preparing, adopting and implementing a sustainability plan, we expect that a number of basins will seek DWR approval of alternative management strategies. In order to succeed in that endeavor, a sustainability agency will need to demonstrate that an alternative strategy will achieve a sustainable basin, or that active management is not necessary because the basin has been operated within its sustainable yield for at least 10 years.²⁴⁶ DWR may adopt regulations regarding the evidence that should be presented on those questions, which may impact the number of basins that are able to qualify. Nonetheless, we predict that a number of agencies will view alternative management strategies as an attractive option for pursuit.

One of the most significant provisions of the Act allows sustainability agencies to adopt groundwater extraction allocations, and to limit the production of groundwater. The Act does not, however, dictate the basis for establishing such an allocation or require a sustainability agency to follow the common law of groundwater rights. The indefiniteness of the statute may allow local agencies to craft flexible allocations that achieve sustainability under the special circumstances of each basin, but may also be seen as authorizing the taking of established property rights. A similar approach in the Texas statutes allowing for local management of groundwater led to the Texas Supreme Court deciding in *Edwards Aquifer Authority v. Day*²⁴⁷ that the agency's attempt to allocate groundwater caused a taking of landowner rights under the common law of that state.

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The Act exempts de minimis extractors from both water use reporting and extraction allocations, which is subject to several criticisms. As an initial matter, it may be difficult to determine whether a person qualifies as a de minimis extractor without the installation of a water meter and the reading and reporting of usage. More fundamentally, the exemption ignores the significant cumulative effect that de minimis extractors may have on certain basins. The exemption appears to be based on a perception that small water users should not have to bear the costs of installing a water meter or complying with an allocation, but small domestic users that are connected to a public water system will bear those same costs, either directly through connection fees or indirectly through water rates. The Legislature has previously mandated that water purveyors install meters on domestic service connections,²⁴⁸ and there does not seem to be a good reason why small domestic users should be exempt from metering, reporting and allocation requirements simply because they extract groundwater via private wells rather than a public water system.

In order to implement management programs and actions, the Act gives sustainability agencies broad powers to adopt fees, including groundwater extraction fees. As noted above, the power to collect fees from groundwater users may lead certain local agencies to designate themselves as sustainability agencies, as they seek funding for their own projects. Since fees under the Act are subject to the procedural and substantive requirements of Proposition 218, they will undoubtedly be subject to litigation. The substantive rules of Proposition 218 have proven difficult to apply to water utility ratemaking, with the financial concerns of Proposition 218 colliding with other water policies in favor of water use efficiency and equitable distribution of costs among water ratepayers.²⁴⁹

14.5 Protection of groundwater rights and investments

A fundamental requirement of a successful water sustainability regime is that it recognize and protect water rights, since that allows the long-term investments that are needed. As discussed in Section 11 above, the Legislature expressly stated in several provisions that the Act is not intended to alter existing groundwater rights. The reality, however, is that the Act will substantially affect the formation and use of groundwater rights. The precise nature of the impact will depend on the rules, regulations, groundwater extraction allocation and sustainability plan adopted by each sustainability agency, but the Act does not require an agency to respect existing groundwater rights or investments that have been made based on those rights. Nor does the Act require the SWRCB to follow groundwater rights law in the adoption of an interim plan for a probationary basin. The Act expressly limits the ability of a groundwater right holder to transfer those rights, taking away a valuable "stick" in their legal "bundle of rights."

While actions by a sustainability agency or the SWRCB do not by themselves effect a determination of legal rights, the only way by which a groundwater user may resist the allocations formulated by an agency is to file an adjudication action. Although adjudications are time-consuming and expensive, many groundwater users will decide that the alternative would be loss of their rights and investments. It is reasonable to expect many high and medium priority basins to be adjudicated within the next few years. One challenge facing adjudications is that the Legislature has not created an exemption from the Act for basins that are adjudicated in future. If the Legislature uses its power to exempt a basin to conduct a political review of each adjudication, California groundwater law will devolve into nothing more than an exercise of legislative fiat. We expect that in addition to adjudications, groundwater users will regularly file takings claims against management actions by sustainability agencies, the SWRCB and the Legislature that do not respect common law groundwater rights.

14.6 Water protectionism and anti-trading rules

Without state-level restriction, local water politics often result in the adoption of protectionist rules, most notably prohibitions on the export of groundwater from a basin or political jurisdiction, such as a county. That tendency may be furthered under the Act, because most local sustainability agencies will cover relatively small territories, and the voters and board members within those agencies may be myopic. The failure of the Act to clarify whether groundwater should be developed for the benefit of all Californians or just those who live within the boundaries of a sustainability agency provides an opening for those agencies that desire to act in a protectionist manner.

While the author of this white paper would agree that a basin should not be unsustainably overdrafted for the benefit of distant water users—or local water users, either—there are 27 low priority and 361 very low priority basins in California. Many of those basins could be developed further, and many of them are located outside population centers, necessitating inter-basin transfers to capture the value of the groundwater resource. In addition, the flexible and conjunctive use of groundwater and surface water on a statewide basis would allow for more optimal water usage than local water hoarding. For example, in recent dry years, landowners in groundwater-rich areas of the Sacramento Valley have been able to use those supplies in lieu of surface water supplies, which were transferred to users in the San Joaquin Valley and Southern California. In order to allow statewide water flexibility, California will eventually need to prevent local agencies from adopting protectionist rules for groundwater.

Not only does the Act allow water protectionism by local sustainability agencies, cities and counties,²⁵⁰ it expressly denies the ability of groundwater right holders to transfer, market or trade those supplies unless total extractions from the basin are consistent with the sustainability plan. Operation of that rule will prevent otherwise appropriate water transfers, in which the transferor would not exceed its allocation and there are no third party impacts, based on over-extraction of groundwater by other allocation holders. That rule will deny groundwater right holders the use of their rights for no apparent reason, other than an apparent legislative fear of water transfers, which reinforces local protectionist urges. The inclusion of this anti-trading provision is particularly difficult to understand in light of prior legislative findings that support water transfers in a wide variety of circumstances as a means of promoting improved water efficiency.²⁵¹

14.7 Future water development

As groundwater basins across the state are managed under the Act, it should be anticipated that new development of groundwater supplies within high and medium priority basins will slow or cease altogether. As found by one recent study, the surface waters of the state have been fully or overly appropriated, meaning there is limited potential for the future development of new surface water supplies.²⁵² Rather than encouraging improvements in water management through conjunctive use of groundwater and surface water supplies, the Act is likely to cause each basin to close its borders, fragmenting water management across the state.

The future of new water supplies for California is likely to include development of groundwater in low and very low priority basins, water recycling and the desalination of brackish groundwater and seawater. Although the state has increased its water use efficiency significantly since the 1980s, the state should continue to improve its efficiency in both the urban and agricultural sectors. In order to enjoy the benefits of increased efficiency, the state must improve the ability of water users to market and trade their water supplies.

14.8 Conclusion

While the Act has a laudable purpose of achieving sustainable groundwater resources for California, there are many negative features of the Act for groundwater users, especially those who are not local agencies with the ability to elect themselves to serve as a sustainability agency. Dominance of the new regime by local agencies, with all their self-interest, myopia, politics and protectionism, will make truly sustainable and equitable management of basins difficult. In addition, the Act does not fully protect groundwater rights and investments, and will prevent the most productive and efficient use of California's water by thwarting conjunctive use and water transfers. Key provisions of the Act relating to groundwater extraction allocations and fees contain uncertainties and are likely to be subject to intense debate and litigation. With those challenges on the horizon, it is unclear if the Act will bring the steady rain of water security to California, or only the violent storm of legal uncertainty and upheaval.

Notes

¹ See DWR, Groundwater Basins with Potential Water Shortages and Gaps in Groundwater Monitoring, at 5 (April 30, 2014), <u>http://bit.ly/11hFKiA</u>.

- ² See DWR, Bulletin 118, <u>http://bit.ly/ZCQiaq</u>.
- ³ Cal. Water Code §§ 4999-5009.
- ⁴ For a selected list of these agencies, see note 35 and accompanying text.
- ⁵ Cal. Water Code §§ 10750-10755.4
- ⁶ Cal. Water Code §§ 10920-10936.
- ⁷ Cal. Water Code § 10933(b).
- ⁸ DWR, CASGEM Basin Prioritization, <u>http://bit.ly/1v6izBA</u>.

⁹ See U.S. Drought Monitor, California Map (July 29, 2014).
 ¹⁰ See Cal. Water Code, Div. 6, Part 2.74, §§ 10720-10736.6.
 For convenience, this white paper cites to the provisions of the Act as they will be codified effective January 1, 2015, rather than the original bills as passed by the Legislature.

- ¹¹ Cal. Water Code §§ 10720.3(a), 10721(b), 10722.
- ¹² Cal. Water Code § 10722.4(a)-(c).
- ¹³ Cal. Water Code § 10722.2(a), (b).
- ¹⁴ Cal. Water Code § 10722.2(c).
- ¹⁵ Cal. Water Code § 10722.2(a).
- ¹⁶ Cal. Water Code § 12924(a).

¹⁷ See Cal. Water Code § 10721(g) ("Groundwater' means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water").

¹⁸ See Cal. Water Code §§ 10750-10755.4 (AB 3030 groundwater management plans); *Baldwin v. County of Tehama*, 31 Cal.App.4th 166 (1994) (recognizing police power of counties and cities).

¹⁹ See Cal. Water Code §§ 1200, 10721(g); Baldwin, supra note 18.

 20 Cal. Water Code § 10720.8(a) (listing the 26 basins). The Act does apply to areas that are within the DWR basin boundaries, but outside the area in which an adjudication has determined the rights to extract groundwater. Cal. Water Code § 10720.8(e).

²¹ Cal. Water Code § 10720.8(b)-(d) (Antelope Valley, Owens Valley and Los Osos basins).
²² Cal. Water Code § 10720.8(f)(1).

²³ Cal. Water Code § 10720.8(f)(2).

²⁴ Cal. Water Code § 10721(m).

- ²⁵ Cal. Water Code § 10723(b); Cal. Govt. Code §§ 6060, 6066.
- ²⁶ Cal. Water Code § 10723(b).
- ²⁷ Cal. Water Code § 10733.3.
- ²⁸ Cal. Water Code § 10723(d).

²⁹ Although the statute speaks of "forming" a new agency, a groundwater sustainability agency is not a new type of entity, but only a legal designation that an existing agency may elect to confer on itself.

³⁰ Cal. Water Code §§ 10723.2, 10723.8(a). The beneficial users that must be considered are discussed further in Section 5.

- ³¹ Cal. Water Code § 10723.8(b).
- ³² Cal. Water Code § 10723.8(c).

³³ Cal. Water Code § 10723(c)(1), (2).

- ³⁴ Cal. Water Code § 10723(c)(3).
- ³⁵ Cal. Water Code § 10723(c)(1)(A)-(0).

³⁶ Cal. Water Code § 10723.6(a); Cal. Govt. Code §§ 6500-6599.3 (Joint Exercise of Powers Act).

³⁷ Cal. Water Code § 10723.6(b). An investor-owned water utility participating in this manner would presumably have to do so through a "memorandum of agreement or other legal agreement" rather than a joint powers agreement. *Cf.* Cal. Water Code § 10723.6(a)(1), (2). It is unknown what "approval" means in this context.

³⁸ See Cal. Govt. Code § 6525.

- ³⁹ Cal. Water Code § 10720.3.
- ⁴⁰ Cal. Water Code § 10724(a).

⁴⁰ Cal. Water Code § 10724(a). ⁴¹ Cal. Water Code § 10724(b).

⁴² See Cal. Water Code § 10724(b).

⁴³ Cal. Water Code § 10724(b).

- ⁴⁴ Cal. Water Code § 10725.2(b).
- ⁴⁵ Cal. Water Code § 10725.4(a). An investigation may

include surface waters and surface water rights as well as groundwater and groundwater rights, which could be useful in furthering conjunctive use within a basin. *See* Cal. Water Code § 10725.4(b).

⁴⁶ Cal. Water Code § 10725.4(c); Cal. Code Civ. Proc. §§ 1822.50-1822.60. An inspection warrant is issued by a court in writing after a state or local official shows cause, which may be established by a routine inspection according to adopted standards or if there is reason to believe that a condition of nonconformity exists with respect to the particular place. The agency must normally seek consent first, and inspection will be limited to a manner that imposes the least intrusion necessary to achieve the purposes of the warrant.

⁴⁷ Cal. Water Code § 10725.6

⁴⁸ Cal. Water Code § 10725.8(a), (b).

⁴⁹ Cal. Water Code § 10725.8(c). The water year for purposes of the Act is October 1 through the following September 30. Thus, it follows the water year used for reporting groundwater usage pursuant to Cal. Water Code § 1005.4, but differs from both the November 1 through October 31 water year used in Cal. Water Code §§ 1005.1 and 1005.2 and the calendar year used in Cal. Water Code §§ 4999-5009.

⁵⁰ Cal. Water Code § 10726.

⁵¹ Cal. Water Code § 10725.8(e).

⁵² Cal. Water Code § 10725.8(d).

⁵³ Cal. Water Code § 10726.4(a)(1). Regulation of the construction of new groundwater wells by an agency would be in addition to, not in replacement of, County permit requirements. Cal. Water Code § 10726.4(b).

⁵⁴ Cal. Water Code § 10726.4(a)(2).

⁵⁵ Cal. Water Code § 10726.4(a)(2).

⁵⁶ Cal. Water Code § 10726.4(a)(2).

⁵⁷ Cal. Water Code § 10732(a)(1).

⁵⁸ Cal. Water Code § 10726.4(a)(3).

⁵⁹ Cal. Water Code § 10726.4(a)(4).

60 Cal. Water Code § 10726.4(a)(3).

⁶¹ Cal. Water Code § 10726.2(a).

62 Cal. Water Code § 10726.2(a).

63 Cal. Water Code § 10726.2(b).

⁶⁴ Cal. Water Code § 10726.2(d).

65 Cal. Water Code § 10726.2(e).

66 Cal. Water Code § 10729(a).

67 Cal. Water Code § 10726.2(c).

68 Cal. Water Code § 10726.2(f).

⁶⁹ Cal. Water Code § 10725.2(a).

⁷⁰ Cal. Water Code §§ 10725, 10726.8(a).

 71 A "public water system" is a system for the provision of water for human consumption through pipes or other conveyances that has at least 15 service connections or regularly serves at least 25 individuals for at least 60 days per year. Cal. Health & Safety Code § 116275(h). *See* Cal. Water Code § 10721(r).

⁷² This includes the various military services and managers of federal lands, such as the National Park Service, U.S. Forest Service and Bureau of Land Management. It also likely includes the federal natural resource agencies, such as the U.S. Department of the Interior, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service and NOAA Fisheries.

⁷³ The term is not defined in the Act.

 74 Cal. Water Code §§ 10723.2(j), 10927.

⁷⁵ Cal. Water Code § 10723.4.

⁷⁶ Cal. Water Code § 10726.6(e).

77 Cal. Water Code § 10726.8(e).

78 Cal. Water Code § 10721(q), (u).

⁷⁹ Cal. Water Code § 10631(a) (urban water management plans); Cal. Water Code § 10910(c)(3) (assessment of water supplies for certain urban land developments); Cal. Govt. Code § 66473.7(a)(2) (verification of water supplies for certain urban land developments).

⁸⁰ Cal. Water Code § 10721(v).

⁸¹ DWR, *California's Groundwater*, Bulletin 118, at 99 (Update 2003).

⁸² Cal. Water Code § 10721(w).

⁸³ Cal. Water Code §§ 10720.7(a)(2), 10727(a).

⁸⁴ Cal. Water Code § 10720.7(a)(1).

⁸⁵ Cal. Water Code § 10722.4(d).

⁸⁶ Cal. Water Code § 10720.7(b).

⁸⁷ Cal. Water Code § 10727(b).

⁸⁸ Cal. Water Code § 10727.6.

⁸⁹ Cal. Water Code § 10727.2(a).

⁹⁰ Cal. Water Code § 10727.2(d)(1)-(2). *See* Cal. Water Code § 10927(b)(3) (authorizing a sustainability agency to act as a monitoring and reporting entity under the CASGEM Program).

⁹¹ Cal. Water Code § 10727.2(e), (f).

⁹² Cal. Water Code § 10727.2(d)(3)-(5).

⁹³ Cal. Water Code § 10727.4.

94 Cal. Water Code § 10727.2(b)(1).

⁹⁵ Cal. Water Code § 10727.2(b)(2).

⁹⁶ Cal. Water Code § 10727.2(b)(3).

⁹⁷ Cal. Water Code § 10727(a). *See also* Cal. Water Code §§ 10750 *et seq.* (prior authority).

⁹⁸ Cal. Water Code § 10727.2(b)(4).

⁹⁹ Cal. Water Code § 10750.1(a), (b).

¹⁰⁰ Cal. Water Code § 10727.8.

¹⁰¹ Cal. Water Code § 10728.4

¹⁰² Cal. Govt. Code §§ 54950 *et seq.*

¹⁰³ Cal. Water Code § 10728.6. See Cal. Pub. Res. Code §§ 21000 et seq.

¹⁰⁴ Cal. Water Code §10652.

¹⁰⁵ Cal. Water Code § 10733.4(a).

¹⁰⁶ Cal. Water Code § 10725.2(c).

¹⁰⁷ Cal. Water Code § 10726.6(a); Cal. Code of Civ. Proc. §§ 860 *et seq.*

¹⁰⁸ The agency may file the action "no sooner than 180 days following the adoption of the plan," Cal. Water Code § 10726.6(a), and then must file the action within "60 days thereafter." Cal. Code of Civ. Proc. § 860.

¹⁰⁹ Cal. Water Code § 10726.6(b).

¹¹⁰ Cal. Water Code § 10728.

¹¹¹ Cal. Water Code § 10728.2.

¹¹² Cal. Water Code § 10733.8.

¹¹³ Cal. Water Code § 10729(b).

¹¹⁴ Cal. Water Code § 10732(a)(2).

¹¹⁵ Cal. Water Code § 10732(b)(1).

¹¹⁶ Cal. Water Code § 10732(b)(2).

¹¹⁷ Cal. Water Code § 10732(b)(3).

¹¹⁸ Cal. Water Code § 10732(c). ¹¹⁹ Cal. Water Code § 10733.6(b). See Cal. Water Code §10750.1(c) (allowing the use of Assembly Bill 3030 groundwater management plans approved by DWR as an alternative management proposal). ¹²⁰ Cal. Water Code § 10733.6(b)(3). 121 Cal. Water Code § 10733.6(d). See Cal. Water Code §§ 10920 et seg.; DWR, California Statewide Groundwater Elevation Monitoring (CASGEM), http://bit.lv/1wrpcji. ¹²² Cal. Water Code § 10733.6(c). ¹²³ Cal. Water Code § 10733.8. ¹²⁴ Cal. Water Code § 10730(a). ¹²⁵ Cal. Water Code § 10730(d). ¹²⁶ Cal. Water Code § 10726.8(d). ¹²⁷ Cal. Water Code § 10730.2(a). ¹²⁸ Cal. Water Code §§ 10730.2(b), 10730.4. ¹²⁹ Cal. Water Code § 10730.2(a)(1)-(4). ¹³⁰ Cal. Water Code § 10730.2(d). ¹³¹ Cal. Water Code § 10731(a). ¹³² Cal. Water Code § 10730(a). ¹³³ Cal. Water Code § 10730(b). ¹³⁴ Cal. Water Code § 10739(c). ¹³⁵ Cal. Water Code § 10730(d). ¹³⁶ Cal. Water Code § 10730.2(c). See Cal. Const., Art. XIIID, § 6(a), (b); Griffith v. Pajaro Vallev Water Management Agency, 220 Cal.App.4th 586 (2013), review denied; Pajaro Valley Water Management Agency v. Amrhein, 150 Cal.App.4th 1364 (2007). ¹³⁷ Cal. Water Code § 10730.6(a). ¹³⁸ Cal. Water Code § 10730.6(b). ¹³⁹ Cal. Water Code § 10730.6(c). ¹⁴⁰ Cal. Water Code § 10730.6(e). ¹⁴¹ Cal. Water Code §§ 10730.6(d), (f), 10730.8(a). ¹⁴² Cal. Water Code § 10726.6(c). ¹⁴³ Cal. Water Code § 10726.6(d). ¹⁴⁴ Cal. Water Code §§ 10730(e), 10730.2(e). ¹⁴⁵ See generally Revenue Bond Law of 1941, Cal. Govt. Code §§ 54300 et seq. ¹⁴⁶ Cal. Water Code § 10720.1(h). ¹⁴⁷ See DWR, Bulletin 118, <u>http://bit.lv/ZCOiaq</u>. ¹⁴⁸ See DWR, California Water Plan, <u>http://bit.ly/ZLDZZR</u>. ¹⁴⁹ Cal. Water Code § 10733.2(a)(1). ¹⁵⁰ Cal. Water Code § 10733.2(a)(2). ¹⁵¹ Cal. Water Code § 10733.2(b)(2). ¹⁵² Cal. Water Code § 10733.2(c). ¹⁵³ See Cal. Govt. Code §§ 11340 et seq. ¹⁵⁴ Cal. Water Code § 10733.2(d). ¹⁵⁵ Cal. Water Code § 10733.2(e). ¹⁵⁶ Cal. Water Code § 10733.2(b)(1). ¹⁵⁷ Cal. Water Code § 10729(c). ¹⁵⁸ Cal. Water Code § 10729(d). ¹⁵⁹ Cal. Water Code § 10733.4(a). ¹⁶⁰ Cal. Water Code § 10733.4(b). ¹⁶¹ Cal. Water Code § 10733.4(c). ¹⁶² Cal. Water Code § 10733(a). ¹⁶³ Cal. Water Code § 10733(b). ¹⁶⁴ Cal. Water Code § 10733(c). ¹⁶⁵ Cal. Water Code § 10733.4(d).

¹⁶⁶ Cal. Water Code § 10733.6(a). ¹⁶⁷ Cal. Water Code § 10735.2(a)(1). If an alternative management proposal has been rejected by DWR, local agencies have 180 days to submit an election to become a groundwater sustainability agency. Cal. Water Code § 10735.2(a)(1)(C). If the SWRCB finds that formation of a groundwater sustainability agency was prevented by litigation, it may extend this deadline for the period of time equal to the delay caused by the litigation. Cal. Water Code § 10735.2(d). ¹⁶⁸ Cal. Water Code § 10735.2(a)(2). ¹⁶⁹ Cal. Water Code § 10735.2(a)(3). ¹⁷⁰ Cal. Water Code § 10735.2(a)(4). ¹⁷¹ Cal. Water Code § 10735.2(a)(5)(A). ¹⁷² Cal. Water Code §§ 10735.2(a)(5)(B), 10735.8(h). ¹⁷³ Cal. Water Code § 10735.2(e). ¹⁷⁴ Cal. Water Code § 10735(a). ¹⁷⁵ Cal. Water Code § 10735(d). ¹⁷⁶ See Cal. Water Code § 10723.2(e) (listing environmental users as beneficial uses and users of groundwater under the Act). ¹⁷⁷ Cal. Water Code § 10735.4(a). ¹⁷⁸ Cal. Water Code § 10734.4(b). ¹⁷⁹ Cal. Water Code § 10735.4(c). ¹⁸⁰ Cal. Water Code § 10735.6(a). ¹⁸¹ Cal. Water Code § 10735.6(b). ¹⁸² Cal. Water Code § 10735.8(b). ¹⁸³ Cal. Water Code § 10735.8(c). ¹⁸⁴ Cal. Water Code § 10735.8(d), (i). ¹⁸⁵ Cal. Water Code § 1831(d)(3). ¹⁸⁶ Cal. Water Code § 10735.8(e). ¹⁸⁷ Cal. Water Code § 10735.8(g)(1)-(3). ¹⁸⁸ Cal. Water Code § 10735.8(g)(1)-(2), (4). ¹⁸⁹ Cal. Water Code § 10735.8(g)(5). ¹⁹⁰ Cal. Water Code §§ 10735.2(a), 10735.8(a), 10736(b). ¹⁹¹ Cal. Water Code §§ 10735.2(b), 10736.6(a). The SWRCB must ensure that the costs incurred by a person in the preparation of a report bears a reasonable relationship to the need for the report and the benefit to be obtained from the report. If the preparation of multiple reports would be duplicative, or the reports are necessary to evaluate the cumulative effect of several extractions or uses of water, the SWRCB may order any person to pay a reasonable share of the cost of preparing reports. Id. Any such order must be served by personal service or registered mail, and the affected persons may request a hearing within 30 days of service. Cal. Water Code § 10736.6(b)(1). The SWRCB may also adopt a regulation affecting a class of persons, rather than an order affecting specific persons. Cal. Water Code § 10736.6(b)(2). ¹⁹² Cal. Water Code § 10735.2(b). ¹⁹³ Cal. Water Code § 10736(b)(1). ¹⁹⁴ Cal. Water Code § 10736(b)(2), (3). ¹⁹⁵ Cal. Water Code §§ 10735(a), (d), 10736.2. 196 Cal. Water Code § 1120. See Cal. Water Code §§ 1122-1124 (reconsideration), 1126-1126.2 (judicial review). ¹⁹⁷ Cal. Water Code § 1529.5(a). ¹⁹⁸ Cal. Water Code § 1529.5(b).

¹⁹⁹ Cal. Water Code § 1529.5(c). The fees do not have to recover all costs within one or two years, but may do so "over a period of years."

²⁰⁰ Cal. Water Code § 1552(c).

²⁰¹ See Senate Bill 1168, § 1; Assembly Bill 1739, § 1.

²⁰² See Cal. Water Code §§ 102, 104, 105.

²⁰³ Cal. Water Code § 10725(b).

²⁰⁴ Cal. Water Code § 10720.1(b).

²⁰⁵ Cal. Water Code § 10720.5(a).

²⁰⁶ Cal. Water Code § 10720.5(b).

²⁰⁷ Assembly Bill 1739, § 1(b)(4).

²⁰⁸ Cal. Water Code § 10735.8(i).

²⁰⁹ Cal. Water Code § 10726.8(b).

²¹⁰ Cal. Water Code § 10726.4(a)(2).

²¹¹ See Cal. Water Code §§ 2500 et seq.

- ²¹² Cal. Water Code § 10735.8(d), (e), (i).
- ²¹³ Cal. Water Code § 10720.5(a).

²¹⁴ Cal. Water Code § 10736.4. This is similar to the holding in *People v. Shirokow*, 26 Cal.3d 301 (1980), that a person may not form surface water rights through prescription against the state.

²¹⁵ 23 Cal.4th 1224 (2000).

- ²¹⁶ *Id.* at 1237-38. *See* Cal. Const., Art. X, § 2.
- 217 Id. at 1249-51.

²¹⁸ Cal. Water Code § 5202(a)(1).

- ²¹⁹ Cal. Water Code § 5202(a)(2).
- ²²⁰ Cal. Water Code § 5202(b).

²²¹ Cal. Water Code § 5202(c).

²²² Cal. Water Code § 348(a).

²²³ Cal. Water Code § 5203.

²²⁴ Cal. Water Code § 5204(a).

²²⁵ Cal. Water Code § 5204(b).

- ²²⁶ Cal. Water Code §§ 5107, 5208.
- ²²⁷ Cal. Water Code § 5207.

²²⁸ Cal. Water Code § 5205.

²²⁹ Cal. Water Code §§ 13751, 13752.

²³⁰ Cal. Water Code § 5206; Cal. Govt. Code § 6254.16. There is some confusion in the language adopted by the Legislature, because Cal. Water Code § 5206 refers to the California Public Records Act exemption for utility customer information, including utility usage data, while the definition of "personal information" in new Cal. Water Code § 5201(h) refers to the usage of that term in the Information Practices Act of 1977 (IPA), which only includes a person's name, social security number, physical description, home address, telephone number, education, financial matters and medical or employment history. A strict reading could limit the coverage of Cal. Water Code § 5206 to the IPA list and exclude information about groundwater extraction. Such a reading appears directly contrary to the intention of the Legislature, however, so we would not expect the law to be interpreted in that manner.

²³¹ Cal. Govt. Code § 65350.5.
²³² Cal. Govt. Code § 65352(a)(8).
²³³ Cal. Govt. Code § 65352(a)(9).

²³⁴ Cal. Govt. Code § 65352(a)(7).

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²³⁶ Cal. Water Code § 10726.8(f).

²³⁷ Cal. Water Code § 10726.9.

²³⁸ Cal. Water Code § 10727.2(g).

²³⁹ Those factors are sometimes called the three pillars of sustainability: people, planet and profit.

²⁴⁰ See Cal. Health & Safety Code §§ 38500 et seq.

²⁴¹ Similar criticisms have arisen about management by groundwater conservation districts based predominately on county boundaries in Texas. *See* Texas Water Code, Ch. 36.

²⁴² See notes 71 through 74 and accompanying text.

²⁴³ Assembly Bill 1471 (2014), codified at Cal. Water Code § 79712(a) (including public utilities and mutual water companies as "eligible applicants" for bond funds).

²⁴⁴ See, e.g., Monterey Herald, Monterey County begins Salinas Valley groundwater sustainability effort (October 21, 2014), <u>http://bit.ly/1vK3of0</u>.

²⁴⁵ See Basin Plan for the Los Osos Groundwater Basin, Public Review Draft (August 1, 2013), <u>http://bit.ly/1xgfS2H</u>.
²⁴⁶ See notes 119 through 123 and accompanying text.
²⁴⁷ 369 S.W.3d 814 (Tex. 2012).

²⁴⁸ See Water Measurement Law, Cal. Water Code §§ 500-535. ²⁴⁹ See, e.g., City of Palmdale v. Palmdale Water District, 198 Cal.App.4th 926 (2011). For a summary of the case, see Wes Strickland, Collision Course: Proposition 218 and Conservation Water Rates in California (September 13, 2011), http://bit.ly/1Hc9mhC.

²⁵⁰ See Cal. Water Code § 10726.4(a)(3).

²⁵¹ See, e.g., Cal. Water Code §§ 109, 475.

²⁵² *See* Theodore E. Grantham and Joshua H. Viers, 100 years of California's water rights system: patterns, trends and uncertainty, Environ. Res. Lett. 9 (2014) (finding that the California surface water rights system has allocated five times the state's mean annual runoff).

²³⁵ Cal. Govt. Code § 65352.5(d).

