

DOWNEY BRAND

MEMORANDUM

FROM: ERNEST A. CONANT
DATE: JUNE 4, 2025
RE: GROUNDWATER BANKING & RECHARGE IN CALIFORNIA

This memorandum provides a high-level overview of legal principles and concepts related to the storage and recovery of groundwater in California. Its focus is on a banking arrangement where there is an intent to recharge imported or previously stored surface water through the banker's recharge operations and an intent to recover the stored water, whether recovery is carried out by the storing district itself or its water users. I summarize the law related to groundwater banking and recent changes in groundwater management and law in California, and at the end of the memorandum provide some practical pointers how one can develop a groundwater banking program.

“Banking” can have many different meanings throughout the West—it can be temporary storing water in a surface reservoir (as some agencies and states have used in coordination with the U.S. Bureau of Reclamation on the Colorado River system) or it can mean a transfer, lease or exchange in some contexts. In this memorandum we focus on groundwater banking as that term has become to be known in California in light of California case law, legislation and practice.

Groundwater recharge and banking has become more important in recent years in California with limited surface water supplies as a result of drought and environmental regulatory constraints, and implementation of the Sustainable Groundwater Management Act (SGMA) discussed below limiting pumping of native groundwater in many basins. Groundwater recharge and banking is recognized and encouraged by the State's leadership--the Governor's “California's Water Supply Strategy—Adapting to a Hotter, Drier Future” (August 2022), among other things, calls for creating up to 4 million acre-feet of new storage to capitalize on big storms when they occur and store water for dry periods, including expanding groundwater recharge by at least 500,000 acre-feet on average annually.

This memorandum is based on my observations and experience practicing water law in California for over 40 years, but is not to provide legal advice to anyone, and not necessarily the position of any of our clients or that of any governmental agency in California.

A. The Legal Framework for Groundwater and Storage and Banking

First, the basics of the morass of groundwater law in California. The Courts have said “First priority goes to the landowner whose property overlies the groundwater. These ‘overlying rights’ are analogous to riparian rights in that they are based on ownership of adjoining land, and they have priority. . . Surplus groundwater also may be taken by an appropriator and priority among ‘appropriative rights’ holders generally follows the similar principle that ‘the one first in time is the first in rights’ [citation omitted]. With groundwater there is an exception, however, that gives rise to a third category of rights. Under certain circumstances, an appropriator may gain

‘prescriptive rights’ by using groundwater to which it is not legally entitled. . . [citation omitted]” *Antelope Valley Groundwater Cases* 62 Cal.App. 5th 992, 1022 (2021). In very limited circumstances the courts have also recognized “pueblo rights” where a city is a predecessor to a pueblo that had “paramount rights based on Spanish and Mexican law, to use the waters. . . to the extent of its municipal needs and those of its inhabitants” *City of Los Angeles v. City of San Fernando* 14 Cal. 3d 199, 245 (1975).

In this memorandum we focus on overlying rights, the groundwater rights typically used in California’s vast agricultural economy, and the right to store or retrieve imported water in groundwater basins.

Adoption of the Sustainability Groundwater Management Act of 2014.

The 2014 Sustainable Groundwater Management Act (**SGMA**) changed California’s historic approach to the administration of groundwater rights—for the first time permitting (and in some cases, directing) that local governmental agencies regulate the extraction and use of groundwater. Historically, that regulation had occurred only on an ad hoc basis, in the context of adjudication actions or local ordinances. SGMA’s basic framework directs that local entities (Groundwater Sustainability Agencies, or “**GSAs**”), through adoption of Groundwater Sustainability Plans (“**GSPs**”), to identify sustainability standards pursuant to which a basin must be managed, and quantifiable metrics that determine whether those standards have been met. SGMA empowers GSAs with broad authorities to intervene, either through affirmative demand management, fee structures, or the implementation of projects targeted at addressing those issues.

State structures provide an additional level of oversight—if either the plan adopted by the GSA or the actions taken by the GSA fail to move the basin sufficiently toward sustainability, the basin may be referred to the State Water Resources Control Board (“**State Water Board**”) for a probationary basin designation, and ultimately may be subject to management by the State. Through actions taken to implement its GSPs, a GSA can control groundwater extractions by, among other things, providing for “groundwater extraction allocations” (Water Code §10726.4(a)(2)).¹ However, “[n]othing in [SGMA], or any groundwater management plan adopted pursuant to this part, determines or alters surface water rights or groundwater rights under common law. . . . (§ 10720.5(b), emphasis added).

It’s ironic that California, generally seen as a very “progressive” state, until recently has been far behind most Western states in terms of regulating use of groundwater. Use of groundwater has been a critical element of sustaining the California agricultural economy, which in recent times has become more reliant on groundwater because of lack of surface water from the federal Central Valley Project, California’s State Water Project and other projects, due in large part to extended droughts and increased environmental regulatory constraints on diversion and use of surface water otherwise available.

¹ This authority passes to the SWRCB, in the event that it assumes jurisdiction of a non-performing basin through an “Interim Plan.”

Case Law Development of Groundwater Banking.

San Fernando, supra, one of the longest reported cases of the California Supreme Court, sets out the common law considerations for groundwater rights and groundwater banking and retrieval of stored water. *San Fernando* arose in 1955 when the City of Los Angeles brought an action to enjoin others from extracting water from the Upper Los Angeles River Area that it claimed the City had stored in the basin as a result of its historic and ongoing operations. A commentator generally summarized *San Fernando* and another recently decided case, *Niles Sand and Gravel Co. Inc. v. Alameda Water District*, 37 Cal. App. 3d 924 (1974), as recognizing the following rights:

- The right to store water in a natural underground basin without compensating overlying landowners;
- The right to protect the stored water from expropriation by others and from inequitable operational burdens;
- The right to recapture the stored water when it is needed; and
- The public's priority to stored water underground when there is a shortage of underground storage space.²

Subsequent cases established additional principles:

- That the rights of overlying pumpers are distinct from those of groundwater bankers extracting stored water. *Central and West Basin Water Replenishment Dist. v. Southern Cal. Water Co.* 109 Cal. App. 4th 891, 910 (2003) (“Extraction and storage are different physical processes; establishing a hydrologic link between them is not sufficient to show that a legal interest of one creates an interest in the other.”)
- That groundwater storage space is a public resource. *Id.* at 912 (“Appellants’ [So Cal Water] proposal fails to ensure that the storage space will be used for the public benefit.”)
- That groundwater bankers’ rights are constrained by the principal that their activities should not harm the basin. *Id.* at 916 (“...the Water Rights Holders have an interest in the natural replenishment and an interest to ensure that any imported water does not harm the basin.”).
- That, as in the case of surface water, water recharged into the aquifer “stream” could be reclaimed by the appropriator, provided that this entity imports water into the aquifer with the intent to reappropriate it, rather than abandon it. *Orange County Water Dist. v. Sabic Innovative Plastics US LLC* 14 Cal App. 5th 343, 411 (2017)

² V. Gleason, *Water Projects Go Underground* 5 Ecology L. Q. 625 (1976) 667-68.) Based on the *Central and West Basin* case noted below, the last bullet needs to be qualified that banking of imported water cannot harm the basin.

For decades, agencies have relied upon these and other case law as the common law to develop banking programs within or outside their boundaries or in partnership with others to recharge, store and recover imported water, primarily in Southern California and the San Joaquin Valley. Collectively, these agencies have invested at least hundreds of millions of dollars in such projects, with the rights arising from those programs recognized in various groundwater adjudications.

Interplay Between SGMA and Banking Under Common Law.

SGMA contemplates that GSAs will have a role in at least overseeing groundwater banking and storage programs or projects, both authorizing the GSA itself to conserve and store water for later use, as well as requiring that the GSP map current and potential recharge locations, and that entities carrying out recharge operations provide reports on those operations to the GSA (§§ 10726.2(b), 10727.2(a)(5), and 10726). Indeed, part of its legislative purpose was to “. . .increase groundwater storage and remove impediments to recharge” (§ 10720.1(g)). The GSA’s work in conserving and storing water, however “shall not alter another person’s or agency’s existing groundwater conjunctive use or storage program except upon a finding that [it]. . .interferes with implementation of the agency’s groundwater sustainability plan.” (§ 10726.2(b); emphasis added).

GSAs through a GSP, may control groundwater extractions, including “establishing groundwater extraction allocations”. . . but “A limitation on extractions by a groundwater sustainability agency shall not be construed to be a final determination of rights. . .” (§ 10726.4(a)(2)). Additionally, the GSA may authorize temporary or permanent transfers or carry over of groundwater extraction allocations (§§ 10726.4(a)(3) and (4)).

A GSP would necessarily need to account for direct recharge or return flows from an ongoing conjunctive use project for its water balance to demonstrate sustainability. But nothing in SGMA suggests that another agency cannot carry out a banking project to recharge, store and extract imported surface water as recognized by common law absent SGMA. In fact, SGMA contemplates such activities through the need to report recharge to storage to the applicable GSA, as noted above (§ 10726).

Any proposal for banking should be consistent with the common law groundwater principles outlined above. However, we note that the common law focuses specifically on imported water introduced specifically for later use. Agencies have not typically laid “claim,” in a water right sense, to groundwater that is the result of incidental recharge operations by way of return flows and conjunctive use, but this may be changing as a result of SGMA implementation, particularly in connection with the development of basin water budgets related to existing recharge and sustainable yield.

Given this structure, and the GSAs’ ongoing responsibility to ensure the sustainable management of the groundwater basin, any proposal to issue credits or account for recharged water for use in future extractions should be coordinated with the GSA. This coordination could extend along a continuum from a formal banking system administered by the GSA and integrated into its demand management program at one extreme, to a basic acknowledgement from the GSA that certain volumes of water recharged into the basin by participants will be accounted for as stored water subject to withdrawal (and not part of the native yield).

B. Implications of Streamlined Adjudication Statutes (SAS)

Streamlined Adjudication Statute of 2015 (SAS)

Where water right holders have a dispute as to the extent of their right to groundwater in a basin, the Code of Civil Procedure has historically offered a court adjudication process. Through the regular adjudication process, a court will hear evidence regarding the respective rights of each claimant in a basin (or portion thereof), and issue a decree setting forth the rights of all claimants. The process is time-intensive and heavily reliant on the establishment of a factual record surrounding groundwater use, land use, and the history of the basin. Prior to SGMA’s enactment, there had been 26 adjudications litigated under regular provisions of the Code of Civil Procedure, and there was criticism that this historic approach was overly cumbersome and time consuming.

The 2015 Streamlined Adjudication Statutes (SAS), codified at Code of Civil Procedure § 830 et seq., provide special procedures for comprehensive groundwater adjudication actions. Under these provisions, if more than 50% of the parties, supported by extractors of at least 75% of extractions, propose a stipulated judgment to the Court, the Court may approve if it meets certain criteria and following a hearing process (CCP § 850(d)). Small users (less than 5 acre-foot annually) may be exempted by the court from the adjudication process. (CCP § 833(d)). Initiating a streamlined adjudication, however, is not an off-ramp to the normal SGMA compliance path for a covered basin: where a GSP is required, the court “shall manage the proceedings in a manner that minimizes interference with timely completion and implementation” of a GSP (Water Code § 10737.2). SAS provides that the court may determine *all* groundwater rights of the basin, including use of storage space (CCP § 834(a)).

SAS Potentially Addressing Dormant Overlying Rights.

Prior to the enactment of the SAS, *Wright vs. Goleta Water District* 174 Cal.App.3d 74 (1985) was the leading case concerning unexcised or dormant overlying groundwater rights. In that case, the appellate court declined to apply the principles set out in *In re Waters of Long Valley Creek Stream System* (1979) 25 Cal.3d 339, which would allow the court to subordinate a dormant riparian right to an exercised appropriative right. Through newly enacted Code of Civil Procedure §§ 870(b)(7), the SAS in essence modified *Wright* and specifically providing that in administering a streamlined adjudication, the Court “may consider applying the principles established in [*Long Valley*].”

SAS vs SGMA Plans

SAS is also a tool that users in certain basins have used to challenge a local GSPs. Of particular note:

- *Las Posas Valley Water Rights Coalition, et al. v. Fox Canyon Groundwater Management Agency, et al.* The *Las Posas* judgment now under review by the Second District Court of Appeal, among other things, restricts use of unexercised overlying rights by requiring the new users to potentially pay for the cost of importing additional water that would not otherwise be available to the basin and not reducing the “operating yield,” and that is one of the issues raised in the appeals. The earliest we would expect a decision in this appeal is late 2025.

- *Indian Wells Groundwater Authority v. Superior Court* (Fourth District Court of Appeals Case No G064757, issued November 14, 2024): In *Indian Wells Groundwater Authority*, the GSA is arguing that a SAS proceeding cannot revise the determination of the safe/sustainable yield that the GSA through its GSP determined.

We are aware of four adjudications that have been brought under SAS, and expect others to be filed as GSAs and users work to implement their GSPs (or reach impassable conflicts in doing so).

A bill now pending in the Legislature, AB 1413, seeks to clarify and change certain elements of the SAS as it relates to GSPs adopted under SGMA. Among other things it would prevent one from challenging through a SAS proceeding the sustainable yield of a basin established under a GSP if no action to invalidate the GSP was filed.

C. Outline of Major Considerations in the Development of a Banking Program

Below we outline various issues for discussion in developing any coordinated voluntary banking program. These include both policy questions with potential legal implications, as well as items that require engineering and/or hydrologic analysis to inform the discussion. These practical practice pointers are intended to help one in identifying potential costs, benefits, pitfalls, and opportunities for potential groundwater banking programs:

Major Considerations

- Is the physical setting and geology of the area conducive to groundwater banking operations?
 - *Consider:* Is there the ability to efficiently recharge through recharge basins or on-farm recharge? If not, are there areas not served by surface water that could be developed into an in-lieu program, or alternatively, are groundwater injection wells feasible?
 - *Consider:* Is there surface water available (and how much) to recharge and a realistic way to convey it to the contemplated recharge facilities?
 - *Consider:* If infrastructure is needed, how will it be financed?
- Once water is applied, how will the ultimate amount delivered to the basin be determined and accounted for? Who will be responsible for providing this accounting? Do all participants share the same assumptions regarding loss accounting?
 - *Consider:* Determination of losses can vary significantly by seasons, soil type, and location in a basin. Types of losses may include evaporative, transportation/conveyance, migration, etc.
 - *Consider:* Who will determine the methodology for losses, and how will consensus be achieved? Is there a need for an Engineering Committee either through the applicable GSA(s) or with group of surrounding agencies?

- *Consider:* Who will be the “bookkeeper” for water in and out of the basin? How will that accounting interact with GSA water budgets or other GSA-led programs?
- Starting date of any accounting or credits—does recharge relate back to any prior activities?
- Is “in lieu” recharge going to be permitted and recognized? “In lieu” recharge or banking is the practice of providing surplus surface water to historic groundwater users, thereby leaving groundwater in storage for later use. Special rules may be necessary to insure it does not result in expanded development.
- What other agencies in the area could be partnered with or have objections to the proposed project? Is there need for some form of mediation to early on resolve any issues?
 - *Consider:* How to assure that the Banking activity does not unreasonably interfere with natural replenishment for the benefit of overlying users or others—see *Central and West Basin* case reference above—this can be an important consideration particularly in some basins where there may be limited storage available.
 - *Consider:* Will the group do business with outside water users/interests who may help finance facilities, or will operations be restricted to local agencies?
 - *Consider:* If return/recovered water is conveyed through others’ facilities, will return water quality be an issue?
- Are there major environmental issues—what level of review under the California Environmental Quality Act (CEQA) and/or the National Environmental Policy Act (NEPA) will be required? Will permits be required from the California Department of Fish and Wildlife and/or U.S Fish and Wildlife Service and/or U.S. Corps of Engineers?
- Are permits required from the State Water Board for acquisition/diversion or storage of water?
- How long will it take to get the project in place? Is there need for a pilot program to get started and demonstrate feasibility?
- How best to engage public after the project is defined?

How to Get Started

One doesn’t need to have resolved every issue, including the “considerations” listed above, to get started with some form of planning process. And, in many cases, work may already be underway to resolve questions surrounding the technical feasibility and scope of potential recharge operations. Other actions that may drive progress forward include:

- Identifying key principles of agreement and planning assumptions for participating stakeholders, and memorializing these among the group. These might include, for example, parameters related to technical assumptions (what “yield” is assigned to each area, and what operations will be part of the agreement), financial considerations (how much will each participant contribute), or administrative parameters (who will hire any consultants, and how will that work be directed and supervised).
- Aggregating existing work on the feasibility of recharge and banking operations in the region, and (as necessary) directing a reconnaissance-level study to evaluate the physical setting and possible options; a more detailed hydrogeologic study may need to be completed after it is clearer what project is realistic.
- Gathering data from existing pilot projects, and identifying any appropriate test projects to “prove up” future options for management and operations.
- Identifying a clear path for communication with neighboring agencies, including GSAs, to avoid unnecessary concerns and opposition through the “rumor mill” as options for accounting and participation are explored.
- Reviewing operations in other basins, and identifying accounting principles/processes that are most appropriate for this region. Ultimately an accounting system to properly account for stored imported water will need to be developed with “buy-in” from all or most affected agencies, possibly sponsored by the applicable GSA, and early communication to do in a cooperative spirit will be helpful.