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Sent via email

California Water Commission
Matthew Swanson, Chair
Fern Steiner, Vice-Chair
Samantha Arthur, Member
Daniel Curtin, Member
Kimberly Gallagher, Member
Alexandre Makler, Member
Jose Solorio, Member
Joe Yun, Executive Officer

Re: Comments and Concerns On Final Draft Groundwater Trading White Paper

Dear California Water Commission:

We write to you to provide comments and concerns regarding the final draft white paper (white paper) entitled *A State Role in Supporting Groundwater Trading with Safeguards for Vulnerable Users: Findings and Next Steps*.

Our deep skepticism for the establishment of water trading programs and water markets stems from our work with residents who are among the most impacted by groundwater overdraft. Specifically, Leadership Counsel works alongside low-income communities of color in the San Joaquin Valley and the Eastern Coachella Valley to advocate for local, regional and state government entities to address their communities' needs for the basic elements that make up a safe and healthy community, including clean, safe, reliable and affordable drinking water, affordable housing, effective and safe transportation, efficient and affordable energy, green spaces, clean air, and more. We have been engaged in Sustainable Groundwater Management Act (SGMA) implementation because many of the communities with whom we work are dependent on groundwater for their drinking water supplies, and often have already experienced groundwater quality and supply issues.

Enclosed in this letter are our comments and concerns regarding the establishment of groundwater markets and comments and suggestions regarding how the white paper is currently written.

Residents of disadvantaged communities (DACs) we work with have expressed three main concerns with groundwater markets and water trading programs:

1. Residents do not agree with a market-based approach to solving groundwater issues because it would exacerbate existing inequities in how water is managed. Residents know that water is extremely valuable for California businesses, and foresee that markets would allow financially powerful entities to use our public trust water resources at the expense of small communities' and households' drinking water, small-scale and socially disadvantaged farmers, and ecosystems. In practice, groundwater markets would likely allow powerful companies to pump out the groundwater from under households and communities. This is already a common phenomenon in the San Joaquin Valley, but would expand with groundwater markets and water trading programs.
2. Residents do not trust the governance structures of groundwater markets and groundwater trading programs, since these markets and programs will be managed by the same GSAs who have chosen to let their wells continue to go dry. Communities want to see our groundwater resources managed as a commons, or a public trust, instead of as a commodity purchased by the wealthiest buyer.
3. Establishment of a groundwater market is unprecedented in basins with thousands of domestic wells, many of which are not clustered in a defined community, and dozens of communities reliant on small water systems.¹²³

After having participated in the writing, adoption, and implementation of dozens of GSPs across the state, there is little evidence to show that GSAs can establish groundwater markets or water trading programs that will protect the drinking water of hundreds of DACs and hundreds of thousands of domestic wells. GSAs in the San Joaquin Valley plan to let groundwater levels continue to decline, causing up to 12,000 more homes to lose access to running water and few GSAs have adopted programs to help address those dry wells.⁴⁵⁶⁷

While some of these concerns are addressed to an extent in the white paper, we still have concerns regarding the guidance given on how groundwater trading and markets can protect DACs, small water systems, and domestic drinking-water wells:

1. *Purpose of groundwater trading should be to reach sustainability, not allow over-pumpers to continue to overpumping*

¹ Wheeler S.A., Schoengold K., Bjornlund H. (2016) Lessons to Be Learned from Groundwater Trading in Australia and the United States. In: Jakeman A.J., Barreteau O., Hunt R.J., Rinaudo J.D., Ross A. (eds) Integrated Groundwater Management. Springer, Cham. https://doi.org/10.1007/978-3-319-23576-9_20

² Newlin, Brad D., et al. "Southern California water markets: Potential and limitations." *Journal of Water Resources Planning and Management* 128.1 (2002): 21-32.

³ Nysten, Neil Green, et al. "Trading Sustainably: Critical Considerations for Local Groundwater Markets Under the Sustainable Groundwater Management Act." (2017).

⁴ <https://www.latimes.com/environment/story/2021-12-16/its-a-race-to-the-bottom-for-agricultural-wells>

⁵ <https://www.latimes.com/projects/california-farms-water-wells-drought/>

⁶ <https://www.latimes.com/environment/story/2021-12-11/state-cites-flaws-in-san-joaquin-valley-groundwater-plans>

⁷ <https://www.gspdrywells.com/>

SGMA was adopted to ensure our groundwater resources are managed sustainably. As this white paper is currently written the main concern appears to be the economic hardships caused by water scarcity.⁸ The economic hardships caused by water scarcity that markets or water trading programs are set up to address will likely only benefit those who have over-pumped water and now need to reduce their water use. While we understand that reducing pumping will impact their industries, vulnerable water users have already borne the brunt of industrial overpumping. The law requires GSAs to implement management practices that have been determined to be technologically and economically effective, practicable, and based on best available science.⁹ The massive data gaps on groundwater conditions and potential impacts based on management decisions, as cited in the 34 groundwater sustainability plans deemed incomplete,¹⁰ shows GSAs are nowhere near ready to entertain water trading or markets as technologically or economically sound management practices. It's telling that the paper only refers to water conservation as a possible side benefit of a multi-year trading allotment, rather than a feature of the program.

2. Limited suggestions on safeguards for drinking water users

This white paper outlines some of the potential risks for drinking water users in the implementation of a water trading program but offers limited suggestions on how to actively protect against these potential risks. The safeguards that are presented lack nuanced discussion about the risks posed if the safeguards are not included, as well as potential deficiencies in the presented safeguards. For example, allocations for DACs need to consider the growth and expansion of those communities. Allocations could severely underdetermine this as we lack data on economic growth and expansion in both our census data and county general plans.¹¹ Allocations are even more difficult to set for domestic well users generally as domestic wells are often found throughout basins, as opposed to clustered in a specific location. Furthermore, given the nature of how groundwater moves, neither geographic nor spatial limitations on groundwater pumping, such as a buffer zone, will truly protect drinking water, since water will flow towards wherever it is being pumped. An allocation for DACs also won't address other potential impacts of trading to their water such as shifting and expanding contaminant plumes because of changing pumping patterns, the inequities they would face if they were to be forced to engage in trading if they need more than their allocation, and the data and modeling gaps that currently do not accurately depict their water use needs.

The white paper contains an internal contradiction that reinforces this perception, emphasizing the need for local control of groundwater markets while assigning the state the role of protecting and supporting those beneficial users most likely to suffer under the program. Also concerning are the results of the stakeholder survey, whose recommendations are in conflict with both the out-of-state experts and the paper itself, most strikingly in the attitudes expressed about stakeholder engagement. We strongly recommend that an appendix be added to the report that identifies survey questions and lists survey respondents by stakeholder category.

⁸ California Water Commission (2022) "A State Role in Supporting Groundwater Trading with Safeguards for Vulnerable Users: Findings and Next Steps", pg 3, 5, 7

⁹ 23 CCR § 351

¹⁰ <https://water.ca.gov/News/Blog/2022/Feb-22/DWR-Takes-Next-Steps-Towards-Groundwater-Sustainability>

¹¹ Sullivan T.A. (2020) Who's Missing? Undercounting and Underreporting. In: Census 2020. Springer, Cham. https://doi.org/10.1007/978-3-030-40578-6_3

3. Does not adequately warn against adopting trading programs

Aside from the complexity of the physical influences on groundwater, its use is tethered to socio-economic, legal, institutional and political systems. There are several drivers of groundwater access and use such as other water sources, demographic and socio-economic factors, science and technological innovation, policies, laws and financial conditions, climate variability and market changes (changed demand, changed renewal, availability of other sources), etc, that this white paper fails to thoroughly explore and warn about. In some global examples of groundwater trading, great lengths had to be taken to establish a market or trading program, such as having to completely restructure water rights systems, access to pumping licenses for all users, transparent trading rules, an efficient approval processes; and scientifically sound systems for metering and monitoring, before a market could be put in place.¹² It is not sufficient to just raise some of these concerns without outlining the potential detrimental effects that not having critical components in place will have on the most vulnerable groundwater users in the state.

We appreciate the paper's recommendation to start small, it is an appropriate precautionary action, as well as the white paper's point that if protections for drinking water users cannot be guaranteed, then trading programs should not be implemented. However, no recommendations or support are offered to incentivize this action and suggested safeguards underdeveloped, it is difficult to take this recommendation seriously.

4. State role is not thoroughly explored

Without strict regulation, a groundwater market will actually increase inefficiency and will lead to more severe impacts than without a market. Issues that could arise include: inefficient pricing and misallocation; users take too much, too quickly and from what may be considered the wrong locations (e.g. closer to surface waters), individual users of groundwater have, in the absence of regulation or other incentives, little reason to consider the increased pumping costs for other users as a result of the extraction they undertake, and many more.¹³ GSAs have not shown that they can strictly enforce any regulation, again as can be seen in the 34 incomplete GSPs. In the absence of strict GSA regulation, the state would need to play an active role in regulating any kind of trading program or market. Currently the state role is relegated primarily to general SGMA oversight, convening stakeholders, and identifying GSAs' needs. Given the state agencies' numerous legal responsibilities towards the protection of water, including but not limited to, upholding the human right to water, the reasonable and beneficial use doctrine, the public trust doctrine, the Porter-Cologne Act, etc, it is troubling that their engagement is currently being posed as advisory as oppose to a more regulatory role.

To provide adequate guidance, the above issues must be addressed. Furthermore, before even considering publishing guidelines, providing funding, or endorsing groundwater markets and

¹² Wheeler S.A., Schoengold K., Bjornlund H. (2016) Lessons to Be Learned from Groundwater Trading in Australia and the United States. In: Jakeman A.J., Barreteau O., Hunt R.J., Rinaudo JD., Ross A. (eds) Integrated Groundwater Management. Springer, Cham. https://doi.org/10.1007/978-3-319-23576-9_20

¹³ Katic, Pamela; Grafton, R. Q. 2012. Economic and spatial modeling of groundwater extraction. *Hydrogeology Journal*, 20(5):831-834. doi: <http://dx.doi.org/10.1007/s10040-011-0817-z>

water trading programs, state agencies and GSAs have multiple responsibilities to vulnerable water users that they must uphold:

1. This paper fails to reinforce GSAs' existing role in protecting drinking water users, but refers instead to compliance with "state policies" in the implementation of water markets and identifies "limits" on state agencies' authority. This must be corrected. SGMA statute requires that GSAs "consider the interests of all beneficial uses and users of groundwater," yet this paper repeatedly ignores the statutory authority and responsibility GSAs have to protect drinking water users. Further, the regulations adopted to implement the statute require that GSAs, in its evaluation of GSPs, identify "Whether the interests of the beneficial uses and users of groundwater in the basin, and the land uses and property interests potentially affected by the use of groundwater in the basin, have been considered;" and also "Whether the projects and management actions are feasible and likely to prevent undesirable results and ensure that the basin is operated within its sustainable yield." GSAs clearly have both the authority and the responsibility to ensure that management actions and projects, including a water trading program, protect DACs, a point that this paper fails to reinforce.
2. GSAs, in establishing regulations to implement SGMA, set the bar for GSP adequacy as being in "substantial compliance" with those regulations. Given the broad information and engagement needs identified for a functioning water market, GSAs must update its regulations if it is to determine the adequacy of a GSP to support a water market. Markets should not be permitted under this standard of review.
3. California codified access to an adequate supply of safe and affordable drinking water as a human right in 2012. Water Code § 106.3(a) provides as follows: It is hereby declared to be the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.¹⁴ While it is often incorrectly stated that this section is not binding, § 106.3(b) expressly states in that "[a]ll relevant state agencies, including GSAs, the state board, and the State Department of Public Health, shall consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and criteria are pertinent to the uses of water described in this section." The use of the mandatory "shall" rather than a permissive "may" indicates that the requirement of subsection (b) to consider the Human Right to Water is a mandatory duty of all relevant state agencies, including the California Water Commission.
4. The public trust doctrine has recently been applied to groundwater where there is a hydrological connection between the groundwater and a navigable surface water body.¹⁵ In *Environmental Law Foundation v. State Water Resources Control Board* ("ELF"), the court held that the public trust doctrine applies to "the extraction of groundwater that adversely impacts a navigable waterway" and that the government has an affirmative duty to take the public trust into account in the planning and allocation of water resources.¹⁶ Under ELF, the Public Trust doctrine imposes an affirmative and independent

¹⁴ 23 CCR § 354.18(c)(3)

¹⁵ *United States v. State Water Resources Control Bd.* (1986) 182 Cal.App.3d 82, 106; see also *Nat'l Audubon Soc'y v. Superior Court* (1983) 33 Cal.3d 419, 426 ["before state courts and agencies approve water diversions they should consider the effect of such diversions upon interests protected by the public trust, and attempt, so far as feasible, to avoid or minimize any harm to those interests."].

¹⁶ *Environmental Law Foundation v. State Water Resources Control Bd.* (2018) 26 Cal.App.5th 844, 844.

obligation to consider the public trust that applies to state's decisions regarding groundwater management practices, imposing a legal duty on state agencies to not only consider the potential adverse impacts of groundwater extractions on navigable waterways but also "to protect public trust uses whenever feasible."¹⁷ A discussion of the public trust doctrine, how it applies to groundwater, and how groundwater markets may contradict the state's duty to guard public resources for the good of the public, would add needed context to the white paper.

5. The "reasonable and beneficial use" doctrine is codified in the California Constitution. It requires that "the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare."¹⁸ The doctrine applies to all water users, regardless of the basis of water right, and all water rights and methods of diversion.¹⁹ A determination of reasonableness of a use "cannot be resolved in vacuo isolated from statewide considerations of transcendent importance."²⁰
6. Last, we would like to remind all agencies that state law provides that no person shall, on the basis of race, national origin, ethnic group identification, and other protected classes, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under, any program or activity that is conducted, operated, or administered by the state.²¹ The potential disparate impacts trading programs and markets could have on DACs must be taken into consideration.

While we appreciate the work the commission and advisory group has put into this white paper, given the multiple legal responsibilities agencies have to uphold, how constrained groundwater resources are, and the GSAs' lack of commitment to protect vulnerable drinking water uses, we are skeptical groundwater trading programs, markets, or other market-based approaches can be established in a way that would protect self-supplied households and DACs access to groundwater for drinking and domestic purposes.

¹⁷ *Id.* at 865

¹⁸ Cal Const, Art. X § 2; see also Water Code § 100; *United States v. State Water Resources Control Bd.* (1986) 182 Cal.App.3d 82, 105 ["...superimposed on those basic principles defining water rights is the overriding constitutional limitation that the water be used as reasonably required for the beneficial use to be served."].

¹⁹ *Peabody v. Vallejo* (1935) 2 Cal.2d 351, 367, 372; *Light v. State Water Resources Control Board*, (2014) 226 Cal. App. 4th 1463, 1479

²⁰ *Joslin v. Marin Municipal Water Dist.* (1967) 67 Cal.2d 132, 140.

²¹ Gov. Code § 11135 ["No person in the State of California shall, on the basis of sex, race, color, religion, ancestry, national origin, ethnic group identification, age, mental disability, physical disability, medical condition, genetic information, marital status, or sexual orientation, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under, any program or activity that is conducted, operated, or administered by the state or by any state agency, is funded directly by the state, or receives any financial assistance from the state."]; Gov. Code § 65008 [Any discriminatory action taken "pursuant to this title by any city, county, city and county, or other local governmental agency in this state is null and void if it denies to any individual or group of individuals the enjoyment of residence, land ownership, tenancy, or any other land use in this state..."]; Government Code §§ 12955, subd. (l) [unlawful to discriminate through public or private land use practices, decisions or authorizations].

For these reasons, we want to express our continued deep skepticism on the establishment of water trading programs and water markets, and warn state agencies that the adoption of water trading programs and water markets will likely lead to disparate impacts on already vulnerable communities.

Sincerely,

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