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May 15th, 2020

Re: Recommendations for DWR and SWRCB Action Regarding the Merced Groundwater Subbasin GSP

Dear Department of Water Resources and State Water Resources Control Board,

Leadership Counsel for Justice and Accountability works with low-income communities of color in the San Joaquin Valley and the Eastern Coachella Valley. We have been engaged in the Sustainable Groundwater Management Act (SGMA) implementation process because most of the communities we work with are wholly dependent on groundwater for their drinking water supplies, and many have already experienced groundwater supply and quality issues. The communities where we work have not been adequately included in decision-making about their precious water resources, and their needs are not prioritized in such decisions.

Disadvantaged communities in the Merced Subbasin have the most to gain and the most to lose from SGMA implementation in the region. Communities like Planada are majority Latino and

depend on small community water systems and/or domestic wells for their drinking water supply. Because residents in disadvantaged communities do not typically have the financial means to dig deeper wells or to install, operate and maintain drinking water treatment infrastructure, they are more likely to be severely impacted by lowering groundwater levels and groundwater contamination.

As a particularly vulnerable group, the critical drinking water needs of disadvantaged communities and low-income households must be considered and protected by the Groundwater Sustainability Plan (GSP). The Merced Groundwater Sustainability Agencies (GSAs) have not adequately done so in this GSP. As described below, the GSP is likely to allow 1,100 drinking water wells to go dry in the subbasin and puts domestic wells at risk of contamination from many unmonitored drinking water contaminants, with no clear plan to help prevent and mitigate drinking water impacts.

The Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB) must evaluate GSPs according to the Human Right to Water, and ensure that the GSPs comply with SGMA, the GSP regulations, and state and federal civil rights law, among other laws and regulations. In 2012, California recognized the Human Right to Water, codifying “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.”¹ Under the Human Right to Water law, DWR and the State Water Resources Control Board must consider the Human Right to Water on review of GSPs.² In order to comply with this obligation, the Department and Board must ensure that GSPs do not cause or allow further drinking water crises that interfere with residents’ access to an adequate supply of safe drinking water. In coordination with the Community Water Center and Self-Help Enterprises, we have developed a Human Right to Water Scorecard that contains elements necessary for state review of GSPs to comply with the Human Right to Water.³ We urge DWR and the SWRCB to use this scorecard in evaluating this GSP.

Additionally, SGMA requires GSAs to include disadvantaged communities in decision-making, and create GSPs in a transparent and inclusive way. DWR and the SWRCB must ensure that GSPs do not cause “significant and unreasonable impacts” to the beneficial uses and users of groundwater in the subbasin, that they encourage the participation of a diverse variety of stakeholders,⁴ and that they “consider the interests of” an enumerated list of all types of beneficial users, including disadvantaged communities on domestic wells and community water

¹ Water Code § 106.3(a)

² Water Code § 106.3(b)

³ Attached as Exhibit B.

⁴ Water Code § 10727.8(a) [“The groundwater sustainability agency shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the groundwater basin prior to and during the development and implementation of the groundwater sustainability plan.”].

systems.⁵ Furthermore, 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.⁶ The state’s Fair Employment and Housing Act guarantees all Californians the right to hold and enjoy housing without discrimination based on race, color, or national origin.⁷ DWR and the SWRCB must evaluate GSPs in accordance with all of these and other relevant legal obligations.

Unfortunately, the Merced Subbasin GSAs did not take advantage of the opportunity to protect the drinking water resources relied upon by disadvantaged communities or low-income households, or avoid disparate impacts, and the GSP is incomplete and does not comply with SGMA and other applicable state laws. As noted above, we reviewed the Merced Groundwater Subbasin GSP according to our Human Right to Water Scorecard. Our review shows that the GSP does not contain all of the information required under SGMA, does not adequately evaluate “significant” and “unreasonable” impacts to beneficial uses including the drinking water needs of disadvantaged communities, will create a disparate impact on protected classes unless significantly modified, and does not comply with the Human Right to Water statute.

For the reasons discussed in these comments, and in prior written and oral comments provided to the GSAs, DWR must not approve the GSP.⁸

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⁵ Water Code § 10723.2.

⁶ 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].

⁷ Gov. Code § 12900 et seq.

⁸ Attached as exhibits are certain documents, studies and analysis supporting these comments, which we request be incorporated into the record.

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### **A. The GSP Does Not Comply with SGMA Because It Lacks Required Information**

The GSP must contain all of the elements set forth in the GSP regulations. However, this GSP omits critical data and information to comply with the GSP regulations. As discussed below, the GSP lacks required information and analyses, including among other things an analysis of the significance and reasonableness of sustainable management criteria and the description of the water budget. Therefore, the GSP fails to “include[] the information required by [SGMA] and [its accompanying regulations],” and is thus inadequate.<sup>9</sup> These inadequacies prevent DWR from being able to determine that the GSP will likely achieve its sustainability goal.<sup>10</sup> Given these deficiencies, we ask DWR not to approve the plan.

### **B. DWR Cannot Approve The GSP Because It Will Cause Disproportionate And Disparate Negative Impacts On Protected Classes.**

The Merced Groundwater subbasin GSAs must ensure that the GSP does not cause disparate impacts on protected groups, and must prioritize drinking water as an essential pillar of their groundwater sustainability plan. The GSP does not comply with this responsibility.

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 any state agency.<sup>11</sup> In addition, the state’s Fair Employment and Housing Act guarantees all Californians the right to hold and enjoy housing

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<sup>9</sup> 23 CCR § 355.4(a)(2).

<sup>10</sup> Water Code § 10733(a); 23 CCR § 355.4(b).

<sup>11</sup> 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].

without discrimination based on race, color, or national origin.<sup>12</sup>

The GSP will have disparate impacts on protected classes, including negative and discriminatory impacts on the basis of race, color, ancestry, national origin, and ethnic group identification. “Low-income communities and communities of color in the Central Valley rely disproportionately on private wells because adequate public services were not developed in those communities.”<sup>13</sup> As a result, “low-income households, people of color, and communities already burdened with environmental pollution suffered the most severe impacts [from drought]” and dry wells.<sup>14</sup> Similarly, communities of color in the Central Valley are disproportionately impacted by groundwater contamination.<sup>15</sup>

Consistent with these studies, this GSP will cause disproportionate negative impacts on communities of color reliant on small water systems and domestic wells. There are at least 47 disadvantaged unincorporated communities (DUCs) within Merced County, many of which will be impacted by this GSP.<sup>16</sup> Approximately 72% of the population of Merced DUCs are people of color, significantly higher than the approximately 59% of the population of the County overall who are people of color. As an example, according to the most recent American Communities Survey data, Planada is 96.9% Hispanic or Latino.<sup>17</sup>

As discussed below, the GSP’s determinations and policy decisions will result in many more dry wells, and will not prevent increased drinking water contamination from groundwater activities, particularly for disadvantaged communities reliant on small water systems and domestic wells. This will cause severe harm to residents’ health and daily lives, as well as permanent impacts on residents’ finances and living situations. Additionally, the GSP contains no measures to mitigate these impacts. Therefore, because the GSP is likely to have significant negative impacts on households reliant on small water systems and domestic wells, and because the people reliant on

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<sup>12</sup> Gov. Code § 12900 et seq.

<sup>13</sup> Feinstein et al., “Drought and Equity in California,” p. 21 (January 2019), available at [https://pacinst.org/wp-content/uploads/2017/01/PI\\_DroughtAndEquityInCA\\_Jan\\_2017.pdf](https://pacinst.org/wp-content/uploads/2017/01/PI_DroughtAndEquityInCA_Jan_2017.pdf).

<sup>14</sup> *Id.* at p. 6.

<sup>15</sup> See Balazs et al., “Social Disparities in Nitrate Contaminated Drinking Water in California’s San Joaquin Valley,” *Environmental Health Perspectives*, 19:9 (September 2011), available at <https://ehp.niehs.nih.gov/doi/full/10.1289/ehp.1002878>; Balazs et al., “Environmental Justice Implications of Arsenic Contamination in California’s San Joaquin Valley,” *Environmental Health Perspectives*, 11:84 (November 2012), available at <https://ehjournal.biomedcentral.com/articles/10.1186/1476-069X-11-84>.

<sup>16</sup> Flegel et al., “California Unincorporated: Mapping Disadvantaged Communities in the San Joaquin Valley,” p. 29 (2013), available at

<https://www.policylink.org/resources-tools/california-unincorporated-mapping-disadvantaged-communities-in-the-san-joaquin-valley>; see also Merced County SB 244 Analysis, available at

<https://www.co.merced.ca.us/DocumentCenter/View/12199/Merced-County-SB244-Analysis?bidId=>.

<sup>17</sup> Data available at <https://data.census.gov/cedsci/>, accessed on May 14, 2020.

small water systems and domestic wells are disproportionately people of color, the GSP is likely to cause disparate impacts on protected classes.

### **C. The GSP Does Not Adequately Evaluate Whether Adverse Impacts Are “Significant And Unreasonable” Or Consider Beneficial Uses And Users.**

Under SGMA, DWR must find that a GSP is likely to achieve its sustainability goal before DWR may approve the plan.<sup>18</sup> “‘Sustainability goal’ means the existence and implementation of one or more groundwater sustainability plans that achieve sustainable groundwater management by identifying and causing the implementation of measures targeted to ensure that the applicable basin is operated within its sustainable yield.”<sup>19</sup> “‘Sustainable groundwater management’ means the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.”<sup>20</sup> An “undesirable result” occurs when a GSP allows a “significant and unreasonable” adverse impact to one of six sustainability indicators, including groundwater levels, groundwater storage, groundwater quality, and land subsidence.<sup>21</sup>

If a GSP is unlikely to achieve its sustainability goal, DWR cannot approve the plan.<sup>22</sup> DWR must also independently determine whether or not the GSP is likely to avoid “significant and unreasonable” adverse impacts with regard to each sustainability indicator, and if not then DWR cannot approve the plan. If a GSP will allow an undesirable result even if implemented effectively, then the GSP cannot achieve sustainable groundwater management.<sup>23</sup> Likewise, a plan that cannot achieve sustainable groundwater management has failed to set a valid sustainability goal, in violation of SGMA.<sup>24</sup> If a GSP does not contain a valid sustainability goal, DWR cannot determine that the GSP is “likely to achieve the sustainability goal for the basin,” and DWR cannot approve it.<sup>25</sup>

In addition to defining undesirable results, GSPs must quantify benchmarks for groundwater conditions, or “minimum thresholds,” that may cause undesirable results if exceeded.<sup>26</sup> GSPs must include “an explanation of how the Agency has determined that basin conditions at each minimum threshold will avoid undesirable results for each of the sustainability indicators.”<sup>27</sup> A GSP’s determination of when an undesirable result will occur must be based on analysis of when

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<sup>18</sup> Water Code § 10733(a).

<sup>19</sup> Water Code § 10721(u).

<sup>20</sup> Water Code § 10721(v).

<sup>21</sup> Water Code § 10721(x).

<sup>22</sup> Water Code § 10733(a).

<sup>23</sup> Water Code § 10721(v).

<sup>24</sup> Water Code § 10721(u).

<sup>25</sup> Water Code § 10733(a); *see also* 23 CCR 354.24 (“Each Agency shall establish in its Plan a sustainability goal for the basin that culminates in the absence of undesirable results within 20 years of the applicable statutory deadline.”).

<sup>26</sup> 23 CCR 354.28(a).

<sup>27</sup> 23 CCR 354.28(b)(2).

adverse impacts become “significant” and “unreasonable.”<sup>28</sup>

In all of its actions, a GSA must “consider the interests of” all categories of beneficial users, including express requirements to consider disadvantaged communities on domestic wells and community water systems.<sup>29</sup> Failure to consider the interests of a category or categories of beneficial users is itself grounds for DWR to decline to approve a plan.<sup>30</sup> DWR regulations also establish that a failure to consider all beneficial uses and users of groundwater undermines the likelihood that a basin will reach its sustainability goal.<sup>31</sup>

We note that an impact on drinking water that persists for even a relatively short period of time (e.g., months or years rather than decades) may have permanent and irreversible impacts on households and communities. A household is not habitable without access to an adequate supply of safe drinking water, and once families begin to leave uninhabitable dwellings after wells have failed, community cohesion is irreparably harmed. These impacts are inconsistent with the very concept of sustainable groundwater management.

As explained below, the GSAs have not based their policy determinations on an analysis of what impacts are “significant” and “unreasonable,” and have not considered the interests of disadvantaged communities or low-income households reliant on small water systems or domestic wells.

#### **D. DWR Cannot Approve The GSP Because It Was Developed With Inadequate Transparency, Accessibility, Consideration Of Public Input And Representation.**

As public agencies, GSAs are subject to the requirements of the Brown Act, which requires transparency of public agencies through notice of meetings and prior posting of agendas, posting of meeting minutes after meetings, and public access to meeting materials upon request by a member of the public.<sup>32</sup> GSAs are also subject to the requirements of the Bilingual Services Act, which requires a public agency to provide interpretation and translate materials into all languages for which there is a “substantial” number of people who it serves who speak that language.<sup>33</sup>

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<sup>28</sup> Water Code § 10721(x); 23 CCR 354.28(b); *see also* Cal. Dep’t Water Res., *Draft Best Management Practices for the Sustainable Management of Groundwater* 6 (Nov. 2017) [“GSAs must consider and document the conditions at which each of the six sustainability indicators become significant and unreasonable in their basin, including the reasons for justifying each particular threshold selected.”]; *id.* 8 [“The GSP must include an analysis and written interpretation of the information, data, and rationale used to set the minimum threshold.”].

<sup>29</sup> Water Code § 10723.2.

<sup>30</sup> Water Code § 10723.2; 23 CCR 355.4(b) [“The Department shall evaluate a Plan ... to determine whether the Plan ... complies with the Act ....”].

<sup>31</sup> 23 CCR 355.4(b)(4).

<sup>32</sup> California Gov. Code § 54954.1

<sup>33</sup> Bilingual Services Act, Gov. Code, §§ 7293, 7295.

In addition, GSAs must also adhere to the specific public participation and inclusivity requirements laid out in SGMA. As discussed above, SGMA requires that a GSA “shall consider the interests of all beneficial uses and users of groundwater,” which expressly includes “[h]olders of overlying rights” and “[d]isadvantaged communities, including, but not limited to, those served by private domestic wells or small community water systems.”<sup>34</sup> The emergency regulations similarly require that a GSP summarize and identify “opportunities for public engagement and a discussion of how public input and response will be used.”<sup>35</sup> The GSAs thus must engage “diverse social, cultural, and economic elements of the population within the basin.”<sup>36</sup> The regulations recognize that failure to engage adequately with a diverse cross-section of the public undermines the likelihood that a GSP will avoid undesirable results and meet its sustainability goal.<sup>37</sup>

The GSAs did not incorporate stakeholder feedback into their evaluation of impacts on disadvantaged communities. The Stakeholder Committee contained two disadvantaged community representatives out of its 23 members, and one of these representatives, Maria Herrera, made repeated asks for the GSAs to evaluate how many wells would go dry from the proposed sustainable management criteria, asked for more protective minimum thresholds, asked for more contaminants to be included in the contaminants of concern, and asked for a domestic well mitigation program, among other requests. These requests were echoed by our organization and community residents at workshops, but were not considered by the board. This lack of consideration of the interests of disadvantaged communities fails to meet the requirements of SGMA.

The GSAs’ process of collecting stakeholder input on the final draft of the GSP did not allow for all interests to be considered adequately. Upon releasing the 339 page final draft of the GSP with 416 pages of appendices on July 19th, 2019, the GSAs made the decision to only allow 30 days for the public to submit comments on the GSP. Of the 12 GSP development processes in which we are engaged, this GSP is the only one with a public comment period shorter than 45 days. Second, the GSA held a public workshop on the GSP in which the public gave comments to GSA members, but the GSA members did not respond to comments, and did not direct staff to look into any of the comments or respond in any way. There was no follow-up with stakeholders who commented on the plan to discuss and incorporate their comments. This was not a meaningful or transparent way to accept public comments.

The GSAs’ consultants collaborated with Leadership Counsel and SHE on the structure and content of two of its public workshops, as well as outreach for these workshops. This made it

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<sup>34</sup> Water Code § 10723.2.

<sup>35</sup> 23 CCR 354.10(d).

<sup>36</sup> Guidance Document for Groundwater Sustainability Plan; Stakeholder Communication and Engagement, p. 1.

<sup>37</sup> 23 CCR 355.4(b)(4).

easier for residents to learn about, access and participate meaningfully in the workshops. However, while the GSA provided interpretation services at its public workshops, and workshops were held at accessible times and places for residents, the GSAs did not provide or offer interpretation services at their regular GSA meetings, Stakeholder Committee or Coordination Committee meetings, and did not translate all of its materials or notices of meetings into threshold languages, in violation of the Bilingual Services Act.<sup>38</sup>

The GSAs and Coordination Committee boards also lacked representatives from DACs, impeding the ability for DACs' needs to be taken seriously when making final decisions about the GSP.

Ultimately, the vast majority of DAC residents' and Leadership Counsel's input regarding protection of DACs' drinking water was not incorporated into the GSP. Although residents asked for domestic wells to be protected from going dry or becoming contaminated and asked for a program to mitigate any such impacts that may occur, this input was not incorporated in the GSP, and it is unclear whether or how this input was considered or weighed against other factors.

The public engagement process for this GSP was therefore inadequate. At a minimum, an adequate process must include the following elements, which were not present here:

1. **Description of DAC engagement:** Ensure that the GSP specifically identifies how DAC beneficial users were engaged in the planning process.
2. **Notice:**<sup>39</sup> Ensure that the GSAs provided clear notice to the public about GSA meetings to develop the GSP, posted in ways that all stakeholders were made aware of the meetings, and translated into all languages spoken by at least 5 percent of the public served by the agency, who do not speak English or are unable to effectively communicate in English.<sup>40</sup>
3. **Translation of materials:**<sup>41</sup> Ensure that the GSA translated materials into all languages spoken by at least 5 percent of the public served by the agency, who do not speak English or are unable to effectively communicate in English.

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<sup>38</sup> Bilingual Services Act, Gov. Code, §§ 7293, 7295.

<sup>39</sup> Government Code § 54954(a).

<sup>40</sup> Government Code sec. 7296.2: Dymally-Alatorre Bilingual Services Act, stating that local agencies providing services to the public must provide translated materials and interpretation when it serves a substantial number of non-English-speaking people. The law defines a "substantial number of non-English-speaking people" as "members of a group who either do not speak English, or who are unable to effectively communicate in English because it is not their native language, and who comprise 5 percent or more of the people served by the statewide or any local office or facility of a state agency." This is because "effective maintenance and development of a free and democratic society depends on the right and ability of its citizens and residents to communicate with their government and the right and ability of the government to communicate with them."

<sup>41</sup> Government Code sec. 7296.2.

4. **Interpretation:**<sup>42</sup> Ensure that the GSAs provided interpretation services at board meetings, committee meetings and workshops into all languages spoken by at least 5 percent of the public served by the agency, who do not speak English or are unable to effectively communicate in English.
5. **Meaningful DAC representation on advisory committee:** Ensure that the GSAs developed the GSP with an advisory committee that contained representatives from DACs, such that DAC representatives' voices were not drowned out by the overwhelming majority of another interest group.
6. **DAC representation on GSA boards and Coordination Committee:** Ensure that the GSAs developed the GSP with GSA boards and a Coordination Committee that contained representatives from DACs.
7. **Public Comment Period:** Ensure that the GSAs provided a robust public comment period of at least 60 days, with opportunity for the public to discuss comments and proposed agency responses with staff and the GSAs before GSP approval.
8. **Incorporation of stakeholder input:** Ensure that the GSP explicitly describes how stakeholder input was incorporated into the GSP process and decisions, including sustainable management criteria and all projects and management actions.

#### **E. The Water Budget is Inadequate**

Water budgets must contain an accounting and assessment of the total annual volume of groundwater and surface water entering and leaving the basin, including historical, current and projected water budget conditions, and the change in the volume of water stored.<sup>43</sup> DWR regulations also require that the historical water budget “start[] with the most recent available information.”<sup>44</sup> In order to have any chance of meeting a GSA’s sustainability goal, a GSA must accurately estimate current and future groundwater usage. A GSP’s sustainable yield must also be “calculated over a base period representative of long-term conditions in the basin.”<sup>45</sup>

The GSP does not conform to these requirements. Specifically, it does not accurately explain or include all urban water users, or rely on the most recent information. According to the GSP, urban water demand is based on the 2015 Urban Water Management Plan (UWMP) and municipal pumping records. However, no information is provided on the magnitude of the urban demand, population information, or per capita water use specified in the model. The GSP does not identify which municipal water providers provided data and which required estimation of water demand. Nor does it discuss how estimated water use from rural domestic water users or

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<sup>42</sup> Government Code sec. 7296.2.

<sup>43</sup> 23 CCR § 354.18.

<sup>44</sup> 23 CCR 354.18(c)(2)(B).

<sup>45</sup> Water Code § 10721(w).

small community water systems was represented in the model or the magnitude of these values. Therefore, based on the limited data provided in the GSP, the public cannot review the drinking water demand estimates for domestic users, community water systems, or large urban water suppliers and make an assessment as to the appropriateness of the demands considered in the historical, current, or future water budgets.

Additionally, the GSP does not adequately factor in population growth and expanded development in cities and communities in the subbasin. SGMA requires that a “groundwater sustainability plan shall take into account the most recent planning assumptions stated in local general plans of jurisdictions overlying the basin.”<sup>46</sup> The regulations also require that projected water demand must take into account, among other things, population growth.<sup>47</sup> Accounting for future growth within the water budget must also include accounting for reasonable growth in DACs. This information is critical to incorporate into the water budget to ensure that communities have a stable source of water when the GSP is implemented. The GSAs must look to General Plans, Community Plans, Specific Plans, Regional Transportation Plans, LAFCO Municipal Service Reviews, Regional Housing Needs Assessments, and Department of Finance population estimates to accurately assess future drinking water needs in disadvantaged communities in the subbasin. If such documents do not contain information about population projections in all DACs, the GSAs should communicate directly with residents of DACs and community-based nonprofits working with local communities to estimate future population growth.

To form its projected land use conditions baseline, the GSP shows that the GSAs communicated about future projects directly with local agencies and farmers, but did not do so with all beneficial user groups including disadvantaged communities. Because SGMA requires that the interests of all beneficial users and uses to be considered in developing GSPs,<sup>48</sup> there must be direct communication with all relevant stakeholders and representatives of all beneficial uses, including people reliant on domestic wells and residents of DACs reliant on small water systems. This communication should be through meetings held in communities, facilitated where possible by collaboration with community-based nonprofits.

It is unclear why the GSAs chose the historical baselines that they did. The methodology that the GSAs used to choose the historical baseline of 1969 to 2018 should be clarified. The GSP must also explain why the GSAs chose a different period as their baseline for their current and projected water budget.

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<sup>46</sup> Water Code § 10726.9.

<sup>47</sup> 23 CCR 354.18(c)(3)(B).

<sup>48</sup> Water Code section 10723.2.

There is no specific information included in the GSP on how historical land use was determined or how it varies over the historical water budget period. According to the GSP, the current water budget uses 2013 CropScape data and the projected water budget uses the 2013 CropScape data, 2015 agricultural water management plan projections, and information from local agencies and farmers. No summary of acreages by land use type is provided so the accuracy of the representation of urban and agricultural areas cannot be assessed by the public. Without this information the public cannot assess how domestic well users and small community water systems are represented in the land use data.

The majority of the GSP section discussing the water budget focuses on the results of the water budget, but describes the results in an overly vague way. The results are presented as average annual values for the entire subbasin which limit the ability for the public to evaluate and understand the impacts to DACs and small community water systems. Time series graphs of the water budget results are needed to evaluate if the water budget adequately represents the temporal variability and trends in drinking water demand. Similarly, more geographically granular information is needed to show how demand is distributed across the subbasin. By presenting only subbasin-level water budget results and only average annual values, the presented results are opaque with respect to drinking water use by DACs, as well as demands by other types of beneficial users.

The GSP does not include any discussion of the uncertainty in the data used for the model and its potential effects on the water budget results. The GSP should include an uncertainty analysis to identify the plausible range in water budget results and an indication of the magnitude of the effects these inherent uncertainties may have on the water budget results. Absent this information, it is difficult to evaluate the likelihood that the GSP will result in sustainable groundwater management.

It is not clear how demands by drinking water users were considered in the sustainable yield calculation. The estimate of sustainable yield for the subbasin was determined using the Projected Conditions Baseline scenario. According to the GSP, in this scenario, agricultural and urban demand is reduced across the model domain to achieve a net storage change of zero. Agricultural demand was reduced by reducing agricultural land use. Urban demand was reduced by reducing the per capita water use. However, the GSP does not present information on how per capita water use reductions were determined or if they were applied equally to all drinking water users (municipal users, rural domestic users, small community waters systems, etc.). The document also does not include a discussion of how these reductions would affect domestic water users or small community water systems. Based on this, it is not clear how demands by drinking water users were considered in the sustainable yield calculation.

The water budget is central to establishing effective policies for sustainable groundwater management in the GSAs area. Since the GSP's water budget is inadequate, DWR cannot approve this GSP.

#### **F. The GSP's Sustainable Management Criteria for Groundwater Levels Are Not Adequate**

The sustainable management criteria for groundwater levels must be made after considering the interests of all beneficial user groups, including disadvantaged communities reliant on domestic wells and community water systems,<sup>49</sup> and must be based on an analysis of what are “significant” and “unreasonable” impacts.<sup>50</sup> These policy decisions must also avoid disparate impacts on protected groups pursuant to state and federal law.<sup>51</sup> As discussed below, the GSP does not meet these requirements.

##### **a. The Undesirable Result for Groundwater Levels are Inadequate**

Undesirable results are the point at which groundwater conditions cause “significant and unreasonable” impacts on beneficial users. The SGMA regulations require GSAs to justify their undesirable results by including the “[p]otential effects on the beneficial uses and users of groundwater.”<sup>52</sup> GSAs must also describe the “processes and criteria relied upon to define undesirable results.”<sup>53</sup> These determinations must be made based on an analysis of when decreasing groundwater levels will cause results that are either “significant” or “unreasonable” in light of the context of the basin and the real-world circumstances on the ground. The undesirable results determination does not comply with these requirements because it is unsupported by analysis, it is too vague, and it does not show how the GSA considered the interests of beneficial users in shaping its conclusions.

The GSAs propose to wait until 25% of representative wells fall below the minimum threshold for two consecutive wet, above normal, or below normal years, before an undesirable result occurs. The GSAs have included no information or criteria to explain how many domestic wells will go dry if this undesirable result is reached, or before it is reached, and therefore does not set forth adequate information to justify this decision. Given the amount of wells outside of the representative monitoring well 2-mile radius zone, and the wells that are screened above the

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<sup>49</sup> Water Code § 10723.2.

<sup>50</sup> Water Code § 10721(x); 23 CCR 354.28(b); *see also* Cal. Dep't Water Res., *Draft Best Management Practices for the Sustainable Management of Groundwater* 6 (Nov. 2017) [“GSAs must consider and document the conditions at which each of the six sustainability indicators become significant and unreasonable in their basin, including the reasons for justifying each particular threshold selected.”]; *id.* 8 [“The GSP must include an analysis and written interpretation of the information, data, and rationale used to set the minimum threshold.”].

<sup>51</sup> Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l).

<sup>52</sup> 23 CCR § 354.26.

<sup>53</sup> 23 CCR § 354.26.

minimum threshold, this could put thousands of domestic users' drinking water access at severe risk.<sup>54</sup> Furthermore, that the undesirable result occurs only after two consecutive wet, above normal or below normal years to the undesirable result will likely endanger drinking water supplies considering California's highly variable regional climate.<sup>55</sup> The GSAs have not analyzed what quantitative impacts these undesirable results would have on beneficial users, whether those impacts are "significant" and "unreasonable," or what criteria the GSAs relied upon to define the undesirable results.

#### **b. The Measurable Objectives for Groundwater Levels are Inadequate**

The SGMA regulations require the GSAs to set measurable objectives that "achieve the sustainability goal for the basin within 20 years of Plan implementation and...continue to sustainably manage the groundwater basin over the planning and implementation horizon."<sup>56</sup>

The GSP sets measurable objectives without conducting an analysis of how many wells would go dry, and whether that impact is significant or unreasonable. Even where the proposed measurable objective is 25 feet above the shallowest well, there are still many domestic wells at risk of dewatering in areas without representative monitoring wells. This does not comply with the GSAs' obligations under SGMA.

#### **c. The Minimum Thresholds for Groundwater Levels are Inadequate**

The groundwater levels sustainable management criteria set by a GSA must be the point that, "if exceeded, may cause undesirable results."<sup>57</sup> SGMA requires GSAs to analyze both the significance and reasonableness of proposed minimum thresholds,<sup>58</sup> and minimum thresholds must have the purpose of avoiding "significant and unreasonable" impacts on beneficial users.<sup>59</sup> The GSA's determination of what is "significant and unreasonable" must consider the impacts on all types of beneficial users, including disadvantaged communities.<sup>60</sup> For groundwater levels specifically, GSAs must place minimum thresholds for each monitoring site at the level "that may lead to undesirable results."<sup>61</sup> Under DWR regulations, the GSA must provide a description of "the information and criteria relied upon to establish minimum thresholds," an explanation of

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<sup>54</sup> Focused Technical Review, Attached as Ex. A.

<sup>55</sup> Bell, Jason L., Lisa C. Sloan, and Mark A. Snyder. "Regional changes in extreme climatic events: a future climate scenario." *Journal of Climate* 17.1 (2004): 81-87.

<sup>56</sup> 23 CCR § 354.30(a)

<sup>57</sup> 23 CCR § 354.28.

<sup>58</sup> Water Code § 10721(x); 23 CCR 354.26(a), (b), 354.28(b); see also Cal. Dep't Water Res., Draft Best Management Practices for the Sustainable Management of Groundwater 6, 8 (Nov. 2017).

<sup>59</sup> 23 CCR § 354.26.

<sup>60</sup> Water Code § 10723.2.

<sup>61</sup> 23 CCR § 354.28.

how the proposed minimum thresholds will “avoid undesirable results,” and “how minimum thresholds may affect the interests of beneficial uses and users of groundwater.”<sup>62</sup>

We commissioned a Focused Technical Review to evaluate the impact of the minimum thresholds on domestic wells. The report notes that nearly one-third of all domestic wells in the subbasin were not considered in the establishment of minimum thresholds: given the limited spatial distribution of the 25 representative monitoring wells, as described above, approximately 1,100 out of approximately 3,600 domestic wells in the subbasin are located outside of the 2-mile radius areas used to establish these minimum thresholds.<sup>63</sup> Therefore, even if all representative monitoring wells were to set the minimum threshold at the level of the shallowest well, this still puts a third of the subbasin’s domestic wells at risk of going dry. Additionally, there are no information or criteria justifying why 2015 levels were chosen as the alternative minimum threshold in cases where shallow wells have gone dry in a 2-mile radius around representative monitoring wells, or why a radius of 2 miles was chosen.

The minimum thresholds do not avoid the significant and unreasonable impact of dry wells, because they are set at the level of the bottom of the total well construction depth. A water supply well becomes unusable or subject to decreased performance and longevity as water levels fall within the screened interval, which will occur before water levels reach the bottom of the well, as highlighted in the attached Focused Technical Review.<sup>64</sup> Therefore, many domestic wells within the two-mile radius of each representative monitoring well will be impacted before the minimum threshold is exceeded.

Furthermore, the GSP does not set forth “the information and criteria” by which the GSAs arrived at the decision to set the minimum threshold for groundwater levels at the level of the shallowest well in a 2-mile radius around each representative monitoring well, or at 2015 levels if the shallowest well has been dewatered. The GSP states that stakeholders identified “significant and unreasonable number of shallow domestic wells going dry” as an undesirable result.<sup>65</sup> However, the GSAs make no determination as to how many dry wells constitute a “significant and unreasonable” number, and this determination was not made at any public meetings. The only type of “information and criteria” that will show whether a proposed minimum threshold will cause dry wells is an analysis of how many wells will go dry throughout the subbasin, based on the best available data. The GSA did not evaluate how many wells would go dry at its minimum thresholds.

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<sup>62</sup> 23 CCR § 354.28.

<sup>63</sup> Focused Technical Review, pg. 1. Attached as Ex. A.

<sup>64</sup> Focused Technical Review, pg. 1, attached as Exhibit A.

<sup>65</sup> Merced Groundwater Subbasin GSP pg. 3-3, dated November 2019

The groundwater levels sustainable management criteria for this GSP are therefore inadequate. At a minimum, adequate groundwater levels sustainable management criteria must include the following elements, which are not present here:

1. **Evaluate the drinking water impact:** Ensure that the GSP includes an analysis of how many drinking water wells (municipal wells, community water system wells, and domestic wells) might go fully or partially dry if groundwater levels reach the undesirable results,<sup>66</sup> measurable objectives and minimum thresholds,<sup>67</sup> including a map of wells that will go fully and partially dry at the measurable objectives and minimum thresholds. Ensure that the GSP includes estimates of the increased pumping costs from additional lift needed to pump water from lower elevations if the undesirable results, measurable objectives and minimum thresholds were to be reached.
2. **Avoid significant and unreasonable impacts to drinking water users in creating sustainable management criteria:**<sup>68</sup> The GSAs must analyze “when significant and unreasonable effects ... are caused by groundwater conditions occurring throughout the basin,” taking into account the beneficial users of groundwater and the basin’s specific circumstances.<sup>69</sup> Therefore the GSP must explicitly state how the GSAs considered drinking water impacts in shaping undesirable results, measurable objectives and minimum thresholds for groundwater levels; for example, the GSP could state how its well impact analysis supported setting stricter measurable objectives and minimum thresholds near at-risk communities.
3. **Incorporate new drinking water data into sustainable management criteria:**<sup>70</sup> Ensure that the GSP includes a description of how data gaps and uncertainties of its drinking water well impact assessment will be addressed and serve to reassess the sustainable management criteria, projects and management actions in accordance with new data.
4. **Implement DAC and drinking water user input into sustainable management criteria:**<sup>71</sup> Ensure that the GSP discusses how stakeholder input from DAC community members was considered in the development of undesirable results, measurable objectives and minimum thresholds. For example, the GSP could state how they took the results of the well impact assessment to the public through meetings, workshops, or Advisory Committees, and together with stakeholders decided how to change sustainable management criteria to protect drinking water, or other programs to implement to mitigate these impacts.

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<sup>66</sup> 23 CCR § 354.26(c)

<sup>67</sup> 23 CCR § 354.28(b)(4)

<sup>68</sup> Water Code § 10723.2

<sup>69</sup> 23 CCR § 354.26.

<sup>70</sup> 23 CCR § 354.38(e)(3)

<sup>71</sup> 23 CCR § 354.10(d); DWR Guidance Document for Groundwater Sustainability Plans: Stakeholder Communication and Engagement, p.1.

5. **Avoid disparate impact:**<sup>72</sup> Ensure that the measurable objectives and minimum thresholds for groundwater levels are established in such a way that prevents a disproportionately negative (“disparate”) impact from occurring on communities of color in the GSP area. For example, the GSP should ensure that the same minimum threshold methodology across the GSP area will not lead to disproportionately more wells going dry for residents of color than for white residents.

### **G. The GSP Fails to Adequately Address Groundwater Quality Through its Sustainable Management Criteria for Groundwater Quality**

GSA activities and policies could cause increased contamination in many ways. For example, the proposed timeline for implementation of demand reduction may allow for continued pumping which may create an increase in naturally occurring contaminants and/or migration of contaminant plumes.<sup>73</sup> Recharge projects could also have severe impacts on groundwater quality by facilitating water percolation on land contaminated with years of pesticide, herbicide, fungicide, and fertilizer application and/or by releasing natural contaminants like uranium into groundwater.<sup>74</sup> A groundwater market is likely to cause geographic concentrations of pumping that increase the likelihood of contaminant plume migration, putting drinking water resources at risk.

SGMA charged GSAs with the responsibility to protect water quality from further degradation due to groundwater management practices, and requires GSAs to establish sustainable management criteria to prevent degraded groundwater quality,<sup>75</sup> based on a determination of what is a “significant and unreasonable” impact on all beneficial users, including domestic well users and disadvantaged communities.<sup>76</sup> This GSP only monitors and regulates one contaminant of concern despite its express knowledge that many other more harmful drinking water

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<sup>72</sup> Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l).

<sup>73</sup> See Smith et al., Overpumping Leads to California Groundwater Arsenic Threat, 9 Nature Communications 2089 (2018), available at <https://www.nature.com/articles/s41467-018-04475-3>.

<sup>74</sup> See Fakhreddine et al., Protecting Groundwater Quality In California, Management Considerations For Avoiding Naturally Occurring And Emerging Contaminants (2019), available at <https://www.edf.org/sites/default/files/documents/groundwater-contaminants-report.pdf> [“Recharging water, even clean water, into a previously uncontaminated aquifer can potentially alter the existing geochemistry and hydrology and subsequently cause the release of geogenic contaminants from soils and sediments.”]; Jurgens, Bryant C., et al. “Effects Of Groundwater Development On Uranium: Central Valley, California, USA,” Groundwater 48.6 p. 913 (2010), available at <https://ngwa.onlinelibrary.wiley.com/doi/abs/10.1111/j.1745-6584.2009.00635.x>; “Groundwater Quality In The Sustainable Groundwater Management Act (SGMA): Scientific Factsheet on Arsenic, Uranium, and Chromium,” available at [https://d3n8a8pro7vhmx.cloudfront.net/communitywatercenter/pages/293/attachments/original/1559328800/Groundwater\\_Quality\\_in\\_SGMA\\_Scientific\\_factsheet\\_on\\_arsenic\\_\\_uranium\\_\\_and\\_chromium.pdf?1559328800](https://d3n8a8pro7vhmx.cloudfront.net/communitywatercenter/pages/293/attachments/original/1559328800/Groundwater_Quality_in_SGMA_Scientific_factsheet_on_arsenic__uranium__and_chromium.pdf?1559328800)

<sup>75</sup> Water Code § 10721(w)(4); 23 CCR § 354.28(c)(4).

<sup>76</sup> Water Code §§ 10727.2(d)(2); 10721(x)(4)

contaminants exist in its GSP area, which could be impacted by groundwater usage and activities. It also fails to clearly define its undesirable results, minimum thresholds or measurable objectives for groundwater quality, so the public and DWR cannot evaluate their impact on beneficial users in the GSP area.

**a. The Sustainable Management Criteria and “Contaminants of Concern” for Groundwater Quality Are Inadequate**

Instead of fully incorporating protection of all drinking water quality standards into the GSP, the GSAs limit their goals for groundwater quality to Total Dissolved Solids (TDS), a constituent far less harmful to human health than many others identified in the GSP, including nitrates, arsenic, 123-TCP, and hexavalent chromium.<sup>77</sup>

The GSAs only establish sustainable management criteria for TDS.<sup>78</sup> They further assert that they do not need to establish minimum thresholds for other constituents because there is no demonstrated correlation between water quality and water elevations.<sup>79</sup> They do not, however, present the data or analysis to support this claim. The water quality trend data presented in Appendix E only provides data through 2012 for selected water quality constituents (TDS, arsenic, nitrate, hexavalent chromium, DBCP, 1,2,3-TCP, etc.) and therefore does not present temporal trend data that would be associated with the lowered groundwater levels during the drought. In fact, there is almost no post-2012 drinking water quality data included in the GSP. This represents an incomplete analysis of groundwater conditions that could have significant impacts to the sustainability and usability of the groundwater resource by drinking water users. The GSP makes a key conclusion relevant to the long term management of water quality in the subbasin based on a conclusion that is unsupported by the analysis presented in the GSP.

The GSP does not set sustainable management criteria for other contaminants of concern, even though it states that “[t]he primary water quality constituents of concern related to human activity include salinity, nitrate, hexavalent chromium, petroleum hydrocarbons (such as benzene and MTBE), pesticides (such as DBCP, EDB, 1,2,3 TCP), solvents (such as PCE, TCE), and emerging contaminants (such as PFOA, PFOS).”<sup>80</sup> Of these constituents, nitrates are the most widespread contaminant with a direct impact on public health. The Merced County Department of Public Health considers nitrate to be an adverse groundwater quality parameter for most regions in the subbasin.<sup>81</sup> Despite its impacts to human health and prevalence in the area, the GSP does not set minimum thresholds for nitrate, or for any water quality constituent other than TDS. The GSAs attempt to justify this decision, explaining that “[t]hresholds are not set for these

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<sup>77</sup> Merced Groundwater Subbasin GSP pg. 2-79, dated November 2019

<sup>78</sup> Merced Groundwater Subbasin GSP pg. 3-13, dated November 2019.

<sup>79</sup> Merced Groundwater Subbasin GSP pg. 3-13, dated November 2019.

<sup>80</sup> Merced Groundwater Subbasin GSP pg. 2-79, dated November 2019

<sup>81</sup> Merced Groundwater Subbasin GSP pg. 2-80, dated November 2019.

constituents as the GSAs have no authority to limit the loading of nutrients or agrochemicals.”<sup>82</sup> This justification is flawed as groundwater management actions will have a direct and indirect impact on the transport of nitrates, for example through groundwater recharge activities, groundwater pumping and management can impact the migration of contaminant plumes, and decreased water resources can increase concentrations of contaminants.

#### **b. The Minimum Threshold for Groundwater Quality is Inadequate**

GSAs must place groundwater quality minimum thresholds for each monitoring site at the level “that may lead to undesirable results.”<sup>83</sup> Under the SGMA regulations, the GSP must provide a description of “the information and criteria relied upon to establish minimum thresholds,” an explanation of how the proposed minimum thresholds will “avoid undesirable results,” and “how minimum thresholds may affect the interests of beneficial uses and users of groundwater.”<sup>84</sup>

The minimum threshold for TDS itself is inadequate. A minimum threshold will only be triggered after seven representative wells show increasing levels of salinity consecutively for two years.<sup>85</sup> A minimum threshold is not triggered by seven or more wells showing increasing TDS levels as long as the increase is interrupted so as to be nonconsecutive. This may occur due to seasonal precipitation or other factors that do not indicate that groundwater is being sustainably managed with respect to quality. Moreover, the GSA does not present the “information and criteria” relied upon to determine that this minimum threshold would prevent “significant and unreasonable” impacts on beneficial user groups including disadvantaged communities.

Furthermore, this is likely to cause significant and unreasonable impacts on beneficial users. Since there are significant geographic gaps in the Merced Subbasin monitoring network (as discussed below), by the time seven of the 25 representative wells show increases in salinity for two consecutive years, it is more than likely that a high percentage of vulnerable drinking water users will be experiencing severe, long-term drinking water contamination problems before a minimum threshold is triggered. Therefore, this minimum threshold does not protect access to safe drinking water.

The groundwater quality sustainable management criteria for this GSP are therefore inadequate. At a minimum, adequate groundwater quality sustainable management criteria must include the following elements, which are not present here:

#### **1. Ensure that the GSP sets measurable objectives and minimum thresholds at all representative monitoring wells for all of the following contaminants:<sup>86</sup>**

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<sup>82</sup> Merced Groundwater Subbasin GSP pg. 3-13, dated November 2019.

<sup>83</sup> 23 CCR § 354.28.

<sup>84</sup> 23 CCR § 354.28.

<sup>85</sup> Merced Groundwater Subbasin GSP pg. ES-5, Table ES-1, dated November 2019.

<sup>86</sup> 23 CCR § 354.34(b)(2) and (f)(3)

- a. Contaminants with primary drinking water standards,
  - b. PFOs/PFOAs and chrome-6, which are contaminants known to be very harmful to human health, AND
  - c. Contaminants like uranium, arsenic and nitrate which are known to increase due to groundwater management practices.
2. **Ensure that the GSP triggers a violation of a minimum threshold after *one* test shows that there has been an increase in contamination since January 1st, 2015.** Once the minimum threshold is reached, the GSAs must start the evaluation of whether groundwater management activities or groundwater pumping have caused the increase, or whether the increase was caused by other factors such as natural fluctuation, testing inaccuracy, or activities outside the purview of the GSAs. If the increase was caused by groundwater management activities or groundwater pumping, the GSAs must immediately stop increasing the contamination and remediate.
  3. **Immediately remediate any contamination caused by groundwater conditions since 2015:** The GSAs must immediately remediate any increased contamination caused by groundwater management policies or activities (including lack of adequate regulation of pumping) since 2015. The GSAs must begin remediation immediately upon establishing causation. The GSAs must remediate contamination within two years, or as soon as technologically and hydrologically possible, whichever is faster. Design and implementation of remediation measures must be done in partnership with all groundwater users, primarily disadvantaged communities. The GSAs must also clearly identify funding sources for remediation, and identify a timeline for procuring those funds.
  4. **Strive to remediate existing drinking water contamination:** Ensure that the GSAs will strive to remediate drinking water contaminants that exceeded the MCL before 2015 wherever feasible, through projects, management actions and policies.
  5. **Evaluate the drinking water impact:** Ensure that the GSP includes an analysis of how drinking water wells (municipal wells, community water system wells, and domestic wells) are likely to be affected by the undesirable results,<sup>87</sup> measurable objectives and minimum thresholds.<sup>88</sup>
  6. **Implement DAC and drinking water user input into sustainable management criteria:**<sup>89</sup> Ensure that the GSP discusses how stakeholder input from DAC community members was considered in the development of undesirable results, measurable objectives and measurable objectives.

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<sup>87</sup> 23 CCR § 354.26(c)

<sup>88</sup> 23 CCR § 354.28(b)(4)

<sup>89</sup> 23 CCR § 354.10(d); DWR Guidance Document for Groundwater Sustainability Plans: Stakeholder Communication and Engagement, p.1.

7. **Incorporate new drinking water data into sustainable management criteria:**<sup>90</sup> Ensure that the GSP includes a description of how data gaps and uncertainties of its drinking water well impact assessment will be addressed and serve to reassess the sustainable management criteria, projects and management actions in accordance with new data.
8. **Avoid disparate impact:**<sup>91</sup> Ensure that the minimum thresholds for groundwater quality are established in such a way that prevents a disproportionately negative impact on communities of color in the GSP area. For example, the GSP should ensure that the same minimum threshold methodology across the GSP area will not lead to disproportionately more wells going dry for residents of color than for white residents.

#### **H. The Monitoring Network is Inadequate With Respect to Groundwater Levels and Groundwater Quality**

GSAs must monitor impacts to groundwater for drinking water beneficial users,<sup>92</sup> including disadvantaged communities on domestic wells,<sup>93</sup> and must avoid disparate impacts on protected groups pursuant to state law.<sup>94</sup>

The GSA's monitoring network does not comply with SGMA regulations, and fails to capture drinking water impacts to disadvantaged communities and domestic wells. The GSAs have therefore not considered the interests of this beneficial user group and the GSP is likely to cause a disparate impact on protected groups who are dependent on domestic wells in the GSAs area.

Moreover, the lack of adequate monitoring will make it impossible for the GSA to monitor drinking water to prevent undesirable results, undermining the likelihood that the basin will achieve sustainable groundwater management.

The GSP lacks representative monitoring wells in areas of the subbasin where drinking water users may be particularly vulnerable to groundwater supply and quality issues, leaving the GSAs with no ability to measure and avoid significant and unreasonable impacts to those users. The GSAs must prioritize measures to address these data gaps and add more representative monitoring wells.

The insufficiency of the representative monitoring network renders the GSP inadequate.

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<sup>90</sup> 23 CCR § 354.38(e)(3)

<sup>91</sup> Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (I).

<sup>92</sup> 23 CCR § 354.34

<sup>93</sup> Water Code § 10723.2.

<sup>94</sup> Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (I).

### **a. Groundwater Level Monitoring**

The SGMA regulations state that monitoring networks must include a “sufficient density of monitoring wells to collect representative measurements through depth-discrete perforated intervals to characterize the groundwater table or potentiometric surface for each principal aquifer.”<sup>95</sup> The GSA must also make decisions about the monitoring network in a way that considers the interests of all beneficial users.<sup>96</sup>

The GSAs have proposed a monitoring network of 50 wells, out of which only 25 have been designated as representative wells.<sup>97</sup> As the attached Focused Technical Review notes, this represents only one well for over 153 square miles of groundwater subbasin, or 0.65 wells per 100 square miles. This monitoring well density is just barely above the bottom of the range established by DWR guidance for monitoring well densities of between 0.2 and 10 wells per 100 square miles.<sup>98</sup> In addition, representative wells are generally located in the center of the subbasin, while domestic wells are distributed widely across the subbasin;<sup>99</sup> this results in approximately 1,100 out of approximately 3,600 domestic wells in the subbasin being located outside of the two-mile radius areas used to establish the GSP’s minimum thresholds as highlighted in the attached Focused Technical Review. In particular, the domestic wells located in and around the DACs of El Nido, Planada, Le Grand, and south of the City of Merced are located outside of the areas being monitored for water levels. As such, there are no representative wells for groundwater levels or groundwater quality in the vicinity of these beneficial users. Furthermore, the areas not covered by the monitoring network are where the subbasin’s shallowest wells are located, as indicated by the Merced County tanked water program, which tanked water out to many communities in the areas without monitoring wells.<sup>100</sup>

Consultants for the GSAs have cited the lack of data to justify why it cannot protect drinking water users from wells going dry at several subbasin meetings.<sup>101</sup> This stance is alarming. It is imperative that the GSAs include a plan for a robust monitoring network to fill those data gaps and protect access to drinking water. In their GSP, the GSAs have only proposed to install four more representative wells to fill in data gaps in groundwater levels in the three large data gap regions they have identified,<sup>102</sup> and plans to wait until a year after GSP approval by DWR (which

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<sup>95</sup> 23 CCR § 354.34(c)(1)(A)

<sup>96</sup> 23 CCR § 354.34(b)(2)

<sup>97</sup> Merced Groundwater Subbasin GSP pg. 4-9, dated November 2019.

<sup>98</sup> DWR, 2016. Best Management Practices for the Sustainable Management of Groundwater, Monitoring Networks and Identification of Data Gaps (BMP #2), December 2018.

<sup>99</sup> Merced Groundwater Subbasin GSP pg. 4-3, dated November 2019.

<sup>100</sup> Merced Groundwater Subbasin GSP pg. 3-5, dated November 2019.

<sup>101</sup> Merced Subbasin Stakeholder Committee meeting, July 22, 2019, in which consultants stated that data is limited in some SDAC areas so they cannot include them in representative wells.

<sup>102</sup> Merced Groundwater Subbasin GSP pg. 4-15, dated November 2019.

may not be for another two years) to create a plan to fill data gaps.<sup>103</sup> Additionally, the GSA proposes to fill two of their data gap areas by relying on monitoring wells and data from existing programs such as the East San Joaquin Water Quality Coalition Groundwater Quality Trend Monitoring and Public Water System,<sup>104</sup> which is concerning as ESJWQC is still phasing in their groundwater trend monitoring network and the network is intended only to identify broad regional trends for nitrate and salinity.<sup>105</sup> It is also unclear whether the additional wells will be at the correct groundwater depth to detect impacts to domestic wells.

The groundwater levels monitoring network for this GSP is therefore inadequate. At a minimum, an adequate groundwater levels monitoring network must include the following elements, which are not present here:

1. **Ensure accurate detection of impacts on drinking water users and DACs:**<sup>106</sup> Ensure that the groundwater level monitoring network includes *representative* monitoring wells *in or near DACs*, and placed in a way that detects impacts to the *vast majority* of drinking water users in the GSP area. If new monitoring wells are required, ensure that the GSP contains a concrete plan to fund and construct new representative monitoring wells within the first year of GSP implementation to ensure that vulnerable communities' drinking water resources are monitored. The plan to improve the monitoring network should include testing of domestic wells in the interim as wells are constructed.
  - a. The GSP states that the GSAs plan to install more monitoring wells near El Nido. The same should be done in or near the DACs of Planada and Le Grand to detect groundwater quality and supply impacts to those communities. The GSAs should also add the monitoring well proposed to be installed in El Nido, and all other monitoring wells near DACs, to the representative monitoring well network by ensuring that it meets the requirements of being a representative monitoring well.
  - b. The GSAs should include all MAGPI wells in the representative monitoring network in order to include DACs such as Planada and Winton, so that those wells can measure compliance with goals for groundwater quality and quantity.
2. **Clearly show representative monitoring well locations in relation to DACs:**<sup>107</sup> Ensure that the representative monitoring wells (RMWs) for groundwater levels are presented on maps and in tables that identify which set of minimum thresholds and measurable objectives will be applied to which RMWs, and that these maps clearly identify the locations of DACs, small water systems and other sensitive users.

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<sup>103</sup> Merced Groundwater Subbasin GSP pg. 4-26, dated November 2019.

<sup>104</sup> Merced Groundwater Subbasin GSP pg. 4-26, dated November 2019.

<sup>105</sup> East San Joaquin Water Quality Coalition Groundwater Quality Trend Monitoring Workplan: Phase III.

<sup>106</sup> 23 CCR § 354.34(b)(2) and (f)(3)

<sup>107</sup> 23 CCR § 354.34(b)(2) and (f)(3)

3. **Identify and address other drinking water data gaps:**<sup>108</sup> Ensure that the GSP clearly identifies any other gaps in data regarding impacts to drinking water users, and that the GSP contains a clear plan to fill data gaps regarding impacts to drinking water users. The GSP explains how it will fill some monitoring data gaps, but does not ensure that these gaps will capture impacts on all drinking water users, particularly disadvantaged communities.

#### **b. Groundwater Quality Monitoring**

SGMA regulations require that GSPs create a groundwater quality monitoring network that will “collect sufficient spatial and temporal data from each applicable principal aquifer to determine groundwater quality trends for water quality indicators, as determined by the Agency, to address known water quality issues.”<sup>109</sup>

The same gaps in representative monitoring wells referenced above apply to the GSA’s monitoring network for groundwater quality.

Additionally, while the GSP contains a map of where the monitoring wells are located, it does not show which monitoring wells are representative monitoring wells that will be used for measuring compliance with minimum thresholds and measurable objectives.<sup>110</sup> It does not indicate whether disadvantaged communities are in relation to the representative monitoring wells, so the public cannot see whether the representative monitoring wells will capture impacts on disadvantaged communities. The GSP also does not identify what the baseline contaminant levels are for each well.

Additionally, all wells in the GSP monitoring network are to be tested only as frequently as they are normally tested in the program for which they were built; for example, ESJWQC and GWTM data will only be procured annually at most.<sup>111</sup> This will not allow the GSAs to detect groundwater quality impacts in time to protect drinking water from groundwater management activities, and may prevent the minimum threshold from being triggered for two years despite the presence of severe water quality issues.

The groundwater quality monitoring network for this GSP is therefore inadequate. At a minimum, an adequate groundwater quality monitoring network must include the following elements, which are not present here:

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<sup>108</sup> 23 CCR § 354.38(e)(3)

<sup>109</sup> 23 CCR § 354.34(c)(4)

<sup>110</sup> Merced Groundwater Subbasin GSP pg. 4-18, dated November 2019.

<sup>111</sup> Merced Groundwater Subbasin GSP pg. 4-27, dated November 2019.

1. **Ensure that the GSP plans to measure the following contaminants at all representative monitoring wells:**<sup>112</sup>
  - a. Contaminants of concern with primary drinking water standards
  - b. PFOs/PFOAs and chrome-6, which are contaminants known to be very harmful to human health
  - c. Contaminants like uranium, arsenic and nitrate which are known to increase due to groundwater management practices
2. **Clearly describe how the GSAs will monitor for drinking water impacts:** Ensure that the GSP includes a description of how the GSA(s) will monitor groundwater contamination that could affect drinking water in the GSA area. Ensure that the representative monitoring wells (RMWs) for groundwater quality are presented on maps and in tables, and that the maps of RMWs clearly identify the locations of DACs, small water systems and other sensitive users.
3. **Ensure accurate detection of impacts on drinking water users and DACs:**<sup>113</sup> Ensure that the groundwater level monitoring network includes *representative* monitoring wells *in or near DACs*, and placed in a way that detects impacts to the *vast majority* of drinking water users in the GSP area. If new monitoring wells are required, ensure that the GSP contains a concrete plan to fund and construct new representative monitoring wells within the first year of GSP implementation to ensure that vulnerable communities' drinking water resources are monitored. The plan to improve the monitoring network should include testing of domestic wells in the interim as wells are constructed.
  - a. The GSP states that the GSAs plan to install more monitoring wells near El Nido. The same should be done in or near the DACs of Planada and Le Grand to detect groundwater quality and supply impacts to those communities. The GSAs should also add the monitoring well proposed to be installed in El Nido, and all other monitoring wells near DACs, to the representative monitoring well network by ensuring that it meets the requirements of being a representative monitoring well.
  - b. The GSAs should include all MAGPI wells in the representative monitoring network in order to include DACs such as Planada and Winton, so that those wells can measure compliance with goals for groundwater quality and quantity.
4. **Identify baseline contaminant levels:** Ensure that the GSP identifies the current contaminant levels, minimum thresholds and measurable objectives at each RMW, so that it is clear to the public how the contamination could change at each RMW site.
5. **Frequent testing:** Ensure that the groundwater quality monitoring network tests for contaminants of concern frequently, in a way that avoids persistent drinking water contamination. Testing should be done monthly.

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<sup>112</sup> 23 CCR § 354.34(b)(2) and (f)(3)

<sup>113</sup> 23 CCR § 354.34(b)(2) and (f)(3)

6. **Collaboration with other agencies:**<sup>114</sup> Ensure that the GSP explains how the GSA(s) will share data with and collaborate with other groundwater quality regulatory programs, such as ILRP, IRWM, and CV SALTS, and nonregulatory programs such as SB 200, the SWRCB’s needs assessment and the GAMA program, in order to build better regional understanding of groundwater quality issues and better respond to groundwater quality impacts caused by groundwater management.

### **I. Projects and Management Actions Are Inadequate**

The GSAs must consider the interests of all beneficial users including domestic well owners and disadvantaged communities<sup>115</sup> and avoid disparate impacts on protected groups.<sup>116</sup> The GSP must also concretely outline how each objective and the overall sustainability goal will be achieved.<sup>117</sup> The projects and management actions set forth in the GSP do not demonstrate a path towards achieving sustainability goals in the plan, and do not adequately account for the needs of disadvantaged communities pertaining to protected groups under state law. This undermines the likelihood that the basin will reach its sustainability goal by 2040, as required by SGMA.<sup>118</sup>

#### **a. The Projects and Management Actions are Inadequate, Do Not Protect Drinking Water for Disadvantaged Communities, and Will Likely Cause Disparate Impacts.**

The projects and management actions set forth in the GSP does not demonstrate a path towards achieving sustainability goals in the plan, as significant management actions will not be fully implemented until five years before the GSAs must achieve their sustainability goals. The GSAs have not demonstrated how they have considered the interests of beneficial users including domestic well owners and disadvantaged communities.<sup>119</sup> The resulting impact from the proposed sustainable management criteria will likely lead to disparate impacts on protected groups pursuant to state and federal law.<sup>120</sup>

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<sup>114</sup> 23 CCR § 354.34(e)

<sup>115</sup> Water Code § 10723.2.

<sup>116</sup> Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l).

<sup>117</sup> Water Code § 10727.2(b)(2).

<sup>118</sup> Water Code § 10727.2(b)(1).

<sup>119</sup> Water Code sec. 10723.2.

<sup>120</sup> 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

The GSAs selected two main management actions to achieve sustainability: an initial groundwater allocation framework and groundwater demand reduction. These two actions will be pivotal to reaching basin wide sustainability by 2040. However, the GSP does not set a clear timeline for implementation of an allocation framework. The GSP states that the GSAs will only implement the demand reduction strategy “as needed,” that demand reduction does not begin until 2025, and will not be fully implemented until 2035. The GSAs will not achieve their sustainability goals if water use is not limited through both an allocation framework (established within one year of GSP adoption) and a fully implemented demand reduction requirements immediately. The GSAs’ chosen management actions undermine the likelihood that the basin will reach its sustainability goal by 2040, as required by SGMA.<sup>121</sup>

Despite the fact that 1,100 drinking water wells may go dry at the GSP’s groundwater levels minimum thresholds, and drinking water contamination is likely to occur from changing pumping patterns, the GSA does not have a plan for preventing or mitigating these impacts.

Furthermore, the GSA’s description of projects does not include a description of any potential negative impacts on beneficial uses of water, such as groundwater contamination, and how such impacts will be mitigated and monitored.

Although it is not in the Projects and Management Actions section of the GSP, in the “Establishing Metering Program” section the GSA states that on advisement from the stakeholders and coordination committees, the GSA should take a “flexible approach” to metering.<sup>122</sup> This statement is concerning given that many GSAs are considering approaches to measuring groundwater extraction that are estimates based on extrapolated data. Without accurate metering across the basin, the GSAs will not have an accurate view of how much water is entering and exiting the aquifer, and therefore will not be able to reach their sustainability goal by 2040.

Also in the Plan Implementation chapter, the Merced subbasin GSAs briefly discuss mitigation for possible future domestic well dewatering.<sup>123</sup> The GSP must include a concrete mitigation and well protection program, particularly given the 1,100 drinking water wells that it will likely allow to dewater if minimum thresholds are reached. Additionally, the GSP will not be monitoring for any drinking water contaminants, which will likely lead to contamination of drinking water wells. Given these impacts, and the lack of a program to mitigate or prevent

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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].

<sup>121</sup> Water Code § 10727.2(b)(1).

<sup>122</sup> Merced Groundwater Subbasin GSP pg. 7-10, dated November 2019.

<sup>123</sup> Merced Groundwater Subbasin GSP pg. 7-11, dated November 2019.

these impacts, the GSP will likely cause disparate impacts, and has not considered all beneficial users in determining what “significant and unreasonable” impacts it will allow.

### **b. Minimum Requirements for Projects and Management Actions**

The projects and management actions for this GSP are inadequate. At a minimum, adequate projects and management actions must include the following elements, which are not present here:

1. **Include a Drinking Water Well Impact Mitigation Program:** Ensure that the GSP contains a drinking water protection program to prevent impacts to drinking water users and mitigate the drinking water impacts that occur. Please reference the Framework for a Drinking Water Well Impact Mitigation Program that our organization developed with the Community Water Center and Self-Help Enterprises for more details, a draft of which is attached as part of the Human Right to Water Scorecard in Exhibit B.
2. **Establish a clear and proactive plan for demand reduction.** Demand reduction should be implemented immediately.
3. **Describe the potential drinking water impacts of each project or management action.**
4. **Include management actions to measure groundwater extraction using the most scientifically accurate method.** From our conversations with scholars, it is clear that metering is the most accurate way of measuring groundwater extraction. Metering should be required for all users, particularly large agricultural pumpers.
5. **Ensure that the GSP’s projects and management actions will not cause a disparate impact:**<sup>124</sup> Ensure that the GSP’s projects and management actions, taken as a whole, prevent a disproportionately negative impact on communities of color in the GSP area. Projects and management actions may not cause, or fail to prevent, disproportionately more dry wells and contaminated water for residents of color than for white residents in the GSP area.

### **J. Plan Implementation Section is Inadequate**

GSPs must include a planning and implementation horizon<sup>125</sup> and must show how the sustainability goal will be achieved by 2040.<sup>126</sup> GSP implementation must continue to consider the interests of all beneficial user groups and engage a diversity of stakeholders. The GSP’s plan implementation section is insufficient in regards to public engagement/outreach and does not

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<sup>124</sup> Gov. Code § 11135; Gov. Code § 65008; Government Code §§ 12955, subd. (l).

<sup>125</sup> Water Code § 10727.2.(c)

<sup>126</sup> Water Code § 10727.2(b)(1).

contain adequate information regarding annual reporting or the potential to make amendments to the GSP. Absent this information, DWR cannot evaluate when and whether the plan is likely to achieve sustainable groundwater management, so DWR cannot approve the plan.<sup>127</sup>

We have several concerns regarding plan implementation, specifically concerns over public outreach and the potential to make amendments to the GSP.

First, in the public outreach section for plan implementation, the GSA did not include translation services for DACs in which the predominant language is not English. The Merced basin is home to a large Latino population, many of whose first language is Spanish.<sup>128</sup> In order to be able to include all beneficial users in the GSP implementation process, material needs to be made available in the appropriate language. Additionally, GSA should not rely on email as the primary mode of relaying information and conducting outreach since many of the most vulnerable drinking water users may not have access to internet services.

It is unclear if reconsidering elements of the GSP is only possible at the 5-year update or if reconsiderations can be proposed and made at any other time. Through its GSP, the GSA must establish processes by which it will seek and incorporate feedback from the public on an ongoing basis through direct outreach to disadvantaged communities and public workshops that are held at convenient locations and times and accessible in multiple languages. The GSAs should include representatives on the boards of GSAs, in the Merced SGMA Coordination Committee, and should include more representatives from DACs in the Merced SGMA Stakeholder Committee so that their voices can be as strong as other beneficial user groups. Additionally, proposed reconsiderations must be publicly noticed and circulated for public review and comment prior to final adoption.

The plan implementation section for this GSP is therefore inadequate. At a minimum, an adequate plan implementation section must include the following elements, which are not present here:

1. **Description of DAC engagement:** Ensure that the GSP describes how ongoing engagement will be conducted during GSP implementation, including but not limited to engagement regarding: decisions about projects, management actions, modifying sustainable management criteria, changes to monitoring networks, and conducting GSP updates.
2. **Notice:**<sup>129</sup> Ensure that the GSP states that ongoing engagement will include clear notices about GSA meetings and workshops that are posted in ways that all stakeholders were

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<sup>127</sup> Water Code § 10733(a); 23 CCR 355.4(b).

<sup>128</sup> United States Census Bureau. "QuickFacts, Merced County, California" census.gov. 16 Aug. 2019. Web <https://www.census.gov/quickfacts/mercedcountycalifornia#qf-headnote-b>.

<sup>129</sup> Government Code § 54954(a).

made aware of the meetings, and translated into all languages spoken by at least 5 percent of the public served by the agency, who do not speak English or are unable to effectively communicate in English.<sup>130</sup>

3. **Translation of materials:**<sup>131</sup> Ensure that the GSP states that ongoing engagement will include translation of materials into all languages spoken by at least 5 percent of the public served by the agency, who do not speak English or are unable to effectively communicate in English.
4. **Interpretation:**<sup>132</sup> Ensure that the GSP states that ongoing engagement will include interpretation services provided at board meetings, committee meetings and workshops into all languages spoken by at least 5 percent of the public served by the agency, who do not speak English or are unable to effectively communicate in English.
5. **Accessible workshops:** Ensure that the GSP states that ongoing engagement will include workshops held at accessible times and locations for disadvantaged community residents.
6. **DAC representation on advisory committee and board:** Ensure that the GSP states that ongoing engagement will include advisory committees and Boards containing representatives from DACs. The GSAs should include representatives on the boards of GSAs, in the Merced SGMA Coordination Committee, and should include more representatives from DACs in the Merced SGMA Stakeholder Committee so that their voices can be as strong as other beneficial user groups.
7. **Partnership with local community based organizations:** Ensure that the GSP states that ongoing engagement will include partnership between GSAs and community based organizations and nonprofits.
8. **Engagement on key decisions:** Ensure that the GSP states that ongoing engagement will include strategies to keep the public informed and engaged during and prior to critical decisions about the GSP, including but not limited to the five year GSP review, modification of sustainable management criteria, design and adoption of any projects and management actions, and development and adoption of the programs to assist with impaired wells.
9. **Engagement on financial issues:** Ensure that the GSP states that it will conduct outreach to DACs before approving operating budgets and enacting groundwater fees.

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<sup>130</sup> Government Code sec. 7296.2.

<sup>131</sup> Government Code sec. 7296.2.

<sup>132</sup> Government Code sec. 7296.2.

## **K. The GSP Does Not Comply With California Water Law.**

### **a. The GSP Conflicts With Water Code § 106.3.**

As noted above, 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.

It is often incorrectly stated that this section is not binding. This is a misnomer for several reasons. First, § 106.3(b) expressly states in that “[a]ll relevant state agencies, including the department, 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 DWR and the SWRCB.

Moreover, there is nothing in § 106.3 that indicates that either a GSA or a state agency may take an action that conflicts with the human right of all Californians to access safe and affordable drinking water. Rather, the section and its requirements are subject to only three narrow exceptions. First, subsection (c) states that “[t]his section does not expand any obligation of the state to provide water or to require the expenditure of additional resources to develop water infrastructure beyond the obligations that may exist pursuant to subdivision (b).” This exception applies only to the “state,” and does not apply to GSAs. Further, it speaks only to the obligation to provide water or to require development of water infrastructure, not to any obligation to manage groundwater resources in a way that protects existing access to drinking water.

Second, subsection (d) states that “[t]his section shall not apply to water supplies for new development.” It is silent regarding water supplies for existing households.

Third, subsection (e) states that “[T]he implementation of this section shall not infringe on the rights or responsibilities of any public water system.” As a GSA is not a public water system, this exception is not relevant here.

Given that none of the three exceptions contained in § 106.3 apply to the development and implementation of GSPs, they must be consistent with the Human Right to Water, and

separately, DWR must consider the human right on review of GSPs. Because the GSP at issue here conflicts with § 106.3 by interfering with access to safe and affordable drinking water, DWR cannot approve it.

### **b. The GSP Threatens to Infringe Upon Water Rights**

In enacting SGMA, the legislature found and declared that “[f]ailure to manage groundwater to prevent long-term overdraft infringes on groundwater rights.”<sup>133</sup> The text of SGMA further notes that “[n]othing 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.”<sup>134</sup> As discussed in detail above, the GSP allows continued overdraft above the safe yield of the basin, such that drinking water wells (especially domestic wells) will continue to go dry, infringing upon the rights of overlying users of groundwater. DWR cannot approve the GSP until it is revised to protect the rights of residents of disadvantaged communities and/or low-income households who hold overlying rights.<sup>135</sup>

### **c. The GSP Conflicts with the Reasonable And Beneficial Use Doctrine**

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.”<sup>136</sup> The doctrine applies to all water users, regardless of basis of water right, and all water rights and methods of diversion.<sup>137</sup> A determination of reasonableness of a use “cannot be resolved in vacuo isolated from statewide considerations of transcendent importance.”<sup>138</sup>

DWR and the Water Board must ensure that GSPs’ water allocations are consistent with the reasonable and beneficial use doctrine.<sup>139</sup> In doing so, DWR and the Board must follow the

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<sup>133</sup> AB 1739 (2014).

<sup>134</sup> Water Code § 10720.5(b).

<sup>135</sup> See also Water Code § 10723.2 [The groundwater sustainability agency shall consider the interests of all beneficial uses and users of groundwater... [including] Domestic well owners.”].

<sup>136</sup> 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.”].

<sup>137</sup> *Peabody v. Vallejo* (1935) 2 Cal.2d 351, 367, 372; *Light v. State Water Resources Control Board*, (2014) 226 Cal. App. 4th 1463, 1479.

<sup>138</sup> *Joslin v. Marin Municipal Water Dist.* (1967) 67 Cal.2d 132, 140.

<sup>139</sup> Water Code § 275 [“The department and board shall take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water in this state”]; *Light*, 226 Cal.App.4th at 1482-83 [same].

Legislature’s directive to prioritize domestic use of water resources over irrigated agriculture<sup>140</sup> and ensure that SGMA implementation furthers the human right to safe and affordable drinking water<sup>141</sup> — both statewide considerations of transcendent importance. In other words, a GSP that allows use of water for irrigation at the expense of use of water for domestic purposes is not consistent with the reasonable and beneficial use doctrine.

The reasonable and beneficial use doctrine applies here given the negative impacts of the GSP on groundwater supply and quality, which are likely to unreasonably interfere with the use of groundwater for drinking water and other domestic uses. As the GSP authorizes waste and unreasonable use, and indeed does not even analyze the reasonable and beneficial use doctrine at all, it conflicts with the reasonable and beneficial use doctrine and the California Constitution. As a result, DWR cannot approve the GSP as presently drafted.

#### **d. The GSP Conflicts with the Public Trust Doctrine**

The public trust doctrine applies to the waters of the State, and establishes that “the state, as trustee, has a duty to preserve this trust property from harmful diversions by water rights holders” and that thus “no one has a vested right to use water in a manner harmful to the state’s waters.”<sup>142</sup>

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.<sup>143</sup> 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.<sup>144</sup> Under *ELF*, the Public Trust doctrine imposes an affirmative and independent obligation to consider the public trust that applies to DWR’s decisions regarding submitted GSPs, imposing a legal duty on DWR to not only consider the potential adverse impacts of groundwater extractions on navigable waterways but also “to

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<sup>140</sup> Water Code § 106 [“It is hereby declared to be the established policy of this State that the use of water for domestic purposes is the highest use of water and that the next highest use is for irrigation”]; *United States v. State Water Resources Control Board* (1986) 182 Cal.App.3d 82, 103 .

<sup>141</sup> Water Code § 106.3.

<sup>142</sup> *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.”].

<sup>143</sup> *Environmental Law Foundation v. State Water Resources Control Bd.* (2018) 26 Cal.App.5th 844, 844.

<sup>144</sup> *Id.* at 856-62.

protect public trust uses whenever feasible.”<sup>145</sup> The court also specifically held that SGMA does not supplant the requirements of the common law public trust doctrine.<sup>146</sup>

Notably, the public trust doctrine applies to both currently navigable surface water bodies and surface water bodies that were historically navigable at the time of statehood.<sup>147</sup> Further, certain rivers like the San Joaquin River have been declared navigable in statute.<sup>148</sup>

In contrast to these requirements, the GSP does not consider impacts on public trust resources, or attempt to avoid insofar as feasible harm to the public’s interest in those resources. DWR cannot approve the GSP without evaluating impacts to public trust resources and protecting public trust uses whenever feasible. Specifically, DWR must (1) identify any public trust resources within the basin; (2) identify any public trust uses within the basin; (3) identify and analyzing potential adverse impacts of groundwater extractions on public trust resources and uses; and (4) determine the feasibility of protecting public trust uses and protect such uses whenever feasible.

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DWR cannot approve the GSP because it fails to protect access to drinking water. We welcome the opportunity to discuss our concerns with the Department of Water Resources and the State Water Resources Control Board. Furthermore, we urge DWR to review this and all other GSPs according to the Human Right to Water Scorecard, as we have done in this letter.¹⁴⁹ We hope to successfully work with GSAs, communities, DWR and the SWRCB to ensure that groundwater management is equitable and sufficiently protective of vital drinking water resources. Going forward, we ask DWR to ensure that GSPs currently being developed adhere to the standards in the Human Right to Water Scorecard, and that these standards are followed during GSP implementation.

Sincerely,

Amanda Monaco, Nataly Escobedo Garcia and Madeline Harris

¹⁴⁵ *Id.* at 865.

¹⁴⁶ *Id.* at 862-870.

¹⁴⁷ See *San Francisco Baykeeper, Inc. v. State Lands Com.* (2015) 242 Cal.App.4th 202, 232 citing *Western Oil & Gas Asso. v. State Lands Com.* (1980) 105 Cal.App.3d 554, 562 [“When California became a state in 1850 it succeeded to sovereign ownership of various tidelands and submerged lands under the terms of common law trust doctrine... .”]; *PPL Montana, LLC v. Montana* (2012) 565 U.S. 576, 592 [“For state title under the equal-footing doctrine, navigability is determined at the time of statehood...and based on the ‘natural and ordinary condition’ of the water.”] [internal citation omitted].

¹⁴⁸ Harb. & Nav. Code s. 105 [affirmatively declaring the San Joaquin River to be navigable “between its mouth and Sycamore Point.”].

¹⁴⁹ Attached as Exhibit B.

Leadership Counsel for Justice and Accountability