



CALIFORNIA DEPARTMENT OF WATER RESOURCES

SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE

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January 21, 2022

Blaine Reely
Groundwater Sustainability Director
County Government Center, Room 206
San Luis Obispo, CA 93408
breely@co.slo.ca.us

RE: "Incomplete" Determination of the 2020 Paso Robles Area Subbasin Groundwater Sustainability Plan

Dear Blaine Reely,

The Department of Water Resources (Department) has evaluated the groundwater sustainability plan (GSP) submitted for the Paso Robles Area Subbasin (Subbasin) and has determined that the GSP is "Incomplete". The Department based its determination on recommendations from the Staff Report, included as an enclosure to the attached Statement of Findings, which describes that the Paso Robles Area Subbasin GSP does not satisfy the objectives of the Sustainable Groundwater Management Act (SGMA) nor substantially comply with the GSP Regulations. The Staff Report also provides corrective actions which the Department recommends to address the identified deficiencies.

The Subbasin's Groundwater Sustainability Agencies (GSAs) have 180 days, the maximum allowed by GSP Regulations, to address the identified deficiencies. Where addressing the deficiencies requires modification of the GSP, the GSAs must adopt those modifications into the Subbasin's GSP or otherwise demonstrate that those modifications are part of the GSP before resubmitting it to the Department for evaluation no later than July 20, 2022. The Department understands that much work has occurred to advance sustainable groundwater management since the GSAs submitted the GSP in January 2020. To the extent to which those efforts are related or responsive to the Department's identified deficiencies, we encourage you to document that as part of your resubmittal. The Department prepared a [Frequently Asked Questions](#) document to provide general information and guidance on the process of addressing deficiencies in an "Incomplete" Determination.

Department staff will work expeditiously to review the revised components of your GSP resubmittal. If the revisions address the identified deficiencies, the Department will determine that the GSP is "Approved". In that scenario, Department staff will identify additional recommended corrective actions that the GSAs should address early in implementing their GSP (i.e., no later than the first required periodic evaluation). Among other items, those recommendations will include for the GSAs to provide more detail on their plans and schedules to address data gaps. Those recommendations will also call for significantly expanded documentation of the plans and schedules to implement specific projects and management actions. Regardless of those recommended corrective actions, the Department expects the first periodic evaluations, required no later than January 2025 – one-quarter of the way through the

20-year implementation period – to document significant progress toward achieving sustainable groundwater management.

If the GSAs cannot address the deficiencies identified in this letter by July 20, 2022, then the Department, after consultation with the State Water Resources Control Board, will determine the GSP to be “Inadequate”. In that scenario, the State Water Resources Control Board may identify additional deficiencies that the GSAs would need to address in the state intervention processes outlined in SGMA.

Please contact Sustainable Groundwater Management staff by emailing sgmps@water.ca.gov if you have any questions about the Department’s assessment, implementation of your GSP, or to arrange a meeting with the Department.

Thank You,

Paul Gosselin

Paul Gosselin
Deputy Director of Sustainable Groundwater Management

Attachment:

1. Statement of Findings Regarding the Determination of Incomplete Status of the Salinas Valley - Paso Robles Area Subbasin Groundwater Sustainability Plan

**STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES**

**STATEMENT OF FINDINGS REGARDING THE
DETERMINATION OF INCOMPLETE STATUS OF THE
SALINAS VALLEY - PASO ROBLES AREA SUBBASIN
GROUNDWATER SUSTAINABILITY PLAN**

The Department of Water Resources (Department) is required to evaluate whether a submitted groundwater sustainability plan (GSP or Plan) conforms to specific requirements of the Sustainable Groundwater Management Act (SGMA or Act), is likely to achieve the sustainability goal for the basin covered by the Plan, and whether the Plan adversely affects the ability of an adjacent basin to implement its GSP or impedes achievement of sustainability goals in an adjacent basin. (Water Code § 10733.) The Department is directed to issue an assessment of the Plan within two years of its submission. (Water Code § 10733.4.) This Statement of Findings explains the Department's decision regarding the Plan submitted jointly by the City of Paso Robles Groundwater Sustainability Agency (GSA), the Paso Basin - County of San Luis Obispo GSA, the San Miguel Community Services District GSA, and the Shandon - San Juan GSA (collectively, the GSAs or Agencies) for the Salinas Valley - Paso Robles Area Subbasin (No. 3-004.06).

Department management has reviewed the enclosed Staff Report, which recommends that the identified deficiencies should preclude approval of the GSP. Based on its review of the Staff Report, Department management is satisfied that staff have conducted a thorough evaluation and assessment of the Plan and concurs with, and hereby adopts, staff's recommendation and all the corrective actions provided. The Department thus deems the Plan incomplete based on the Staff Report and the findings contained herein.

- A. The GSP has not defined sustainable management criteria in the manner required by SGMA and the GSP Regulations.
 1. The GSP lacks justification for, and effects associated with, the sustainable management criteria for groundwater levels, particularly the minimum thresholds and undesirable results, and the effects of those criteria on the interests of beneficial uses and users of groundwater.
 - i. The GSP does not explain how it considered and addressed potential impacts of dewatering of domestic wells in the context of the undesirable result of significant and unreasonable depletion of supply associated with the chronic lowering of groundwater levels. Furthermore, the GSP does not describe how the GSAs determined that significant and unreasonable depletion of supply will be

Statement of Findings

Salinas Valley - Paso Robles Area Subbasin (Basin No. 3-004.06)

avoided by managing to the established criteria for chronic lowering of groundwater levels.

- ii. The GSP does not provide supporting information for how it determined that the selected minimum thresholds are consistent with avoiding undesirable results. Without supporting information and specific details regarding how that information was considered by the GSAs, Department staff cannot evaluate whether the criteria are reasonable or whether operating the Subbasin to avoid those thresholds is consistent with avoiding undesirable results.

B. The GSAs do not sufficiently demonstrate that interconnected surface water or undesirable results related to depletions of interconnected surface water are not present and are not likely to occur in the Subbasin because the determination of non-applicability of the sustainability indicator is not supported with best available science.

1. The GSP does not develop sustainable management criteria for the depletion of interconnected surface water citing insufficient data to determine whether surface water and groundwater are interconnected in the Subbasin. However, the GSP includes data and information that indicate historical, current, and future groundwater discharge to streams and rivers in the Subbasin. This information and science included in the GSP represents, at this time, the best available to the GSAs, even if the available data may be imperfect or the analysis incomplete. Therefore, Department staff believe there is sufficient data to indicate the potential of interconnected surface water in the Subbasin that warrants and requires setting initial sustainable management criteria that may be reevaluated and potentially modified as new data become available. Absent a clear demonstration that depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of surface water are not present and are not likely to occur in the Subbasin, the GSAs must develop sustainable management criteria for as required by the GSP Regulations.

Statement of Findings

Salinas Valley - Paso Robles Area Subbasin (Basin No. 3-004.06)

Based on the above, the GSP submitted by the Agencies for the Salinas Valley - Paso Robles Area Subbasin is determined to be incomplete because the GSP does not satisfy the requirements of SGMA, nor does it substantially comply with the GSP Regulations. The corrective actions provided in the Staff Report are intended to address the deficiencies that, at this time, preclude approval. The Agencies have up to 180 days to address the deficiencies outlined above and detailed in the Staff Report. Once the Agencies resubmit their Plan, the Department will review the revised GSP to evaluate whether the deficiencies were adequately addressed. Should the Agencies fail to take sufficient actions to correct the deficiencies identified by the Department in this assessment, the Department shall disapprove the Plan if, after consultation with the State Water Resources Control Board, the Department determines the Plan inadequate pursuant to 23 CCR § 355.2(e)(3)(C).

Signed:



Karla Nemeth, Director

Date: January 21, 2022

Enclosure: Groundwater Sustainability Plan Assessment Staff Report – Salinas Valley - Paso Robles Area Subbasin

State of California
Department of Water Resources
Sustainable Groundwater Management Program
Groundwater Sustainability Plan Assessment Staff Report

Groundwater Basin Name: Salinas Valley - Paso Robles Area Subbasin (No. 3-004.06)
Submitting Agencies: City of Paso Robles Groundwater Sustainability Agency;
Paso Basin - County of San Luis Obispo Groundwater Sustainability Agency; San Miguel Community Services District Groundwater Sustainability Agency; Shandon - San Juan Groundwater Sustainability Agency
Recommendation: Incomplete
Date: January 21, 2022

The Sustainable Groundwater Management Act (SGMA)¹ allows for any of the three following planning scenarios: a single groundwater sustainability plan (GSP) developed and implemented by a single groundwater sustainability agency (GSA); a single GSP developed and implemented by multiple GSAs; and multiple GSPs implemented by multiple GSAs and coordinated pursuant to a single coordination agreement.² Here, as presented in this staff report, a single GSP covering the entire basin was adopted and submitted to the Department of Water Resources (Department) for review.³

The City of Paso Robles GSA, the Paso Basin - County of San Luis Obispo GSA, the San Miguel Community Services District GSA, and the Shandon - San Juan GSA jointly submitted the Salinas Valley Groundwater Basin Paso Robles Area Subbasin Groundwater Sustainability Plan (Paso Robles GSP or Plan) to the Department for evaluation and assessment as required by SGMA and the GSP Regulations.⁴ The Plan covers the entire Paso Robles Area Subbasin (Subbasin) for the implementation of SGMA.

Evaluation and assessment by the Department is based on whether an adopted and submitted GSP, either individually or in coordination with other adopted and submitted GSPs, complies with SGMA and substantially complies with the GSP Regulations. Department staff base their assessment on information submitted as part of an adopted GSP, public comments submitted to the Department, and other materials, data, and reports that are relevant to conducting a thorough assessment. Department staff have evaluated the Paso Robles GSP and have identified deficiencies that staff recommend

¹ Water Code § 10720 *et seq.*

² Water Code § 10727.

³ Water Code §§ 10727(b)(1), 10733.4; 23 CCR § 355.2.

⁴ 23 CCR § 350 *et seq.*

should preclude its approval.⁵ In addition, consistent with the GSP Regulations, Department staff have provided corrective actions⁶ that the GSAs should review while determining how and whether to address the deficiencies. The deficiencies and corrective actions are explained in greater detail in Section 3 of this staff report and are generally related to the need to define sustainable management criteria in the manner required by SGMA and the GSP Regulations and the development of sustainable management criteria for depletions of interconnected surface water.

This assessment includes four sections:

- **Section 1 – Evaluation Criteria:** Describes the legislative requirements and the Department’s evaluation criteria.
- **Section 2 – Required Conditions:** Describes the submission requirements, GSP completeness, and basin coverage requirements for a GSP to be evaluated by the Department.
- **Section 3 – Plan Evaluation:** Provides a detailed assessment of deficiencies identified in the GSP which may be capable of being corrected by the GSAs. Consistent with the GSP Regulations, Department staff have provided corrective actions for the GSAs to address the deficiencies.
- **Section 4 – Staff Recommendation:** Provides the recommendation of Department staff regarding the Department’s determination.

⁵ 23 CCR §355.2(e)(2).

⁶ 23 CCR §355.2(e)(2)(B).

1 EVALUATION CRITERIA

The Department evaluates whether a GSP conforms to the statutory requirements of SGMA⁷ and is likely to achieve the basin's sustainability goal.⁸ To achieve the sustainability goal, the GSP must demonstrate that implementation of its groundwater sustainability program will lead to sustainable groundwater management, which means the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.⁹ Undesirable results are required to be defined quantitatively by the GSAs overlying a basin and occur when significant and unreasonable effects for any of the applicable sustainability indicators are caused by groundwater conditions occurring throughout the basin.¹⁰ The Department is also required to evaluate whether the GSP will adversely affect the ability of an adjacent basin to implement its groundwater sustainability program or achieve its sustainability goal.¹¹

To evaluate a GSP, the Department must first determine a GSP was submitted by the statutory deadline¹², is complete,¹³ and covers the entire basin.¹⁴ For those GSAs choosing to develop multiple GSPs, the GSPs must be coordinated pursuant to a single coordination agreement that covers the entire basin.¹⁵ If these conditions are satisfied, the Department evaluates the GSP to determine whether it complies with SGMA and substantially complies with the GSP Regulations.¹⁶ As stated in the GSP Regulations, “[s]ubstantial compliance means that the supporting information is sufficiently detailed and the analyses sufficiently thorough and reasonable, in the judgment of the Department, to evaluate the Plan, and the Department determines that any discrepancy would not materially affect the ability of the Agency to achieve the sustainability goal for the basin, or the ability of the Department to evaluate the likelihood of the Plan to attain that goal.”¹⁷

When evaluating whether implementation of the GSP is likely to achieve the sustainability goal for the basin, Department staff review the information provided and relied upon in the GSP for sufficiency, credibility, and consistency with scientific and engineering professional standards of practice.¹⁸ The Department's review considers whether there is a reasonable relationship between the information provided by the GSA and the

⁷ Water Code §§ 10727.2, 10727.4.

⁸ Water Code §§ 10733(a).

⁹ Water Code § 10721(v).

¹⁰ 23 CCR § 354.26 *et seq.*

¹¹ Water Code § 10733(c).

¹² Water Code § 10720.7; 23 CCR § 355.4(a)(1).

¹³ 23 CCR §§ 355.4(a)(2).

¹⁴ 23 CCR § 355.4(a)(3).

¹⁵ Water Code §§ 10727(b)(3), 10727.6; 23 CCR § 357.4.

¹⁶ 23 CCR § 350 *et seq.*

¹⁷ 23 CCR § 355.4(b).

¹⁸ 23 CCR § 351(h).

assumptions and conclusions presented in the GSP, including whether the interests of the beneficial uses and users of groundwater in the basin have been considered; whether sustainable management criteria and projects and management actions described in the GSP are commensurate with the level of understanding of the basin setting; and whether those projects and management actions are feasible and likely to prevent undesirable results.¹⁹ The Department also considers whether the GSA has the legal authority and financial resources necessary to implement the GSP.²⁰

To the extent that overdraft is present in a basin, the Department evaluates whether the GSP provides a reasonable assessment of the overdraft and includes reasonable means to mitigate it.²¹ When applicable, the Department will assess whether coordination agreements have been adopted by all relevant parties and satisfy the requirements of SGMA and the GSP Regulations.²² The Department also considers whether the GSP provides reasonable measures and schedules to eliminate identified data gaps.²³ Lastly, the Department's review considers the comments submitted on the GSP and evaluates whether the GSA adequately responded to the comments that raise credible technical or policy issues with the GSP.²⁴

The Department is required to evaluate the GSP within two years of its submittal date and issue a written assessment.²⁵ The assessment is required to include a determination of the GSP's status.²⁶ The GSP Regulations provide three options for determining the status of a GSP: approved,²⁷ incomplete,²⁸ or inadequate.²⁹

After review of the GSP, Department staff may find that the information provided is not sufficiently detailed, or the analyses not sufficiently thorough and reasonable, to evaluate whether the GSP is likely to achieve the sustainability goal for the basin. If the Department determines the deficiencies precluding approval may be capable of being corrected by the GSA in a timely manner,³⁰ the Department will determine the status of the GSP to be incomplete. A formerly deemed incomplete GSP may be resubmitted to the Department for reevaluation after all deficiencies have been addressed by the GSA within 180 days after the Department makes its incomplete determination. The Department will review the revised GSP to evaluate whether the identified deficiencies were sufficiently addressed. Depending on the outcome of that evaluation, the Department may determine the resubmitted GSP is approved. Alternatively, the Department may find a formerly deemed

¹⁹ 23 CCR §§ 355.4(b)(1), (3), (4) and (5).

²⁰ 23 CCR § 355.4(b)(9).

²¹ 23 CCR § 355.4(b)(6).

²² 23 CCR § 355.4(b)(8).

²³ 23 CCR § 355.4(b)(2).

²⁴ 23 CCR § 355.4(b)(10).

²⁵ Water Code § 10733.4(d); 23 CCR § 355.2(e).

²⁶ Water Code § 10733.4(d); 23 CCR § 355.2(e).

²⁷ 23 CCR § 355.2(e)(1).

²⁸ 23 CCR § 355.2(e)(2).

²⁹ 23 CCR § 355.2(e)(3).

³⁰ 23 CCR § 355.2 (e)(2)(B)(i).

incomplete GSP is inadequate if, after consultation with the State Water Resources Control Board, it determines that the GSA has not taken sufficient actions to correct any identified deficiencies.³¹

Even when the Department determines a GSP is approved, indicating that it satisfies the requirements of SGMA and is in substantial compliance with the GSP Regulations, the Department may still recommend corrective actions.³² Recommended corrective actions are intended to facilitate progress in achieving the sustainability goal within the basin and the Department's future evaluations, and to allow the Department to better evaluate whether implementation of the GSP adversely affects adjacent basins. While the issues addressed by the recommended corrective actions in an approved GSP do not, at the time the determination was made, preclude its approval, the Department recommends that the issues be addressed to ensure the GSP's implementation continues to be consistent with SGMA and the Department is able to assess progress in achieving the basin's sustainability goal.³³ Unless otherwise noted, the Department proposes that recommended corrective actions be addressed by the submission date for the first five-year assessment.³⁴

The staff assessment of the GSP involves the review of information presented by the GSA, including models and assumptions, and an evaluation of that information based on scientific reasonableness. In conducting its assessment, the Department does not recalculate or reevaluate technical information provided in the GSP or perform its own geologic or engineering analysis of that information. The recommendation to approve a GSP does not signify that Department staff, were they to exercise the professional judgment required to develop a GSP for the basin, would make the same assumptions and interpretations as those contained in the GSP, but simply that Department staff have determined that the assumptions and interpretations relied upon by the submitting GSA are supported by adequate, credible evidence, and are scientifically reasonable.

Lastly, the Department's review of an approved GSP is a continual process. Both SGMA and the GSP Regulations provide the Department with the ongoing authority and duty to review the implementation of the GSP.³⁵ Also, GSAs have an ongoing duty to reassess their GSPs, provide annual reports to the Department and, when necessary, update or amend their GSPs.³⁶ The passage of time or new information may make what is reasonable and feasible at the time of this review to not be so in the future. The emphasis of the Department's periodic reviews will be to assess the progress toward achieving the sustainability goal for the basin and whether GSP implementation adversely affects the ability of adjacent basins to achieve its sustainability goals.

³¹ 23 CCR § 355.2 (e)(3)(C).

³² Water Code § 10733.4(d).

³³ Water Code § 10733.8.

³⁴ 23 CCR § 356.4.

³⁵ Water Code § 10733.8; 23 CCR § 355.6 *et seq.*

³⁶ Water Code §§ 10728 *et seq.*, 10728.2.

2 REQUIRED CONDITIONS

A GSP, to be evaluated by the Department, must be submitted within the applicable statutory deadline.³⁷ The GSP must also be complete and must, either on its own or in coordination with other GSPs, cover the entire basin. If a GSP is determined to be incomplete, Department staff may require corrective actions that address minor or potentially significant deficiencies identified in the GSP. The GSAs in a basin, whether developing a single GSP covering the basin or multiple GSPs, must sufficiently address those required corrective actions within the time provided, not to exceed 180 days, for the GSP to be reevaluated by the Department and potentially approved.

2.1 SUBMISSION DEADLINE

SGMA required basins categorized as high- or medium-priority as of January 1, 2017 and that were subject to critical conditions of overdraft to submit a GSP no later than January 31, 2020.³⁸

The GSAs submitted the Paso Robles GSP on January 30, 2020, in compliance with the statutory deadline.

2.2 COMPLETENESS

GSP Regulations specify that the Department shall evaluate a GSP if that GSP is complete and includes the information required by SGMA and the GSP Regulations.³⁹

The GSAs submitted an adopted GSP for the entire Subbasin. Department staff found the Paso Robles GSP to be complete and include the required information, sufficient to warrant an evaluation by the Department. The Department posted the GSP to its website on January 31, 2020.

2.3 BASIN COVERAGE

A GSP, either on its own or in coordination with other GSPs, must cover the entire basin.⁴⁰ A GSP that intends to cover the entire basin may be presumed to do so if the basin is fully contained within the jurisdictional boundaries of the submitting GSAs.

The Paso Robles GSP intends to manage the entire Paso Robles Area Subbasin and the jurisdictional boundaries of the submitting GSAs cover the Subbasin.

³⁷ Water Code § 10720.7.

³⁸ Water Code § 10720.7(a)(1).

³⁹ 23 CCR § 355.4(a)(2).

⁴⁰ Water Code § 10727(b); 23 CCR § 355.4(a)(3).

3 PLAN EVALUATION

As stated in Section 355.4 of the GSP Regulations, a basin “shall be sustainably managed within 20 years of the applicable statutory deadline consistent with the objectives of the Act.” The Department’s assessment is based on a number of related factors including whether the elements of a GSP were developed in the manner required by the GSP Regulations, whether the GSP was developed using appropriate data and methodologies and whether its conclusions are scientifically reasonable, and whether the GSP, through the implementation of clearly defined and technically feasible projects and management actions, is likely to achieve a tenable sustainability goal for the basin.

Department staff have identified deficiencies in the GSP, the most serious of which preclude staff from recommending approval of the GSP at this time. Department staff believe the GSAs may be able to correct the identified deficiencies within 180 days. Consistent with the GSP Regulations, Department staff are providing corrective actions related to the deficiencies, detailed below, including the general regulatory background, the specific deficiency identified in the GSP, and the specific actions to address the deficiency.

3.1 DEFICIENCY 1. THE GSP LACKS JUSTIFICATION FOR, AND EFFECTS ASSOCIATED WITH, THE SUSTAINABLE MANAGEMENT CRITERIA FOR GROUNDWATER LEVELS.

3.1.1 Background

SGMA defines sustainable groundwater management as the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.⁴¹ The avoidance of undesirable results is thus explicitly part of sustainable groundwater management, as established by SGMA, and critical to the success of a GSP. To achieve sustainable groundwater management under SGMA, the basin must experience no undesirable results by the end of the 20-year GSP implementation period and be able to demonstrate an ability to maintain sustainable conditions over the 50-year planning and implementation horizon.

The definition of undesirable results is critical to the establishment of an objective method to define and measure sustainability for a basin. As an initial matter, SGMA provides a qualitative definition of undesirable results as “one or more” of six specific “effects caused by groundwater conditions occurring throughout the basin.”⁴² SGMA identifies the effects related to chronic lowering of groundwater levels as those “...indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon.”

⁴¹ Water Code § 10721(v).

⁴² Water Code § 10721(x).

It is up to GSAs to define, in their GSPs, the specific significant and unreasonable effects that would constitute undesirable results and to define the groundwater conditions that would produce those results in their basins.⁴³ The GSA's definition needs to include a description of the processes and criteria relied upon to define undesirable results and must describe the effect of undesirable results on the beneficial uses and users of groundwater. From this definition, the GSA establishes minimum thresholds, which are quantitative values that represent groundwater conditions at representative monitoring sites that, when exceeded individually or in combination with minimum thresholds at other monitoring sites, may cause the basin to experience undesirable results.⁴⁴ Put another way, the minimum thresholds represent conditions that, if not exceeded, should prevent the basin from experiencing the undesirable results identified by the GSA.

SGMA leaves the task of establishing undesirable results and setting thresholds largely to the discretion of the GSA, subject to review by the Department. In its review, the Department requires a thorough and reasonable analysis of the groundwater conditions the GSA is trying to avoid, and the GSA's stated rationale for setting objective and quantitative sustainable management criteria to prevent those conditions from occurring. If a Plan does not meet this requirement, the Department is unable to evaluate the likelihood of the Plan in achieving its sustainability goal. This does not necessarily mean that the GSP or its objectives are inherently unreasonable; however, it is unclear which conditions the GSA seeks to avoid, making it difficult for the Department to monitor whether the GSA will be successful in that effort when implementing its GSP.

3.1.2 Deficiency Details

Based on its evaluation, Department staff are concerned that although the Paso Robles GSP appears to realistically quantify the water budget and identify the extent of overdraft in the Subbasin, and while the Plan proposes projects and management actions that appear likely to eventually eliminate overdraft in the Subbasin, it has not defined sustainable management criteria in the manner required by SGMA and the GSP Regulations.

1. Regarding the GSA's description of the criteria relied upon to define undesirable results⁴⁵ and the potential effects of undesirable results on beneficial uses and users of groundwater, on land uses and property interests, and other potential effects:⁴⁶ The Paso Robles GSP states that an undesirable result for chronic lowering of groundwater levels is one that significantly and unreasonably impacts the ability of existing domestic wells of average depth to produce adequate water for domestic purposes, causes significant financial burden to those who rely on the groundwater basin, or interferes with other SGMA sustainability indicators.⁴⁷

⁴³ 23 CCR § 354.26.

⁴⁴ 23 CCR § 354.28, DWR Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT), November 2017.

⁴⁵ 23 CCR § 354.26(a).

⁴⁶ 23 CCR § 354.26(b)(3).

⁴⁷ Paso Robles GSP, Section 8.4.2, p. 222.

However, the Plan does not explain why those effects were selected or how the GSAs determined that they will be avoided by managing to the established criteria for chronic lowering of groundwater levels. As written, the Paso Robles GSP implies that some unspecified level of impacts to domestic wells of average depth would be acceptable and provides no detail of expected impacts to domestic wells of less-than-average depth or to other groundwater users in the Subbasin.

2. Regarding the Plan's definition of minimum thresholds:⁴⁸ The Paso Robles GSP provides insufficient detail for how it determined that the selected minimum thresholds (which are set to 30-feet below observed conditions in 2017⁴⁹ for all representative monitoring sites) are consistent with avoiding the undesirable results stated above. The Plan states that "[s]pecific conditions such as well depths at each [representative monitoring site] were considered when establishing the groundwater level for the initial minimum threshold."⁵⁰ However, no supporting information was provided and, in the absence of specific details regarding how that information was considered (e.g., the GSA's best estimate of the location and number of impacted domestic wells), the Department cannot evaluate whether the criteria are reasonable or whether operating the Subbasin to avoid those thresholds is consistent with avoiding undesirable results. The Department's expectation that impacts to domestic wells, a key component of the Plan's stated undesirable result for chronic lowering of groundwater levels, would be evaluated in the Plan is reasonable as other GSAs and interested parties in California have evaluated the effects of sustainable management criteria on well infrastructure using best available information.

3.1.3 Corrective Actions

The GSAs must provide more detailed explanation and justification regarding the selection of the sustainable management criteria for groundwater levels, particularly the undesirable results and minimum thresholds, and the effects of those criteria on the interests of beneficial uses and users of groundwater. Department staff recommend the GSAs consider and address the following:

1. The GSAs should describe the specific undesirable results they aim to avoid through implementing the Plan. If, for example, significant and unreasonable impacts to domestic wells of average depth are a primary management concern for the Subbasin, then the GSAs should sufficiently explain why that effect was selected and what they consider to be a significant and unreasonable level of impact for those average wells. In support of its explanation, the Paso Robles GSP should also clearly discuss and disclose the anticipated impact of operating the Subbasin at conditions protective against those effects on users of domestic wells with less-than-average depth and all other beneficial uses and users of

⁴⁸ 23 CCR §§ 354.28(b)(1), 354.28(b)(2), 354.28(b)(4), 354.28(c)(1).

⁴⁹ Paso Robles GSP, ES-7, p. 35.

⁵⁰ Paso Robles GSP, Section 8.4.4, p. 224.

groundwater in the Subbasin. The discussion should be supported using best available information such as using State or county information on well completion reports to analyze the locations and quantities of domestic wells and other types of well infrastructure that could be impacted by groundwater management when implementing the Plan.

2. The GSAs should either explain how the existing minimum threshold groundwater levels are consistent with avoiding undesirable results or they should establish minimum thresholds at the representative monitoring wells that account for the specific undesirable results the GSAs aim to avoid.

Information from DWR's Household Water Supply Shortage Reporting System⁵¹ indicates some domestic groundwater wells in the Subbasin have reported impacts from lowering of groundwater levels. If, after considering the deficiency described above, the GSAs retain minimum thresholds that allow for continued lowering of groundwater levels, then it is reasonable to assume that additional wells may be impacted during implementation of the Plan. While SGMA does not require all impacts to groundwater uses and users be mitigated, the GSAs should consider including mitigation strategies describing how drinking water impacts that may occur due to continued overdraft during the period between the start of Plan implementation and achievement of the Subbasin's sustainability goal will be addressed. If mitigation strategies are not included, the Paso Robles GSP should contain a thorough discussion, with supporting facts and rationale, explaining how and why the GSAs determined not to include specific actions or programs to monitor and mitigate drinking water impacts from continued groundwater lowering below 2015 levels.

Information is available to the GSAs to support their explanation and justification for the criteria established in their Plan. For example, the Department's well completion report dataset,⁵² or other similar data, can be used to estimate the number and kinds of wells expected to be impacted at the proposed minimum thresholds. Additionally, public water system well locations and water quality data can currently be obtained using the State Water Board's Geotracker website.⁵³ Administrative contact information for public water systems, and well locations and contacts for state small water systems and domestic wells, can be obtained by contacting the State Water Board's Needs Analysis staff. The State Water Board is currently developing a database to allow for more streamlined access to this data in the future.

⁵¹ Department of Water Resources, *California Household Water Shortage Data* [website], <https://mydrywatersupply.water.ca.gov/report/publicpage>, (accessed 21 May 2021).

⁵² Department of Water Resources, *Well Completion Reports* [website], <https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Completion-Reports>, (accessed 21 May 2021).

⁵³ State Water Resources Control Board, *GeoTracker* [website], <https://geotracker.waterboards.ca.gov/>, (accessed 21 May 2021).

Based on the above information and other local information, and by the first periodic update, the GSAs should continue to better define the location of active wells in the Subbasin. The GSAs should document known impacts to drinking water users caused by groundwater management, should they occur, in annual reports and subsequent periodic updates.

3.2 DEFICIENCY 2. THE GSP DOES NOT DEVELOP SUSTAINABLE MANAGEMENT CRITERIA FOR THE DEPLETIONS OF INTERCONNECTED SURFACE WATER BASED ON BEST AVAILABLE INFORMATION AND SCIENCE.

3.2.1 Background

SGMA identifies six effects of groundwater conditions occurring throughout the basin that GSAs must evaluate to achieve sustainable groundwater management. The GSP Regulations refer to these effects as sustainability indicators and they are chronic lowering of groundwater levels, reduction of groundwater storage, seawater intrusion, degraded water quality, land subsidence, and depletions of interconnected surface water.⁵⁴ Generally, when any of these effects are significant and unreasonable, as defined in SGMA, they are referred to as undesirable results.⁵⁵ SGMA requires GSAs to sustainably manage groundwater, which is defined as avoiding undesirable results for any sustainability indicator during the planning and implementation horizon.⁵⁶ Specifically, for each applicable indicator a GSA must develop sustainable management criteria, describe the process used to develop those criteria, and establish a monitoring network to adequately monitor conditions.⁵⁷

A GSA that is able to demonstrate one or more sustainability indicators are not present and are not likely to occur in the basin is not required to develop sustainable management criteria for those indicators.⁵⁸ Absent an explanation of why a sustainability indicator is not applicable, the Department assumes all sustainability indicators apply.⁵⁹ Demonstration of applicability (or non-applicability) of sustainability indicators must be supported by best available information and science and should be provided in descriptions throughout the Plan (e.g. information describing basin setting, discussion of the interests of beneficial users and uses of groundwater).

The Department's assessment of a Plan's likelihood to achieve its sustainability goal for its basin is based, in part, on whether it provides sufficiently detailed and reasonable supporting information and analysis for all applicable indicators. The GSP Regulations

⁵⁴ 23 CCR § 351(ah).

⁵⁵ Water Code § 10721(x).

⁵⁶ Water Code §§ 10721(v), 10721(r).

⁵⁷ 23 CCR §§ 354.22, 354.32.

⁵⁸ 23 CCR §§ 354.22, 354.26(d), 354.28(e).

⁵⁹ DWR Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT), November 2017.

require the Department to evaluate whether establishment of sustainable management criteria is commensurate with the level of understanding of the basin setting.⁶⁰

The GSP Regulations require a Plan to identify interconnected surface water systems in the basin and evaluate the quantity and timing of depletions of those systems using the best available information.⁶¹ As noted above, absent a demonstration of the inapplicability of the depletion of interconnected surface water sustainability indicator, GSAs in basins with interconnected surface waters must develop sustainable management criteria for those depletions as described in the GSP Regulations.

3.2.2 Deficiency Details

Department staff conclude, based on conflicting information contained in the Paso Robles GSP, that the GSAs do not sufficiently demonstrate that interconnected surface water or undesirable results related to depletions of interconnected surface water are not present and are not likely to occur in the Subbasin. Therefore, in the absence of a clear demonstration, the GSAs must develop initial sustainable management criteria for depletions of interconnected surface water as required by the GSP Regulations.⁶²

The Plan states the surface water flows in the Subbasin over the period of record are “[e]phemeral” and “[t]here are no available data that establish whether or not the groundwater and surface water are connected through a continuous saturated zone” when describing current and historical groundwater conditions.⁶³ Citing such “insufficient data to determine whether surface water and groundwater are interconnected,” the GSAs accordingly do not develop sustainable management criteria.⁶⁴ The GSAs state “[d]efinitive data delineating any connections between surface water and groundwater or a lack of interconnected surface waters is a data gap” and provide a general schedule for surface and groundwater investigations in areas of potential interconnectivity planned over the next four years, with a \$400,000 budget.⁶⁵

However, descriptions for the hydrogeological conceptual model and water budgets provided in the Paso Robles GSP appear to clearly indicate that interconnectivity between groundwater and surface water exists. For example, the Plan states “[n]atural groundwater discharge areas within the Plan area include ... groundwater discharge to surface water bodies.”⁶⁶ Additionally, groundwater model results from a study conducted by Fugro West Inc. in the Subbasin, which is a primary source for material in the Plan describing the hydrogeologic conceptual model, “indicate that stream discharge accounted for 9,700 AFY [acre-feet per year] of outflow over the 17-year base period

⁶⁰ 23 CCR § 355.4(b)(3).

⁶¹ 23 CCR §§ 354.28(c)(6)(A), 354.28(c)(6)(B).

⁶² 23 CCR §§ 354.22, 354.26(d), 354.28(e).

⁶³ Paso Robles GSP, Section 5.5, p. 144.

⁶⁴ Paso Robles GSP, Section 8.9, p. 255-256.

⁶⁵ Paso Robles GSP, Section 5.5 and Figure 10-1, p. 144 and 309.

⁶⁶ Paso Robles GSP, Section 4.7.2, p. 113.

[from 1981 to 1997]”.⁶⁷ These discharge areas have not been mapped to date; however, the Plan presents groundwater model results identifying potential areas where groundwater discharge to streams is at least 10 acre-feet per year – these areas occur primarily on the Salinas River and Estrella River that overlay the Alluvial Aquifer.⁶⁸ Moreover, water budgets developed using the model specifically quantify groundwater discharge to rivers and streams from the Alluvial Aquifer.⁶⁹ For instance, during the historical period (from 1981 to 2011) rates of groundwater discharge to streams are estimated to be 7,300 acre-feet per year. Overlapping some areas of potential groundwater discharge are areas of potential groundwater dependent ecosystems (GDEs) that are yet to be verified.⁷⁰ The availability of such data in the Plan (i.e. hydrogeological studies and water budgets), therefore, seems to contradict the statement that there is “no available data...”. Department staff believe the groundwater model results and available historical information can serve as the basis to develop initial sustainable management criteria (as defined by the Paso Robles GSP and discussed below). Consequently, Department staff find that the sustainable management criteria currently presented in the Plan (i.e., not defining and establishing criteria) is not commensurate with the level of understanding of the basin setting.

The method for developing sustainable management criteria, as described in the Paso Robles GSP, involved setting initial minimum thresholds and measurable objectives by “[c]ombining survey results, outreach efforts, and hydrogeologic data.”⁷¹ A review of the referenced survey indicates 21 percent of respondents (mostly users of domestic wells, agricultural wells, municipal water supply, and community water supply) report being negatively impacted by reduced stream flows.⁷² Furthermore, respondents believe the health of the Salinas River (which drains the Subbasin and overlays the Alluvial Aquifer) is negatively impacted by groundwater pumping to a higher degree than direct diversions and limited releases.⁷³ Additionally, the Plan caveats the sustainable management criteria developed for other applicable indicators by stating that “[d]ue to uncertainty in the hydrogeologic conceptual model, these Sustainable Management Criteria are considered initial criteria and will be reevaluated and potentially modified in the future as new data become available.”⁷⁴ Nevertheless, despite survey results indicating impacts to beneficial users, available hydrogeologic data (as discussed above), and a declaration that the Plan’s initial sustainable management criteria for other applicable indicators is based on

⁶⁷ Fugro West, Inc., ETIC Engineering, Inc., Cleath and Associates, Paso Robles Groundwater Basin Study Phase II-Numerical Model Development, Calibration and Application, February 2005.

⁶⁸ Paso Robles GSP, Figure 4-17, p. 114.

⁶⁹ Paso Robles GSP, Tables 6-1, 6-4, 6-6, 6-9, 6-11, and 6-13, p. 162, 166, 172, 176, 185, and 187. The same information is summarized in the Executive Summary, Table ES-1, p. 31.

⁷⁰ Paso Robles GSP, Figure 4-18 and Appendix C, p. 115 and 406.

⁷¹ Paso Robles GSP, Section 8.3, p. 221.

⁷² Paso Robles GSP, Appendix G, p. 553.

⁷³ Paso Robles GSP, Appendix G, p. 563, p. 564 and 565.

⁷⁴ Paso Robles GSP, Section 8, p. 216.

known uncertainty, the GSAs do not develop sustainable management criteria for depletions of interconnected surface water.

The GSAs have provided, throughout the Paso Robles GSP, data and information that indicate historical, current, and future groundwater discharge to streams and rivers in the Subbasin; therefore, Department staff disagree with the statement that there is “no available data...” Department staff understand that uncertainty may exist in understanding the basin setting and recognize efforts by the GSAs to fill data gaps by planning to conduct investigations and expand the monitoring network.⁷⁵ The information and science included in the Plan related to interconnected surface water represents, at this time, the best available to the GSAs even if the available data may be imperfect or the analysis incomplete. Therefore, Department staff believe there is sufficient data to indicate the potential of interconnected surface water in the Subbasin that warrants and requires setting initial sustainable management criteria that may be reevaluated and potentially modified as new data become available. Not developing criteria limits the ability of Department staff to assess whether the Subbasin is being, or will be, sustainability managed within 20 years.

3.2.3 Corrective Action

The GSAs must provide more detailed information, as required in the GSP Regulations, regarding interconnected surface waters and depletions associated with groundwater use. Department staff recommend the GSAs consider and address the following:

1. Clarify and address the currently conflicting information in the Paso Robles GSP regarding what is known, qualified by the level of associated uncertainty, about the existence of interconnected surface water and, if applicable, the depletion of that interconnected surface water by groundwater use, including quantities, timing, and locations.⁷⁶
2. If the GSAs cannot provide a sufficient, evidence-based justification for the absence of interconnected surface water, then they should develop sustainable management criteria, as required in the GSP Regulations,⁷⁷ based on best available information and science. Evaluate and disclose, sufficiently and thoroughly, the potential effects of the Plan’s sustainable management criteria for depletion of interconnected surface water on beneficial uses of the interconnected surface water and on groundwater uses and users.

⁷⁵ Paso Robles GSP, Section 10, p. 309.

⁷⁶ 23 CCR §§ 354.28(c)(6)(A), 354.28(c)(6)(B).

⁷⁷ 23 CCR §§ 354.26, 354.28, 354.30.

4 STAFF RECOMMENDATION

Department staff believe that the deficiencies identified in this assessment should preclude approval of the GSP for the Paso Robles Area Subbasin. Department staff recommend that the Paso Robles GSP be determined incomplete.