Paso Basin Cooperative Committee
Notice of Regular Meeting

AGENDA
July 26, 2023

NOTICE IS HEREBY GIVEN that the Paso Basin Cooperative Committee will hold a Regular Meeting at **4:00 p.m.** on **Wednesday, July 26, 2023,** at the Paso Robles Council Chambers, 1000 Spring Street, Paso Robles, CA 93446.

Zoom Link: https://us06web.zoom.us/j/83359446962?pwd=bGJFK3pXYitOQ0hWdk5mZTBXWDFoZz09
Meeting ID: 833 5944 6962
Passcode: 068456
Call-in: +16694449171,,83359446962#,,,,*068456#

NOTE: The Paso Basin Cooperative Committee (PBCC) reserves the right to limit each speaker to three (3) minutes per subject or topic. In compliance with the Americans with Disabilities Act, all possible accommodations will be made for individuals with disabilities, so they may participate in the meeting. Persons who require accommodation for any audio, visual or other disability in order to participate in the meeting of the PBCC are encouraged to request such accommodation 48 hours in advance of the meeting from Taylor Blakslee at (661) 477-3385.

Members	**Alternates**
Matt Turrentine, Chair, Shandon-San Juan WD	Ray Shady, Shandon-San Juan WD
Kelly Dodd, Vice Chair, San Miguel CSD	Dustin Pittman, San Miguel CSD
John Hamon, Secretary, City of Paso Robles	Steve Martin, City of Paso Robles
Bruce Gibson, Treasurer, County of SLO	Blaine Reely, County of SLO
Dana Merrill, Estrella El-Pomar Creston WD	Hilary Graves, Estrella El-Pomar Creston WD

1. Call to Order **(Turrentine)** **(1 min)**
2. Pledge of Allegiance **(Turrentine)** **(1 min)**
3. Roll Call **(Blakslee)** **(1 min)**
4. Meeting Protocols **(Blakslee)** **(2 min)**
5. Welcome of the Estrella-El Pomar-Creston Water District GSA to the PBCC **(Turrentine)** **(15 min)** – *Verbal*
6. Public Comment – Items not on Agenda **(Turrentine)** **(3 min/speaker)**
7. Response to Previous Public Comments **(Reely)** **(5 min)** – *Nothing to Report*

REPORT ITEMS

8. Report on Final DWR GSP Approval Letter and Recommended Corrective Actions **(Reely)** **(15 min)**
9. Notice of No Award for the $8.89M Department of Conservation MILR Grant **(Reely)** **(2 min)**
10. Report on SGMA GSP Round 1 Grant Implementation **(Reely)** **(5 min)**
11. Report on Technical Advisory Committees **(Blakslee)** **(15 min)**
    a. Expanded Monitoring Network
    b. Blended Water Supply
    c. MILR
12. Report on 2025 Groundwater Sustainability Plan Evaluation **(Reely)** **(5 min)** – *Verbal*

ACTION ITEMS

13. Approval of April 26, 2023, Meeting Minutes **(Turrentine)** **(10 min)**
14. Develop Responses to the June 23, 2023 Grand Jury Report Items R1-R5 and R9 and Submit to the Court by September 21, 2023 **(Reely)** **(60 min)**

15. Direct Staff to Issue an RFP for the Paso Robles Groundwater Basin Blended Water Supply Project Water Supply Feasibility and Engineering Study **(Reely)** **(10 min)**
16. Direct Staff to Prepare an RFP to Conduct a Rate Study to Provide Funding for the Implementation of the Blended Water Supply Project and the Multi-benefit Irrigated Land Repurposing Program **(Reely)** **(10 min)** – *Verbal*
17. Update from Member GSAs **(10 min)** – *Verbal*
    a. City of Paso Robles
    b. County of San Luis Obispo
    c. Estrella-El Pomar-Creston Water District
    d. San Miguel Community Services District
    e. Shandon-San Juan Water District
18. Upcoming meeting(s) **(Blakslee)** **(2 min)**
    a. Next Regular PBCC Meetings – October 25th
19. Future Items **(2 min)**
20. Correspondence **(2 min)**
21. Adjourn **(7:03 p.m.)**

PASO BASIN COOPERATIVE COMMITTEE
July 26, 2023

Agenda Item #8 – Report on Final DWR GSP Approval Letter and Recommended Corrective Actions

Recommendation
None; information only.

Prepared By
Blaine Reely, County of San Luis Obispo Groundwater Sustainability Director

Discussion
On March 2, 2023, the California Department of Water Resources (DWR) issued a letter indicating recommended approval of the Paso Basin Groundwater Sustainability Plan (GSP). On June 20, 2023, DWR issued a final approved determination for the Paso Basin GSP based on recommendations from their accompanying staff report (provided as Attachment 1).

The DWR staff report proposes additional corrective actions and "strongly encourages the recommended corrective actions be given due consideration and suggests incorporating all resulting changes to the GSP in future updates." The recommended correction actions generally focus on:

1. Elaborating on the definition of undesirable results;
2. Re-evaluating the well impact analysis and filling related data gaps;
3. Considering mitigation strategies;
4. Further explaining connections with the Alluvial Aquifer, Estrella River, and San Juan Creek;
5. Continuing to fill data gaps, collect additional monitoring data, and coordinate with agencies and interested parties to understand beneficial uses and users that may be impacted by depletions of interconnected surface water caused by groundwater pumping;
6. Explaining the monitoring network for interconnected surface water;
7. Refining sustainable management criteria to include the Alluvial Aquifer; and
8. Reconciling Monitoring Network Module and the GSP monitoring network.

* * *

CALIFORNIA DEPARTMENT OF WATER RESOURCES
SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE
715 P Street, 8th Floor | Sacramento, CA 95814 | P.O. Box 942836 | Sacramento, CA 94236-0001

June 20, 2023

Blaine Reely
County of San Luis Obispo GSA - San Luis Obispo Valley
1055 Monterey Street, Suite D430
San Luis Obispo, CA 93408
805-781-4206
breely@co.slo.ca.us

RE: Approved Determination of the Revised Groundwater Sustainability Plan Submitted for the Salinas Valley – Paso Robles Area Subbasin

Dear Blaine Reely,

The Department of Water Resources (Department) has evaluated the revised groundwater sustainability plan (GSP) for the Salinas Valley - Paso Robles Area Subbasin in response to the Department's incomplete determination on January 21, 2022 and has determined the GSP is approved. The approval is based on recommendations from the Staff Report, included as an exhibit to the attached Statement of Findings, which describes that the Paso Robles Area Subbasin GSP has taken sufficient action to correct deficiencies identified by the department and satisfies the objectives of the Sustainable Groundwater Management Act (SGMA) and substantially complies with the GSP Regulations. The Staff Report also proposes recommended corrective actions that the Department believes will enhance the GSP and facilitate future evaluation by the Department. The Department strongly encourages the recommended corrective actions be given due consideration and suggests incorporating all resulting changes to the GSP in future updates.

Recognizing SGMA sets a long-term horizon for groundwater sustainability agencies (GSAs) to achieve their basin sustainability goals, monitoring progress is fundamental for successful implementation. GSAs are required to evaluate their GSPs at least every five years and whenever the Plan is amended, and to provide a written assessment to the Department. Accordingly, the Department will evaluate approved GSPs and issue an assessment at least every five years. The Department will initiate the first periodic review of the Paso Robles Area Subbasin GSP no later than January 30, 2025.

Please contact Sustainable Groundwater Management staff by emailing sgmps@water.ca.gov if you have any questions related to the Department's assessment or implementation of your GSP.

Thank You,

Paul Gosselin

Paul Gosselin
Deputy Director
Sustainable Groundwater Management

Attachment:

1. Statement of Findings Regarding the Determination of Approval of the Salinas Valley - Paso Robles Area Subbasin Groundwater Sustainability Plan (June 20, 2023)

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

STATEMENT OF FINDINGS REGARDING THE APPROVAL 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.) If a Plan is determined to be Incomplete, the Department identifies deficiencies that preclude approval of the Plan and identifies corrective actions required to make the Plan compliant with SGMA and the GSP Regulations. The GSA has up to 180 days from the date the Department issues its assessment to make the necessary corrections and submit a revised Plan. (23 CCR § 355.2(e)(2)). This Statement of Findings explains the Department's decision regarding the revised June 2022 Plan submitted by the 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 (GSA(s) or Agencies) for the Salinas Valley – Paso Robles Area Subbasin (Basin No. 3-004.06).

Department management has discussed the Plan with staff and has reviewed the Department Staff Report, entitled Sustainable Groundwater Management Program Groundwater Sustainability Plan Assessment Staff Report, attached as Exhibit A, recommending approval of the GSP. Department management is satisfied that staff have conducted a thorough evaluation and assessment of the Plan and concurs with staff's recommendation and all the recommended corrective actions. The Department therefore **APPROVES** the Plan and makes the following findings:

A. The initial Plan for the basin submitted by the GSA for the Department's evaluation satisfied the required conditions as outlined in § 355.4(a) of the GSP Regulations (23 CCR § 350 et seq.), and Department Staff therefore evaluated the initial Plan.

B. On January 21, 2022, the Department issued a Staff Report and Statement of Findings determining the initial GSP submitted by the Agencies for the basin to be incomplete, because the GSP did not satisfy the requirements of SGMA, nor did it substantially comply with the GSP Regulations. At that time,

the Department provided corrective actions in the Staff Report that were intended to address the deficiencies that precluded approval. Consistent with the GSP Regulations, the Department provided the Agencies with up to 180 days to address the deficiencies detailed in the Staff Report. On July 19, 2022, within 180 days of the Staff Report related to the Department's initial incomplete determination, the Agencies submitted a revised 2022 GSP to the Department for evaluation. When evaluating a revised GSP that was initially determined to be incomplete, the Department reviews the materials (e.g., revised or amended GSP) that were submitted within the 180-day deadline and does not review or rely on materials that were submitted to the Department by the GSA after the resubmission deadline. Part of the Department's review, focuses on how the Agency has addressed the previously identified deficiencies that precluded approval of the initially submitted Plan. The Department shall find a Plan previously determined to be incomplete to be inadequate if, after consultation with the State Water Resources Control Board, the Department determines that the Agency has not taken sufficient actions to correct the deficiencies previously identified by the Department. (23 CCR § 355.2(e)(3)(C).) The Department shall approve a Plan previously found to be incomplete if the Department determines the Agency has sufficiently addressed the deficiencies that precluded approval. The Department may evaluate other components of the Plan, particularly to assess whether revisions to address deficiencies may have affected other components of a Plan or its likelihood of achieving sustainable groundwater management and may offer recommended corrective actions to deal with any issues of concern.

C. The Department's Staff Report, dated January 21, 2022, identified the deficiencies that precluded approval of the initially submitted Plan. After thorough evaluation of the revised Plan, the Department makes the following findings regarding the sufficiency of the actions taken by the Agencies to correct those deficiencies:

    1. Deficiency 1: The corrective action advised the Agencies to address several aspects of the Plan's disclosure, discussion, and analyses of groundwater level sustainable management criteria and potential impacts to groundwater users and uses. The initially submitted GSP did not provide detailed information explaining or justifying groundwater level sustainable management criteria, specifically undesirable results and minimum thresholds and the impacts of these on beneficial uses and users of groundwater.

        The 2023 Staff Report associated with the revised 2022 Plan indicates that the Agencies have taken sufficient actions to correct this deficiency such that, at this time, although the Staff Report

includes recommended corrective actions to further align this aspect of the Plan with the GSP Regulations, the Department finds Plan approval is not precluded, and further finds that the Agencies have the ability to achieve the sustainability goal for the basin on SGMA timelines, and that the Department will be able to periodically monitor and evaluate the likelihood of Plan implementation to achieve sustainability.

Deficiency 2: The corrective action advised the Agencies to address several aspects of the Plan's disclosure, discussion, and analyses of interconnected surface water sustainable management criteria and potential impacts to groundwater users and uses. The initially submitted GSP did not sufficiently demonstrate that depletions of interconnected surface water were present or not likely to occur in the Subbasin. As a result, the GSP did not establish sustainable management criteria for interconnected surface water.

The 2023 Staff Report indicates that the Agencies have taken sufficient actions to correct this deficiency such that, at this time, although the Staff Report includes recommended corrective actions to further align this aspect of the Plan with the GSP Regulations, the Department finds Plan approval is not precluded, that the Agencies have the ability to achieve the sustainability goal for the basin on SGMA timelines, and that the Department will be able to periodically monitor and evaluate the likelihood of Plan implementation to achieve sustainability.

D. The Plan satisfies the relevant conditions in § 355.4(a) of the GSP Regulations (23 CCR § 350 et seq.):

1. The Plan was complete, meaning it generally appeared to include the information required by the Act and the GSP Regulations sufficient to warrant a thorough evaluation and issuance of an assessment by the Department. (23 CCR § 355.4(a)(2).)

2. The Plan, either on its own or in coordination with other Plans, appears to cover the entire Basin sufficient to warrant a thorough evaluation. (23 CCR § 355.4(a)(3).)

E. The general standards the Department applied in its evaluation and assessment of the Plan are: (1) "conformance" with the specified statutory requirements, (2) "substantial compliance" with the GSP Regulations, (3) whether the Plan is likely to achieve the sustainability goal for the Basin within 20 years of the implementation of the Plan, and (4) 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.) Application of these standards requires exercise of the Department's expertise, judgment, and discretion when making its determination of whether a Plan should be deemed "approved," "incomplete," or "inadequate."

The statutes and GSP Regulations require Plans to include and address a multitude and wide range of informational and technical components. The Department has observed a diverse array of approaches to addressing these technical and informational components being used by GSAs in different basins throughout the state. The Department does not apply a set formula or criterion that would require a particular outcome based on how a Plan addresses any one of SGMA's numerous informational and technical components. The Department finds that affording flexibility and discretion to local GSAs is consistent with the standards identified above, the state policy that sustainable groundwater management is best achieved locally through the development, implementation, and updating of local plans and programs (Water Code § 113), and the Legislature's express intent under SGMA that groundwater basins be managed through the actions of local governmental agencies to the greatest extent feasible, while minimizing state intervention to only when necessary to ensure that local agencies manage groundwater in a sustainable manner. (Water Code § 10720.1(h).) The Department's final determination of a Plan's status is made based on the entirety of the Plan's contents on a case-by-case basis, considering and weighing factors relevant to the particular Plan and Basin under review.

F. In making these findings and Plan determination, the Department also recognized that: (1) it maintains continuing oversight and jurisdiction to ensure the Plan is adequately implemented; (2) the Legislature intended SGMA to be implemented over many years; (3) SGMA provides Plans 20 years of implementation to achieve the sustainability goal in a Subbasin (with the possibility that the Department may grant GSAs an additional five years upon request if the GSA has made satisfactory progress toward sustainability); and, (4) local agencies acting as GSAs are authorized, but not required, to address undesirable results that occurred prior to enactment of SGMA. (Water Code §§ 10721(r); 10727.2(b); 10733(a); 10733.8.)

G. The Plan conforms with Water Code §§ 10727.2 and 10727.4, substantially complies with 23 CCR § 355.4, and appears likely to achieve the sustainability goal for the Subbasin.

    1. The sustainable management criteria and goal to maintain groundwater conditions at elevations that allow for reasonable operation flexibility are sufficiently justified and explained. The Plan relies on credible information and science to quantify the groundwater conditions that the Plan seeks to avoid and provides an objective way to determine whether the Subbasin

is being managed sustainably in accordance with SGMA. (23 CCR § 355.4(b)(1).)

2. The Plan demonstrates a thorough understanding of where data gaps exist and demonstrates a commitment to eliminate those data gaps. The GSP establishes a monitoring network and data collection methods to fill data gaps related to adequately characterizing groundwater levels and identifying interconnected surface water bodies. Filling these known data gaps, and others described in the Plan, should lead to the refinement of the GSAs' monitoring networks, the Subbasin's GSP model, and sustainable management criteria and help inform and guide future adaptive management strategies (23 CCR § 355.4(b)(2).)

3. The projects and management actions proposed are designed to provide new water supplies, improve groundwater monitoring, and reduce groundwater use. The projects and management actions are reasonable and commensurate with the level of understanding of the Subbasin setting. The projects and management actions described in the Plan provide a feasible approach to achieving the Subbasin's sustainability goal and should provide the GSAs with greater versatility to adapt and respond to changing conditions and future challenges during GSP implementation. (23 CCR § 355.4(b)(3).)

4. The Plan provides a detailed explanation of how the various interests of groundwater uses and users in the Subbasin were considered in developing the sustainable management criteria and how those interests, including domestic wells, would be impacted by the chosen minimum thresholds. (23 CCR § 355.4(b)(4).)

5. The Plan's projects and management actions appear feasible at this time and appear likely to prevent undesirable results and ensure that the Subbasin is operated within its sustainable yield within 20 years. The Department will continue to monitor Plan implementation and reserves the right to change its determination if projects and management actions are not implemented or appear unlikely to prevent undesirable results or achieve sustainability within SGMA timeframes. (23 CCR § 355.4(b)(5).)

6. The Plan includes a reasonable assessment of overdraft conditions and includes reasonable means to mitigate overdraft, if present. (23 CCR § 355.4(b)(6).)

7. At this time, it does not appear that the Plan will adversely affect the ability of an adjacent basin to implement its GSP or impede achievement of sustainability goals in an adjacent basin. The Plan states that GSP implementation will be coordinated with the neighboring groundwater

sustainability agencies in the Salina Valley Basin and Atascadero Subbasin. The Plan includes an analysis of potential impacts to adjacent basins related to the established minimum thresholds for each sustainability indicator. The Plan does not anticipate any impacts to adjacent basins resulting from the minimum thresholds defined in the Plan. (23 CCR § 355.4(b)(7).)

8. If required, a satisfactory coordination agreement has been adopted by all relevant parties. (23 CCR § 355.4(b)(8).)

9. The GSAs' member agencies, the City of Paso Robles, County of San Luis Obispo, San Miguel Community Services District, and the Shandon-San Juan Water District have historically taken action to address problematic groundwater conditions in the Subbasin, such as offsetting water demand by regulating land use dependent on groundwater, monitoring and managing water quality, and preventing groundwater export from the Subbasin. The GSAs' member agencies and their history of groundwater management provide a reasonable level of confidence that the GSAs has the legal authority and financial resources necessary to implement the Plan. (23 CCR § 355.4(b)(9).)

10. Through review of the Plan and consideration of public comments, the Department determines that the GSAs adequately responded to comments that raised credible technical or policy issues with the Plan, sufficient to warrant approval of the Plan at this time. The Department also notes that the recommended corrective actions included in the Staff Report are important to addressing certain technical or policy issues that were raised and, if not addressed before future, subsequent plan evaluations, may preclude approval of the Plan in those future evaluations. (23 CCR § 355.4(b)(10).)

H. In addition to the grounds listed above, DWR also finds that:

1. The Plan considers potential impacts on existing well users in establishing minimum thresholds for chronic lowering of groundwater levels that take into consideration the sustainable groundwater supply needed for the well users. Minimum thresholds were established through analyses of historical groundwater level data that allow reasonable operational flexibility while accounting for seasonal and anticipated climatic variations. The Plan's compliance with the requirements of SGMA and substantial compliance with the GSP Regulations supports the state policy regarding the human right to water (Water Code § 106.3). The Department developed its GSP Regulations consistent with and intending to further the policy through implementation of SGMA and the Regulations, primarily by achieving sustainable groundwater management in a basin. By ensuring

substantial compliance with the GSP Regulations, the Department has considered the state policy regarding the human right to water in its evaluation of the Plan. (23 CCR § 350.4(g).)

2. The Plan acknowledges and identifies interconnected surface waters within the Subbasin. The GSAs proposes initial sustainable management criteria to manage this sustainability indicator and measures to improve understanding and management of interconnected surface water. The GSAs acknowledge, and the Department agrees, data gaps related to interconnected surface water exist. The GSAs should continue filling data gaps, collecting additional monitoring data, and coordinating with resources agencies and interested parties to understand beneficial uses and users that may be impacted by depletions of interconnected surface water caused by groundwater pumping. Future updates to the Plan should aim to improve the initial sustainable management criteria as more information and improved methodology becomes available.

3. The California Environmental Quality Act (Public Resources Code § 21000 *et seq*.) does not apply to the Department's evaluation and assessment of the Plan.

Accordingly, the revised GSP submitted by the Agencies for the Salinas Valley – Paso Robles Area Subbasin is hereby **APPROVED.** The recommended corrective actions identified in the Staff Report will assist the Department's future review of the Plan's implementation for consistency with SGMA and the Department therefore recommends the Agencies address them by the time of the Department's first periodic review, which is set to begin on January 30, 2025, as required by Water Code § 10733.8. Failure to address the Department's Recommended Corrective Actions before future, subsequent plan evaluations, may lead to a Plan being determined incomplete or inadequate.

Signed:

Karla Nemeth

Karla Nemeth, Director
Date: June 20, 2023

Exhibit A: Groundwater Sustainability Plan Assessment Staff Report – Salinas Valley – Paso Robles Area Subbasin (June 20, 2023)

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
Submittal Type:	Revised Plan in Response to Incomplete Determination
Submittal Date:	July 20, 2022
Recommendation:	Approve
Date:	June 20, 2023

On July 20, 2022, 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) submitted the revised Paso Robles Area Subbasin Groundwater Sustainability Plan – June 2022 (Paso Robles GSP, GSP, or Plan) for the Salinas Valley Groundwater Basin Paso Robles Area Subbasin (Paso Robles Subbasin or Subbasin) to the Department of Water Resources (Department) in response to the Department's incomplete determination on January 21, 2022,[1] for evaluation and assessment as required by the Sustainable Groundwater Management Act (SGMA)[2] and GSP Regulations.[3] After evaluation and assessment, Department staff conclude the GSAs have taken sufficient actions to correct deficiencies identified by the Department and recommend approval of the Plan; however, Department staff have recommended additional corrective actions, which staff recommend the GSAs address by the Plan's first periodic evaluation.

Overall, Department staff believe the Plan contains the required components of a GSP, demonstrates a thorough understanding of the Subbasin based on what appears to be the best available science and information, sets well explained, supported, and reasonable sustainable management criteria to prevent undesirable results as defined in the Plan, and proposes a set of projects and management actions that, if successfully

[1] Water Code § 10733.4(b); 23 CCR § 355.4(a)(4); https://sgma.water.ca.gov/portal/gsp/assessments/35.
[2] Water Code § 10720 *et seq*.
[3] 23 CCR § 350 *et seq*.

implemented, are likely to achieve the sustainability goal defined for the Subbasin.[4] Department staff will continue to monitor and evaluate the Subbasin's progress toward achieving the sustainability goal through annual reporting, periodic evaluations of the GSP, and GSP implementation.

This assessment includes six sections:

- **Section 1 – Summary:** Provides an overview of the Department Staff's assessment and recommendations.
- **Section 2 – Evaluation Criteria:** Describes the legislative requirements and the Department's evaluation criteria.
- **Section 3 – Required Conditions:** Describes the submission requirements of a response to an incomplete determination to be evaluated by the Department.
- **Section 4 – Deficiency Evaluation:** Provides an assessment of whether and how the contents included in the GSP submittal addressed the deficiencies identified by the Department in the initial incomplete determination.
- **Section 5 – Plan Evaluation:** Provides a detailed assessment of the contents included in the GSP organized by each Subarticle outlined in the GSP Regulations.
- **Section 6 – Staff Recommendation:** Includes the staff recommendation for the Plan and any recommended corrective actions.

[4] 23 CCR § 354.24.

1 SUMMARY

Department staff conclude the GSA took sufficient action to correct the deficiencies previously identified. Accordingly, Department staff recommend **approval** of the Groundwater Sustainability Plan for the Salinas Valley – Paso Robles Area Subbasin, along with recommended corrective actions described in this Staff Report which Department staff recommend be addressed by the next periodic evaluation to further improve Plan implementation and achievement of basin sustainability in accordance with SGMA timelines.

The GSAs have identified areas for improvement of its Plan (e.g., addressing data gaps, expanding monitoring networks, refining the groundwater model, developing the structure for area specific mandatory pumping limitations). Department staff concur those items are important and recommend the GSAs address them as soon as possible. Department staff have also identified additional recommended corrective actions that the GSAs should consider for the first periodic evaluation of the Plan (see Section 6). Addressing these recommended corrective actions will be important to demonstrate, on an ongoing basis, that implementation of the Plan is likely to achieve the sustainability goal. The recommended corrective actions generally focus on the following:

(1) elaborating on the definition of undesirable results;

(2) re-evaluating the well impact analysis and filling related data gaps;

(3) considering mitigation strategies;

(4) further explaining connections with the Alluvial Aquifer, Estrella River, and San Juan Creek;

(5) continuing to fill data gaps, collect additional monitoring data, and coordinate with agencies and interested parties to understand beneficial uses and users that may be impacted by depletions of interconnected surface water caused by groundwater pumping;

(6) explaining the monitoring network for interconnected surface water;

(7) refining sustainable management criteria to include the Alluvial Aquifer; and

(8) reconciling Monitoring Network Module and the GSP monitoring network.

Addressing the recommended corrective actions identified in Section 6 of this Staff Report will be important to demonstrate, on an ongoing basis, that implementation of the Plan is likely to achieve the sustainability goal.

2 EVALUATION CRITERIA

The Department evaluates whether a Plan conforms to the statutory requirements of SGMA[5] and is likely to achieve the basin's sustainability goal,[6] whether evaluating a basin's first Plan,[7] a Plan previously determined incomplete,[8] an amended Plan,[9] or a GSA's periodic evaluation to an approved Plan.[10] To achieve the sustainability goal, each version of the Plan must demonstrate that implementation 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.[11] The Department is also required to evaluate, on an ongoing basis, whether the Plan will adversely affect the ability of an adjacent basin to implement its groundwater sustainability program or achieve its sustainability goal.[12]

The Plan evaluated in this Staff Report was previously determined to be incomplete. An incomplete Plan is one which Department staff identified one or more deficiencies that preclude its initial approval. Deficiencies may include a lack of supporting information that is sufficiently detailed or analyses that are sufficiently thorough and reasonable, or where Department staff determine it is unlikely the GSA(s) in the basin/subbasin could achieve the sustainability goal under the proposed Plan. After GSAs have been afforded up to 180 days to address the deficiencies and based on the GSAs' efforts, the Department can either approve[13] the Plan or determine the Plan inadequate.[14]

The Department's evaluation and assessment of a Plan previously determined to be incomplete, as presented in this Staff Report, continues to follow Article 6 of the GSP Regulations[15] to determine whether the Plan, with revisions or additions prepared by the GSA, complies with SGMA and substantially complies with the GSP Regulations.[16] As stated in the GSP Regulations, "substantial 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]

[5] Water Code §§ 10727.2, 10727.4, 10727.6.
[6] Water Code § 10733; 23 CCR § 354.24.
[7] Water Code § 10720.7.
[8] 23 CCR § 355.2(e)(2).
[9] 23 CCR § 355.10.
[10] 23 CCR § 355.6.
[11] Water Code § 10721(v).
[12] Water Code § 10733(c).
[13] 23 CCR §§ 355.2(e)(1).
[14] 23 CCR §§ 355.2(e)(3).
[15] 23 CCR § 355 *et seq*.
[16] 23 CCR § 350 *et seq*.
[17] 23 CCR § 355.4(b).

When reviewing a Plan that has previously been determined to be incomplete, Department staff primarily assess whether the GSA(s) have taken sufficient actions to correct any deficiencies identified by the Department.[18] A Plan approval does not signify that Department staff, were they to exercise the professional judgment required to develop a Plan for the basin, would make the same assumptions and interpretations as those contained in the revised Plan, but simply that Department staff have determined that the modified assumptions and interpretations relied upon by the submitting GSA(s) are supported by adequate, credible evidence, and are scientifically reasonable. The reassessment of a Plan previously determined to be incomplete may involve the review of new information presented by the GSA(s), including models and assumptions, and a reevaluation of that information based on scientific reasonableness. In conducting its reassessment, Department staff does not recalculate or reevaluate technical information or perform its own geologic or engineering analysis of that information.

The recommendation to approve a Plan previously determined to be incomplete is based on a determination that the GSA(s) have taken sufficient actions (e.g., amended or revised the Plan) to correct the deficiencies previously identified by the Department that precluded earlier approval.

3 REQUIRED CONDITIONS

For a Plan that the Department determined to be incomplete, the Department identifies corrective actions to address those deficiencies that preclude approval of the Plan as initially submitted. The GSAs in a basin, whether developing a single GSP covering the basin or multiple GSPs, must attempt to sufficiently address those corrective actions within the time provided, not to exceed 180 days, for the Plan to be evaluated by the Department.

3.1 INCOMPLETE RESUBMITTAL

GSP Regulations specify that the Department shall evaluate a revised GSP in which the GSAs have taken corrective actions within 180 days from the date the Department issued an incomplete determination to address deficiencies.[19]

The Department issued the incomplete determination on January 21, 2022. The GSAs submitted a revised GSP on July 19, 2022, in compliance with the 180-day deadline.

[18] 23 CCR §§ 355.2(e)(3)(C).
[19] 23 CCR § 355.4(a)(4).

4 DEFICIENCY 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.

In its initial incomplete determination, the Department identified two deficiencies in the Plan related to chronic lowering of groundwater levels and interconnected surface water, which precluded the Plan's approval in January 2022.[20] The GSAs were given 180 days to take corrective actions to remedy the identified deficiencies. Consistent with the GSP Regulations, Department staff are providing a reevaluation of the resubmitted Plan to determine if the GSAs have taken sufficient actions to correct the deficiencies.

This section describes the corrective actions recommended by the Department related to each deficiency, followed by Department staff's evaluation on the actions taken by the GSAs to address the deficiency.

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

4.1.1 Corrective Action

To address Deficiency 1—as identified in the January 21, 2022, Incomplete Determination—staff stated "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

[20] *Incomplete Determination of the 2020 Groundwater Sustainability Plans Submitted for the Salinas Valley – Paso Robles Area Subbasin*, California Department of Water Resources, January 21, 2022. https://sgma.water.ca.gov/portal/gsp/assessments/35.

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 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 System[21] 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,[22] 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.[23] 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

[21] Department of Water Resources, *California Household Water Shortage Data* [website], https://mydrywatersupply.water.ca.gov/report/publicpage, (accessed 21 May 2021).
[22] Department of Water Resources, *Well Completion Reports* [website], https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Completion-Reports, (accessed 21 May 2021).
[23] State Water Resources Control Board, *GeoTracker* [website], https://geotracker.waterboards.ca.gov/, (accessed 21 May 2021).

State Water Board is currently developing a database to allow for more streamlined access to this data in the future.

Based on the above information and other local information, and by the first periodic evaluation, 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 [evaluations]."[24]

4.1.2 Evaluation

The preceding GSP for the Paso Robles Area Subbasin, submitted in 2020 to the Department, defined "significant and unreasonable groundwater levels in the Subbasin" as those that:

1. Impact the ability of existing domestic wells of average depth to produce adequate water for domestic purposes.
2. Cause significant financial burden to those who rely on the groundwater basin.
3. Interfere with other SGMA sustainability indicators.[25]

The description was not supported with additional detail describing, for example, what is defined as "average depth" or "adequate water". Similarly in the 2020 submission of the GSP, minimum thresholds descriptions were insufficiently detailed and largely qualitative in explaining effects to beneficial users such as domestic wells. For example, in selecting minimum thresholds, the GSP had stated that the "groundwater elevation minimum thresholds for each monitoring well were set to an elevation 30 feet below the measurable objective" without sufficient detail discussing how selected thresholds are consistent with avoiding undesirable results.

To address the identified deficiency, the GSAs have supplemented portions of the Plan related to the sustainable management criteria for chronic lowering of groundwater levels. Specifically, descriptions supporting the undesirable result and minimum threshold definitions have been further detailed and/or revised, and an evaluation of existing well records (as of 2021) is incorporated to describe effects on beneficial uses and users of groundwater from management criteria.

4.1.2.1 Undesirable Results for Chronic Lowering of Groundwater Levels

In the revised Plan, the GSAs modified the 2020 GSP's definition of significant and unreasonable effects from chronic lowering of groundwater to include evaluations of all wells with known total depth information, and by no longer evaluating financial burdens[26]

[24] *Incomplete Determination of the 2020 Groundwater Sustainability Plans Submitted for the Salinas Valley – Paso Robles Area Subbasin*, California Department of Water Resources, January 21, 2022. https://sgma.water.ca.gov/portal/gsp/assessments/35.
[25] 2022 Redlined Paso Robles GSP, Table 7-4, pp. 219-222.
[26] Note: The GSP states that the issue is more appropriately addressed as part of the projects and management actions and implementation plan; staff do not see changes made to those sections of the GSP.

to establish management criteria. The Plan added specificity in defining significant and unreasonable effects from groundwater levels as:

1. A significant number (defined by GSAs as 10 percent[27]) of all wells going dry (defined as when the total depth of the well is unsaturated[28]) throughout the Subbasin
2. Chronic groundwater level declines that interfere with other SGMA sustainability indicators.

In updating the definition of significant and unreasonable effects, as required by the corrective action, the GSAs no longer use average well depth which eliminates the vague aspect of the original definition. Overall, the GSAs have sufficiently explained how significant and unreasonable impacts were identified. The analysis of management criteria effects on wells is conducted using available well construction information from the Departments Online System of Well Completion Reports, Paso Robles Subbasin Data Management System, and information from model development. While these datasets include substantial information, the Plan states there are limitations such as absence of information on pumping equipment, limited screen interval information, and potential inclusion of older (typically shallower) wells that have since been replaced or destroyed. Therefore, due to the incompleteness of available well construction information, the GSP established management criteria in terms of a well "going dry" which means the entire length to the bottom of the well is unsaturated.[29]

The Plan explains there is a range of increasingly severe conditions that may affect wells (e.g., groundwater level declines that may be resolved by lowering the pump, declines that drop below the top of the well screen, declines that leave the entire well depth unsaturated, and reduced capacity of a well causing it to not meet the intended water supply purpose). The Plan also emphasizes that a "reasonable expectation exists for well owners to construct, maintain, and operate a well to provide expected yield" and so the range of potential impacts of groundwater decline on wells includes effects that "are noticed and reasonably handled by the well owner".[30] Though not plainly stated in the revised GSP, this approach effectively shifts financial burden due to declining groundwater levels from the realm of consideration of GSAs, to the responsibility of the well owner; as evident in the updated definition of significant and unreasonable effects.

The GSP describes the specific level of impact they consider significant and unreasonable (i.e., 10 percent of all wells of all wells in the Subbasin going dry); however, the GSP does not explain how the 10 percent value was selected. As discussed below (section 4.1.2.2), minimum thresholds are established at elevations 30 feet below 2017 levels and are calculated to cause only 3.9 percent of all analyzed wells in the Subbasin

[27] Represented by wells of known location and construction information, and wells that did not already go dry prior to 2017. 2020 Redlined Paso Robles GSP, pp. 270-271.
[28] 2022 Redlined Paso Robles GSP, Section 8.4.2, p. 268.
[29] 2022 Redlined Paso Robles GSP, Section 8.4.2.1, p. 268.
[30] 2022 Redlined Paso Robles GSP, Section 8.4.2.3, pp. 269-270.

to go dry when all minimum thresholds are encountered. The GSP explains generally that the process for establishing sustainable management criteria included public input received in public surveys, public meetings, and comment forms.[31] Initial minimum thresholds were presented at public meetings where they received additional public input before being finalized. While not precluding approval, Department staff recommend the GSAs explain why 10 percent was selected in the upcoming periodic evaluation (see Recommended Corrective Action 1).

4.1.2.2 Minimum Thresholds for Chronic Lowering of Groundwater Levels

To explain how the minimum thresholds for groundwater levels are consistent with avoiding undesirable results, in the revised Plan, the GSAs have supplemented the discussion to include a well impact analysis of the originally established minimum thresholds on wells with known well construction information.

The analysis conducted to track all wells that would go dry when groundwater levels are at minimum thresholds simultaneously throughout the Subbasin, utilizes 1,593 wells with total depth information[32] to represent "5,164 wells documented in the Subbasin, most [of which] are domestic wells."[33] The revised GSP details the sources of the datasets used to conduct the analysis and the limitations of the dataset (e.g., lack of total well depth) which resulted in the use of the subset of wells.[34] The analysis grouped the 1,593 wells to the nearest of 22 representative monitoring sites (RMS) and evaluated the effect of groundwater elevations reaching minimum thresholds at RMS in terms of the well going dry (i.e., the entire length of the well depth is unsaturated). As discussed in Section 4.1.2.1 of this Staff Report, the analysis focused on dewatering of the entire well depth instead of the increasingly severe potential effects on wells prior to "going dry" due to the unavailability of complete well construction information. Based on available data, the analysis indicates 62 (or 3.9 percent)[35] wells would go dry if minimum thresholds were reached simultaneously at all RMS throughout the Subbasin. The GSP notes that the undesirable result quantitative criteria include geographic and temporal components that prevent all monitoring sites reaching minimum thresholds simultaneously in the entire Subbasin.[36]

Department staff believe the GSA has taken meaningful steps to identify and describe the impacts at this time; however, there is a data gap in the analysis which the GSAs need to fill. There is concern that the wells not included in the analysis could go dry and cause significant and unreasonable effects in the Subbasin as defined by the GSAs. For this reason, by the next periodic evaluation (due in January 2025), staff recommend the GSAs pursue activities so that limitations of accurate and complete well construction information are overcome, and further refine the GSP's criteria, assumptions, analysis, and objectives

[31] 2020 Redlined Paso Robles GSP, Section 8.3, p. 266.
[32] 2022 Redlined Paso Robles GSP, Section 8.4.4.1.1, p. 278.
[33] 2022 Redlined Paso Robles GSP, Section 3.5, p. 62.
[34] 2022 Redlined Paso Robles GSP, Section 8.4.4.1.1, pp. 278-279.
[35] Note: Percent of wells dry at minimum thresholds are not dry at average 2017 levels.
[36] 2022 Redlined Paso Robles GSP, Section 8.4.6.1, p. 291.

in defining significant and unreasonable effects based on best available information (Recommended Corrective Action 2).

A component of the corrective action stated "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." The revised GSP does not include mitigation strategies and does not explicitly provide a discussion, with supporting facts and rationale, explaining how and why the GSAs determined not to include specific actions or programs to monitor and potentially mitigate drinking water impacts from continued groundwater lowering below 2015 levels as indicated by the corrective action. The revised GSP maintains the same, unchanged, discussion stating that three public meetings were held to discuss minimum thresholds and measurable objectives and claims to have received public input.[37] The GSP provides the general assumption that the "[r]esponsibility for wells in a SGMA managed groundwater basin is shared between GSAs that manage groundwater levels to protect against significant and unreasonable conditions and well owners who have responsibility for their respective wells," and the states it is "reasonable expectation exists that a well owner would construct, maintain, and operate the well to provide its expected yield over the well's life span, including droughts, and with some anticipation that neighbors also might construct wells (consistent with land use and well permitting policies)."[38]

While this does not preclude approval of the Plan at this time, Department staff believe the GSA should respond to this component of the corrective action by the next periodic evaluation. The GSA may wish to review the Department's April 2023 guidance document titled *Considerations for Identifying and Addressing Drinking Water Well Impacts* guidance to assist its adaptive management efforts.[39] (See Recommended Corrective Action 3)

4.1.3 Conclusion

Overall, Department staff believe the GSAs have taken significant action to address deficiencies identified. Staff conclude that the sustainable management criteria for groundwater levels is commensurate with the understanding of current conditions, responsive to interested party feedback. The Plan provides a credible and sufficient assessment of the effects the minimum thresholds would have on all wells—including domestic wells—by evaluating wells with known construction information and the established minimum thresholds at monitoring sites. However, as highlighted in the

[37] 2022 Redlined Paso Robles GSP, Section 8.3, p. 266.
[38] 2022 Redlined Paso Robles GSP, Section 8.4.2.2, p. 269.
[39] https://water.ca.gov/Programs/Groundwater-Management/Drinking-Water-Well

recommended corrective actions, the GSP should include additional supporting technical details and clarifications by the next periodic evaluation.

4.2 Deficiency 2. The GSP does not develop sustainable management criteria for the depletions of interconnected surface water based on best available information and science

4.2.1 Corrective Action

To address Deficiency 2—as identified in the 2020 Incomplete Determination—staff stated "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 provided the following corrective actions for the GSAs to consider and address:

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.[40]

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,[41] 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."

4.2.2 Evaluation

The preceding GSP for the Paso Robles Area Subbasin, submitted in 2020 to the Department, asserted that there was "no available data that establish whether or not the groundwater and surface water are connected" in the Subbasin.[42] Therefore, the 2020 Plan did not develop sustainable management criteria for the depletion of interconnected surface water citing "…insufficient data to determine if there is an interconnection between surface water and groundwater in the Subbasin at this time."[43] However, Department staff found the GSP to present conflicting information on the presence of interconnected surface water in the Subbasin. The conflicting Information undermines any argument that undesirable results related to depletions of interconnected surface water are not present and are not likely to occur in the Subbasin. The GSA needed to either develop persuasive evidence showing that interconnected surface waters are

[40] 23 CCR §§ 354.28(c)(6)(A), 354.28(c)(6)(B).
[41] 23 CCR §§ 354.26, 354.28, 354.30.
[42] 2022 Redlined Paso Robles GSP, Section 5.5, p. 149.
[43] 2022 Redlined Paso Robles GSP, Section 8.9.3, p. 317.

absent or develop sustainable management criteria in response to the incomplete determination.

To address Deficiency 2 identified in the Plan, the GSAs have modified portions of the Plan related to the interconnected surface water aspects of the basin setting, sustainable management criteria, and monitoring network.

4.2.2.1 Basin Setting Related to Interconnected Surface Water

The revised Plan has updated the Basin Setting to clarify the existence of interconnected surface water within the Subbasin. The GSAs have re-investigated interconnected surface and groundwater using the National Hydrology Dataset (NHD), high-resolution aerial imagery, historical groundwater levels, stream flow measurements, Natural Communities Commonly Associated with Groundwater (NCCAG), and information from modeling. The GSP explains that in the Paso Robles Subbasin, major streams all overlie alluvial deposits, and interconnection is with alluvial groundwater.[44] In some parts of the Subbasin—predominantly in the west near the Salinas River—extensive clay layers exist between the alluvium underlying the streams (i.e., the Alluvial Aquifer) and the deeper Paso Robles Formation Aquifer. These clays are noted to extend eastward to the community of Estrella along the Estrella River and the community of Creston along Huer Huero Creek. The hydrogeological conceptual model suggests that groundwater pumping, which predominantly occurs in the Paso Robles Formation, could potentially lower alluvial groundwater levels and deplete stream flows upstream of the clay layers but have only a negligible effect on alluvial water levels and stream flows overlying the clay layers.

Two categories of interconnection are described in the GSP: interconnection with surface water in streams and interconnection with the root zone of riparian vegetation (about 25 feet below ground surface).[45] Areas classified as interconnected for both categories are found along the Salinas River, the Estrella River, and San Juan Creek.[46] Specifically, the GSP states that the Salinas River surface water is interconnected with the Alluvial Aquifer; with no evidence of connection to the Paso Robles Formation Aquifer.[47] Sufficient evidence exists that there could potentially be a surface water connection between Estrella River and San Juan Creek to the underlying Paso Robles Formation Aquifer.[48] A potential connection to the vegetation zone is also identified along segments of the Salinas River (Paso Robles to the Subbasin boundary below San Miguel), Estrella River (Jardine Road up to Shedd Canyon), and San Juan Creek (upstream of Spring Creek).[49]

[44] 2020 Redlined Paso Robles GSP, Section 5.5, pp. 149-151.
[45] 2022 Redlined Paso Robles GSP, Section 5.5.5, p. 162.
[46] 2022 Redlined Paso Robles GSP, Figure 5-18, p. 164.
[47] 2022 Redlined Paso Robles GSP, Section 5.5.5, p. 162 and Section 7.10, p. 254.
[48] 2022 Redlined Paso Robles GSP, Section 5.5.5, p. 162.
[49] 2022 Redlined Paso Robles GSP, Section 5.5.5, p. 163 and Section 8.9.7.2, p. 321.

The GSP provides a map, Figure 1 below, depicting locations of interconnection between groundwater and surface water.[50]

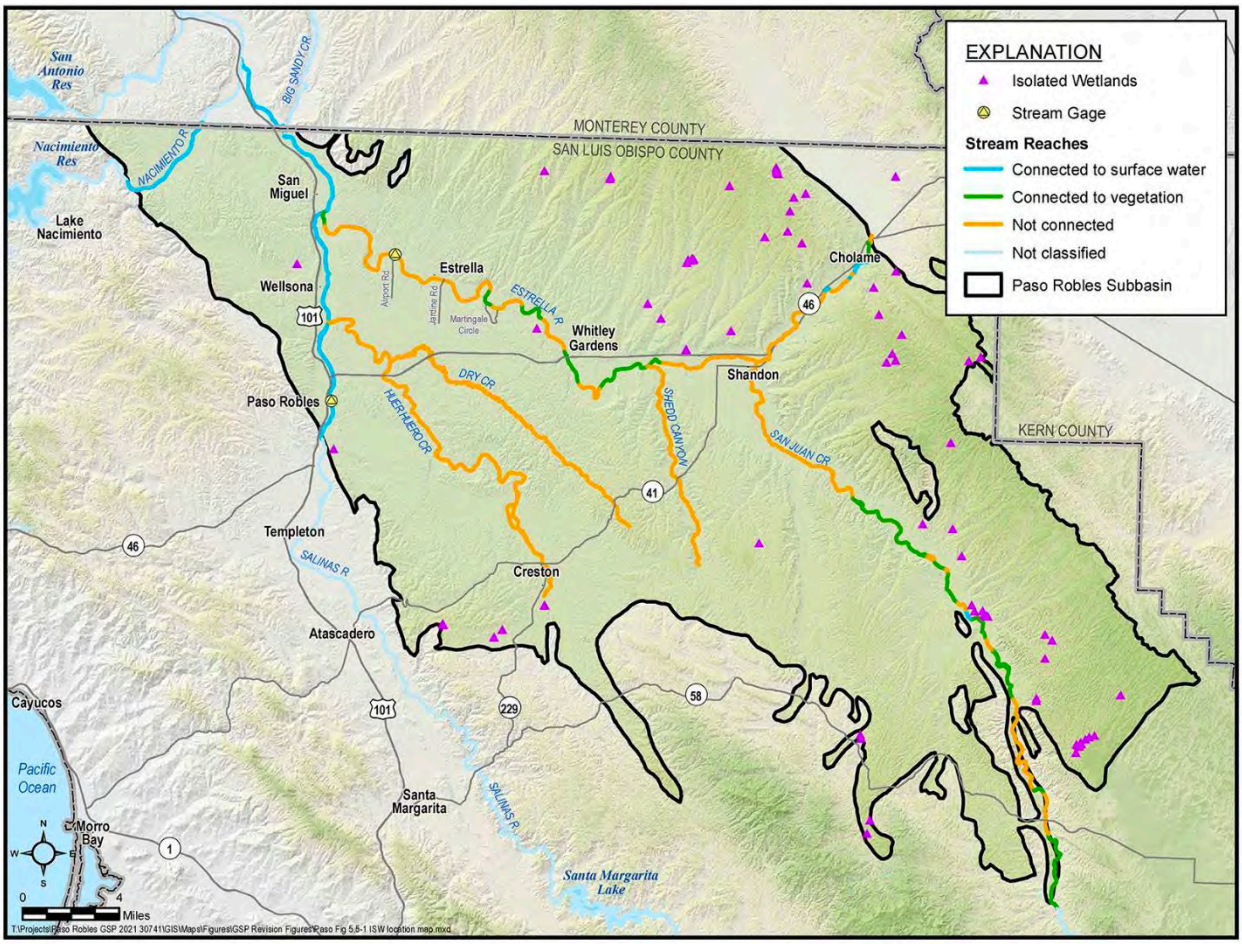


Figure 1: Locations of interconnection between groundwater and surface water.

Staff consider the revised Plan to be generally improved but still missing information that should be included to improve clarity and completeness in addressing the GSP Regulations and facilitate staff evaluations of GSP and subsequent periodic evaluations. The Plan notes that pumping from the Alluvial Aquifer is “rare”, generally occurs to meet domestic and limited livestock water demands, and large-scale irrigation pumping does not typically occur.[51] However, the GSP also states that the agricultural water use sector—which is the largest by volume[52] with production wells located along the Salinas and Estrella Rivers[53]—also pumps from the Alluvial Aquifer[54] without quantifying that volume. The GSP should provide specific volumetric quantities of estimated pumping that

[50] 2022 Redlined Paso Robles GSP, Table 5-18, p. 164.
[51] 2022 Redlined Paso Robles GSP, Section 5.5, p. 150.
[52] 2022 Redlined Paso Robles GSP, Table 6-10, p. 199.
[53] 2022 Redlined Paso Robles GSP, Figure 3-8, p.64.
[54] 2022 Redlined Paso Robles GSP, Section 4.5, p. 114.

occurs from the Alluvial Aquifer to detail the comparison of pumping from the Subbasin's two principal aquifers. Staff require this supporting information to assess whether the establishment of management criteria, which relies heavily on the claim that most groundwater pumping is from the Paso Robles Formation Aquifer, is a reasonable assumption. Additionally, while the GSP states analysis from *Methodology for Identifying Groundwater Dependent Ecosystems* indicates that groundwater pumping from the Paso Robles Formation Aquifer does not materially impact relevant groundwater dependent animals in Salinas River flows, the GSP does not discuss potential impacts of pumping from the Alluvial Aquifer on southern steelhead which migrate up and down the Salinas River in winter and spring. Department staff recommend the GSAs provide clear explanation of the usage of the Alluvial Aquifer and provide specific volumetric quantities of estimated pumping that occurs from the Alluvial Aquifer to detail the comparison of pumping from the Subbasin's two principal aquifers. (see Recommend Corrective Action 4a).

Lastly, the potential connection between Estrella River and San Juan Creek and the underlying Paso Robles Formation Aquifer should, as the GSP states, be further investigated. Department staff believe this investigation should be further explained (i.e., scope, schedule, budget) and conducted by the periodic evaluation to confirm this potential connection.[55] (Recommend Corrective Action 4b).

4.2.2.2 Sustainable Management Criteria for Depletions of Interconnected Surface Water

In the revised Plan, initial sustainable management criteria are developed based on the updated information in the basin setting which classified areas of interconnection with the alluvial water table along the Salinas River, the Estrella River, and San Juan Creek.[56] While the GSP does not quantify the rate or volume of depletions of interconnected surface water due to groundwater pumping, the GSP proposes initial sustainable management criteria using shallow near stream groundwater levels (measured at Alluvial Aquifer RMS wells) as a proxy for the rate and volume of depletions. The Plan acknowledges that currently, there are too few Alluvial Aquifer monitoring wells along the Estrella River and San Juan Creek and the GSAs plan to install new monitoring wells during the first five years of implementation (see Section 4.2.2.3).[57] Therefore, initially only the Salinas River and the interconnected Alluvial Aquifer will be evaluated.

Potential effects of depletion are described in the GSP as reduction in Salinas River outflow that decreases groundwater recharge in the Salinas Valley, reduction in passage opportunity for steelhead trout, and reduction in the extent, density, and health of riparian vegetation and animal species that use riparian habitat. Accordingly, the Plan defines significant and unreasonable effects of depletions of interconnected surface water in

[55] 2022 Redlined Paso Robles GSP, Section 5.5.1, p. 152 and Section 7.10, p. 254.
[56] 2022 Redlined Paso Robles GSP, Section 8.9.2, p. 316.
[57] 2022 Redlined Paso Robles GSP, Section 8.9.3, p. 317.

terms of decreased groundwater recharge from surface water and reduction in groundwater dependent ecosystems. Specifically, the GSP states:

- Decreased groundwater discharge to the Salinas River would be significant and unreasonable if it prevented groundwater users in the Salinas Valley—where groundwater is primarily recharged by Salinas River percolation—from continuing their existing, economically viable agricultural or urban uses of land.[58]
- The undesirable result for steelhead trout—which uses surface flow in the Salinas River for migration—is a long-term decrease in population as a result of flow depletion caused by groundwater pumping.[59]
- An undesirable result for groundwater dependent vegetation would be water levels along more than 15 percent of the length of any of the three stream reaches with abundant riparian vegetation exceeding the minimum threshold as a result of groundwater pumping in the Paso Robles Formation Aquifer.[60]

The GSP lacks specificity regarding conditions that would be considered significant and unreasonable and as a result is not consistent with requirements of the GSP Regulations. For example, the GSA does not explain how it would determine that the "economically viable agricultural or urban uses of land" had been hindered, or how the contribution of surface flow depletion due to groundwater pumping would be quantified. The GSP Regulations require undesirable results to be described by "a quantitative description of the combination of minimum threshold exceedances that cause significant and unreasonable effects in the basin" and include a description of the potential effects of undesirable results occurring, but this information is not provided in the GSP.[61] These additional supporting details would allow staff to understand the specific significant and unreasonable effects the Subbasin is trying to avoid and assess if established minimum thresholds are likely to attain that goal. As a result, Department staff conclude that the GSP's description of significant and unreasonable conditions and definition of undesirable results was not prepared in accord with the GSP Regulations and suggest measures the GSAs should consider taking to improve this aspect of the Plan.

Minimum thresholds for depletions of interconnected surface water are defined as a decline in the alluvial water table elevation as measured in the spring at Alluvial Aquifer wells along the Salinas River, the middle reach of the Estrella River (from Shedd Canyon to Martingale Circle) and San Juan Creek upstream of Spring Creek that:[62]

- Is likely caused by groundwater pumping in the Paso Robles Formation Aquifer,
- Is more than 10 feet below the spring 2017 elevation,

[58] 2022 Redlined Paso Robles GSP, Section 8.9.7.1, p. 320.
[59] 2022 Redlined Paso Robles GSP, Section 8.9.7.3, p. 321.
[60] 2022 Redlined Paso Robles GSP, Section 8.9.7.2, p. 321.
[61] 23 CCR §§ 354.26(b)(2) and 354.26(b)3)
[62] 2022 Redlined Paso Robles GSP, Section 8.9.2, p. 316.

- Persists for more than two consecutive years, and
- Occurs along more than 15 percent of the length of any of the three stream reaches.

GSP Regulations require quantification of minimum thresholds as a "numeric value … that, if exceeded, may cause undesirable results."[63] The GSP defines minimum thresholds in a manner that includes quantitative elements, but whose application remains subjective and incomplete. The GSP does not explain how surface water depletion caused by pumping in the Paso Robles Formation Aquifer will be quantified, and the definition altogether ignores potential depletion caused by pumping from the Alluvial aquifer. As for the other elements of the definition, although these are couched in quantitative terms, because the GSP has not clearly defined undesirable results that identify conditions the GSA considers significant and unreasonable, the GSP is unable to show how the proposed minimum thresholds are designed to avoid undesirable results.

The GSP has identified interconnection to the alluvial water table while also identifying limited or inconclusive data regarding groundwater flow between the two principal aquifers (Alluvial Aquifer and Paso Robles Formation Aquifer), yet the description of minimum thresholds includes the requirement of being caused by pumping from the Paso Robles Formation Aquifer. For example, with the current definition, water levels in the Alluvial Aquifer monitoring well can decline more than 10 feet below 2017 levels, persist for more than two consecutive years, impact more than 15 percent of vegetation along the Salinas River, and yet not be identified as exceeding minimum thresholds if they are not found to be caused by groundwater pumping in the Paso Robles Formation Aquifer; a likely scenario given that limited data exist to assess vertical gradients and vertical flows between the two principal aquifers in the Subbasin.[64] Given the uncertainty in understanding the vertical groundwater interaction in the Subbasin and the lack of supporting scientific information describing the extent of groundwater use from each aquifer, staff do not believe the definition of minimum thresholds should require a causal nexus to pumping from the Paso Robles Formation Aquifer. It's also unclear how the GSAs will determine when declines occur along 15 percent of the river reaches since the GSP does not detail this when describing the monitoring network. Overall, Department staff are unclear if the minimum threshold, as currently defined, will avoid significant and unreasonable effects.

Measurable objectives are defined as a five-year moving average of spring groundwater elevations that are no more than five feet below the spring 2017 groundwater elevations in Alluvial Aquifer wells along the Salinas River, the middle reach of the Estrella River (from Shedd Canyon to Martingale Circle) and San Juan Creek upstream of Spring Creek.[65] The objective is to help maintain the extent and density of riparian vegetation to 2017 levels and maintain Salinas River outflow and steelhead passage opportunity at

[63] 23 CCR § 354.28(a).
[64] 2022 Redlined Paso Robles GSP, Section 4.9.3, p. 123 and Section 5.1.3, p. 141.
[65] 2022 Redlined Paso Robles GSP, Section 8.9.3, pp. 317-318.

existing levels. Again, for the first five years of GSP implementation only the Salinas River and the interconnected Alluvial Aquifer will be evaluated.

However, having measurable objects defined as range is not consistent with the GSP Regulations. The current definition allows for exceedances beyond five feet below 2017 levels in a single year as long as the five-year average is above that limit, potentially causing undesirable results. Department staff recommend the measurable objectives be redefined to be consistent with the GSP Regulations which require a measurable objective to be established using the same metrics and monitoring sites as are used to define the minimum thresholds.

Department staff understand that quantifying depletions of interconnected surface water from groundwater extractions is a complex task that likely requires developing new, specialized tools, models, and methods to understand local hydrogeologic conditions, interactions, and responses. During the initial review of GSPs, Department staff have observed that most GSAs have struggled with this requirement of SGMA. However, staff believe that most GSAs will more fully comply with regulatory requirements after several years of Plan implementation that includes projects and management actions to address the data gaps and other issues necessary to understand, quantify, and manage depletions of interconnected surface waters. Department staff further advise that at this stage in SGMA implementation GSAs address deficiencies related to interconnected surface water depletion where GSAs are still working to fill data gaps related to interconnected surface water and where these data will be used to inform and establish sustainable management criteria based on timing, volume, and depletion as required by the GSP Regulations. (see Recommended Corrective Action 5a)

The Department will continue to support GSAs in this regard by providing, as appropriate, financial and technical assistance to GSAs, including the development of guidance describing appropriate methods and approaches to evaluate the rate, timing, and volume of depletions of interconnected surface water caused by groundwater extractions. Once the Department's guidance related to depletions of interconnected surface water is publicly available, GSAs, where applicable, should consider incorporating appropriate guidance approaches into their future periodic evaluations to the GSP (see Recommended Corrective Action 5a). GSAs should consider availing themselves of the Department's financial or technical assistance, but in any event must continue to fill data gaps, collect additional monitoring data, and implement strategies to better understand and manage depletions of interconnected surface water caused by groundwater extractions and define segments of interconnectivity and timing within their jurisdictional area (Recommended Corrective Action 5b). Furthermore, GSAs should coordinate with local, state, and federal resources agencies as well as interested parties to better understand the full suite of beneficial uses and users that may be impacted by pumping induced surface water depletion (Recommended Corrective Action 5c).

4.2.2.3 Monitoring Network for Depletions of Interconnected Surface Water

The Plan recognizes that the current monitoring wells do not adequately cover the three stream reaches where interconnection of groundwater with surface water and/or the riparian vegetation root zone occurs.[66] The GSP states there are seven existing groundwater monitoring wells within 2,000 feet of those stream reaches and three stream gages on the Salinas River, Heur Huero Creek, and Estrella River; it is unclear to staff how the stream gage data are utilized in the Plan. Of the seven existing wells, four are described to be along the Salinas River; the sole area where depletions of interconnected surface water to the Alluvial Aquifer will be evaluated for the first five years of GSP implementation. The Plan acknowledges that separation between Alluvial Aquifer groundwater levels and Paso Robles Formation Aquifer is poorly known in the eastern part of the Subbasin. A map and table are provided of recommended locations for additional wells and stream gages to verify and monitor interconnection in the Subbasin. The GSP also provides a table briefly describing a $400,000 plan to fill interconnected surface water monitoring network data gaps between 2020 and 2024, including the potential installation of five new wells.[67]

As the GSAs continue to expand the monitoring network, Department staff note some clarity needs to be provided as it relates to the description of the current monitoring network. For example, though seven monitoring wells are described, the location of only two is shown on the map provided due to confidentiality agreements limiting staff's ability to evaluate the monitoring network. Furthermore, of the two wells shown, only one is along the Salinas River where management criteria will be assessed for the first five years of GSP implementation. It is not clear to staff why only the Salinas River is being evaluated given that there are three known monitoring wells along the Estrella River, another location of identified interconnection. Additionally, it is unclear why monitoring wells from the Paso Robles Formation Aquifer are not included for a potential analysis to understand if deeper groundwater pumping is causing the shallow groundwater table to decline, which is required to monitor and evaluate minimum threshold exceedances as defined. Also, though current and potential monitoring sites are described for Huer Huero Creek and Cholame Creek, these creeks are not included in the management criteria developed for the Subbasin—though, Cholame Creek is identified as having interconnection to riparian vegetation. Huer Huero Creek is identified as not connected so the significance of discussing monitoring of the creek for depletions is not clear. Lastly, and most significantly, the Plan does not explain how stream gages described in the monitoring network will be utilized to evaluate depletions of interconnected surface water or how the use of groundwater levels serves as a suitable proxy for this sustainability indicator. Department staff recommend GSAs provide a clear explanation of the monitoring network for interconnected surface water, including how each aquifer is going

[66] 2022 Redlined Paso Robles GSP, Section. 7.6.1, p. 228.
[67] 2022 Redlined Paso Robles GSP, Table 10-1, p. 376.

to be monitored and how stream gages will be utilized to evaluate depletions of interconnected surface water. (See Recommended Corrective Action 6)

4.2.3 Conclusion

At this time, Department staff conclude sufficient action has been taken on this deficiency and believe the GSAs can work with the Department to further efforts on interconnected surface water. Department staff also recognize efforts from GSAs to identify monitoring data gaps and plan actions to expand the monitoring network and collect hydrologic, geologic, and hydrogeologic data to better characterize interconnectivity. However, Department staff have provided recommended corrective actions in which the GSAs should address within the periodic evaluation.

5 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 Subbasin. The Department staff's evaluation of the likelihood of the Plan to attain the sustainability goal for the Subbasin is provided below.

5.1 ADMINISTRATIVE INFORMATION

The GSP Regulations require each Plan to include administrative information identifying the submitting Agency, a description of the Plan area, and a demonstration of the legal authority and ability of the submitting Agency to develop and implement a Plan for that area.[68]

The GSP has been jointly developed and adopted by four GSAs, which include: City of Paso Robles GSA; County of San Luis Obispo GSA; San Miguel Community Services District GSA; and Shandon-San Juan GSA.[69] A Memorandum of Agreement, wherein the framework for governance and decision-making is described, established a Cooperative Committee made up of representatives from each of the five original GSAs.[70] The Cooperative Committee developed the GSP, which was then considered for adoption by each individual GSA. With respect to decisions related to GSP development, each of the GSAs has a weighted vote: County of San Luis Obispo (61 percent), City of Paso Robles (15 percent), Shandon-San Juan Water District (20 percent), San Miguel CSD (three

[68] 23 CCR § 354.2 *et seq*.
[69] 2020 Paso Robles GSP, Section 2, p. 41.
[70] Note: Heritage Ranch CSD is no longer a part of the GSAs that submitted this GSP

percent), and Heritage Ranch CSD (one percent).[71] The County of San Luis Obispo Director of Groundwater Sustainability has been designated as the Plan Manager.

The Paso Robles Subbasin is part of the Salinas Valley Groundwater Basin and located in the northern portion of San Luis Obispo County which is in the Central Coast region of California. The Subbasin is drained by the Salinas River and its tributaries - including the Estrella River, Huer Huero Creek, and San Juan Creek. The Subbasin is 436,240-acres (681 square miles) and the majority of the Subbasin is comprised of gentle flatlands near the Salinas River Valley, ranging in elevation from approximately 445 to 2,387 feet above mean sea level.[72] The Subbasin includes the incorporated City of Paso Robles and the unincorporated census-designated places of Shandon, San Miguel, Creston, Cholame, and Whitley Gardens. The Subbasin also includes disadvantaged communities (DACs) and severely disadvantaged communities (SDACs). [73] Bounded by four adjacent groundwater basins, the Subbasin has the Upper Valley Aquifer Subbasin to the north, the Cholame Valley Basin to the east, the Carrizo Plain Basin to the southeast, and the Atascadero Area Subbasin to the southwest.[74] The Upper Valley Aquifer Subbasin is a medium-priority basin with a GSP deadline of January 2022, while the other basins are very-low priority and not required to submit a GSP for evaluation and assessment.[75]

The Subbasin currently utilizes two water sources - groundwater, surface water - and soon plans to utilize recycled water. Prior to 2015, all water demands in the Subbasin were met with groundwater. Water management authority lies with federal agencies (Los Padres National Forest and the Bureau of Land Management), state agencies (California National Guard and California Department of Fish and Wildlife), county agencies (County of San Luis Obispo), and local entities (City of Paso Robles, San Miguel CSD, Shandon-San Juan Water District, and the Estrella-El Pomar-Creston Water District).[76] Significant water users include agricultural (the largest by water use), native vegetation (largest by land area), urban, and industrial (limited use).[77] Land use planning authority lies with the City of Paso Robles and the County of San Luis Obispo.[78] Existing land uses are 387,435 acres of native vegetation, 40,228 acres of agricultural land, and 8,577 acres of urban areas.[79]

The Communication and Engagement Plan provided in the GSP details the effort to involve diverse social, cultural, and economic elements of the Subbasin population. Beneficial users identified in the Subbasin include disadvantaged communities, various agencies, agriculture, water corporations, domestic wells owners, municipal well

[71] 2020 Paso Robles GSP, Section 2, pp. 44-48.
[72] 2020 Paso Robles GSP Section 1.2, pp. 42-44 and Section 3, p. 47.
[73] 2020 Paso Robles GSP, Figure 1, p. 700.
[74] 2020 Paso Robles GSP, Figure 1-1, p. 40.
[75] The Atascadero Area Subbasin, though a designated under SGMA as low-priority and not required to submit a GSP, is planning to develop and adopt a GSP.
[76] 2020 Paso Robles GSP, Figures 3-2, p. 51, and Figure 3-3, p. 52.
[77] 2020 Paso Robles GSP, Section 3.4.2, p. 57 and Figure 3-6, p. 58.
[78] 2020 Paso Robles GSP, Section 3.4, p. 53 and Figure 3-4, p. 54.
[79] 2020 Paso Robles GSP, Figure 3-4, p. 54 and Table 3-1, p. 53.

operators, public water systems, land use planning agencies, environmental users, surface water users, native American tribes, and the federal government.[80] As stated in the Plan, beneficial groundwater uses in the Subbasin include "various irrigated and non-irrigated agricultural activities; rural domestic/residential wells; municipal and industrial supply; and aquatic ecosystems associated with rivers and streams, some of which provide habitat for threatened or endangered species."[81] As stated in the Communication and Engagement Plan, interested parties can participate in public meetings, hearings, workshops, and communicate with Cooperative Committee members to provide input, obtain information, and review and comment on future GSP documents.[82]

The Plan describes in sufficient detail the GSAs' authority to manage groundwater in the Subbasin, which was generally presented in an understandable format using appropriate data. The Plan contains sufficient detail regarding the beneficial uses and users of groundwater, water use types, existing water monitoring and resource programs, and types and distribution of land use and land use plans for the Subbasin. The Agency provides a list of public meetings, materials, and notifications on its website, and lists of meetings and public comments and how they were addressed by the GSA are included in the appendices of the GSP.

The GSP's discussion and presentation of administrative information covers the specific items listed in the GSP Regulations in an understandable format using appropriate data. Department staff are aware of no significant inconsistencies or contrary information to that presented in the GSP and therefore have no significant concerns regarding the quality, data, and discussion of this subject in the GSP. The administrative information included in the Plan substantially complies with the requirements outlined in the GSP Regulations.

5.2 Basin Setting

GSP Regulations require information about the physical setting and characteristics of the Subbasin and current conditions of the Subbasin, including a hydrogeologic conceptual model; a description of historical and current groundwater conditions; and a water budget accounting for total annual volume of groundwater and surface water entering and leaving the Subbasin, including historical, current, and projected water budget conditions.[83]

5.2.1 Hydrogeologic Conceptual Model

The GSP Regulations require a descriptive hydrogeologic conceptual model of the Subbasin that includes a written description supported by cross sections and maps.[84] The hydrogeologic conceptual model is a non-numerical model of the physical setting, characteristics, and processes that govern groundwater occurrence within a basin, and

[80] 2020 Paso Robles GSP, Appendix M, Appendix D, pp. 701-703.
[81] 2020 Paso Robles GSP, Appendix M, Section 3, p. 680.
[82] 2020 Paso Robles GSP, Table 11-2, p. 313, Appendix M, p. 691, Appendix N, pp. 719-1174.
[83] 23 CCR § 354.12 *et seq*.
[84] 23 CCR § 354.12 *et seq*.

represents a local agency's understanding of the geology and hydrology of the basin that support the geologic assumptions used in developing mathematical models, such as those that allow for quantification of the water budget.[85]

The hydrogeologic conceptual model is based primarily upon two published studies (hydrogeologic and geologic investigations by Fugro Consultants Inc. completed for San Luis Obispo County Flood Control and Water Conservation District (SLOFCWCD) in 2002 and 2005).[86] The Plan graphically represents the hydrogeologic conceptual model with a combination of scaled cross-sections. The physical characteristics of the Subbasin are represented by maps depicting the geologic formations within and surrounding the Subbasin, topography, soil characteristics, potential recharge and discharge areas, surface water bodies, and imported supplies as required.

The Plan identifies and describes two principal aquifers in the Subbasin:

- **The Alluvial Aquifer** — A relatively continuous and unconfined aquifer comprising of Quaternary-age alluvial deposits that underlie streams. It is generally composed of saturated coarse-grained sediments and occurs along Huer Huero Creek, the Salinas River, and the Estrella River. The highly permeable aquifer varies in thickness, but is generally about 100 feet thick. Hydraulic conductivity may be over 500 feet per day and wells screened in the Alluvial Aquifer can yield up to a 1,000 gallons per minute.[87]
- **The Paso Robles Formation Aquifer**—An interbedded and discontinuous aquifer, comprising of Tertiary-age sand and gravel lenses that underlie the Alluvial Aquifer. Groundwater occurs under unconfined, semi-confined, and confined conditions. The aquifer is generally thin and discontinuous sand and gravel zones usually separated vertically by relatively thick zones of silts and clays. Sediments have a thickness of 700-1,200 feet. Hydraulic conductivity ranges from about 1-20 feet per day and well yields range from approximately 150-850 gallons per minute.[88]

Primary groundwater users include municipal, agricultural, rural residential, small community water systems, small commercial entities, and environmental users.[89] The municipal sector pumps primarily from the Paso Robles Formation Aquifer in the Subbasin and also utilizes imported surface water. The agriculture sector, which is reliant solely on groundwater, pumps from both principal aquifers. The Plan notes that pumping

[85] DWR Best Management Practices for the Sustainable Management of Groundwater: Hydrogeologic Conceptual Model, December 2016: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/BMP-3-Hydrogeologic-Conceptual-Model_ay_19.pdf.
[86] 2020 Paso Robles GSP, Section 4, p. 83.
[87] 2020 Paso Robles GSP, Figure 4-4, p. 91, Section 4.3.2.1, p. 89, Section 4.4, pp. 102-109.
[88] 2020 Paso Robles GSP, Section 4.3.2.2 p. 101, Section 4.4, p. 102, Section 5.1.2, p. 124, Paso Robles Subbasin First Annual Report (2017-2019).
[89] 2020 Paso Robles GSP, Section 4.5, p. 110.

from the Alluvial Aquifer is “rare”, generally occurs to meet domestic and limited livestock water demands, and large-scale irrigation pumping does not typically occur.[90] The Plan concludes that groundwater in the Subbasin is generally suitable for drinking and agricultural uses; having defined the depth where water is generally of poor quality as the bottom (though flow is continuous across this depth).[91]

The Plan acknowledges current data gaps in the hydrogeologic conceptual model related to the characterization of the Alluvial Aquifer, inconclusive understanding of the vertical groundwater flow between the two principal aquifers, limited information on the continuity of stratigraphic features that limit groundwater flow, understanding the influence of faults on groundwater flow, and very limited data available to estimate specific yield. These gaps “could be improved with certain additional data and analyses” and, therefore, the GSAs include management actions — with a budget of $300,000 to be spent between 2020 and 2024 — to fill data gaps and refine the hydrogeologic conceptual model with the findings.[92] Department staff will be reviewing the progress of those efforts and recommend the GSAs provide the Department updates via annual reports and periodic evaluations.

The discussion of the hydrogeologic conceptual model related to interconnected surface water in the 2020 Plan was corrected based on deficiencies identified by the Department. An assessment of the corrected information, and corrective actions taken by the GSAs is provided in Section 4.2.2.1 of this Staff Report. Overall, the hydrogeologic conceptual model information provided in the GSP substantially complies with the requirements outlined in the GSP Regulations. In general, the Plan’s descriptions of the regional geologic setting, the Subbasin’s physical characteristics, the principal aquifer, and hydrogeologic conceptual model appear to utilize the best available science. Department staff are aware of no significant inconsistencies or contrary technical information to that presented in the Plan.

5.2.2 Groundwater Conditions

The GSP Regulations require a written description of historical and current groundwater conditions for each of the applicable sustainability indicators and groundwater dependent ecosystems.[93]

The Plan describes groundwater conditions in the Subbasin, though, the discussion is largely based on findings from the Paso Robles Formation Aquifer. The GSP uses a total of 55 wells from the SLOFCWCD monitoring network for the assessment, with only seven of those wells being located in the Alluvial Aquifer.[94]

[90] 2022 Redlined Paso Robles GSP, Section 5.5, p. 144.
[91] 2020 Paso Robles GSP, Section 4.1, p. 83, Figure 4-2, p. 86, Section 4.6, p. 110.
[92] 2020 Paso Robles GSP, Section 4.9, p. 118 and Table 10-1, p. 309.
[93] 23 CCR § 354.16 (a-f).
[94] 23 CCR § 354.16 et seq. and 2020 Paso Robles GSP, Section 5.1, pp. 119-120.

For the Alluvial Aquifer, the Plan states groundwater elevation data are "too limited to prepare representative contour maps of the seasonal high and seasonal low groundwater elevations, or to prepare maps of historical [1997] groundwater elevations." A groundwater elevation contour map for 2017 depicts groundwater flow direction generally following the alignment of the creeks and rivers, flowing southeast to northwest across the Subbasin.[95] Hydrographs for the Alluvial Aquifer are not included because the data was collected under confidentiality agreements. As a result, no long-term groundwater elevations change assessment is provided. Previous hydrologic studies indicate that groundwater elevations are generally higher in the Alluvial Aquifer than the underlying Paso Robles Formation Aquifer, resulting in groundwater flow from the Alluvial Aquifer to the underlying Paso Robles Formation Aquifer.[96] As stated in the Plan, "[t]he lack of publicly available groundwater level data for the Alluvial Aquifer [and the Paso Robles Formation Aquifer] is a significant data gap."[97]

For the Paso Robles Formation Aquifer, a comparison of groundwater elevation data for historical (1997) and current (2017) groundwater conditions is presented. Over the course of the 20-year period, groundwater elevations have fallen by as much as 80 feet in some areas.[98] The GSP states groundwater flow direction is generally to the northwest and west over most of the Subbasin, except in the area north of the City of Paso Robles where groundwater flow is to the northeast.[99] The GSP states "[l]imited data exist to assess vertical groundwater gradients" but "there is an assumed upward vertical groundwater gradient within the Paso Robles Formation near the northern portion of the Subbasin, although data were not provided to verify this assumption".[100] The GSP provides hydrographs depicting long-term groundwater elevation trends from 22 monitoring wells with publicly available well information.[101]

Change in groundwater storage, estimated annual groundwater pumping (derived from the GSP Model), and water year type for the Alluvial and Paso Robles Formation Aquifers are summarized for the historical (1981) and current (2016) periods as required.[102] A total estimated decrease in groundwater storage of 70,000 acre-feet and 646,000 acre-feet occurred in the Alluvial and the Paso Robles Formation Aquifers, respectively, within the 35-year time period. However, the Plan states the period from 1981 through 2011 is considered representative of long-term hydrologic conditions prior to the drought period of 2012 through 2016.[103] Therefore, the Plan also provides the estimated decrease in groundwater storage from 1981 through 2011 which was 20,000 acre-feet in the Alluvial

[95] 2020 Paso Robles GSP, Section 5.1.1.1, p. 122 and Figure 5-2, p. 123.
[96] 2020 Paso Robles GSP, Section 5.1.3, p. 136.
[97] 2020 Paso Robles GSP, Section 5.1.1.2, p. 122 and Section 5.1.2.2, p. 134.
[98] 2020 Paso Robles GSP, Figure 5-7, p. 132 and Figure 5-8, p. 133.
[99] 2020 Paso Robles GSP, Section 5.1.2.1, p. 124 and Section 5.1.3, p. 136.
[100] 2020 Paso Robles GSP, Section 5.1.3, p. 136.
[101] 2020 Paso Robles GSP, Section 5.1.2.2, p. 138.
[102] 23 CCR § 354.18 et seq., 2020 Paso Robles GSP, Section 5.2, pp. 138-141, Figure 5-11, p. 139, Figure 5-12, p. 141.
[103] 2020 Paso Robles GSP, Section 5.2.1, p. 138.

Aquifer and 369,000 acre-feet in the Paso Robles Formation Aquifer. Department staff note that the Plan identifies "[e]xtensive, unanticipated drought" as a potential cause of undesirable results. SGMA allows for periods of drought if extractions and groundwater recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods.[104] Therefore, Department staff suggest not discounting years of drought when considering change in groundwater storage.[105]

Groundwater quality has been analyzed throughout the basin for various studies (conducted by Fugro and most recently by the USGS), the Salt and Nutrient Management Plan, and compliance with regulatory programs.[106] The GSP focuses only on constituents if they have a drinking water standard, have a known effect on crops, or concentrations of these constituents of concern were above the standards for drinking water or the level that affects crops. For drinking water, total dissolved solids (TDS) exceeded the Secondary MCL in 14 of 74 samples, and Nitrate exceeded the MCL in 4 of the 74 samples.[107] For agriculture, of 74 samples, only 13 had severe restrictions for irrigation use due to high sodium, chloride or boron toxicity.[108]

The Plan states the historical rate of subsidence is "relatively insignificant and not a major concern for the Subbasin. However, ongoing subsidence over many years could add up to a more significant ground surface drop and the GSAs will continue to monitor annual subsidence".[109] From 2015 to 2018, a region on the Estrella River and a region northwest of Creston experienced up to 1.5 inches of subsidence while the majority of the Subbasin experienced a rise or drop of less than 1.2 inches—a rate of subsidence in the range of 0.4-0.5 inches per year.

The discussion of groundwater conditions related to interconnected surface water in the 2020 Plan was corrected based on deficiencies identified by the Department. An assessment of the corrected information, and corrective actions taken by the GSAs is provided in Section 4.2.2.1 of this staff report. The Plan sufficiently describes the historical and current groundwater conditions throughout the Subbasin, and the information included in the Plan substantially complies with the requirements outlined in the GSP Regulations.

5.2.3 Water Budget

GSP Regulations require a water budget for the basin that provides an accounting and assessment of the total annual volume of groundwater and surface water entering and

[104] Water Code § 10721(x)(1).
[105] 2020 Paso Robles GSP, Section 8.4.2, pp. 223.
[106] 2020 Paso Robles GSP, Section 5.6, p. 144.
[107] 2020 Paso Robles GSP, Section 5.6.1, pp. 144-145.
[108] 2020 Paso Robles GSP, Section 5.6.2, p. 145.
[109] 2020 Paso Robles GSP, Section 5.4, p. 142.

leaving the basin, including historical; current; and projected water budget conditions, and the change in the volume of water stored, as applicable.[110]

Water budgets were developed using an integrated system of three hydrologic models, including a watershed model, a soil water balance spreadsheet model, and a numerical groundwater flow model. Though the models were originally developed by Fugro and Geoscience Support Services, Inc. for the SLOFCWCD, the models were updated for GSP purposes and are collectively referred to as the "GSP model."[111] As stated by the GSP, the GSP model has uncertainty due to limitations in available data and assumptions.[112]

The GSP selects the period from 1981 to 2011 for historical water budget condition accounting and assessments. Over the 31-year period, a net loss of groundwater storage of approximately 390,000 acre-feet occurred and the annual average groundwater storage loss was approximately 12,600 acre-feet.[113] The estimated sustainable yield for the historical period is 59,800 acre-feet per year.[114] Years 2012 to 2016 are selected for current water budget estimates and over the five-year period, an estimated net loss of groundwater in storage of approximately 327,000 acre-feet occurred, equating to an annual average groundwater storage loss of approximately 65,400 acre-feet per year.[115] Estimated sustainable yield for current groundwater conditions is 20,400 acre-feet per year. The period from 2020 to 2040 was selected for projected (referred to as "future" in the GSP) water budget estimates using the Department's climate change factors for 2030. The Plan estimated future sustainable yield to be approximately 61,100 acre-feet per year.

Department staff conclude the historical, current, and projected water budgets included in the Plan substantially comply with the requirements outlined in the GSP Regulations. The GSP provides the required historical, current, and future accounting and assessment of the total annual volume of groundwater and surface water entering and leaving the Subbasin including an estimate of the sustainable yield of the Subbasin and projected future water demands.

5.2.4 Management Areas

The GSP Regulations provide the option for one or more management areas to be defined within a basin if the GSA has determined that the creation of the management areas will facilitate implementation of the Plan. Management areas may define different minimum thresholds and be operated to different measurable objectives, provided that undesirable

[110] 23 CCR § 354.18.
[111] 2020 Paso Robles GSP, Section 6.2, pp. 159-160.
[112] 2020 Paso Robles GSP, Section 6.2.1, pp. 160-161.
[113] 2020 Paso Robles GSP, Section 6.3.2.3, p. 167.
[114] 2020 Paso Robles GSP, Section 6.3.2.4, pp. 170-171.
[115] 2020 Paso Robles GSP, Section 6.4.2.3, p. 170.

results are defined consistently throughout the basin.[116] The Paso Robles GSP does not utilize management areas for the Subbasin.

5.3 Sustainable Management Criteria

GSP Regulations require each Plan to include a sustainability goal for the Subbasin and to characterize and establish undesirable results, minimum thresholds, and measurable objectives for each applicable sustainability indicator, as appropriate. The GSP Regulations require each Plan to define conditions that constitute sustainable groundwater management for the Subbasin including the process by which the GSA characterizes undesirable results and establishes minimum thresholds and measurable objectives for each applicable sustainability indicator.[117]

5.3.1 Sustainability Goal

The information provided in the Plan for the sustainability goal reasonably sets forth how sustainable groundwater management for the Subbasin will be achieved and substantially complies with the GSP Regulations. The sustainability goal for the Subbasin, as defined in the Plan, is "…to sustainably manage the groundwater resources of the Paso Robles Subbasin for long-term community, financial, and environmental benefit of Subbasin users." The Plan further states the GSAs will "balance the needs of all groundwater users in the Subbasin within the sustainable limits of the Subbasin's resources." The GSP states that a "combination of the management actions and conceptual projects will be implemented to ensure the Subbasin operates within its sustainable yield and achieves sustainability" within 20 years.

5.3.2 Sustainability Indicators

Sustainability indicators are defined as any of the effects caused by groundwater conditions occurring throughout the basin that, when significant and unreasonable, cause undesirable results.[118] Sustainability indicators thus correspond with the six undesirable results – chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon, significant and unreasonable reduction of groundwater storage, significant and unreasonable seawater intrusion, significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies, land subsidence that substantially interferes with surface land uses, and depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water[119] – but refer to groundwater conditions that are not, in and of themselves, significant and unreasonable. Rather, sustainability indicators refer to the effects caused by changing groundwater conditions that are monitored, and for which criteria in the form

[116] 23 CCR § 354.20.
[117] 23 CCR § 354.22 *et seq*.
[118] 23 CCR § 351(ah).
[119] Water Code § 10721(x).

of minimum thresholds are established by the agency to define when the effect becomes significant and unreasonable, producing an undesirable result.

The following subsections thus consolidate three facets of sustainable management criteria: undesirable results, minimum thresholds, and measurable objectives. Information, as presented in the Plan, pertaining to the processes and criteria relied upon to define undesirable results applicable to the basin, as quantified through the establishment of minimum thresholds, are addressed for each sustainability indicator. However, a submitting agency is not required to establish criteria for undesirable results that the agency can demonstrate are not present and are not likely to occur in a basin.[120]

5.3.2.1 Chronic Lowering of Groundwater Levels

The GSP Regulations require the minimum threshold for chronic lowering of groundwater levels to be the groundwater elevation indicating a depletion of supply at a given location that may lead to undesirable results.[121] Undesirable results and minimum thresholds for chronic lowering of groundwater levels in the 2020 Plan were corrected based on deficiencies identified by the Department. An assessment of the corrected information and corrective actions taken by the GSAs is provided in Section 4.1.2 of this Staff Report.

The GSP states sustainable management criteria were developed in response to a variety of input (e.g., public outreach efforts, survey results, hydrogeologic information, evaluation of historical groundwater levels, and well construction information). The quantitative criteria for defining undesirable results have not been modified and are: “Over the course of two years, no more than two exceedances for the groundwater elevation minimum thresholds within a 5-mile radius or within a defined area of the Basin for any single aquifer. A single monitoring well in exceedance for two consecutive years also represents an undesirable result for the area of the Basin represented by the monitoring well. Geographically isolated exceedances will require investigation to determine if local or Basin wide actions are required in response.” [122] Average 2017 non-pumping groundwater levels have been selected as measurable objectives, with minimum thresholds set 30 feet below those levels since “analysis of historical groundwater elevation data suggested that 30 feet allows for reasonable operational flexibility that accounts for seasonal and anticipated climatic variations on groundwater elevation.”

The GSP provides qualitative descriptions of how the selected minimum thresholds could impact other applicable sustainability indicators (i.e., change in groundwater storage, change in groundwater quality, and subsidence). For instance, the description for groundwater storage impacts states that because groundwater elevation minimum thresholds are set to maintain a constant elevation--consistent with pumping at or below the sustainable yield—the groundwater elevation minimum thresholds should not be a negative impact to groundwater storage. The discussion related to the depletions of

[120] 23 CCR § 354.26(d).
[121] 23 CCR § 354.28(c)(1).
[122] 2022 Redlined Paso Robles GSP, Section 8.4.6.1, p. 290.

interconnected surface water sustainability indicator has been modified based on better understanding of the basin setting (see Section 4.2 of this Staff Report).

A well impact analysis was conducted for the Paso Robles Formation Aquifer only. The Alluvial Aquifer is currently monitored by one well installed in June 2018 and did not have sufficient historical data for the 2020 GSP submittal Plan to establish initial sustainable management criteria for groundwater levels. The Plan states criteria for the Alluvial Aquifer will be established early after GSP adoption and the monitoring network will expand by locating new candidate monitoring wells, modifying confidentiality agreements at known wells so that groundwater level data can be used, or by installing new monitoring wells.[123] Staff recommend the GSAs include sustainable management criteria for groundwater levels in the Alluvial Aquifer based on available monitoring data as part of the next periodic evaluation (see Recommended Corrective Action 7).

Department staff conclude that the sustainable management criteria for groundwater levels is commensurate with the understanding of current conditions, responsive to interested party feedback, and reasonably protective of the groundwater uses and users in the Subbasin. The Plan provides a credible and sufficient assessment of the impacts the minimum thresholds would have on all wells by evaluating the well depth and established minimum thresholds at individual representative monitoring points. However, as highlighted in the recommended corrective actions, the GSP should include some additional supporting technical details, clarifications, and Alluvial Aquifer management criteria in the next periodic evaluation.

5.3.2.2 Reduction of Groundwater Storage

The GSP regulations require the minimum threshold for the reduction of groundwater storage to be a total volume of groundwater that can be withdrawn from the basin without causing conditions that may lead to undesirable results. Minimum thresholds for reduction of groundwater storage shall be supported by the sustainable yield of the basin, calculated based on historical trends, water year type, and projected water use in the basin.[124]

The Plan describes significant and unreasonable groundwater storage conditions as those conditions that lead to long-term reduction in storage or interfere with the other sustainability indicators. Conditions that may lead to an undesirable result include expansion of non-de minimis pumping, expansion of de minimis pumping, and extensive, unanticipated drought. The Plan states prolonged reductions in the amount of groundwater in storage could lead to undesirable results affecting beneficial users and uses of groundwater. Groundwater pumpers that rely on water from shallow wells may be temporarily impacted by temporary reductions if the amount of groundwater in storage drops and lower water levels in their wells.

[123] 2022 Redlined Paso Robles GSP, Section 8.4.3.3, p. 272.
[124] 23 CCR § 354.28(c)(2).

This GSP adopts changes in groundwater level as a proxy for changes in groundwater storage and, therefore, the "minimum threshold is that the groundwater surface elevation averaged across all the wells in the groundwater level monitoring network will remain stable above the minimum threshold for chronic lowering of groundwater levels". The GSP states using the same measurable objectives as groundwater elevation protects against significant and unreasonable reduction in groundwater storage as it does protecting against chronic lowering of groundwater levels; the measurable objective, using the groundwater level proxy, is stable average groundwater levels. The reduction of groundwater in storage measurable objective and minimum threshold is established as a whole for the Subbasin rather than for each principal aquifer. Thus, this results in groundwater storage minimum thresholds being monitored without direct measured input from the Alluvial Aquifer, which does not have established sustainable management criteria for groundwater levels. In addressing Recommended Corrective Action 7, the GSAs should also update the discussion of reduction of groundwater storage to include the Alluvial Aquifer.

Based on review of the materials referenced in the GSP, staff find that the GSP's discussion and presentation of information related to significant and unreasonable reduction of groundwater storage, including the rationale that maintaining stable groundwater levels indicates groundwater storage is not being reduced, covers the specific items listed in the GSP Regulations in an understandable format using appropriate data.

5.3.2.3 Seawater Intrusion

The GSP Regulations require the minimum threshold for seawater intrusion to be defined by a chloride concentration isocontour for each principal aquifer where seawater intrusion may lead to undesirable results.[125]

The GSP states seawater intrusion is not an applicable sustainability indicator as the "Subbasin is not adjacent to the Pacific Ocean, a bay, or inlet." Department staff concur with the rationale for not setting sustainable management criteria for seawater intrusion.

5.3.2.4 Degraded Water Quality

The GSP Regulations require the minimum threshold for degraded water quality to be the degradation of water quality, including the migration of contaminant plumes that impair water supplies or other indicator of water quality as determined by the Agency that may lead to undesirable results. The minimum threshold shall be based on the number of supply wells, a volume of water, or a location of an isocontour that exceeds concentrations of constituents determined by the Agency to be of concern for the basin. In setting minimum thresholds for degraded water quality, the Agency shall consider local, state, and federal water quality standards applicable to the basin.[126]

[125] 23 CCR § 354.28(c)(3).
[126] 23 CCR § 354.28(c)(4).

The Plan identifies significant and unreasonable degraded water quality conditions as any increase in a chemical constituent that results in groundwater concentrations in a public supply well above an established primary or secondary maximum contaminant level (MCL), or that lead to reduced crop production. The minimum thresholds are based on a number of supply wells, specifically limiting future primary and secondary MCL exceedances to existing exceedances plus 10 percent (with a minimum of one additional exceedance) for constituents of concern in public supply wells (for total dissolved solids, chloride, sulfate, nitrate, gross alpha radiation) and agricultural supply wells (for chloride, boron). The Plan leverages existing water quality regulatory programs operating in the Subbasin to assess degraded water quality.

Based on review of the GSP's discussion of the establish sustainable management criteria, Department staff find that the GSP's discussion and presentation of information on degradation of water quality covers the specific items listed in the regulations in an understandable format using appropriate data.

5.3.2.5 Land Subsidence

The GSP Regulations require the minimum threshold for land subsidence to be the rate and extent of subsidence that substantially interferes with surface land uses and may lead to undesirable results.[127] Minimum thresholds for land subsidence shall be supported by identification of land uses and property interests that have been affected or are likely to be affected by land subsidence in the basin, including an explanation of how the Agency has determined and considered those uses and interests, and the Agency's rationale for establishing minimum thresholds in light of those effects and maps and graphs showing the extent and rate of land subsidence in the basin that defines the minimum threshold and measurable objectives.[128]

The Plan defines an undesirable result as "pumping induced subsidence of greater than 0.1 foot in any single year and a cumulative 0.5 foot in any five-year period …" The Plan states that based on InSAR data provided by the Department, meaningful land subsidence did not occur during the period between June 2015 and June 2018 in the Paso Robles Subbasin and continuing to avoid undesirable results "will protect the beneficial uses and users from impacts to infrastructure and interference with surface land uses." The subsidence minimum threshold is, therefore, having "the InSAR measured subsidence between June of one year and June of the subsequent year be no more than 0.1 foot in any single year and a cumulative 0.5 foot in any five-year period, resulting in no long-term permanent subsidence." The measurable objective is the "maintenance of current ground surface elevations" and avoid "permanent subsidence." This represents a rate of subsidence that is three times the average rate observed between 2015 and 2018. The Plan states that possible shifts in pumping locations that lead to declines groundwater levels could trigger excessive subsidence. However, since data indicates that no infrastructure is currently affected by subsidence and future

[127] 23 CCR § 354.28(c)(4).
[128] 23 CCR § 354.28(c)(4)(A-B).

pumping will be reduced from current pumping levels, impacts to beneficial uses and users are not anticipated.

Department staff find that the GSP adequately describes the sustainable management criteria and approach to managing land subsidence. Department staff also believe the Agency used the best information and science available at the time of Plan development.

5.3.2.6 Depletions of Interconnected Surface Water

SGMA defines undesirable results for the depletion of interconnected surface water as those that have significant and unreasonable adverse impacts on beneficial uses of surface water and are caused by groundwater conditions occurring throughout the Subbasin.[129] The GSP Regulations require that a Plan identify the presence of interconnected surface water systems in the basin and estimate the quantity and timing of depletions of those systems.[130] The GSP Regulations further require that minimum thresholds be set based on the rate or volume of surface water depletions caused by groundwater use, supported by information including the location, quantity, and timing of depletions, that adversely impact beneficial uses of the surface water and may lead to undesirable results.[131]

The sustainable management criteria for depletions of interconnected surface water in the 2020 Plan was corrected based on deficiencies identified by the Department. An assessment of the corrected information, and corrective actions taken by the GSAs is provided in Section 4.2.2.2 of this staff report.

5.4 MONITORING NETWORK

The GSP Regulations describe the monitoring network that must be developed for each basin including monitoring objectives, monitoring protocols, and data reporting requirements. Collecting monitoring data of a sufficient quality and quantity is necessary for the successful implementation of a groundwater sustainability plan. The GSP Regulations require a monitoring network of sufficient quality, frequency, and distribution to characterize groundwater and related surface water conditions in the basin and evaluate changing conditions that occur through implementation of the Plan.[132] Specifically, a monitoring network must be able to monitor impacts to beneficial uses and users,[133] monitor changes in groundwater conditions relative to measurable objectives and minimum thresholds,[134] capture seasonal low and high conditions,[135] include required information such as location and well construction and include maps and tables clearly showing the monitoring site type, location, and frequency.[136] Department staff

[129] Water Code § 10721(x)(6).
[130] 23 CCR § 354.16 (f).
[131] 23 CCR § 354.28 (c)(6).
[132] 23 CCR § 354.32.
[133] 23 CCR § 354.34(b)(2).
[134] 23 CCR § 354.34(b)(3).
[135] 23 CCR § 354.34(c)(1)(B).
[136] 23 CCR §§ 354.34(g)-(h).

encourage GSAs to collect monitoring data as specified in the GSP, fill data gaps identified in the GSP prior to the first periodic evaluation,[137] update monitoring network information as needed, follow monitoring best management practices,[138] and submit all monitoring data to the Department's Monitoring Network Module immediately after collection including any additional groundwater monitoring data that is collected within the Plan area that is used for groundwater management decisions. Staff note that if GSAs do not fill their identified data gaps, the GSA's basin understanding may not represent the best available science for use to monitor basin conditions.

The Plan's approach for establishing the monitoring networks is to leverage existing monitoring programs and incorporate additional monitoring locations that have been made available by cooperating entities. Currently the monitoring networks are limited to locations with data that are publicly available and not collected under confidentiality agreements. As stated in the GSP, "the availability of well data and restrictions of existing confidentiality agreements results in a monitoring network with relatively few wells.[139] The Plan provides estimated planning-level costs for the first five years for the verification and expansion of monitoring networks ($670,000) and conducting groundwater investigations ($750,000).[140]

There are currently 23 wells in the groundwater level monitoring network, with 22 wells that are part of SLOFCWCD monitoring network for the Paso Robles Formation Aquifer, and one City of Paso Robles-owned monitoring well in the Alluvial Aquifer.[141] The Plan acknowledges that the current number of monitoring wells for both aquifers are "insufficient."[142] As such, data gaps for groundwater level monitoring are identified in the Plan, including a list of nine potential future groundwater monitoring wells (which currently have unknown well information) and a reference to approximately 90 additional wells that are currently not included due to confidentiality agreements which SLOFCWD will attempt to amend with well owners.[143] The Plan allocates a budget of $600,000, anticipated to be spent in the first half of 2020, for installation and inspection of monitoring wells in key data gap areas. GSAs have identified 10 sites for monitoring well installation (along with stream gage installation where needed). GSAs are planning construction of monitoring wells at two sites with existing stream gages using Supplemental Environmental Project funds in 2021.[144] Department staff concur there is a significant data gap in monitoring groundwater levels, especially in the Alluvial Aquifer, and recommend GSAs take action to address the gaps early in Plan implementation as planned.

[137] 23 CCR § 354.38(d).
[138] Department of Water Resources, 2016, Best Management Practices and Guidance Documents.
[139] 2020 Paso Robles GSP, Section 7.1, p. 188.
[140] 2020 Paso Robles GSP, Table 10-1, p. 309.
[141] 2020 Paso Robles GSP, Table 7-1, pp. 194.
[142] 2020 Paso Robles GSP, Section 7.2.1, p. 197.
[143] 2020 Paso Robles GSP, Table 7-2, pp. 195, Section 7.2.1, p. 197, Table 7-3, p. 199.
[144] Paso Robles First Annual Report (2017-2019) and Paso Robles Water Year 2020 Annual Report.

The GSP adopts groundwater levels as a proxy for assessing reduction in groundwater storage.[145] As such, the network of wells providing groundwater level data (and the associated data gaps) are the same as for the reduction in groundwater storage sustainability indicator. The relationship between change in groundwater levels, amount of groundwater pumping, and change in groundwater storage will be developed after GSP adoption and when additional data are available.

The monitoring network for groundwater quality is comprised of public water supply wells to monitor constituents of concern for drinking water, and agricultural supply wells to monitor constituents of concern for crop production. Public water supply well data are from the State Water Resources Control Board (SWRCB) Division of Drinking Water and includes 31 wells in the Paso Robles Formation Aquifer and 7 in the Alluvial Aquifer. Twenty-eight agricultural supply wells were identified by reviewing data from the Irrigated Lands Regulatory Program and stored in the SWRCB's Groundwater Ambient Monitoring and Assessment Program database.

Land subsidence is evaluated by monitoring land subsidence using Interferometric synthetic aperture radar (InSAR) data. Currently this data is provided by the Department and covers the Subbasin. The GSAs will continue to annually assess subsidence using the Department-provided InSAR data. Currently, there are no data gaps identified with the subsidence network; however, GSAs will consider subsidence surveys published by the United States Geological Survey (USGS) in assessing land subsidence across the Subbasin if they become available in the future.

The discussion of the monitoring network related to depletions of interconnected surface water in the 2020 Plan was corrected based on deficiencies identified by the Department. An assessment of the corrected information, and corrective actions taken by the GSAs is provided in Section 4.2.2.3 of this staff report.

The description of the monitoring network included in the Plan substantially complies with the requirements outlined in the GSP Regulations. Overall, the Plan describes in sufficient detail a monitoring network that promotes the collection of data of sufficient quality, frequency, and distribution to characterize groundwater and related surface water conditions in the Subbasin and evaluate changing conditions that occur through Plan implementation. The GSP provides a good explanation for the conclusion that the monitoring network is supported by the best available information and data and is designed to ensure adequate coverage of sustainability indicators. The Plan also describes existing data gaps and the steps that will be taken to fill data gaps and improve the monitoring network prior to the first periodic evaluation. Department staff consider the information presented in the Plan to satisfy the general requirements of the GSP Regulations regarding monitoring network.

The GSP provides a monitoring network that will monitor the sustainability indicators and assist in achieving the sustainability goal; however, there are data gaps and

[145] 2020 Paso Robles GSP, Section 7.3, p. 202.

recommended corrective actions identified by both the GSAs and Department staff which will improve upon the monitoring network. The GSP Regulations require GSPs to provide specific information about each monitoring site per the data and reporting standards.[146] As Plan implementation progresses, it is imperative the GSA work to ensure the information defining the monitoring network is consistent within the GSP, consistent with the Department's Monitoring Network Module, and follow the data and reporting standards. Department staff recommend there be a reconciliation between the details of the monitoring network provided in the GSP with the requirements of the data and reporting standards in the GSP Regulations (see Recommended Corrective Action 8).

5.5 Projects and Management Actions

GSP Regulations require a description of the projects and management actions the submitting agency has determined will achieve the susta7inability goal for the basin, including projects and management actions to respond to changing conditions in the basin.[147]

The Plan includes a suite of projects (in progress and conceptual) and management actions that appear to be reasonable and feasible, and, if implemented, will likely lead to the Subbasin achieving its sustainability goal.[148] While projects involve new or improved infrastructure to make new water supplies available, management actions are programs or policies that will improve groundwater monitoring, promote groundwater use reduction, develop a mandatory pumping limitation program, and reduce uncertainty. As stated in the Plan, "[t]o stop persistent declines in groundwater levels … reducing groundwater pumping will be needed."[149] Current levels of groundwater pumping in the Subbasin exceed the estimated sustainable yield of 61,100 acre-feet per year (by 13,700 acre-feet per year) and, in certain areas of the Subbasin, groundwater levels are persistently declining.[150] The Plan explains that the implementation of projects may offset pumping and lessen the degree to which management actions would be needed to operate the Subbasin within its sustainability yield.[151]

The GSAs provide general timelines for expected initiation of projects and management actions and cursory identifications of sustainable management criteria that would be affected by implementation. Largely, qualitative descriptions are provided for the evaluation of benefits to the Subbasin from management actions. Maps of projected groundwater level benefit are provided for the projects' benefits evaluation; however,

[146] 23 CCR §§ 352.4, 354.34(g)(2).
[147] 23 CCR § 354.44 et seq.
[148] 2020 Paso Robles GSP, Section 9.1, p. 259.
[149] 2020 Paso Robles GSP, Section 9.1, p. 260.
[150] 2020 Paso Robles GSP, Section 9.2, pp. 260-261.
[151] 2020 Paso Robles GSP, Section 9.5, pp. 274-275.

implementation of most projects depend on willing participants, and successful funding votes.[152]

The Plan divides management actions into basin-wide management actions that will apply to all Subbasin areas and reflect basic GSP implementation requirements, and an area-specific management action that requires adoption of regulations, environmental review, and legal risks. Basin-wide management actions include monitoring, reporting and outreach, promoting best water use practices, promoting stormwater capture, and promoting voluntary fallowing of irrigated crop land. The area-specific management action consists of mandatory pumping limitations in specific areas. It will take an up to five years to establish a regulatory program for area-specific pumping limitations. In the interim, the GSAs plan basin-wide management actions for certifying de minimis users and developing a metering and reporting program for non-de minimis users. Additional basin-wide management actions to increase the level of understanding of the basin include expanding groundwater level monitoring, investigating surface water-groundwater interconnectivity, refining the hydrogeologic conceptual model, and updating the groundwater model. The basin-wide management actions, if successfully and timely implemented, could increase the level of understanding in the Subbasin and allow for the successful implementation of an area specific mandatory pumping limitation regulatory program.

The six projects included in the GSP have been identified after many public meetings and studies over the last decade; however not all projects described in the Plan will necessarily be implemented.[153] The projects focus on new supply of up to 9,200 acre-feet per year, by developing recycled water (2,400 acre-feet per year) and water imports from the Nacimiento Water Project (5,800 acre-feet per year) and Salinas Dam (1,000 acre-feet per year). Only one project, City Recycled Water Delivery, is currently underway as of GSP submittal. This project will use up to 2,200 acre-feet per year of disinfected tertiary effluent for in-lieu recharge near and inside the City of Paso Robles and water not used for recycled water purposes will be discharged to Huer Huero Creek with the potential for additional recharge benefits.

The Plan adequately describes proposed projects and management actions in a manner that is generally consistent and substantially complies with the GSP Regulations. The projects and management actions, which focus largely on conservation and efficiency; stormwater efforts; increasing groundwater in storage through recharge; and increasing non-groundwater water supply, are directly related to the sustainable management criteria and present a generally feasible approach to achieving the sustainability goal of the Subbasin.

[152] 2020 Paso Robles GSP, Section 9.5, p. 275.
[153] 2020 Paso Robles GSP, Section 9.5.2, p. 276.

5.6 Consideration of Adjacent Basins/Subbasins

SGMA requires the Department to "…evaluate whether a groundwater sustainability plan adversely affects the ability of an adjacent basin to implement their groundwater sustainability plan or impedes achievement of sustainability goals in an adjacent basin." Furthermore, the GSP Regulations state that minimum thresholds defined in each GSP should be designed to avoid causing undesirable results in adjacent basins or affecting the ability of adjacent basins to achieve sustainability goals.

The Paso Robles Subbasin is bound by four adjacent groundwater basins: the Upper Valley Aquifer Subbasin to the north, the Cholame Valley Basin to the east, the Carrizo Plain Basin to the southeast, and the Atascadero Area Subbasin to the southwest. The Upper Valley Aquifer Subbasin is a medium-priority basin with a GSP deadline of January 2022, while the other basins are very-low priority and not required to submit a GSP for evaluation and assessment. The Plan includes an analysis of potential impacts to adjacent basins with the defined minimum thresholds for each applicable sustainability indicator. The Plan does not anticipate any impacts to adjacent basins developing GSPs from the minimum thresholds defined in the Plan and, if impacts are ultimately observed, thresholds would be adjusted. The GSP states the Paso Robles Subbasin GSAs have developed a cooperating working relationship with the Salinas Valley Basin GSA and the Agencies managing the Atascadero Subbasin. Specific details regarding the strategy or plan to closely coordinate with the GSA in the neighboring basins are not provided.

5.7 Consideration of Climate Change and Future Conditions

The GSP Regulations require a GSA to consider future conditions and project how future water use may change due to multiple factors including climate change.[154]

Since the GSP was adopted and submitted, climate change conditions have advanced faster and more dramatically. It is anticipated that the hotter, dryer conditions will result in a loss of 10% of California's water supply. As California adapts to a hotter, drier climate, GSAs should be preparing for these changing conditions as they work to sustainably manage groundwater within their jurisdictional areas. Specifically, the Department encourages the GSA to explore how the proposed groundwater level thresholds have been established in consideration of groundwater level conditions in the Subbasin based on current and future drought conditions. The Department encourages the GSA to also explore how groundwater level data from the existing monitoring network will be used to make progress towards sustainable management of the Subbasin given increasing aridification and effects of climate change, such as prolonged drought. Lastly, the Department encourages the GSA to continually coordinate with the appropriate groundwater users, including but not limited to domestic well owners and state small water systems, and the appropriate overlying county jurisdictions developing drought plans and establishing local drought task forces[155] to evaluate how the Agency's

[154] 23 CCR § 354.18.
[155] Water Code § 10609.50.

groundwater management strategy aligns with drought planning, response, and mitigation efforts within the Subbasin.

6 STAFF RECOMMENDATION

Department staff recommend approval of the Plan with the recommended corrective actions listed below. The Plan conforms with Water Code Sections 10727.2 and 10727.4 of SGMA and substantially complies with the GSP Regulations. Implementation of the Plan will likely achieve the sustainability goal for the Paso Robles Area Subbasin. The GSAs have identified several areas for improvement of its Plan and Department staff concur that those items are important and should be addressed as soon as possible. Department staff have also identified additional recommended corrective actions that should be considered by the GSAs for the first periodic evaluation of its GSP. Addressing these recommended corrective actions will be important to demonstrate that implementation of the Plan is likely to achieve the sustainability goal. The recommended corrective actions include:

RECOMMENDED CORRECTIVE ACTION 1

Department staff recommend the GSAs explain the selection of ten percent of all wells going dry as considered undesirable. The GSAs should provide details describing groundwater conditions when ten percent of all wells in the Subbasin go dry and, if appropriate, justify how those groundwater conditions constitute a significant and unreasonable effect to beneficial users and uses.

RECOMMENDED CORRECTIVE ACTION 2

Staff recommend the GSAs continue to re-evaluate the well impact analysis by pursuing activities to fill data gaps so that limitations of accurate and complete well construction information are overcome, and further refine the GSP's criteria, assumptions, analysis, and objectives in defining significant and unreasonable effects based on best available information.

RECOMMENDED CORRECTIVE ACTION 3

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, or provide 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. Department staff recommend that the GSAs review the Department's April 2023 guidance document titled Considerations for Identifying and Addressing Drinking Water Well Impacts guidance to assist its adaptive management efforts.

RECOMMENDED CORRECTIVE ACTION 4

a. Department staff recommend the GSAs provide clear explanation of the usage of the Alluvial Aquifer and provide specific volumetric quantities of estimated pumping that occurs from the Alluvial Aquifer to detail the comparison of pumping from the Subbasin's two principal aquifers.

b. Define the scope, schedule, and budget of the plan to investigate the potential connection between Estrella River and San Juan Creek to the underlying Paso Robles Formation Aquifer. Provide the Department with an update of work that has been conducted by the periodic evaluation.

RECOMMENDED CORRECTIVE ACTION 5

Department staff understand that estimating the location, quantity, and timing of stream depletion due to ongoing, Subbasin-wide pumping is a complex task and that developing suitable tools may take additional time; however, it is critical for the Department's ongoing and future evaluations of whether GSP implementation is on track to achieve sustainable groundwater management. The Department plans to provide guidance on methods and approaches to evaluate the rate, timing, and volume of depletions of interconnected surface water and support for establishing specific sustainable management criteria in the near future. This guidance is intended to assist GSAs to sustainably manage depletions of interconnected surface water.

In addition, the GSA should work to address the following items by the first periodic evaluation:

a. Work to establish undesirable results, minimum thresholds, and measurable objectives consistent with the GSP Regulations. Measurable objectives are to use the same metric used for minimum thresholds, including quantifying the location, quantity, and timing of depletions of interconnected surface water due to groundwater extraction. Consider utilizing the interconnected surface water guidance, as appropriate, when issued by the Department.

b. Continue to fill data gaps, collect additional monitoring data, and implement the current strategy to manage depletions of interconnected surface water and define segments of interconnectivity and timing.

c. Prioritize collaborating and coordinating with local, state, and federal regulatory agencies as well as interested parties to better understand the full suite of beneficial uses and users that may be impacted by pumping induced surface water depletion within the GSA's jurisdictional area.

RECOMMENDED CORRECTIVE ACTION 6

Department staff recommend the GSAs provide a clear explanation of the monitoring network for interconnected surface water, including how each aquifer is going to be monitored and how stream gages will be utilized to evaluate depletions of interconnected surface water.

RECOMMENDED CORRECTIVE ACTION 7

Staff recommends the GSAs include sustainable management criteria for groundwater levels in the Alluvial Aquifer based on available monitoring data as part of the next periodic evaluation. Additionally, the GSAs should increase the publicly available information to describe the monitoring network of the Alluvia Aquifer, including reviewing confidentiality agreements, installing new monitoring wells where needed, and filling data gaps in well information of known wells. As groundwater levels are used as a proxy for reduction of groundwater storage, GSAs may need to update the related discussion for the Alluvia Aquifer.

RECOMMENDED CORRECTIVE ACTION 8

Department staff recommend the GSAs conduct a reconciliation between the details of the monitoring network provided in the GSP with the requirements of the data and reporting standards in the GSP Regulations. Where requirements of the data and reporting standards are not provided, the GSA should include this information in the periodic evaluation of the GSP. As a reminder, updates to the monitoring network must be reflected in the SGMA Portal’s Monitoring Network Module.

PASO BASIN COOPERATIVE COMMITTEE
July 26, 2023

Agenda Item #9 – Notice of No Award for the $8.89M Department of Conservation MILR Grant

Recommendation
None; information only.

Prepared By
Blaine Reely, County of San Luis Obispo Groundwater Sustainability Director

Discussion
On March 29, 2023, the County of San Luis Obispo submitted a grant application, on behalf of the Paso Basin, for the California Department of Conservation's (DOC) Round 2 Multibenefit Land Repurposing Program regional block grant solicitation for a maximum potential award of $8.89 million.

On June 12, 2023, the DOC informed the County that the proposal was **not** selected for funding, but encouraged the County to reapply in the future should the program receive additional funding.

The DOC notification letter is provided as Attachment 1.

* * *

California
Department of Conservation
Division of Land Resource Protection

Gavin Newsom, Governor
David Shabazian, Director

June 12, 2023

Blaine Reely
County of San Luis Obispo

Via Email to: breely@co.slo.ca.us

Re: Multibenefit Land Repurposing Program Grant Solicitation – Regional Block Grants

Dear Blaine:

Thank you for your application in response to the Department of Conservation's Round 2 Multibenefit Land Repurposing Program regional block grant solicitation.

I regret to inform you that your proposal was not selected for funding. We were pleased to receive numerous strong proposals totaling over $84.6 million in requests and demonstrating a commitment to repurposing agricultural lands to support groundwater sustainability and provide multiple benefits, making the $35.56 million allocated for regional block grants insufficient to fund all proposals.

While we were not able to award funding to all proposals this round, should the program receive additional funding, we sincerely hope you will consider submitting another application.

Thank you again for your interest. Should you have any questions, please contact Shanna Atherton-Bauer, Program Manager, at (916) 858-9724.

Sincerely,

Keali'i Bright
Director, Division of Land Resource Protection

PASO BASIN COOPERATIVE COMMITTEE
July 26, 2023

Agenda Item #10 – Report on SGMA GSP Round 1 Grant Implementation

Recommendation
None; information only.

Prepared By
Blaine Reely, County of San Luis Obispo Groundwater Sustainability Director

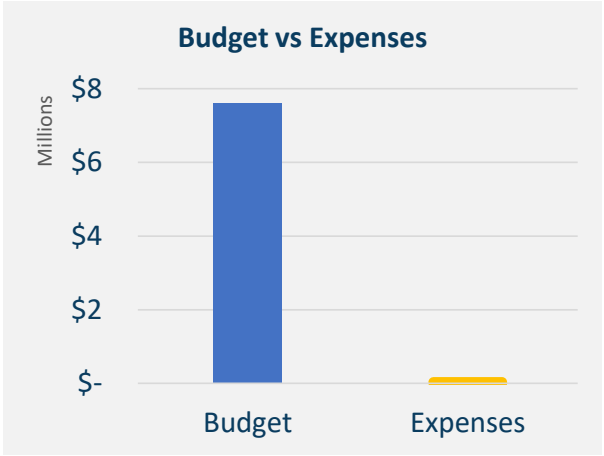
Discussion
A report on the budget and expenses for each component of the awarded California Department of Water Resource Sustainable Groundwater Management Round 1 grant ($7.6 million) is provided as Attachment 1.

* * *

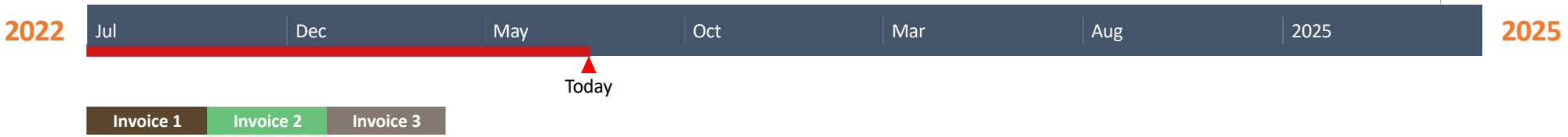
10 – Report on SGMA GSP Round 1 Grant Implementation

Taylor Blakslee

- Three (3) invoices submitted to-date
- Invoice No. 3 Total = $4,154.00

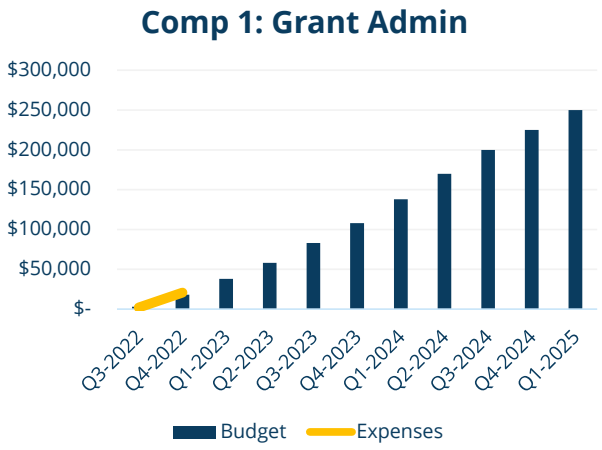


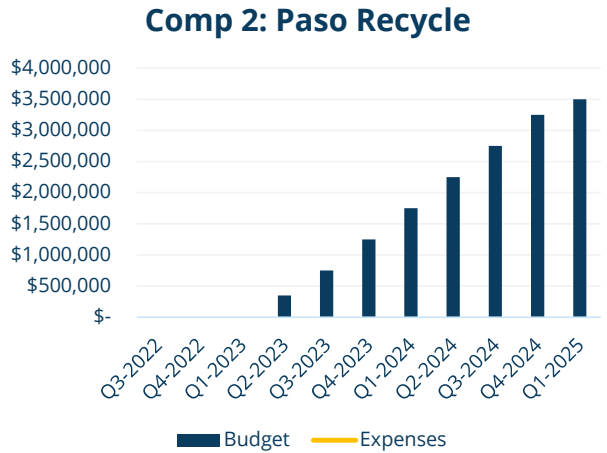
Invoices Submitted

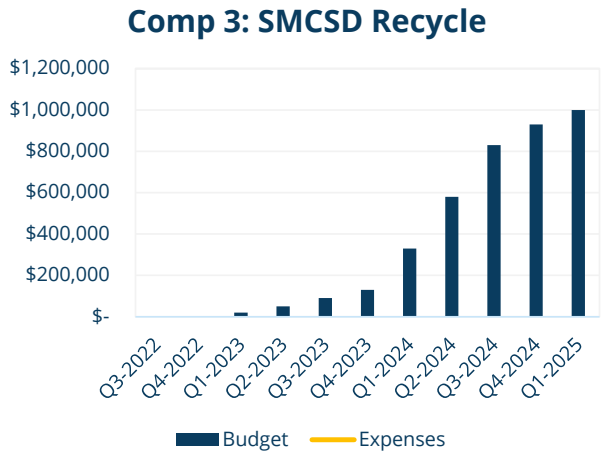


10 – Report on SGMA GSP Round 1 Grant Implementation

Taylor Blakslee



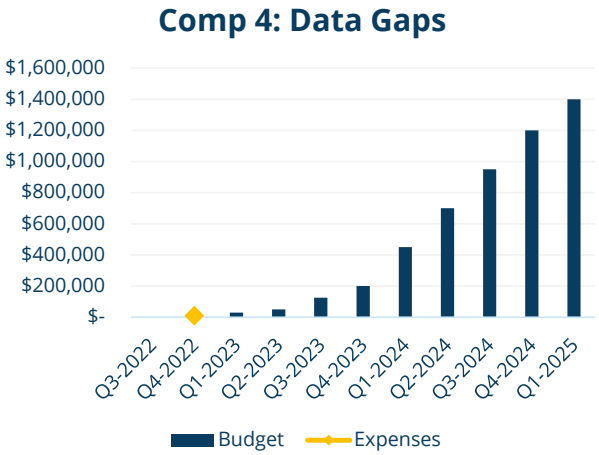


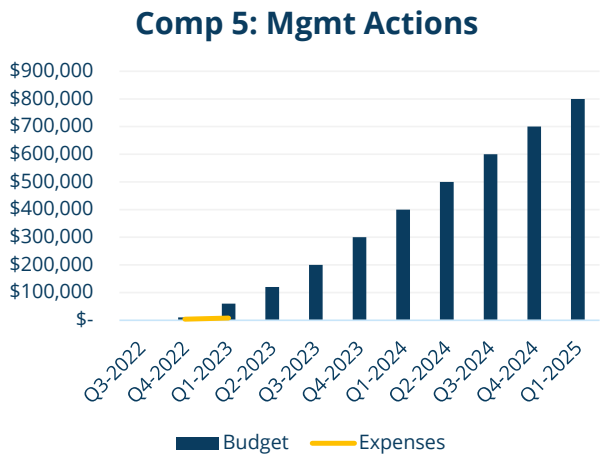


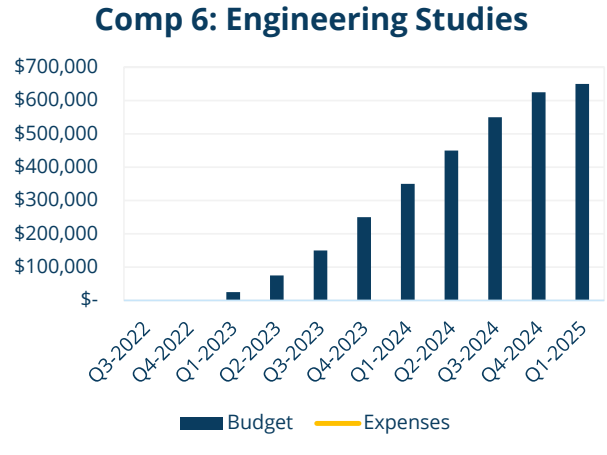
Paso Basin Cooperative Committee
July 26, 2023

10 – Report on SGMA GSP Round 1 Grant Implementation

Taylor Blakslee







Paso Basin Cooperative Committee
July 26, 2023

PASO BASIN COOPERATIVE COMMITTEE
July 26, 2023

Agenda Item #11 – Report on Technical Advisory Committees

Recommendation
None; information only.

Prepared By
Taylor Blakslee, Hallmark Group

Discussion
An update on the following three Technical Advisory Committees is provided as Attachment 1.

- Expanded Monitoring Network
- Blended Irrigation Water Supply Program
- Multibenefit Irrigation Land Repurposing (MILR) Program

* * *

11a – Report on Expanded Monitoring Network TAC

Taylor Blakslee

- Expanded Monitoring Network TAC set on March 16, 2023
- Purpose is to advise and assist in implementation of the Paso Basin expanded monitoring network
- Primary work components:
  - 100+ existing wells into the RMS network
  - 8 new monitoring wells
  - 3 stream gauges
  - 2 climatologic stations
  - Identification of potential rural domestic well impacts
  - Enhance understanding of areas of potential surface water and groundwater interaction
- Secondary / Potential Components
  - Supplemental hydrogeologic investigations to enhance understanding of conditions present in the basin if groundwater levels have declined below designated minimum thresholds (MTs), or in areas where rural domestic wells have gone dry or are at-risk to having their water supply disrupted

11a – Report on Expanded Monitoring Network TAC

Taylor Blakslee

TAC Members:

1. Candace Nachel
2. Chris Winsor
3. Greg Grewal
4. Jerry Reaugh
5. Murray Powell
6. Randy Diffenbaugh
7. Willy Cunha

Meetings:

April 10, 2023
April 20, 2023
May 4, 2023
May 18, 2023
June 1, 2023
July 13, 2023

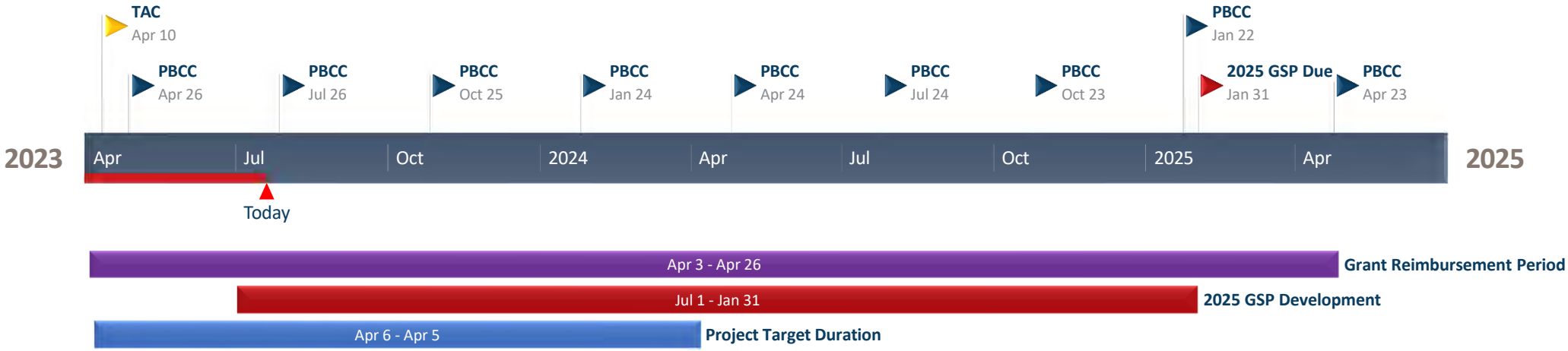
Every two weeks

Current Work Items:

- Recommended network of 1) 100+ existing wells to the current 23 well RMS network (may ultimately be reduced), 2) eight alluvial new wells (based off Todd study), and 3) sites for up to 40 transducers/continuous monitoring devices
  - Developing 3 options for 100 sites, will provide field consultant (TBD) with three prioritized well options improving in-field efficiency
- Draft network recommendation to be presented at next PBCC meeting

11a – Report on Expanded Monitoring Network TAC

Taylor Blakslee



Paso Basin Cooperative Committee
July 26, 2023

11b – Blended Irrigation Water Supply Project TAC

Taylor Blakslee

- Blended Irrigation Water Supply Project TAC set on March 16, 2023
- Purpose is to advise and assist in assessing the feasibility of constructing and operating the Blended Irrigation Water Supply Project
- Primary TAC work components:
  - Develop scope of work for feasibility and preliminary engineering study RFP
  - Review proposals and provide consultant recommendation to PBCC
    - Recommendation on firms to solicit RFP
  - Regular meetings with selected consultant to finalize feasibility and preliminary engineering study

11b – Blended Irrigation Water Supply Project TAC

Taylor Blakslee

TAC Members:

1. Eric Pooler
2. Kirk Gonzalez
3. Matt Merrill
4. Randy Heinzen
5. Ray Shady
6. Robert Woodland
7. Steve Sinton
8. Steven Carter
9. Zachary Merkel

Meetings:

April 20, 2023
May 4, 2023
May 18, 2023
June 1, 2023
July 13, 2023

Every two weeks

Current Work Items:

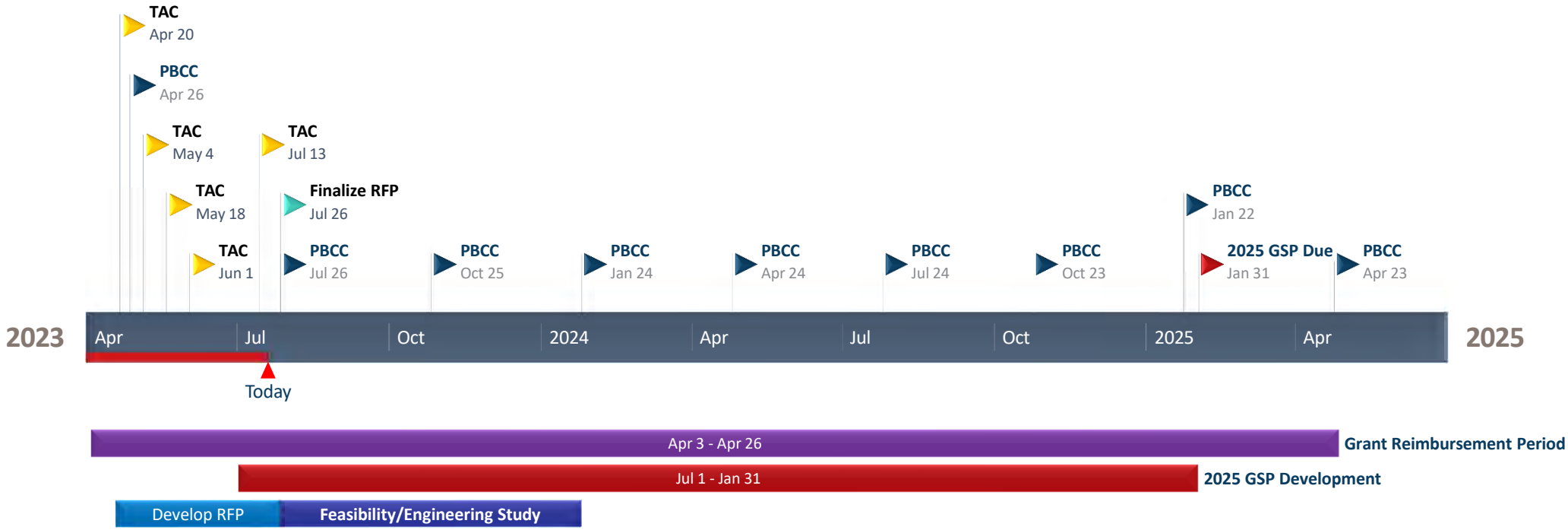
- Finalized RFP

Future Work Items:

- Review RFP proposals
- Assist in selection process
- Interface with selected consultant, as needed

11b – Blended Irrigation Water Supply Project TAC

Taylor Blakslee



Paso Basin Cooperative Committee
July 26, 2023

11c – MILR TAC

Taylor Blakslee

- Multibenefit Irrigated Land Repurposing (MILR) TAC set on March 16, 2023
- Purpose is to advise and assist in the development and implementation of the Paso Robles Groundwater Basin Multi-Benefit Irrigated Land Repurposing (MILR) Program
- Primary TAC Work
  - **Phase 1:** Voluntary Component
    - o Program Development:
      - Determine if a MILR Program is feasible (proof of concept)
      - Assist in development of the Program framework for PBCC consideration
        - **Develop rules and regulations to be codified in an ordinance for adoption by the four (4) GSAs**
        - Identify and procure third party consultants and experts to assist in the process
        - Many details to work out and agreement among stakeholders for a successful program
      - Work with Partners and Collaborators to perform outreach/communication to potential participants regarding framework
    - o Program Implementation
  - **Phase 2:** Mandatory Component (if required)

11c – MILR TAC

Taylor Blakslee

TAC Members:

1. Brent Burchett
2. Christopher Alakel
3. Dana Merrill
4. Jerome Lohr
5. Kurt Ammann
6. Matt Turrentine
7. Neil Roberts
8. Patricia Wilmore
9. Randy Record
10. Tavo Acosta
11. Will John

Meetings:

April 13, 2023
May 23, 2023
July 11, 2023

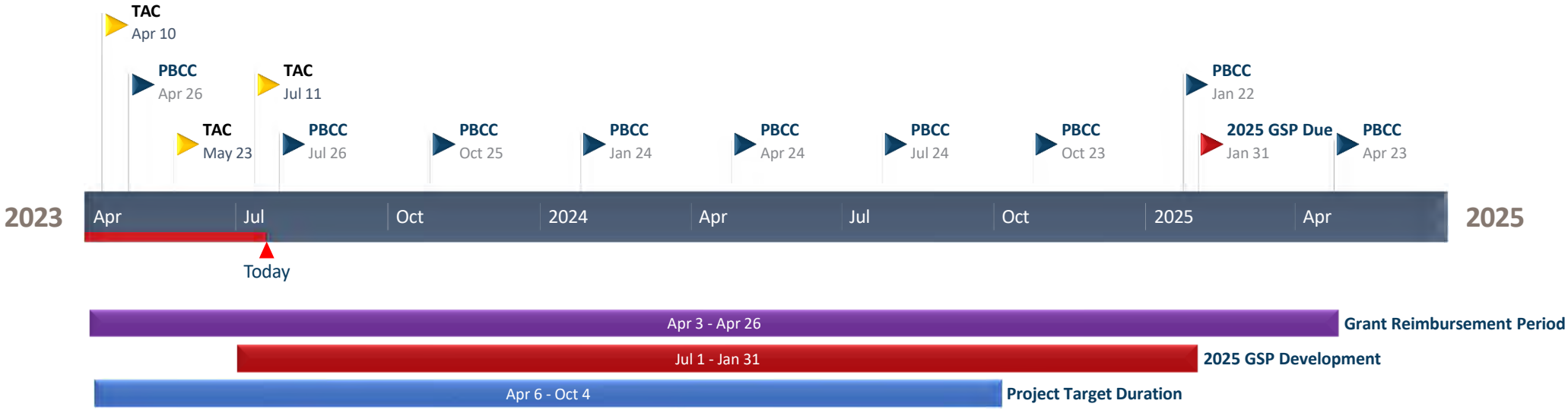
Monthly meetings

Current Work Items:

- Review funding requirements
- Review funding models from successful MILR programs
- Recommending PBCC consider a rate study
- Review proof of concept interactive pricing model
- Discuss sustainability/cost of water expectations
- Discuss additional management actions or practices to reduce water demand

11c – MILR TAC

Taylor Blakslee



Paso Basin Cooperative Committee
DRAFT Minutes
April 26, 2023

The following members or alternates were present:

Matt Turrentine, Chair, Shandon-San Juan Water District GSA
Kelly Dodds, Vice Chair, San Miguel Community Services District GSA
John Hamon, Secretary, City of Paso Robles GSA
Bruce Gibson, Treasurer, County of San Luis Obispo GSA

1. Call to Order	Chair Turrentine: calls the meeting to order at 4:00 p.m.
2. Pledge of Allegiance	Chair Turrentine: leads the Pledge of Allegiance.
3. Roll call	Project Manager, Taylor Blakslee: calls roll.
4. Meeting Protocols	Project Manager, Blakslee provides an overview of meeting protocols.
5. Public Comment – Items not on Agenda	*Meeting Audio: Item start ~ 00:02:12* Chair Turrentine: opens the floor for public comment. Greg Grewal: Notes the Annual Report was submitted to the California Department of Water Resources on April 1st and asks what will be done to discuss the topic of the 21,000 acre-feet of over irrigation between the evapotranspiration and the actual crop factors that are supposed to be used, and also what's being calculated to account for lined irrigation ponds that are filled with pumped groundwater with no protection from evaporation.
6. Response to Previous Public Comments	*Meeting Audio: Item start ~ 00:03:52* Nothing to report
7. Update on Statement of Equity	*Meeting Audio: Item start ~ 00:4:08* Chair Turrentine: opens discussion for Agenda Item 7 Update on Statement of Equity Treasurer Gibson: informs the Paso Basin Cooperative Committee (PBCC) the statement of equity has evolved since it was first mentioned in the special PBCC meeting on March 16, 2023. Treasurer Gibson explains the PBCC was handed a hard copy of the third version of the draft, which had input from conversations from a variety of individuals from the Paso Robles Wine Country Alliance, Farm Bureau, and others and those edits are shown in tracked changes. Treasurer Gibson explains his vision for the statement of equity is for all the Groundwater Sustainability Agency's (GSAs) in the Paso Basin would endorse a statement that would be agreeable to all the GSA's and include the statement of equity in the updated GSP. He notes he believes the statement of equity if getting close to a final version and has not heard any major opposition to the concept and, possibly by the next PBCC meeting, each GSA could potentially endorse a statement of an expected update to the GSP. Treasurer Gibson explains the three categories of changes to the draft document are 1) the document should not speak to the specifics of projects (he also thanks Shandon San Juan Water District for providing comments on the statement), 2) express the value of the

	agricultural use of water, and 3) a measure of reasonableness should be included in the statement. Treasurer Gibson continues to walk through the latest draft which talks about sustainable and equitable access to shared resources. He explains Shandon San Juan identified there are multiple small mutual water supply systems that will need to be identified in the draft, and a bullet that states one of the challenges of equitable access is SGMA emphasized it would not alter California water law. Secretary Hamon: asks if the public received a copy of this draft statement of equity document. Mr. Reely: responds Treasurer Gibson brought hard copies and they were made available at the table near the entrance of the Chambers. Treasurer Gibson: responds each GSA would add this item to their agenda for the public to view. Chair Turrentine: opens the floor for public comment. Patricia Wilmore: speaks Greg Grewal: speaks Willy Cunha: speaks Susan Harvey: speaks Murray Powell: speaks
8. Report on Spring 2023 Groundwater Levels	*Meeting Audio: Item start ~ 00:32:59* Chair Turrentine: opens discussion for Agenda Item 8 Report on Spring 2023 Groundwater Levels. Mr. Reely: informs the PBCC that the County measures spring groundwater levels in April. He notes there are 100 wells in the Paso Basin monitoring network and 87 wells were measured, 11 wells were not measured due to the well pumping or obstruction in the well, and 2 wells were dry. He presents statistics on the groundwater level changes and notes overall positive recovery to groundwater levels to most of the wells in the Basin. Secretary Dodds: asks if the data can be used to assess locations for interconnected surface water. Treasurer Gibson: requests that data be shown as a contour map.

	Chair Turrentine: notes there may be additional recovery measured in the coming months. Chair Turrentine: opens the floor for public comment. Stakeholder: speaks Greg Grewal: speaks
9. Update on SGMA GSP Implementation Round 1 Grant Implementation	*Meeting Audio: Item start ~ 00:48:15* Chair Turrentine: opens discussion for Agenda Item 9 Update on SGMA GSP Implementation Round 1 Grant Implementation. Mr. Blakslee: provides an update on the two invoices submitted to DWR for grant reimbursement and reviewed the costs for each grant budget component. Chair Turrentine: opens the floor for public comment. No comments.
10. Report on Technical Advisory Committees **a. Expanded Monitoring Network** **b. Blended Water Supply** **c. MILR**	*Meeting Audio: Item start ~ 00:50:55* Chair Turrentine: opens discussion for Agenda Item 10 Report on Technical Advisory Committees. Mr. Blakslee: updates the PBCC that Technical Advisory Committees have begun meeting and are being facilitated by the Hallmark Group and provides updates as provided in the PBCC agenda packet. Secretary Hamon: asks if the TAC is working on ways to get Nacimiento water to this source. Mr. Alakel replies that they are. Chair Turrentine: opens the floor for public comment. Willy Cunha: speaks. Joe Irick: speaks. Serena Freedman: speaks.
11. Report on 2025 Groundwater Sustainability Plan Update (GSP)	*Meeting Audio: Item start ~ 01:09:19* Chair Turrentine: opens discussion for Agenda Item 11 Report on 2025 Groundwater Sustainability Plan Update (GSP). Mr. Reely: updates the PBCC that the Groundwater Sustainability Plan (GSP) five-year update is due January 31, 2025, and there are only seven regular PBCC meetings before the GSP update is due. He recommends the PBCC staff develop

recommendations to be presented for the GSP update at the PBCC regular meeting on July 26, 2023.

Chair Turrentine: opens the floor for public comment. No comment.

12. Approval of March 16, 2023 Regular Meeting Minutes

Meeting Audio: Item start ~ 01:13:49

Chair Turrentine: opens discussion for Agenda Item 11 Approval of March 16, 2023, Regular Meeting Minutes; asks for comments from the Committee.

Vice Chair Dodds: requests to change the minutes to correctly spell his last name.

Chair Turrentine: opens the floor for public comment. No comment.

Motion by: Vice Chair Dodds
Second by: Secretary Hamon
Motion: Committee moves to approve March 16, 2023, Regular Meeting Minutes with the correction to correctly spell Vice Chair Dodds name.

Members	Ayes	Noes	Abstain	Recuse
Matt Turrentine (Chair)	X			
Kelly Dodds (Vice Chair)	X			
John Hamon (Secretary)	X			
Bruce Gibson (Treasurer)	X			

13. Approval of Members to the Technical Advisory Committees

Meeting Audio: Item start ~ 01:15:12

Chair Gibson: opens discussion for Agenda Item 13 Approval Members to the Technical Advisory Committees.

Mr. Blakslee: provides background on several applications requesting to join the TACs as follows: Expanded Monitoring Network – Murray Powell; MILR – Cade Creason, Neil Roberts, Tavo Acosta.

Chair Gibson: opens the floor for public comment. No comment.

Motion by: Secretary Hamon
Second by: Vice Chair Dodds
Motion: Committee moves to approve appointments to the TACS as outlined in agenda item No. 13.

Members	Ayes	Noes	Abstain	Recuse
Matt Turrentine (Chair)	X			
Kelly Dodds (Vice Chair)	X			
John Hamon (Secretary)	X			
Bruce Gibson (Treasurer)	X			

14. Update from Member GSAs

Meeting Audio: Item start ~ 01:16:20

	Chair Turrentine: opens discussion for Agenda Item 14 Update from Member GSAs. Christopher Alakel: comments he is working with the County and the California Department of Water Resources to site a dedicated monitor well near the airport and is working with the airport manager. Treasurer Gibson: comments the County is expecting to bring Estrella-El Pomar-Creston Water District (EPC) request to become a GSA to the Board of Supervisors on June 6, 2023, along with the endorsement for the statement of equity. Mr. Reely: comments the County made an application for a grant through the California Department of Conservation for the Multibenefit Irrigated Land Repurposing Program and there is an interview on Friday. Chair Turrentine: comments the Governor Executive Order temporarily suspended the permit process for some recharge projects. He continues to explain Shandon San Juan Water District was able to recharge 35 acre-feet into the basin over the course of two weeks and encourages the PBCC to consider opportunities for small projects like this. Ann Myhre: comments
15. Committee Member Comments	Secretary Hamon: comments Paso went to DWR to further discuss grant application and introduced themselves to DWR.
16. Upcoming meeting(s)	*Meeting Audio: Item start ~ 01:25:37* Chair Turrentine: notes the next meetings are on July 26, 2023 and October 25, 2023.
17. Future Items	Secretary Hamon: requests to add discussion of the statement of equity on the July 26, 2023 agenda. Chair Turrentine: opens the floor to public comment. Cody Ferguson: speaks. Greg Grewal: speaks. Candy Angel: speaks.
18. Correspondence	*Meeting Audio: Item start ~ 01:26:18* Chair Turrentine: opens discussion for Agenda Item 18 Correspondence.

	Mr. Blakslee: reports a letter was received from the City of Paso Robles on April 21, 2023 in support of the EPC becoming a GSA, which is included in the packet. Chair Turrentine: opens the floor for public comment. Greg Grewal: speaks. Jerry Reaugh: speaks. Treasurer Gibson: comments all legal aspects will be considered at the June 6, 2023, Board of Supervisor meeting.
19. Adjourn	Secretary Hamon moves to adjourn the meeting at 6:05 p.m. and Treasurer Gibson seconds the motion.

Drafted by: Taylor Blakslee/Joshua Montoya, Hallmark Group

PASO BASIN COOPERATIVE COMMITTEE
July 26, 2023

Agenda Item #14 – Develop Responses to the June 23, 2023 Grand Jury Report Items R1-R5 and R9 and Submit to the Court by September 21, 2023

Recommendation
PBCC responses to Grand Jury findings and recommendations required.

Prepared By
Blaine Reely, County of San Luis Obispo Groundwater Sustainability Director

Discussion
On June 23, 2023, the Grand Jury issued a report entitled "Can One Year Wash Away the Paso Robles Basin's Water Worries?" The report is provided as attachment 1 and requires responses to specific findings and recommendations from the San Luis Obispo County Board of Supervisors, Shandon San Juan Water District, and the Paso Basin Cooperative Committee (PBCC).

The PBCC is required to respond to recommendations R1-R5 and R9 within 90 days and submit to the presiding judge of the San Luis Obispo County Superior Court. A paper copy and electronic version of the responds must also be provided to the Grand Jury. A template to respond to the recommendations is provided as Attachment 2.

* * *

Can One Wet Year Wash Away the Paso Robles Basin's Water Worries?

SUMMARY

The record-setting snow and rainfall in 2023 are filling our reservoirs here in San Luis Obispo County (County). As the water percolates down, we can expect to see improved water levels in the Paso Robles Groundwater Basin (Paso Basin). While this increase in reserves is valuable, past precipitation history and future models indicate that drier years will continue to be our norm in the County. Users in the Paso Basin typically pump more water than the rainfall recharges, creating a basin in overdraft.

In 2014, the State of California (State) enacted the Sustainable Groundwater Management Act (SGMA) to help protect groundwater resources. This act prioritized basins of concern and required the Paso Basin to create a Groundwater Sustainability Plan (GSP). Diligent work has gone into creation of the Paso Basin GSP, which was approved on March 2, 2023, by the State Department of Water Resources (DWR). While this plan gives us a roadmap toward sustainability, the requirement date for sustainability is 2040, allowing a continued period of basin depletion.

The baseline water storage level chosen for the GSP is 2017, a point at which 141 wells were already recorded to have gone dry[1]. An additional 95 wells were reported dry between January 2018 and 2022. The GSP identified the historical average annual groundwater storage loss of 12,600 acre-feet per year (AFY)[2], which has resulted in an increasing number of dry wells[3]. The GSP identifies some new sources of water, but far less than the 12,600 AFY of overdraft experienced during the time frame 1981-2011. Therefore, the only way to fully achieve sustainably is to use less water.

[1] Technical Memorandum – Paso Robles Basin Well Impacts Analysis using data from the DWR Household Water Supply Shortage Reporting System, GSI Water Solutions Inc., dated May 11, 2022
[2] Acre-Foot of water is equal to 326,000 gallons
[3] Paso Robles Subbasin Groundwater Sustainability Plan (GSP) Page 6-14

Agricultural irrigation is about 90 percent of the Paso Basin water use, so any sustainable plan primarily requires less water use by growers. This is challenging since grapes, our largest crop in the basin and a key part of the economy, are already a good agricultural choice requiring less water per acre than most crops. Ultimately, the problem is a result of too much acreage in production. The GSP presents the concept of a fallowing program to reduce acreage.

The implementation of the GSP is behind schedule and is currently lacking details for how to implement the plan. Without faster progress toward a sustainable basin, more rural resident wells will continue to go dry and water quality could deteriorate.

Abbreviations and Acronyms

AF	Acre-Feet
AFY	Acre-Feet Per Year
CCRWQCB	Central Coast Regional Water Quality Control Board
City	City of Paso Robles
CSA	County Service Area
CSD	Community Services District
County	County of San Luis Obispo
County DGS	San Luis Obispo County Department of Groundwater Sustainability
DWR	California State Department of Water Resources
ET	Evapotranspiration
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GSI	GSI Water Solutions Inc. (consultant)
HWS	DWR Household Water Supply Shortage Reporting System
JPA	Joint Powers Authority
LAFCO	Local Agency Formation Commission
MILR	Multi-Benefit Irrigated Lands Repurposing (fallowing program)
MOA	Memorandum of Agreement
NRCS	National Resources Conservation Service
Paso Basin	Paso Robles Area Subbasin
PBCC	Paso Basin Cooperative Committee
SGMA	Sustainable Groundwater Management Act
State	State of California
SWP	State Water Project
UC Extension	University of California Davis Extension

INTRODUCTION/PURPOSE

In drier and drought-prone areas of California, access to water has historically been an area of concern. Over the years, despite some outside supplementation of water, agricultural demands and the growing population have dramatically reduced many of California's groundwater supplies. In response to the need for long-term access to water, in 2014 the State enacted the SGMA to help protect groundwater resources. This act prioritized basins of concern and required the Paso Basin to create a GSP. The Grand Jury wanted to review the Paso Basin GSP to ensure it is on track to create a sustainable groundwater basin. Further, with 236 rural residential wells having gone dry in the period of 2013 to 2022, would the GSP implementation be robust and timely enough to protect users of the basin from further dry wells?[1]

ORIGIN

The 2022-23 Grand Jury started their term during the summer of 2022, when portions of our county were in critical drought conditions. Because water supply sustainability is a topic of widespread interest, the Grand Jury initiated a review of the Paso Basin GSP to determine whether the GSP is on track to provide sustainable groundwater for future generations. Record rains at the beginning of 2023 have increased reserves and perhaps reduced public concern. Yet the Grand Jury's initial review of the GSP and Annual Reports showed a need to complete the process of investigation and bring a report forward for public awareness and swifter action toward Paso Basin groundwater sustainability.

METHODS/PROCEDURE

The Grand Jury conducted its investigation of the Paso Basin GSP through review of the plan itself, the 2017-2022 Paso Basin Annual Reports, and consultant reports; interviews with GSA board members and their staff, consultants, and agricultural experts; attendance at meetings of the Paso Basin Cooperative Committee; and public records requests for County wells and budget data.

NARRATIVE

Over the past 40 years, the Paso Robles area has seen dramatic changes in agricultural practices as well as persistently dry hydrologic cycles that have negatively affected the underlying Paso Basin. Since 1998, approximately 700,000 acre-feet have been depleted from storage within the Paso Basin[4]. This critical water resource supports over $1.082 billion[5] in agricultural production annually and is a key asset for regional tourism.

The Paso Basin lies entirely within San Luis Obispo County. The basin includes the City of Paso Robles and unincorporated areas of the County including Shandon, Creston, San Miguel, Cholame, and Whitley Gardens. In 2022, approximately 92 percent of groundwater extracted from the Paso Basin was for agricultural use.[6]

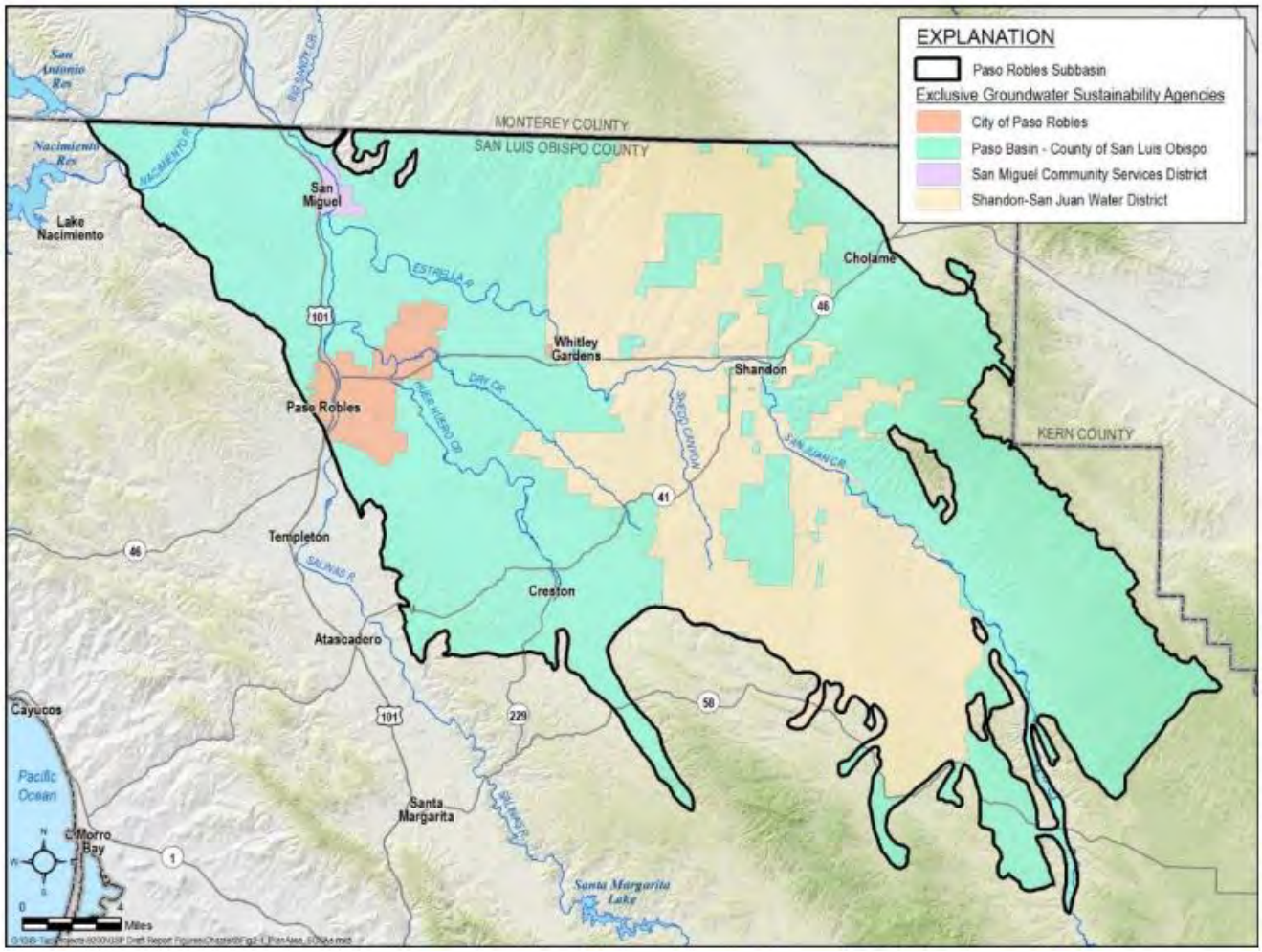
California groundwater had no formal regulations and was based on beneficial use as determined from court rulings under water appropriations and property rights until 2014, when the State of California enacted the SGMA to help protect groundwater resources. The act requires formation of local Groundwater Sustainability Agencies (GSAs) in high- and medium-priority basins to develop and implement GSPs. The objective of GSPs is to provide a roadmap for how groundwater basins will reach long-term sustainability by 2040. Sustainable yield is defined by SGMA as "the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin that can be withdrawn annually from a groundwater basin without causing an undesirable result."[7]

The Paso Basin was determined to be a high priority basin according to the DWR in 2018. Accordingly, a GSP has been jointly developed by four GSAs under a Memorandum of Agreement (MOA):

- City of Paso Robles GSA
- Paso Basin - County of San Luis Obispo GSA
- San Miguel Community Services District (CSD) GSA
- Shandon - San Juan Water District GSA

[4] Paso Robles Subbasin Water Year 2022 Annual Report, Figure 12
[5] 2021 Annual Crop Report, County of San Luis Obispo Department of Agriculture/Weights and Measures, Page 6
[6] Paso Robles Subbasin Water Year 2022 Annual Report, Page 31
[7] Paso Robles Subbasin Groundwater Sustainability Plan, Page 6-1

Figure 1 – Paso Basin Boundary and GSAs[8]



The Paso Basin GSP was recently approved by the DWR on March 2, 2023. Since 2017, the Paso Basin GSAs have produced joint annual reports. The annual reports serve as technical updates to the GSP and are required to be submitted to the State by April 1 of each year following GSP adoption.

The Water Year 2020, 2021, and 2022 Annual Reports show worsening groundwater conditions in the Basin[9]. Groundwater extraction has exceeded the historical Paso Basin Sustainable Yield due to increased pumping and a three-year dry hydrologic cycle. Groundwater storage decreased by 239,400 acre-feet over the three-year period.[10] Of particular concern are the

[8] Source: Figure 2-1 Paso Basin GSP page 2-6
[9] Water Year begins October 1 and ends September 30 of the next year as defined under the GSP
[10] Paso Robles Subbasin Water Year 2022 Annual Report, Page 17

rural communities that rely solely on groundwater for their water supply. Several wells have either gone dry or seen a reduction in water pressure.

On the positive side, an initial round of grants totaling $7.6 million have been awarded to the GSAs by DWR Sustainable Groundwater Management Grant Program. The grants funded numerous GSP implementation items, including supplemental water projects and studies, addressing GSP data gaps, grant administration, and implementing high priority management actions. Additional grants have been awarded and are anticipated for recycled water projects to offset basin pumping.

The 2022 Draft Annual Report states in its Summary of Impacts of Projects and Management Action, "Additional time will be necessary to judge the effectiveness and quantitative impacts of the projects and management actions either now underway or in the planning and implementation stage. However, it is clear that the actions in place and as described in this Water Year 2022 Annual Report are a good start towards reaching the sustainability goals laid out in the GSP." [11]

BASIN DESCRIPTION

In 2018, Paso Basin boundaries[12] were modified by DWR to exclude the Upper Nacimiento River Valley below the Nacimiento Dam, and the basin was classified as a high priority basin. There are two principal aquifers within the Paso Basin: the shallower Alluvial Aquifer and the deeper Paso Robles Formation Aquifer (Paso Aquifer). An aquifer is defined as an underground layer of water bearing permeable rock or unconsolidated material from which freshwater can be brought to the surface by pumping. Groundwater is currently pumped from both aquifers. Historical reduction in groundwater storage has occurred in the Paso Aquifer.

The Paso Basin is a northwest trending, sediment-filled valley bounded on the east by the Temblor Range and San Andreas Fault, on the west by the Santa Lucia Range and San Marcos Rinconada fault, and on the south by the La Panza Range. The Atascadero Sub-basin is separated

[11] Paso Robles Subbasin Water Year 2022 Annual Report, Page 54
[12] DWR Bulletin No. 118; Basin No 3-004.06

from the Paso Basin by the San Marcos Rinconada fault. The northern Basin boundary is the Monterey County line, with water-bearing sediment connection to the Upper Salinas River Basin.

The prevalent sediment within the Paso Basin is the Paso Aquifer. The sediment thickness is commonly 700 to 1,200 feet. However, this formation has sedimentary layers up to 3,000 feet thick in the northern part of the Estrella area and up to 2,000 feet near Shandon. The sand and gravel zones throughout the Paso Aquifer are much thinner and discontinuous. The Alluvial Aquifer is present under the flood plains for local rivers and streams. These deposits are typically no more than 100 feet deep and are comprised of coarse sands and gravels.

EXISTING WELLS IN THE BASIN

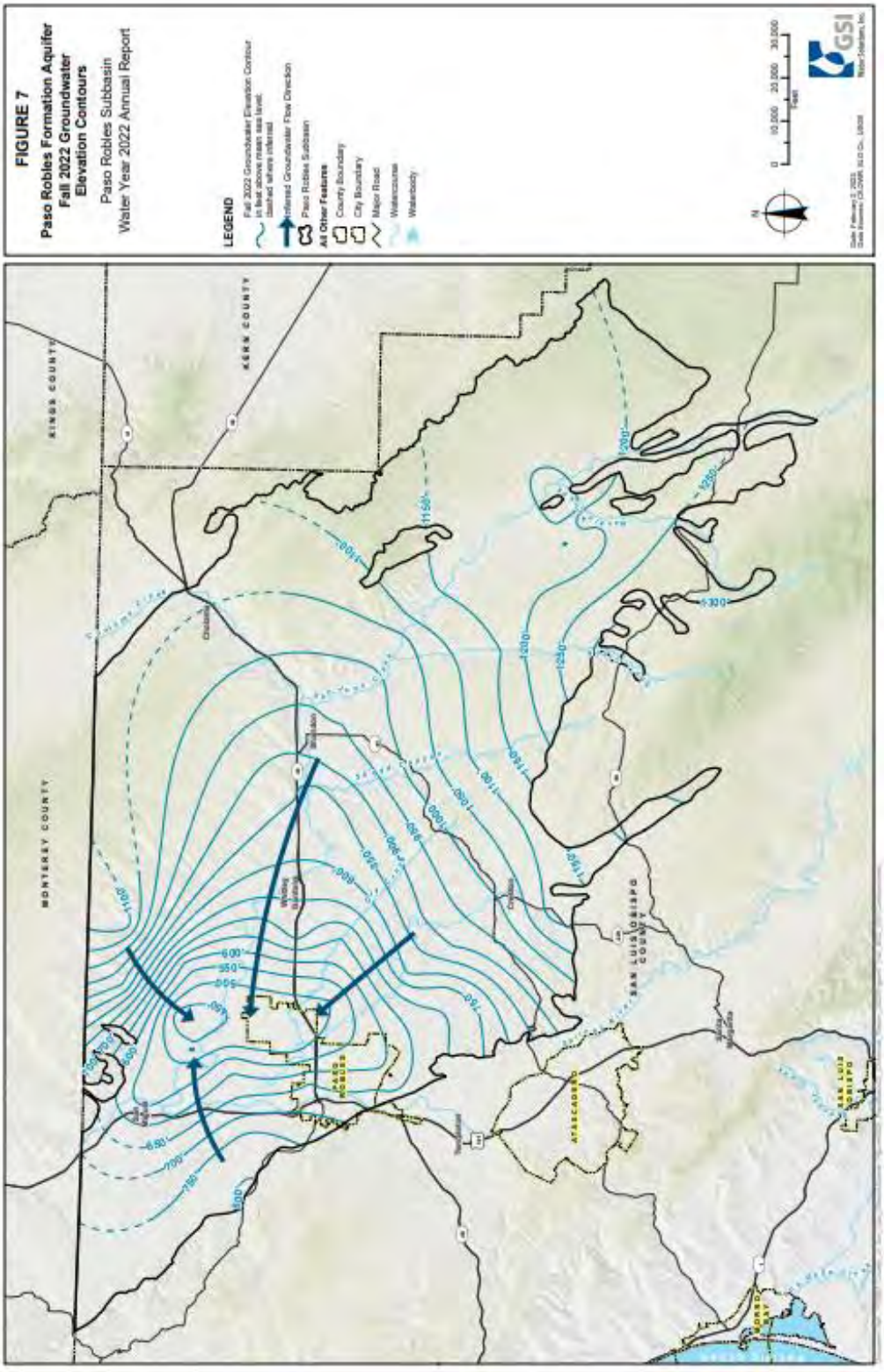
San Luis Obispo County Department of Public Health has record of 5,164 wells in the Paso Basin, most of which are for domestic use, permitted between 1965 and 2022.[13] Of the permitted wells approximately 600 are agricultural (production) wells. Many of the wells have been abandoned and are duplicated in the database. As a result, the exact number of wells in the Paso Basin is unknown.

GROUNDWATER MONITORING METHODS

The GSP utilizes groundwater levels to determine changes in groundwater storage within the Paso Basin. Currently, there are 23 wells in the groundwater elevation monitoring network: 22 wells are in the Paso Aquifer, and one well is in the Alluvial Aquifer.[14] There are approximately 90 confidential wells in the Paso Basin that have been monitored since 2012, which could be used to fill some of these data gaps if the well owners agree to sign amended confidentiality agreements.[12] The submittal of well data by private owners to the GSAs is currently voluntary. Groundwater gradients trend toward the northwest, with depressions near the City of Paso Robles and the community of San Miguel. In general, groundwater in the western side of the basin flows toward the lower groundwater elevations.

[13] Paso Robles Subbasin Groundwater Sustainability Plan, Page 3-13
[14] Paso Robles Subbasin Water Year 2022 Annual Report, Page 25

Figure 2 – Groundwater Elevations as of Fall 2022[15]



[15] Source: Figure 7; 2022 Paso Basin Annual Report page 64

Due to the lack of actual groundwater elevation data, the amount of agricultural groundwater extraction reported in the 2022 Paso Basin Annual Report was estimated using two modeling tools. They are as follows:

1. The soil-water balance model, which was developed for the Paso Robles Groundwater Basin Model Update[16], utilizes crop type information, weather and evapotranspiration data, as well soil water holding capacity to estimate agricultural water demand in the Basin. Evapotranspiration (ET) is the process by which water is transferred from the land to the atmosphere by evaporation from the soil and other surfaces and by transpiration from plants.
2. The satellite-based model uses specific land use data from LandIQ, in conjunction with the OpenET ensemble model. LandIQ is used to set the land use types, while OpenET is used to measure the actual amount of water that is transferred to the atmosphere by evapotranspiration. Together, the two modeling tools provide an estimate of pumped groundwater within the Paso Basin.[17]

In the 2022 Annual Report, the estimates of groundwater extraction were nearly identical when comparing results between the two models. Since the satellite-based model is considered to have a higher level of accuracy, the results were used in the Annual Report.

DRY WELL ANALYSIS

On May 11, 2022, the hydrology consulting firm GSI Water Solutions (GSI) published an analysis which evaluated the incidences of dry wells in the Paso Basin. The data for the analysis came from DWR Household Water Supply Shortage Reporting System (HWS). The study looked at clusters of domestic wells that have gone dry as reported by the HSW. It did not look at agricultural wells.

There have been 236 dry wells reported to HWS since 2013. Of these, 141 wells were reported between 2013 and the end of 2017. An additional 95 wells were reported dry between

[16] Paso Robles Basin Groundwater Basin Model Update, December 19, 2014, Geoscience Support Services, Inc
[17] Paso Robles Subbasin Water Year 2022 Annual Report, Pages 31-33

January 2018 and 2022. The largest number of dry wells occurred in 2017, which was at the end of a period of drought.

The dry wells were grouped into clusters by geographic area. They then analyzed the groundwater elevation for each of the cluster areas. This showed the rate at which the water level of the wells was dropping each year. In all areas, water levels dropped.

Table 1 – Domestic Dry Wells

RURAL DOMESTIC DRY WELLS[18]		
Area	**Number of Dry Wells 2013-2017 Pre-SGMA**	**Number of Dry Wells 2018-2022 Post-SGMA**
Paso Airport Area	82	61
Pomar Area SE of Templeton	34	11
Linne Road Area	12	4
Outlying Areas	13	19
Total	**141**	**95**

The largest number of dry wells was in the Airport area. The greatest decline in water level was in the area around Western Pomar Junction, which had a drop in wells averaging 6 feet per year. The Western Pomar Junction had the second highest number of dry wells.

The neighborhoods around the Western Airport are not part of the City of Paso Robles water system. Therefore, most of the homes in the area have private wells. Based on the HWS permit database most of them were drilled to 100-200 feet in depth. When a well goes dry, it causes considerable problems for the homeowners. The resale value of a property is greatly reduced if the well for that property has gone dry. Some homeowners are forced to order private water deliveries. In many cases the wells must be re-drilled to a greater depth. Most of these neighborhoods are in low-income areas and many of the homeowners cannot afford to have their wells re-drilled.

[18] Extracted from GSI May 11, 2022, Technical Memorandum: Paso Robles Basin Well Impacts Analysis using data from the DWR Household Water Supply Shortage Reporting System

The GSI report suggests that well completion reports could be digitized and precisely located by the San Luis Obispo County Environmental Health Services to create a well dataset that could be used to predict where future dry wells could occur based on water level monitoring data. This would allow the County to perform outreach to those households that are at risk of having their well go dry.

LAND SUBSIDENCE

Land subsidence is the lowering of the land surface. It occurs when water underneath the ground is pumped away and the land above it collapses. Subsidence can be estimated using Interfrerometick Synthetic Aperture Radar. This was done for the Paso Basin, and the data showed that subsidence of up to 0.025 feet (0.3 inches) may have occurred; 1.2 inches is within the noise of the data and is equivalent to no subsidence at all. Subsidence of up to 0.25 feet (3 inches) may have occurred in a few isolated locations between June 2015 and 2020. The GSA will continue to monitor and report on annual subsidence, but the indication is that this is not much of a problem in the basin.

GROUNDWATER QUALITY

Water quality is not a primary focus of SGMA. The groundwater found in the basin is generally suitable for both drinking and agricultural service. Eight Constituents of Concern were identified and reviewed in earlier studies. These are salinity, chlorides, nitrates, sulfates, boron, dissolved solids, sodium, and gross alpha radioactivity. Overall, there have been no significant changes to groundwater quality since 2016. As the water table is lowered, it is possible that concentrations of these chemicals could increase to unsafe levels, and they will continue to be monitored.

HISTORICAL CROP PATTERNS

During the early- to mid-1990s, groundwater pumping decreased in the Paso Basin as high-water-use crops (alfalfa and pasture) were replaced by vineyards, fruits and nuts. Irrigation demand for vines is lower than alfalfa and pasture. However, since late 1998, increased groundwater

pumping has resulted in over 700,000 AF of lost groundwater storage. The groundwater pumping increase is due to continued expansion of irrigated acreage within the basin.

The following table shows a summary of crop patterns and valuation of the respective crops within the County:

Table 2 – Historic Agricultural Production

San Luis Obispo County[19] Acres in Production				
	Field Crops	**Fruit & Nut**	**Vegetable**	**Wine Grapes**
1980	198,000	15,000	22,000	4,374
1990	1,100,000	18,000	33,000	8,327
2000	1,100,000	36,000	36,000	24,600
2010	1,063,000	13,800	31,000	36,253
2020	1,100,000	58,000	28,000	46,600

San Luis Obispo County Total Crop Value				
	Field Crops	**Fruit & Nut**	**Vegetable**	**Wine Grapes**
1980	$ 24,000,000	$ 18,000,000	$ 84,000,000	$ 10,000,000
1990	$ 18,000,000	$ 56,000,000	$ 136,000,000	$ 34,000,000
2000	$ 16,000,000	$ 122,000,000	$ 136,000,000	$ 84,000,000
2010	$ 18,545,000	$ 192,000,000	$ 176,666,000	$ 173,558,000
2020	$ 15,000,000	$ 432,000,000	$ 233,000,000	$ 282,000,000

Crop patterns within the County have changed significantly in the past 40 years. Prior to 1990, the main crops within the County were field crops and vegetables. Field crops are dependent on winter rainfall and not supplemental irrigation. In 2020, the highest valued crops within the County were wine grapes, fruits and nuts. **Since 1980, the acreage of wine grapes in production has increased more than ten-fold (46,400 acres in 2020, versus 4,374 acres in 1980).** Also,

[19] 1980-2021 Annual Crop Report County of San Luis Obispo Department of Agriculture/Weights and Measures

since 1980, the valuation of wine grapes within the County has gone up 280 percent. As of 2022, wine grapes accounted for 36,872 acres within the Paso Basin with a valuation of $223 million.[20]

BASIN WATER SUPPLY DESCRIPTION

Current surface water supplies available within the Paso Basin include 6,500 AFY of Lake Nacimiento entitlement, an average of 3,300 AFY for the last five years of Salinas River Underflow,[21] and 100 AFY of State Water Project (SWP) water for Shandon community water supply. [22] Groundwater pumping is used as the primary source to meet water supply requirements within the Basin.

2022 BASIN WATER USE

In 2022, 4,250 AF of surface water was used within the Basin. The imported water included 901 AF of Nacimiento Water Project and 3,349 AF of Salinas River Underflow, which is classified as surface water. The total amount of these water allocations is not always available and has not been used by the community in all years. No SWP water was used within the basin during 2022[23].

In 2022, 87,200 AF of groundwater was used within the Paso Basin. Agricultural use was 92 percent of groundwater extraction, accounting for 80,200 AF. The other eight percent (7,042 AF) was used by municipal, rural domestic, and small public water systems.[24]

GSP HISTORIC, PRESENT, AND FUTURE WATER BUDGET FOR THE BASIN

SGMA regulations require that the GSP should include an assessment of the groundwater conditions within the Basin for historical, current, and future water budgets. Current data for groundwater changes was based on the period 2012-2016. The historical water budget included data for the period 1981-2011. The future water budget was evaluated for the GSP implementation period from 2020-2040.

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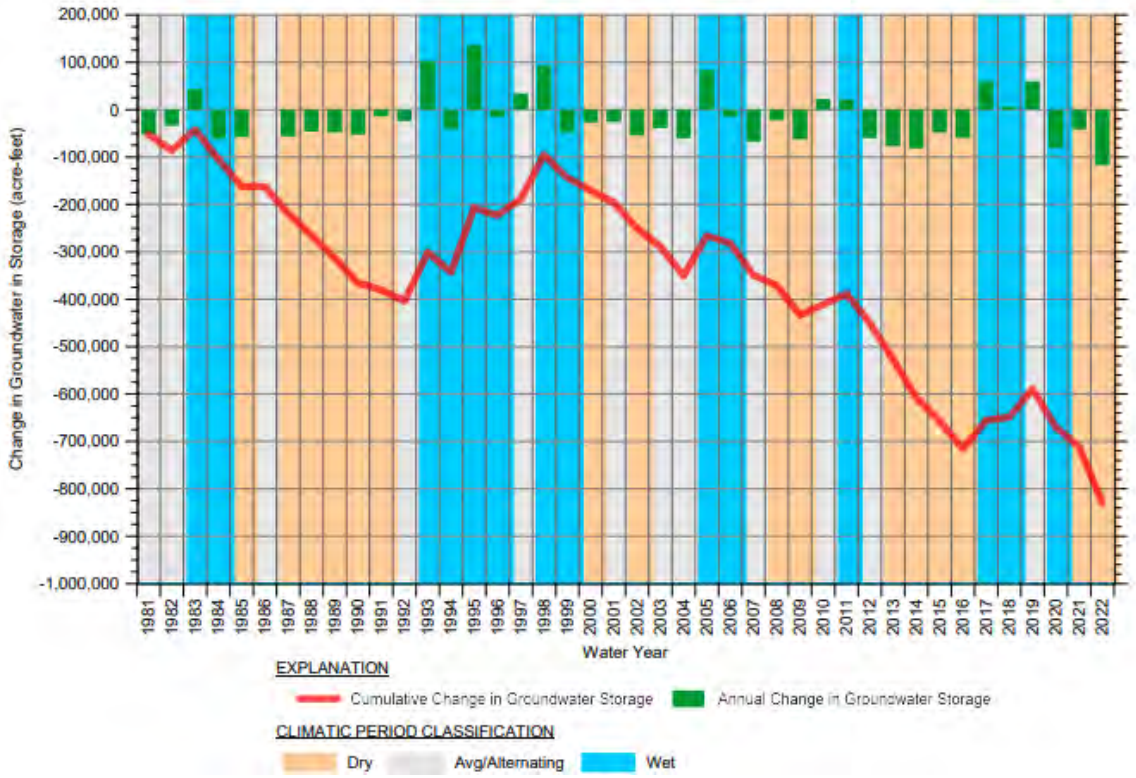
[20] San Luis Obispo County Agricultural Commissioner Letter to the 2022-23 Grand Jury Dated February 21, 2023
[21] The City of Paso Robles produces Salinas River underflow, regulated as surface water by the State Water Resources Control Board, from wells located in Atascadero Subbasin
[22] Paso Robles Subbasin Water Year 2022 Annual Report, Pages 37-38
[23] Paso Robles Subbasin Water Year 2022 Annual Report, Page 39
[24] Paso Robles Subbasin Water Year 2022 Annual Report, Page 36

Figure 3 – Cumulative Change Groundwater in Storage[25]



During the historical water budget period, the average annual groundwater inflow was 71,400 AFY. Inflow is strongly influenced by hydrology. For the same period, average annual groundwater outflow was 84,000 AFY. The largest groundwater outflow component is groundwater pumping at an average of 72,400 AFY, or 90 percent of water used within the basin. The historical water budget sustainable yield estimate for the basin was estimated to be 59,800 AFY. Over the 31-year historical period, the net loss of groundwater was approximately 390,000 AF. Accordingly, there was an annual average groundwater storage loss of 12,600 AF.[26]

During the current water budget period, drought conditions reduced the average annual groundwater inflow to 28,900 AFY. Average annual groundwater outflow was 94,300 AFY. The largest groundwater outflow component was groundwater pumping, at an average of 85,800 AFY or 90 percent of water used within the basin. The current water budget sustainable yield estimate for the basin was about 20,400 AFY, which reflected the drought conditions. During the current

[25] Source: Figure 12; 2022 Paso Basin Annual Report page 69
[26] Paso Robles Subbasin Groundwater Sustainability Report, Pages 6-9 to 6-14

period, the net loss of groundwater was approximately 327,000 AF. As a result, there was an average annual groundwater storage loss of 65,400 AFY.[27]

For the future water budget period, the average annual groundwater inflow was estimated to be 69,500 AFY. Average annual groundwater outflow was calculated to be 83,200 AFY. The largest groundwater outflow component was groundwater pumping at an average of 74,800 AFY, or 90 percent of water used within the basin. The future water budget sustainable yield estimate for the basin was about 61,100 AFY. There is projected to be a 13,700 AFY average groundwater storage deficit for the future groundwater budget, assuming historic inflow.[28]

Table 3 – Groundwater Water Budget

GSP Groundwater Assessment[29]			
	Historical 1981-2011	**Current 2012-2016**	**Future estimate 2017-2040**
Average Inflow	71,400 AFY	28,900 AFY	69,500 AFY
Average Outflow	84,000 AFY	94,300 AFY	83,200 AFY
Average Annual Overdraft Deficit	-12,600 AFY	-65,400 AFY	-13,700 AFY
Net Loss Groundwater Storage	-390,000 AF over 31 years	-327,000 AF over 5 years	-274,000 AF over 20 years
Sustainable Yield	59,800 AFY	20,400 AFY	61,100 AFY
Groundwater Pumping Component	72,400 AFY (90% basin use)	85,800 AFY (90% basin use)	74,800 AFY (90% basin use)

GSP ACTION PLAN

The GSP outlines the approach to achieve a sustainable groundwater resource free of undesirable results within 20 years, while maintaining the unique cultural, community, and business aspects of the basin. The express goal of the GSAs is to balance the needs of all groundwater users in the Paso Basin, within the sustainable limits of the basin's resources. The GSP develops quantifiable management objectives that consider the interests of the basin's

[27] Paso Robles Subbasin Groundwater Sustainability Report, Pages 6-15 to 6-25
[28] Paso Robles Subbasin Groundwater Sustainability Report, Pages 6-25 to 6-31
[29] Paso Robles Subbasin Groundwater Sustainability Report, Page ES-6

beneficial groundwater uses and users, identifying management actions and conceptual projects that will allow the Paso Basin to achieve sustainability by 2040.

The GSP established Sustainable Management Criteria to measure groundwater sustainability in the Paso Basin. The criteria include minimum thresholds, measurable objectives, and undesirable results. The baseline for groundwater levels was set at the average 2017 well readings. The GSP approved by DWR sets the minimum threshold and the measurable objective was determined to be no long-term change in groundwater storage in the Basin. The undesirable limit was set at 30 feet below 2017 benchmark.

The 2022 Annual Report stated that several of the Paso Aquifer monitoring wells, within the groundwater monitoring network, are continuing to trend downward. Three wells have exhibited groundwater elevations below the minimum threshold established in the GSP.[30] Accordingly, the GSAs initiated an investigation to determine if local or basin-wide actions are required to address the undesirable result. The findings will be included in future Annual Reports.

As the GSAs embark on the implementation phase, the agencies need to fulfill the "Actions to Attain Sustainability" in the GSP. These include:

- Establishing a methodology for determining baseline pumping in specific areas,
- Establishing a methodology to determine whose use must be limited and by how much, including the use of supplemental water supply or actions taken by individual pumpers,
- A timeline for limitations on pumping in specific areas,
- Approving a formal regulation to enact the program.

These actions include public outreach and monitoring, promoting best management practices for water use, implementing water supply enhancement projects, and voluntary land fallowing program. The GSAs will establish regulatory conditions for pumping limitations if the groundwater levels continue to decline. Mandatory pumping limitations will depend upon effectiveness of voluntary actions and water enhancement projects.

[30] The Paso Robles Subbasin Water Year 2022 Annual Report, page 29

The GSAs have initiated several management actions to avoid and/or mitigate the decline in groundwater storage, which include:

- Enhanced data including expansion of monitoring wells for basin model,
- Satellite imagery to determine water usage more accurately,
- City of Paso Robles Recycled Water Program (up to 2,200 AFY),
- San Miguel CSD Recycled Water Program (200 – 450 AFY),
- City of Paso Robles Blended Nacimiento Water Program (directed groundwater enhancement),
- Expansion of Salinas Dam,[31]
- Increase in well data from private owners,
- Land fallowing pilot program known as the Multi-Benefit Irrigated Land Repurposing (MILR) Program.

CONSERVATION MEASURES

Water conservation is a key measure to mitigate pumping demand on the basin. The County Farm Advisor Office partners with University of California Davis Extension (UC Extension) outreach which provides extensive water conservation knowledge and practical experience with growers. Of note, the operations of vineyards are generally highly managed such that there is not excessive use of water, the exception being frost prevention systems reliant on irrigation. As noted by UC Extension, some benefits could be realized through growers switching to wind machines; however, that is still being researched and is dependent on specific geographical conditions within the basin. Field crops would be a more likely target for water conservation measures, and one agency representative expressed the need to reduce crop production during peak summer months to relieve pumping demand during the critical period for the basin.

The GSAs are in the process of identifying industry-wide Best Management Practices for water use that can be effectively communicated to water users within the basin. Best Management Practices that are being considered include state-of-the-art irrigation practices, accurate accounting

[31] Ownership transfer from federal to state jurisdiction and required dam retrofit and expansion to meet State dam safety requirement makes this action distant to unlikely.

of precipitation and its contribution to soil moisture, delaying irrigation until soil moisture levels need replenishment, monitoring water use with soil and plant monitoring devices tied to ET estimates, and conversion of high-water demand crops to low water demand crops.

SUPPLEMENTAL WATER OPTIONS

While the GSP indicates a number of supplemental water projects, the magnitude of water supply is limited. Solutions are meant to be targeted to specific depressions or users within the basin. The cumulative effect of these projects, while worthwhile, will fall short of the annual pumping deficit that the basin continues to experience due to agricultural demands. Progress on the supplemental options is shown in the following table.

Table 4 – Proposed Supplemental Water Projects

Project	Lead Agency	Purpose	Timeline	Funding	Potential Acre Feet Annually
Paso Robles Recycled Water	Paso Robles	Direct reused water to Airport Area	Construction scheduled for Fall 2023	$3.5 million WQCB; $ 9.73 m in Federal	3000
San Miguel Recycled Water	San Miguel CSD	Direct recycled water to injection Salinas River	In development	$1million secured for design	200
Nacimiento Water Blending with Recycled Water	Paso Robles	Supplemental recycled water with water to reduce salts	In discussion with growers who would use and pay for water	Unknown	1000
Nacimiento Water injection into Salinas/Estrella Confluence	TBD	Supplement depression in basin	No set partners; availability of water buyers/sellers unknown	Unknown	2800
Nacimiento Water delivered east of City of Paso Robles	TBD	Supplement growers, rural residential or depressions in basin	No set partners; availability of water buyers/sellers unknown	Unknown	2000
Salinas Dam Expansion	County	Install gate in dam to increase water impounded	Requires action at federal level to move to local asset	Unknown	1000

PASO BASIN GOVERNANCE

To develop, oversee, and fund a common GSP, governmental entities with water interests in the basin banded together under a Memorandum of Agreement (MOA). On September 20, 2017, the MOA was entered into by the County, San Miguel CSD, City of Paso Robles, Heritage Ranch CSD, and the Shandon-San Juan Water District. The MOA included a provision for Estrella El Pomar Creston Water District to become a member of the GSP if they were to form no later than June 30, 2017. The water district was not established until December 8, 2017. The original MOA included the intent for all agencies to develop a common GSP for the basin. Moreover, it specified cost sharing and governing board voting parameters under a "Paso Basin Cooperative Committee" (PBCC) body which would meet at least quarterly.

The MOA was intended to sunset after the GSP was accepted for submission by DWR. Subsequently, the MOA was amended by the parties on March 30, 2020, to remove that sunset clause. Heritage Ranch CSD requested removal on January 18, 2019, as DWR had approved their request to modify the basin boundary excluding the agency from the basin. At the time of this writing, the Estrella-El Pomar-Creston Water District (EPCWD) is being processed for inclusion as a GSA. Appendix A provides a map including EPCWD.

Table 5 – GSA Agencies

GSA Agency	Type of User	Voting Share under MOA [32]	Voting Share if EPCWD included[28]
San Luis Obispo County	Municipal CSA 16 Rural Residential Ag Production	62%	33%
Shandon-San Juan Water District (SSJWD)[33]	Ag Production	20%	20%
City of Paso Robles	Municipal	15%	15%
San Miguel CSD (SMCSD)	Municipal	3%	3%
Estrella-El Pomar-Creston Water District (EPCWD) [29]	Ag Production	___	29%

[32] Defined under the Adopted Memorandum of Agreement
[33] Water District formed under California Water Code 34000

The MOA was focused on the initial phase of GSP development and outreach. As a result, there are no specific provisions for implementation of the GSP. Under the submitted GSP, it is stated the agencies must decide whether to continue working in a coordinated fashion with an updated version of the MOA to detail implementation requirements or to seek development of a Joint Powers Authority (JPA). A JPA would require processing through Local Agency Formation Commission (LAFCO). The implementation phase of the GSP will require coordination of the individual GSAs in adopting common programs and regulations to govern the basin on an equal footing. An MOA process would not provide for adopting one common regulation or program, as there is no collective governing authority in that document.

To implement the GSP, the governing boards will need to set up the following programs:

1. Establish an ordinance for setting pumping extractions reporting within the basin based on estimates or actual pumping records on a per parcel basis;
2. Establish an ordinance setting pumping limit levels and penalties for regulation of future pumping;
3. Establish a land fallowing program, either through voluntary means or mandate as warranted; and
4. Establish an ordinance setting extraction fees based on some type of parcel or pumping volume basis across the basin which are equitable.

Both the City of Paso Robles and San Miguel CSD, as municipal water purveyors, have wells that are continually monitored and reported. Their ratepayers are financially contributing to solutions and adhering to water conservation programs which are established either locally or under a state mandate. The focus needs to be on water practices within the unincorporated lands and water districts.

Initially, the City of Paso Robles led the effort to hire and oversee professional consultants to develop the GSP. This responsibility is now managed by the County's Department of Groundwater Sustainability (County DGS), which was created by the Board of Supervisors in 2021. While the County DGS is small, it has a defined objective to address these critical groundwater basins such

as Paso Basin. In addition to a requirement for submitting an Annual Report to DWR, the GSAs will also need to fund and submit a five-year update to the GSP in 2025.

GSAs are a new type of governing structure over a common resource. It is essential for the governing board to build public trust through public outreach and development of regulations and programs that are viewed as fair by the wide range of groundwater users within the basin. The 2013 Paso Robles Basin Land Use Management ordinance was set to regulate continued water usage under a "water offset" requirement. The ordinance established five AFA maximum per parcel for those properties without historical agricultural use. This prevents parcels with no previous water usage above that level from initiating extensive agricultural uses. Moreover, the ordinance limits expansion of existing agricultural operations to occur only when it is shown there is no net water usage increase. That ordinance was created solely by the County Board of Supervisors under their land use powers within the unincorporated areas.

The GSAs collective will need to address what is fair for the various parcels within the basin. In the first quarter of 2023, the PBCC has established three technical committees to: 1) develop the voluntary land fallowing program, known as the Multi-Benefit Irrigated Land Repurpose (MILR) program; 2) expand the basin monitoring program; and 3) oversee development of the City of Paso Robles "Blended Water Project" involving recycled water from the City and available Nacimiento Lake water. The proposed MILR program will address the key elements of groundwater usage measurements, groundwater accounting/pumping restrictions, and groundwater usage fees. A description of the overall MILR program is included in Appendix B.

Time remains of the essence. Although continued outreach and engagement of stakeholders is necessary and ongoing, the PBCC will need to take immediate action. While programs may initially be developed as voluntary, the stakeholders need to be mindful that this may lead to necessary mandatory programs to achieve water balance for the basin. The fallowing plan needs to be substantial enough to allow for revision of the existing planting ordinance to allow for equitable use of properties.

PASO BASIN FUNDING

Under the MOA, the individual GSAs contribute to the costs of the GSP development and Annual Reports based on their prorate representation; the County is covering the majority of costs. Once SGMA was passed, DWR provided GSAs with funding for development of GSPs. For the Paso Basin, DWR awarded a grant of $ 7.5 million, which the City of Paso Robles used to lead efforts to develop the basin GSP. Over the initial years of the GSAs, this grant funding has provided the revenues for most expenditures. The County has also budgeted General Funds in excess of $3.5 million for the GSA formation and development over the past several years.

Under SGMA, GSAs are allowed to impose fees to cover administration, reporting, and monitoring costs. For the City of Paso Robles and the San Miguel CSD, ratepayers would provide the cost share for these entities. For the rural lands, fees can be imposed based on parcel size, pumping volumes, or some combination of the two. Both SSJWD and EEPCWD have established parcel fees for their basic operations. The County unincorporated lands, which lie outside the two water districts, currently have no fees imposed.

In addition to the initial grant from DWR, the basin has received other outside grant packages which are being directed to supplemental water projects. The City of Paso Robles has received $3.5 million and $9.73 million from the Central Coast Regional Water Quality Control Board (CCRWQCB) grant program and the 2021 Federal Infrastructure Bill, respectively. These funds would be used to install pipelines to distribute the City's recycled water to the east side of the City and make it accessible for agricultural parcels in the Airport area. The County is leading efforts to obtain additional grant funding for GSP implementation. Alternatively, under SGMA, GSAs may impose fees for capital improvements or other programs to address pumping demand. However, those fees may be challenged under State statues by the property owners within the basin.

The County DGS has initiated steps to institute a tiered fee program, while creating a nexus study in support of a fee. The balance of grant funds has been used to reimburse the County General Fund in support of the GSP.

PUBLIC OUTREACH AND WEBSITES

During the development of the GSP, over 90 public hearing meetings were held between January 2017 and December 2020. The hearings were held by the individual GSAs and the Cooperative Committee. Since that time, public outreach has been focused on the quarterly Cooperative Committee meetings and the review of the Annual Report. The GSA are in the process of setting up at least three technical advisory committees, which should provide additional forums for public input. The work done on the GSP to date has created a wealth of data, studies, and comments. Many previous studies and committee meeting minutes are stored away in the County DGS website as well as the individual GSA websites. Given the prominence of the Paso Basin and number of stakeholders involved, developing one common website and information repository for implementation actions involving the GSP public meetings, comment periods, budgets, and proposed actions would be useful. Particularly for those rural residential interests which may not be involved in technical committees or the Annual Reports, there is a need for a "one stop shop" for specific location information, questions, and tools for residents to understand current conditions of the basin.

GSP IMPLEMENTATION DEADLINE

The adopted GSP contained the timeline (see Appendix C) for the various initiatives contained in the five-year plan. While the GSP approval is ahead of schedule, the implementation steps are not.

CONCLUSIONS

The Paso Basin was identified by the DWR as a high priority basin for the development of a GSP. The research for this GSP and Annual Reports show that, from 1998 through 2022, approximately 700,000 AF have been depleted from storage (Figure 3). To put this in context, this is the equivalent of more than 14 full Lake Lopez Reservoirs of water being lost from underground aquifers due to water extraction exceeding average annual recharge. We are fortunate, in 2023, to have a wet season in which the recharge will certainly exceed extraction, but this is an isolated year. Past precipitation records and future models predict that drier years will continue.

The approved GSP provides a road map toward sustainability. As legislated by SGMA, the GSP deadline for achieving sustainability is 2040. The GSP implementation is behind schedule. Given the history of 236 known rural residential dry wells from 2013 to 2022, the Paso Basin can ill afford a protracted implementation of the sustainability plan. New water sources will be helpful but are not enough to meet the projected water demand. Since over 90% of the water use is for agriculture, and most agricultural irrigation is managed efficiently, the primary solution will need to be reduced agricultural acreage. The GSP has planned a pilot fallowing program to reach this goal but details and deadlines for this program have not been put in place. Programs are needed to assure water supply equity and easy information access for rural residential users.

In addition to basin water sustainability, there is a need for financial sustainability. Grant funding has covered many projects for the sustainability plan which will reduce costs for rate payers. At this point, some areas of the Paso Basin have imposed fees while others still need to impose fees for equitable user support of the basin.

SYNOPSIS OF PASO BASIN DATA

- The Paso Basin is in decline and the water deficit continues as noted in the GSP and Annual Reports.
- Annual Basin overdraft is approximately 12,600 AFA based on historical data (1981-2011).
- The well monitoring network (water levels) data set is incomplete and does not provide information from some key areas.
- The dataset on agricultural user pumping volumes (extractions) is incomplete.
- Neither feasible supplemental water options nor conservation measures can balance the basin.
- Municipal groundwater agencies have Master Water Plans with conservation programs to regulate usage while the unincorporated lands and agricultural areas have none.
- Information on studies, datasets, meetings, and budgets are contained separately under each GSA.

- Outside Funding for GSP development and implementation includes:
    - $ 7.5 million from DWR (GSP) development
    - $ 4.5 million from Central Coast Regional Water Quality Control Board for recycled water
    - $ 9.73 million from 2021 Federal Infrastructure bill
- Local Funding includes:
    - Parcel Fees under SSJWD and EPCWD
    - Ratepayers in City of Paso Robles, SMCSD
    - Over $ 3.5 million in County General Funds
- 236 Rural Residential wells have run dry between 2013 and 2022.
- Use of rural properties, which did not have a historic water usage prior to 2013, remains restricted and has at present not been resolved by the County under their land use powers.
- The GSP Timeline included in the submitted GSP is behind schedule.

COMMENDATION

Commendation to local government and water boards for the substantial number of grants obtained toward management of the Paso Basin. The City of Paso Robles has made great strides toward implementing their recycled water project.

FINDINGS

F1. The combination of drought conditions and increased agricultural lands in production has resulted in an unsustainable decline in the Paso Basin.

F2. Since 1998 there has been over 700,000 AF reduction of groundwater storage resulting in dry wells for many rural residential properties and jeopardizing long-term agricultural viability.

F3. The current number and location of groundwater monitoring well data collected by the PBCC is insufficient for decision making.

F4. The PBCC currently does not require or have full access to the annual volume of groundwater pumping by all agricultural users to determine the extent of the demand on the basin.

F5. The GSP initiatives for feasible supplemental water options and conservation measures are insufficient to balance the basin. Basin recovery depends upon reduction in active agricultural production pumping.

F6. The failure of the PBCC to apply equitable pumping restrictions has resulted in continued decline of the Paso Basin.

F7. Public information and outreach on Paso Basin status is inadequate.

F8. Fees that would make the GSP self-sustaining are not uniformly applied across the GSAs. Unincorporated areas governed by the County are not collecting fees.

F9. Rural residential wells remain at risk. Many rural residential users lack the resources and means to correct the situation.

F10. There remains an inequity between rural properties in using groundwater for agricultural production under the 2013 County Planting Ordinance.

F11. Management efforts have not advanced sufficiently to begin regulation of basin activities.

RECOMMENDATIONS

R1. The GSAs need to expedite their plans to expand the monitoring network for use in the 2025 GSP update.

R2. The GSAs need to employ the most accurate satellite data for determining groundwater utilization or adopt regulations which mandate reporting of groundwater extraction for agricultural production wells within the Paso Basin by the 2025 GSP update.

R3. Implementation of the proposed MILR Program, to establish voluntary land fallowing, needs to be initiated by the 2025 GSP update. If voluntary measures are ineffective, the PBCC will need to implement a mandatory program.

R4. The GSAs must establish and implement the necessary governance structure to build public trust and execute procedures up to and including formal regulations to define equitable groundwater extractions and enforcement mechanisms.

R5. GSAs should intensify outreach to solicit public input and educate residents and property owners, particularly those whose wells have run dry. Outreach should include the development of a collective single website for the PBCC.

R6. In consideration of equitable use of groundwater, the PBCC needs to develop a plan to set aside funds and an administrative mechanism to ensure that rural residential users have access to water.

R7. By Fiscal Year 2024/25, the County GSA should impose user fees to eliminate the need for County General Fund contributions and to implement the necessary programs for basin sustainability.

R8. Once the GSAs have enacted management measures which ensure the basin is stabilized, the County Board of Supervisors should revise their existing planting ordinance to allow for equitable agricultural use of properties.

R9. For the 2025 GSP annual update, the Cooperative Committee should update the GSP timeline to show a realistic and deliverable set of management actions.

REQUIRED RESPONSES

The Paso Basin Cooperative Committee is required to respond to: R1 – R5 and R9.

The San Luis Obispo County Board of Supervisors is required to respond to: R6 – R8.

The Shandon – San Juan Water District is required to respond to: R6.

All responses shall be submitted to the Presiding Judge of the San Luis Obispo County Superior Court as follows:

Responses from the San Luis Obispo County Board of Supervisors are due within 60 days of submission of the report.

Responses from the Paso Basin Cooperative Committee and the Shandon – San Juan Water District are due within 90 days of submission of the report.

A paper copy and an electronic version of all responses shall be provided to the Grand Jury.

933.05. Findings and Recommendations

(a) For purposes of subdivision (b) of Section 933, as to each grand jury finding, the responding person or entity shall indicate one of the following:
   (1) The respondent agrees with the finding.
   (2) The respondent disagrees wholly or partially with the finding; in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons, therefore.

(b) For purposes of subdivision (b) of Section 933, as to each grand jury recommendation, the responding person or entity shall report one of the following actions:
   (1) The recommendation has been implemented, with a summary regarding the implemented action.
   (2) The recommendation has not yet been implemented, but will be implemented in the future, with a timeframe for implementation.
   (3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a timeframe for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This timeframe shall not exceed six months from the date of publication of the grand jury report.
   (4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation, therefore.

Presiding Judge	Grand Jury
Presiding Judge Craig van Rooyen Superior Court of California 1035 Palm Street Room 355 San Luis Obispo, CA 93408	San Luis Obispo County Grand Jury P.O. Box 4910 San Luis Obispo, CA 93403

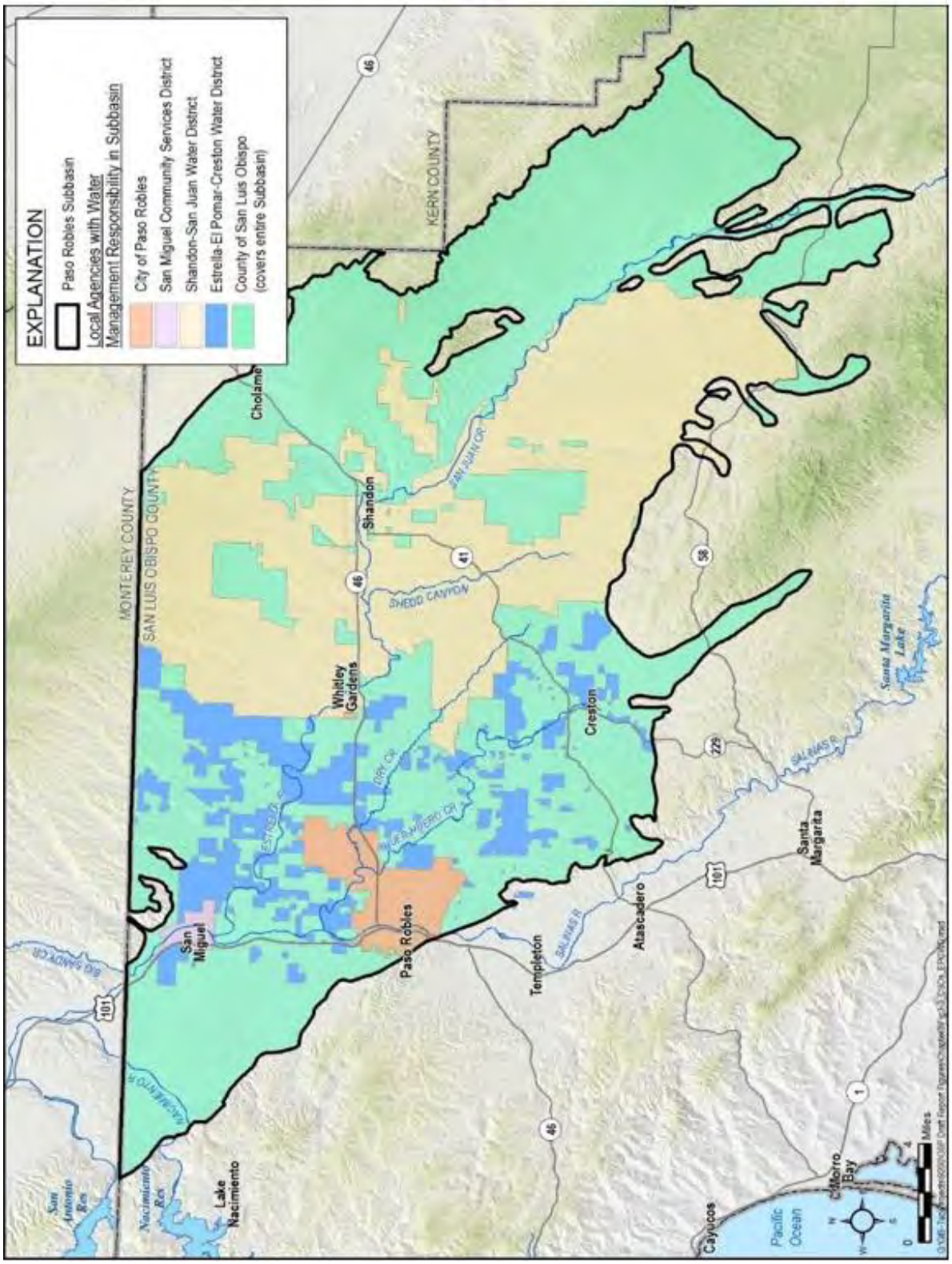
APPENDICES

Appendix A - Map of Basin and GSAs with Estrella El Pomar Creston Water District Boundary

Appendix B - Summary of MILR Program

Appendix C - GSP Timeline

APPENDIX A – GSA map with Estrella El Pomar Creston Water District



(Source: Figure 3-3 Paso Basin GSP page 3-6)

APPENDIX B – Multi-Benefit Irrigated Land Repurposing (MILR) Program

PROGRAM ELEMENTS

- Establish Program Description, Rules and Regulations
- Define Program Administration and Management Entity (Oversight/Authority under GSAs, JPA or third-party contractor)
- Farming Unit Registration
- Define Consumed Groundwater Use Measurement
- Groundwater Usage Fees
- Groundwater Accounting, Data Management, Reporting
- Financial Accounting, Billing, and Auditing
- Enforcement and Penalties
- Link to Mandatory Pumping Reduction/Allocation Program (if required)
- Nexus to Land Use Ordinances (Agricultural Offset Ordinance/Planting Ordinance)

PROGRAM EXAMPLES

- Creation or restoration of habitat (Wetlands, upland, riparian and pollinator habitats)
- Creation of multi-benefit recharge areas
- Conservation of irrigated land to dryland farming or non-irrigated rangeland
- Planting cover crops or conservation cover
- Facilitation of renewable energy projects that have an overall net GHG reduction
- Creation of parks or community recreation areas
- Incentive payments to landowners to implement multi-benefit projects that create public benefit (for at least ten years, with priority for small and medium farmers and ranchers)
- Land acquisitions to facilitate land repurposing and protect repurposed land uses
- Voluntary land transfers to qualified public entities to facilitate land repurposing and protect repurposed land uses
- Easement acquisitions to facilitate land repurposing and protect repurposing land uses

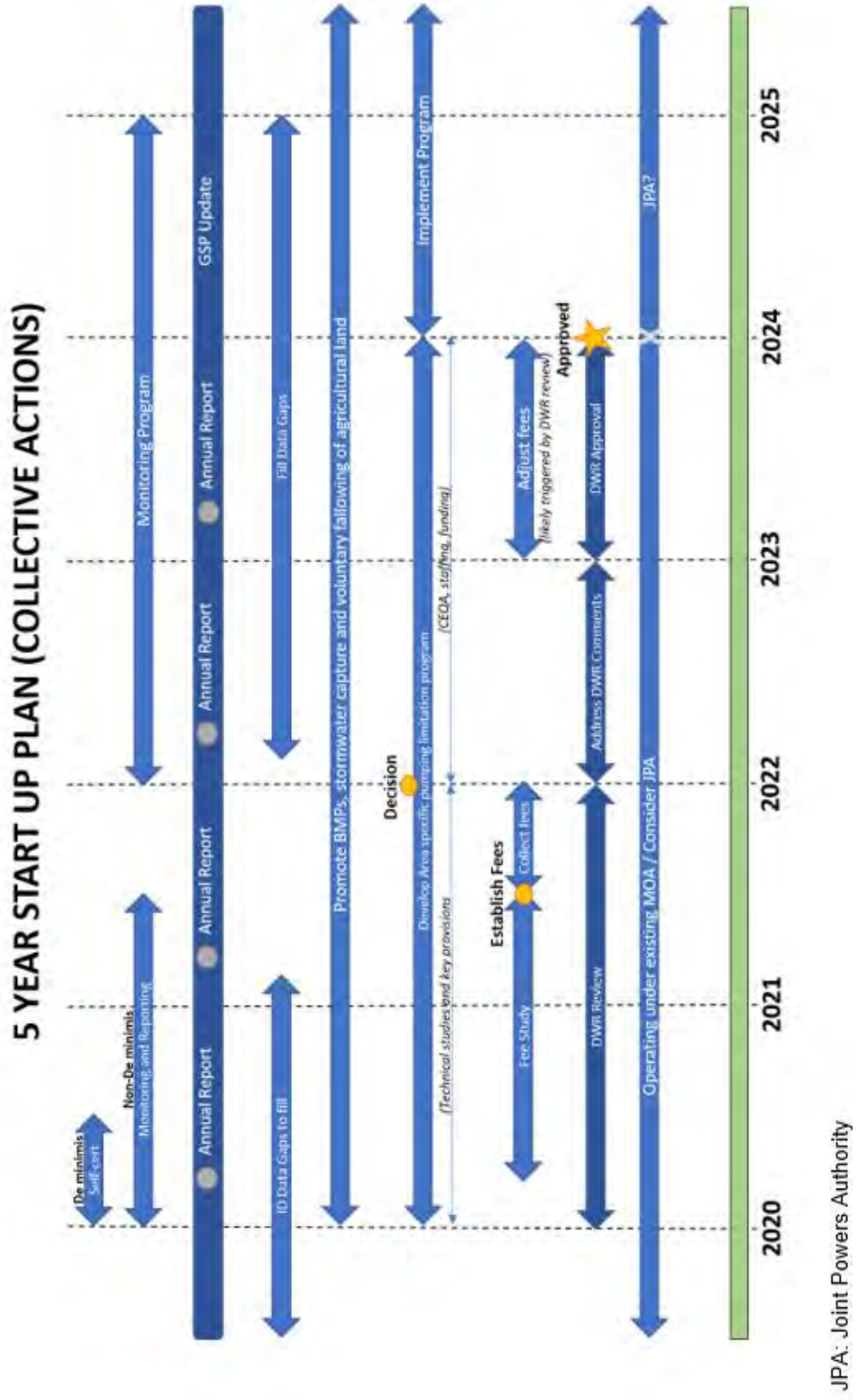
DESIRED OUTCOMES

- Reduced groundwater use
- Increased groundwater recharge
- Improved base flows in rivers and streams
- Conservation of land to less intensive water uses while maintaining natural and working lands
- Creation and/or restoration of wildlife and pollinator habitat and/or migratory resources
- Improved water quality
- Prioritization of lands to be enrolled to maximize benefit to the groundwater basin
- Increased community outreach, involvement, and education
- Mitigation of groundwater conditions in the basin that pose risks to water adequacy and quality for domestic well users (High Priority)

- Protection of areas where interconnected surface water and groundwater systems and groundwater dependent ecosystems exist
- SGMA Compliance
- Long-term groundwater basin sustainability.

(Source: October 26, 2022 Paso Basin Coordinating Committee Agenda Package pages 22,23, 26)

Appendix C – GSP Timeline



(Source: Figure 10-1; Paso Basin GSP page 10-2)

RESPONSE TO GRAND JURY REPORT

Report Title: "*Can One Wet Year Wash Away the Paso Robles Basin's Water Worries?*"

Report Date: June 23, 2023

Response by:_____ **Title:**_____

FINDINGS

1. I (we) agree with the findings numbered:_____
2. I (we) disagree wholly or partially with the findings numbered:_____
   (Attach a statement specifying any portions of the findings that are disputed; include an explanation of the reasons.)

RECOMMENDATIONS

1. Recommendations numbered _____ have been implemented.
   (Attach a summary describing the implementation actions.)

2. Recommendations numbered _____ have not yet been implemented, but will be implemented in the future.
   (Attach a timeframe for the implementation.)

3. Recommendations numbered _____ require further analysis.
   (Attach an explanation and the scope and parameters of an analysis or study, and a timeframe for the matter to be prepared for discussion by the officer or director of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This timeframe shall not exceed six months from the date of the publication of the Grand Jury report.)

4. Recommendations numbered _____ will not be implemented because they are not warranted or are not reasonable.
   (Attach an explanation.)

Date:_____ Signed:_____

Number of pages attached: _____

PASO BASIN COOPERATIVE COMMITTEE
July 26, 2023

Agenda Item #15 – Direct Staff to Issue an RFP for the Paso Robles Groundwater Basin Blended Water Supply Project Water Supply Feasibility and Engineering Study

Recommendation
Direct staff to issue an RFP for the Paso Robles groundwater basin Blended Water Supply Project Water Supply feasibility and engineering study.

Prepared By
Blaine Reely, County of San Luis Obispo Groundwater Sustainability Director

Discussion
The Blended Irrigation Water Supply Project (Project) is included as part of a component in the successfully awarded California Department of Water Resources Round 1 Sustainable Groundwater Management implementation grant.

On March 16, 2023, the Blended Irrigation Water Supply Project Technical Advisory Committee (TAC) was formed, and the TAC's initial deliverable was to develop a scope of work for the Project feasibility and preliminary engineering study RFP. The draft RFP, provided as Attachment 1, is provided for consideration of approval by the PBCC and the proposed RFP schedule is provided below.

The TAC will assist in the proposal review and selection process, and once a contract is awarded, the TAC will meet with selected consultant to provide relevant feedback on the development of the Project feasibility and engineering study, as needed.

RFP Schedule	Date
Issued	July 27, 2023
Pre-Proposal Conference	August 14, 2023
Deadline for Final Questions	August 21, 2023
Proposal Submission Date	August 28, 2023
Evaluation of Proposals	September 11, 2023
Interviews (if needed)	September 21, 2023
Contract Negotiations	October 6, 2023
Intent to Award Issued	October 13, 2023
Award by Board of Supervisors	November 7, 2023
Notice to Proceed	November 8, 2023

* * *

COUNTY OF SAN LUIS OBISPO
CENTRAL SERVICES DEPARTMENT
Christopher Lopez *Director*

REQUEST FOR PROPOSAL PS- #1744
PASO ROBLES GROUNDWATER BASIN BLENDED WATER SUPPLY PROJECT
WATER SUPPLY FEASIBILITY & ENGINEERING STUDY

July 27, 2023

The County of San Luis Obispo (County) is currently soliciting proposals for professional services for the Paso Robles Groundwater Basin Blended Water Supply Project Feasibility & Engineering Study.

Each proposal shall specify each and every item as set forth in the attached specifications. Any and all exceptions must be clearly stated in the proposal. Failure to set forth any item in the specifications without taking exception may be grounds for rejection. The County reserves the right to reject any and all proposals and to waive any irregularity or informality in any proposal or in the RFP process, as long as, in the judgment of the County, such action will not negate fair competition and will permit proper comparative evaluation of the proposals submitted.

This RFP is posted on the County's Purchasing website at http://www.slocounty.ca.gov/GS/Purchasing/Current_Formal_Bids_and_Proposals.htm. Any changes, additions, or deletions to this RFP will be in the form of written addenda issued by the County. Any addenda will be posted on the website. Prospective proposers must check the website for addenda or other relevant new information during the response period. The County is not responsible for the failure of any prospective proposer to receive such addenda. All addenda so issued shall become a part of this RFP.

If your firm is interested and qualified, please submit two (2) separate Adobe Acrobat Portable Data Format (.pdf) files, one (1) technical proposal and one (1) cost proposal, through the County's Purchasing website at the address listed above, by **3:00 p.m.** on **August 28, 2023.**

If you have any questions about the proposal process, please contact the Buyer directly.

MISSY VILES
Buyer II – Central Services Purchasing
mviles@co.slo.ca.us

Table of Contents

I. INTRODUCTION

A. PURPOSE

The purpose of this Request for Proposal (RFP) is to solicit offers from qualified firms to provide water resources planning, engineering, and design services as required to complete a water supply feasibility and engineering study and Preliminary Engineering Report (PER) to assess the feasibility of delivering blended water supplies from Lake Nacimiento pipeline and the City of Paso Robles recycled water system for agricultural use as an in-lieu water supply to allow for reduced groundwater pumping in the Paso Robles Groundwater Basin.

The goal of this project is to complete a feasibility and engineering study to assess the practicality of delivering blended water supplies from Lake Nacimiento pipeline and the City of Paso Robles recycled water system for agricultural use in lieu of groundwater pumping or potentially recharge to benefit the groundwater basin. It is anticipated that a consultant will be retained to provide water resources planning, engineering & hydrology services as may be required to develop a recommended schematic level design of a new water supply, treatment and distribution system which will utilize available water sources from the Nacimiento Water Project and tertiary treated recycled wastewater from the City of Paso Robles Recycled Wastewater (i.e., Purple Pipe) System. The project will be designed to provide a supply of blended water that has suitable quality to meet the requirements of existing and future agricultural operations in the central portion of the Paso Robles Groundwater Basin. The study will include the determination of an optimal configuration for the Blended Irrigation Water Supply system which will include separate connections to the Nacimiento Pipeline and the City of Paso Robles Recycled Wastewater System to best meet the requirements of the end users and achieve hydraulic efficiency. All recommendations for future project design, construction, and system operations shall comply with the County of San Luis Obispo and other applicable local, state, and federal agency regulatory and code requirements.

See Appendix A for detailed scope of work.

The consultant contract is planned to be a “Time and Materials” based contract and the County shall pay to the Consultant as compensation in full for all services performed at the rates specified in the Consultant’s Rate Sheet (to be included in the Consultants Proposal). The term of the contract will not exceed 6-months.

B. BACKGROUND

Several potential projects that considered the use of Lake Nacimiento water were identified in the Paso Robles Basin Groundwater Sustainability Plan (GSP). One project that has gained support from the Groundwater Sustainability Agencies (GSAs) in the Basin is a plan to use a blended supply of recycled water from the City of Paso Robles and a surface water supply from the Nacimiento Water Project (NWP) for agricultural irrigation in lieu of groundwater pumping in contribute to achieving GSP objectives.to produce an irrigation supply water that has desirable water quality properties. The proposed project would produce a water supply of suitable quality and convey the blended supply via new blending facility, pump station and pipeline infrastructure

to irrigate supplement irrigation of approximately 3,000-5,000 acres of existing irrigated crops. potentially convey a blended supply via new blending facility, pump station and pipeline infrastructure to irrigate approximately 3,000-5,000 acres of existing vineyards. Under the current concept, the blended supply of water would be used as an in-lieu irrigation source of supplemental water and permit the curtailment of approximately 3,500-7,000 acre-feet of groundwater pumping from the Basin annually. This study will assess the feasibility of the proposed project, perform design alternatives analyses and develop recommendations for the final project design criteria, including pipeline alignments, and design criteria for the proposed blending facility, treatment, pump station(s), storage facilities, metered turn-outs, and appurtenances.

The City of Paso Robles has a master plan to distribute tertiary-quality recycled water currently being produced at the City's WWTP to east Paso Robles, where it may be safely used for irrigation of City parks, golf courses, and agricultural irrigation, providing supplemental or alternative water supply to irrigators in the basin. In 2019, the City completed construction and began operating the first part of this recycled water system, which is filtration and ultraviolet light disinfection at the WWTP. These new tertiary treatment facilities produce very high-quality recycled water. The City has completed the design of a major distribution system to deliver recycled water to east Paso Robles. When completed, the distribution system project will be capable of delivering up to 4,900 AFY of disinfected tertiary effluent. Of this amount, approximately 2,000 AFY is currently available for use by agricultural irrigators in-lieu of groundwater extraction, in the central portion of the basin. The City anticipates that some recycled water, that is not used in lieu of groundwater pumping, may be discharged to Huer Huero Creek with the potential for additional recharge benefits. The initial segment of the recycled water distribution system, which includes the infrastructure required to convey the treated effluent supply from the City WWTF across the Salinas River where it will be connected to a segment of recycled water line the City has already constructed, is currently under construction. These initial pipeline segments will facilitate a new turn-out for future extension of the "purple-pipe" distribution system to irrigation users including vineyards, municipal parks, golf courses, residential developments, and the local community college.

The Nacimiento Water Project (NWP) consists of 45 miles of pipeline that conveys raw water from Lake Nacimiento in the northern portion of San Luis Obispo County to communities within San Luis Obispo County. Monterey County Water Resource Agency (MCWRA) manages and operates Lake Nacimiento and San Luis Obispo County Flood Control and Water Conservation District (SLOCFCWD) has an entitlement of 17,500 AFY through a Master Water Agreement with MCWRA negotiated in 1959. Of this amount, 1,750 AFY is permanently allocated to lakeside customers, and the rest is allocated to seven participants. Any unused NWP water must be purchased from the existing participants through a "turn back pool" arrangement.

NWP is a generally reliable supply, since SLOCFCWD's entitlement is for the lowest pool in the reservoir, and therefore is largely unaffected by fluctuations in lake levels. However, NWP participants generally use more Nacimiento Water during droughts, which results in less Nacimiento turnback pool water available for direct use for irrigation in lieu of groundwater pumping, or other uses that may benefit the basin. In contrast, the availability of recycled water is not expected to greatly diminish, even in times of drought. These variations on in supply availability shall be considered relative to projected irrigation demands as part of the project scope of work.

II. SCHEDULE AND SUBMITTAL

A. RFP SCHEDULE

The following represents the tentative schedule for this RFP. Any change in the scheduled dates for the Pre-Proposal Conference, Deadline for Final Questions, Proposal Submission Deadline, or Interviews will be advertised in the form of an addendum to this RFP. The schedule for other milestones dates may be adjusted without notice.

RFP Schedule	Date
Issued	July 27, 2023
Pre-Proposal Conference	August 14, 2023
Deadline for Final Questions	August 21, 2023
Proposal Submission Date	August 28, 2023
Evaluation of Proposals	September 11, 2023
Interviews (if needed)	September 21, 2023
Contract Negotiations	October 6, 2023
Intent to Award Issued	October 13, 2023
Award by Board of Supervisors	November 7, 2023
Notice to Proceed	November 8, 2023

B. QUESTIONS

All questions (requests for interpretations or corrections) pertaining to the content of this RFP must be made in writing through the County's Purchasing website by 3:00 p.m. on **August 21, 2023**. Requests submitted after said date may not be considered. Questions will receive a response within five (5) business days. Questions and responses will be posted (anonymously) on the Purchasing website and can be viewed by accessing the RFP. The County reserves the right to determine the appropriateness of comments / questions that will be posted on the website.

C. PROPOSAL SUBMITTAL

If your firm is interested and qualified, please submit two (2) separate Adobe Acrobat Portable Data Format (.pdf) files, one (1) technical proposal and one (1) cost proposal, through the County's Purchasing website at the address listed on the title page by 3:00 p.m. on **August 28, 2023.**

D. PRE-PROPOSAL CONFERENCE

An onsite pre-proposal conference will be held on August 14, 2023, at 10:00AM at SLO County Government Center 1055 Monterey Street STE 454 San Luis Obispo, CA 93408. Interested consultants must RSVP for this meeting to Blaine Reely, Groundwater Sustainability Director via email at breely@co.slo.ca.us no later than 5 p.m. on August 10, 2023. This pre-proposal conference is not mandatory, however, it is highly recommended.

III. GENERAL INSTRUCTIONS

A. COUNTY RIGHTS & OPTIONS

1. All proposals must be submitted to the County's Purchasing website in Adobe PDF format no later than 3:00 p.m. on August 28, 2023. Late proposals will not be considered.
2. The County reserves the right to request any missing information in a proposal submitted in response to this RFP. Proposer shall have 24 hours to provide the information to the requesting Buyer.
3. All costs incurred in the preparation and submission of proposals and related documentation will be borne solely by the proposer.
4. This RFP does not constitute an offer of employment or to contract for services.
5. The County may, in its sole and absolute discretion, accept or reject any and all proposals, in whole or in part, with or without cause, in response to this RFP and to make more than one award, or no award, or postpone or cancel, at any time, this RFP process, as which the County determines to be in its best interests.
6. The County reserves the right to remedy technical errors, modify the published scope of services and approve or disapprove the use of all sub-consultants.
7. The issuance of this RFP does not constitute an agreement by the County that any subsequent selection process will occur, or that any contract will be entered into by the County. Proposals and other materials will not be returned.
8. The County has the right to use any or all ideas or concepts presented in any proposal or interview without restriction, without conversation to all applicants.
9. All documents submitted to the County in response to this RFP will become the exclusive property of the County.
10. All proposals shall remain firm for one hundred eighty, (180) days following closing date for receipt of proposals.
11. The County reserves the right to award the contract to the firms who present the proposal which, in the judgment of the County, best accomplishes the desired results.
12. The term of the contract will be one (1) year from date of award. Pricing will remain unchanged throughout the term of contract.
13. Any contract awarded pursuant to this RFP will incorporate the requirements and specifications contained in this RFP. All information presented in a proposer's proposal will be considered binding upon selection of the successful proposer, unless otherwise modified and agreed to by the County during subsequent negotiations.
14. Under the provisions of the California Public Records Act (the "Act"), Government Code section 6252 et seq., the County may be obligated to provide a copy of any and all records that the proposer provides County relating to this RFP (hereafter "Records from Proposer") , including those records which the proposer believes constitute confidential information. If the County determines (in its sole discretion) that (i) a person/entity has requested a copy of records that would include Records from Proposer , and (ii) the County does not have sufficient direct, first-hand knowledge to independently conclude

that such Records from Proposer are exempt from disclosure under the Act, and (iii) the requester is not willing to accept the proposer's claim that the Records from Proposer are exempt from disclosure under the Act, the County will provide the proposer written notice thereof (via mail and/or email). If the proposer does not, within seven court business days thereof, file the appropriate papers in San Luis Obispo County Superior Court ("Court") seeking a court order preventing the County from disclosing any such Records from Proposer to the requester, and have its request heard by the Court within 30 days thereof, the proposer shall be deemed to have waived any claim that the Records from Proposer are exempt under the Act. (The County reserves the right to issue a written extension of time if it determines (in its sole discretion) that one is appropriate.) Under no circumstances shall the proposer be entitled to recover from County any of its court costs, attorney's fees or other litigation expenses that are related in any way to whether any Records from Proposer are exempt under the Act. If any proposer believes that information contained in its response to this RFP should be protected from disclosure, the proposer MUST specifically identify the pages of the response that contains the information by properly marking the applicable pages and inserting the following notice in the front of its response:

> ***NOTICE:*** *The data on pages _ of this response identified by an asterisk (*) contain technical or financial information, which are trade secrets, or information for which disclosure would result in substantial injury to the proposer's competitive position. Proposer requests that such data be used only for the evaluation of the response, but understands that the disclosure will be limited to the extent the County considers proper under the law. If an agreement is entered into with the proposer, the County shall have the right to use or disclose the data as provided in the agreement, unless otherwise obligated by law.*

The County will not honor any attempt by proposer to designate its entire proposal as proprietary. If there is any dispute, lawsuit, claim or demand as to whether information within the response to the RFP is protected from disclosure under the Act, proposer shall indemnify, defend, and hold harmless, the County arising out of such dispute, lawsuit, claim or demand.

15. The proposer warrants that no official or employee of the County has an interest, has been employed or retained to solicit or aid in the procuring of any contract resulting from this RFP, if any, and further warrants that such person will not be employed in the performance of the contract without immediate written notice to the County.

16. Firms submitting proposals shall warrant that their offer is made without any previous understanding, agreement or connection with any person, firm or corporation submitting a separate proposal for the same project and is in all respects fair, without outside control, collusion, fraud or otherwise illegal action. This condition shall not apply to proposals which are submitted by firms who have partnered with others to submit a cooperative proposal that clearly identifies a primary contractor and the associated sub-contractors.

17. Contractor shall comply with all laws and regulations governing nondiscrimination in employment, including the Americans with Disabilities Act of 1990, the Fair Employment and Housing Act (California Government Code §§ 12900, et seq.), and the applicable regulations promulgated thereunder (2 California Code of Regulations §§ 7285, et seq.).

17.1. **Nondiscrimination**: The Contractor, with regard to the work performed by them during the Contract, shall not discriminate on the grounds of race, color or national origin or other legally protected criteria in employment or the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the Contract covers a program set forth in Appendix B of the Regulation.

17.2. **Solicitation for Subcontracts, Including Procurement of Materials and Equipment**. In all solicitation, either by competitive bidding or negotiation, made by the Contractor for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this Contract and the regulations

18. Unforeseen additional items and/or services may be required. The County therefore reserves the right to negotiate with the successful proposer for additional items and/or services beyond what is described in Appendix A to be added to the final contract.

B. PREVAILING WAGE

At least a portion of this work may require prevailing wage work. For any work done by the prime contractor or a subcontractor under this agreement, in accordance with Labor Code Section 1720 et seq., prime contractor must pay employees at least the prevailing rate wages for public works performed on the Project. Prime contractor and any applicable subcontractors listed in your proposal must be registered with the Department of Industrial Relations (DIR) prior to the closing of this RFP. Contractor must submit certified payroll records to DIR at least monthly for such work. The work is subject to DIR monitoring and enforcement. Prime contractor, as well as all subcontractors under this agreement, must be registered with the Department of Industrial Relations for the entire term of the contract. **NOTE: YOUR PROPOSAL WILL BE REJECTED AND NOT CONSIDERED IF YOU AND ANY APPLICABLE SUBCONTRACTORS LISTED IN YOUR PROPOSAL ARE NOT REGISTERED AT THE TIME THE RFP CLOSES.**

Contractors can register at:

http://www.dir.ca.gov/Public-Works/PublicWorks.html

C. CHANGES TO THE RFP

This RFP is posted on the County's Purchasing website at http://www.slocounty.ca.gov/GS/Purchasing/Current_Formal_Bids_and_Proposals.htm. Any changes, additions, or deletions to this RFP will be in the form of written addenda issued by the County. Any addenda will be posted on the website. Prospective proposers must check the website for addenda or other relevant new information during the response period. The County is not responsible for the failure of any prospective proposer to receive such addenda. All addenda so issued shall become a part of this RFP. Any proposer who has already submitted their proposal and desires to make corrections, may remove and replace their proposal on the Purchasing website up to the date and time for which this RFP closes.

D. COMMUNICATIONS

All communications concerning this RFP shall be directed to Missy Viles, mviles@co.slo.ca.us. All other communication is not binding and shall in no way modify the RFP or the obligations of the County.

The proceedings of the Selection Committee are confidential, and members of the Selection Committee are not to be contacted by the proposers. After the solicitation has closed, proposers can view the RFP on the Purchasing website where any available award information will be posted and updated within the solicitation. Any questions and requests for information must be addressed to the Buyer.

E. INSURANCE

The selected proposer will be required to provide insurance coverage in the amount of One Million Dollars ($1,000,000) Commercial General Liability (CGL) Insurance and Two Million Dollars ($2,000,000) Professional Liability Insurance. See Appendix B – Sample Contract for complete insurance and indemnification requirements.

INSURANCE REQUIRED	AMOUNT
CGL & Property Damage	$ 1.0 Million per occurrence
Professional Liability	$ 1.0 Million per occurrence / $ 2.0 Million aggregate
Auto Liability /Property Damage/Bodily Injury	$ 1.0 Million per occurrence
Workers Compensation & Disability Benefits	$ 1.0 Million per occurrence

The selected proposer shall provide within five (5) days after the Notice of Award is issued a certificate of liability insurance naming the County of San Luis Obispo and its employees and officers as additionally named insured. This shall be maintained in full force and effect for the duration of the contract and must be in an amount and format satisfactory to the County.

F. EXCEPTIONS & DEVIATIONS

Any exceptions to or deviations from the requirements set forth in this RFP must be declared in the proposal submitted by the proposer. Such exceptions or deviations must be segregated as a separate element of the proposal under the heading “Exceptions and Deviations” as instructed below in section IV. The County may waive any immaterial deviation or defect in a proposal.

G. AWARD AND STANDARD AGREEMENT

The County reserves the right to make awards within one hundred eighty, (180) days after the date of the RFP closing. The successful proposer is expected to execute a contract similar to the contract in Appendix B. This sample contract is for reference to the anticipated terms and conditions governing the County and the successful proposer. The proposer must take exception in their proposal to any section of the attached contract they do not agree with. Failing to do so will be deemed as acceptance by the proposer to the terms spelled out in the sample contract. The County reserves the right, in its sole

discretion, to add, delete, or modify, or negotiate additional terms and conditions to the attached contract. BEFORE BEGINNING ANY WORK OR SUBMITTING A PROPOSAL IT IS ADVISED THAT PROPOSERS READ THE COUNTY INSURANCE AND INDEMNIFICATION REQUIREMENTS IN THE ATTACHED SAMPLE CONTRACT. The selected proposer will be asked to provide evidence that County insurance requirements have been met.

IV. PROPOSAL FORMAT

Technical Proposal:

A qualifying technical proposal must address all of the following points and shall be in the format outlined in this section:

A. **Project Title**

B. **Applicant or Firm Name**

C. **Format and Firm Qualifications**

To respond to the RFP, a proposer must submit a proposal on or before the deadline. The proposal shall be limited to forty (40) pages in length, not including resumes, Cost Proposal or the following forms which can be included in the appendices: Risk Assessment Questionnaire, Designation of Subcontractors Form, Local Vendor Preference or the Proposer Checklist. The proposal must be signed by a person authorized to bind the proposing firm to the representations, commitments and statements contained in the proposal. The proposal must contain the following information and documents:

a. A cover letter summarizing the key points of the proposal (2 pages max.)

b. **Description of Firm.** A description of the firm's organizational structure, the jurisdiction in which the firm is organized and date of such organization. In addition, provide a brief description of the firm's qualifications and experience on projects of similar nature to those described in the proposal as well as projects/clients where consultant has performed as an extension of staff.

c. **Authorized representative of the proposer.** The name, address, telephone number, and email address of the person authorized to represent the proposer with respect to all notices, negotiations, discussions, and other communications relating to this proposal, to any negotiation relating to the contract.

d. **Staffing.** Provide an organizational chart identifying: 1) the project manager for the work; 2) each key person who would be assigned to carry out the work, and their respective roles in performing the work. Provide a separate description of the experience and qualifications of such manager and key persons, including a summary of experience on similar projects to those described in this proposal. Resumes should be included for all key individuals as an appendix to the submittal.

e. **References.** A list of no more than three references for the proposer and no more than three references for each subconsultant, including the names, addresses and telephone numbers of recent clients, preferably other public agencies and a listing of the specific projects and key individuals that have participated in each project. Include the dollar amount related to the participation. Identify how much experience the firm and sub consultant has had with public agencies.

f. **Scope.** A clear concise statement of the proposer's understanding of the nature and extent of the services required and a specific outline to demonstrate how personnel would be organized to handle these services.

D. Work Plan / Technical Services

a. This section should establish that the proposer understands the County's objectives and requirements, demonstrate the proposer's ability to meet those requirements and outline clearly and concisely the plan for accomplishing the specified work as outlined in Appendix A, Scope of Services.
b. Indication of information and participation the proposer will require from County staff.

E. Required Attachments Appendix

a. Resumes. In the Appendix, proposer shall include resumes for all key personnel, the specific projects and roles of the individuals, specialty licenses, certificates or relevant training. List all similar work.

Cost Proposal:

A. Fees
Propose total Not to Exceed (NTE) fees as described under Project Scope. The consultant contract is planned to be a "Time and Materials" based contract, with a NTE amount and the County shall pay to Consultant as compensation in full for all services performed at the rates specified in the Consultant's Rate Sheet (to be included in the Consultants Proposal). Fees shall detail the billing rates for each firm's key individuals, other position's overhead rates and other costs. Include any and all other costs for office, vehicle, cell phones, per diem, etc. Travel cost reimbursement rates must conform to the County's Travel Policy reimbursements; costs above these rates are not allowed. See Appendix E. Cost proposal must be submitted in a separate Adobe Acrobat Portable Data Format (.pdf) file and shall not be included within the technical proposal.

V. PROPOSAL SELECTION & CONTRACT AWARD

A. SELECTION PROCEDURES

Proposals will be evaluated by a Selection Committee comprised of one or more County departments, Paso Basin GSA staff, and stakeholders. The Selection Committee will consider the completeness of a proposal and how well the proposal meets the needs of the County. Evaluations will be based on criteria as outlined in **Section B (Selection Criteria)** below. All proposals in response to this RFP will be evaluated using the same criteria.

The sole purpose of the selection procedure is to determine, from among the responses received, which one is the best qualified firm at compensation that the agency determines to be fair and reasonable. Any final analysis or weighted score does not imply that one proposer is superior to another, but simply that, in the Selection Committee's judgment, the selected proposer appears to be best qualified for the County's current and anticipated needs.

The County may require the proposers who receive top rankings during the initial

evaluation phase to conduct an on-site interview or oral presentation of their proposal on the date specified in **RFP Schedule**. The County will provide a required agenda, for those proposers, specifying the items to be covered during the proposer's presentation.

B. SELECTION CRITERIA

The County will evaluate the proposals based on, but not limited to, the following criteria:

Selection Criteria – RFP	Points Available
Understanding of scope of work / completeness of Work Plan	**20**
Demonstrated expertise in performing recent similar work	**20**
Qualifications and experience of key staff (all disciplines)	**15**
Familiarity with local, state and federal procedures (including permitting requirements)	**15**
Previous successful experience working with local agencies	**10**
Project delivery schedule and milestones, and deliverables clearly defined	**10**
Staffing plan and manhour estimates by discipline clearly defined	**10**
Total Points Available Per Contractor	**100**

C. FINAL SELECTION

The Selection Committee will formulate its recommendation for award of the Contract, and forward its selection to the appropriate parties for approval.

D. CONTRACT AWARD AND EXECUTION

The County reserves the right to enter into a contract without further discussion of the submitted proposal. Therefore, the proposal should be initially submitted on the most favorable terms the proposer can offer.

The County reserves the right to withdraw the RFP in whole or in part, at any time and for any reason. Submission of a proposal confers no rights upon a proposer and does not obligate the County in any manner. The County reserves the right to award no contract and to solicit additional offers at a later date.

Each proposer, by submitting a proposal, agrees that if the County accepts its proposal, such proposer will furnish all items and services upon the terms and conditions in this RFP and subsequent contract. Proposals that do not meet the mandatory requirements set forth in this RFP will be considered non-compliant. Proposers may be disqualified and the proposal may be rejected by the County for any of, but not limited to, the following reasons:

- Failure to properly respond to the RFP;
- Evidence of collusion among the proposers submitting the proposals;
- Failure to comply with the specification requirements of the RFP.

Terms, conditions, prices, methodology, or other features of the Contractor's proposal may be subject to negotiation and subsequent revision. As part of the negotiations, the Contractor may be required to submit additional financial information and other data to allow for a detailed evaluation of the feasibility, reasonableness, and acceptability of the proposal.

The RFP document and the successful proposer's proposal response, as amended by agreement between the County and the successful Contractor, including e-mail or written correspondence relative to the RFP, may become part of the contract documents. Additionally, the County may verify the successful proposer's representations that appear in the proposal. Failure of the successful proposer to perform as represented may result in elimination of the successful proposer from competition or in contract cancellation or termination.

The requirements listed in this RFP are not negotiable and will remain unchanged unless the County determines that a change in such requirements is in the best interest of the County.

The County expressly reserves the right, in its sole judgment, to accept or reject any or all proposals, with or without cause, modify, alter, waive any technicalities or provisions, or to accept the proposal which, in its sole judgment, is determined to be the best evaluated offer resulting from negotiation and taking into consideration other evaluation factors set forth in the RFP. The successful proposer will be expected to enter into a contract with the County. If the successful proposer fails to sign a contract within fifteen (15) business days, unless the County grants an extension, following the delivery of the contract documents, the County may elect to negotiate a contract with the next-highest ranked proposer.

The County shall not be bound, or in any way obligated, until both parties have executed a contract. The selected proposer may not incur any chargeable costs prior to final contract execution. The foregoing should not be interpreted to prohibit either party from proposing additional contract terms and conditions during the negotiation of the final Contract.

The supplies and services are to be provided in compliance with all applicable state and federal standards, rules and regulations. The County reserves the right to request additional written and/or oral information from proposers at any time before contract award, in order to obtain clarification of their responses.

E. PROTEST OF AWARD

Any objection to the County's final decision will be handled according to applicable state and local procurement laws.

VI. DEFINITIONS

Response: The written, signed and sealed complete document submitted according to the proposal instructions. Response does not include any verbal or documentary interaction apart from submittal of a formal Response.

Request/Proposal/Bid: The completed and released document, including all subsequent addenda, made publicly available to all prospective proposers.

We/Us/Our: Terms that refer to the County of San Luis Obispo, a duly organized public entity. They may also be used as pronouns for various subsets of the County organization, including, as the context will indicate.

Purchasing: The Contracts and Purchasing Services Division of the Department of Central Services.

Department/Division: The department or division requesting the goods or services contained in this request, for which this PROPOSAL is prepared and which will be the end user of the requested goods or services.

You/Your: Terms that refer to businesses/individuals submitting a response. The term may apply differently as the context will indicate.

Supplier: A business entity engaged in the business of providing services.

Proposer: A business entity submitting a Response to this proposal. Suppliers which may express interest in this proposal, but who do not submit a Response, have no obligations with respect to the proposal requirements.

Contractor: The proposer(s) whose Response to this proposal is evaluated as meeting the needs of the County. Contractor(s) will be selected for award, and will enter into a contract(s) for provision of the services described in this proposal.

Contractor's Employee: All persons who can be offered to provide the services described in the proposal. All employees of the Contractor shall be covered by the insurance programs normally provided to persons employed by a company (ex: Worker's Comp, SDI, etc.).

Mandatory: A required element of this request/proposal/bid. Failure to satisfy any element of this request/proposal/bid defined as "mandatory" will disqualify the particular response.

Default: A failure to act as required by any contract resulting from this request, which may trigger the right to sue or may excuse the other party's obligation to perform under the contract.

Cancellation/Termination: A unilateral or mutual decision to not complete an exchange or perform an obligation under any contract resulting from this request.

"Or Equal": A statement used for reference to indicate the character or quality desired in a requested product or service. When specified in a proposal document, equal items will be considered, provided the response clearly describes the article. Offers of equal items must state the brand and number, or level of quality. When brand, number, or level of quality is not stated by proposer, the offer will be considered exactly as specified. The determination of the Purchasing Agent as to what items are equal is final and conclusive.

APPENDIX A – SCOPE OF SERVICES

Introduction

The scope of work required under the terms of this Request for Proposals (RFP), will include providing the necessary experienced staff and expertise as may be required to develop and evaluate design alternatives for a new water supply, treatment, blending, and distribution system which will utilize available water sources from the Nacimiento Water Project and tertiary treated recycled water supplies from the City of Paso Robles Wastewater Treatment Facility. The project will evaluate multiple engineering alternatives to provide a supply of supplemental water that has suitable quality to meet the requirements of existing and future agricultural irrigators in the Paso Robles Groundwater Basin, to be used in-lieu of groundwater pumping. The study will include the evaluation of various treatment and / or blending scenarios to determine the optimal approach to providing a high-quality product for agricultural irrigation. Water quality from the Nacimiento Water Project varies from season-to-season and year-to-year. There are periods when Nacimiento has very high turbidity and dissolved iron and manganese (and other constituents) that could cause problems with drip irrigation emitters if not treated. This study must account for the varying quality of the raw lake water, it's impact on a blended supply and include provisions for addressing water quality to make water suitable for drip irrigation, as needed. In addition, the work to be performed will include the determination of an optimal configuration for the transmission and distribution pipeline system to best meet the requirements of the end users and achieve hydraulic efficiency. The utilization of existing agricultural irrigation & frost protection storage reservoirs (i.e. AG Ponds) will be evaluated along with the potential for the construction of new storage facilities. The study should focus on determining the optimal balance of maximizing beneficial use of available water supplies to achieve objectives of the GSP while minimizing infrastructure costs. All work will be completed in accordance with the County of San Luis Obispo and other applicable local, state and federal agency regulatory and code requirements.

The feasibility and engineering study will assess the practicality of delivering blended water supplies from Lake Nacimiento pipeline and the City of Paso Robles recycled water system for agricultural use in lieu of groundwater pumping. It is anticipated that a consultant will provide water resources planning, engineering & hydrology services as may be required to develop a recommended schematic level design of a new water supply, treatment, blending, storage and distribution system which will utilize available water sources from the Nacimiento Water Project and tertiary treated recycled water from the City of Paso Robles Recycled Water (i.e., Purple Pipe) System. The project will be designed to provide a supply of blended water that has suitable quality to meet the requirements of existing and future agricultural irrigators in the central portion of the Paso Robles Groundwater Basin. An initial concept for the proposed Blended Water Supply Project pipeline alignment is graphically depicted in Figure 1. Figure 1 is included in this RFP for informational purposes only. The Consultant shall independently develop recommendations for the final project, based on the results of the scope of work described in this RFP. The study will include the determination of an optimal configuration for the Blended Irrigation Water Supply system which will include separate connections to the Nacimiento Pipeline and the City of Paso Robles Recycled Water System to best meet GSP objectives while also meeting the requirements of the end users and maximizing hydraulic efficiency. All recommendations for future project design, construction, and system operations shall comply with the County of San Luis Obispo and other applicable local, state, and federal agency regulatory and code requirements.

The results of the feasibility and engineering study will be documented in a Preliminary Engineering Report (PER). The following is a preliminary outline of the PER. The final content of the PER will be developed during the course of the project, with input provided by the Paso Basin GSA staff, members of the Blended Water Supply Project Technical Advisory Committee (TAC) and members of the NWP participants.

1. Project Planning

    a. Detailed map(s) showing: (Note: All mapping shall be developed using GIS spatially-related datasets which shall be provided to the County as a project deliverable)
        i. Project Vicinity.
        ii. Base map with aerial photographic layer, using the most recent available photography. (Aerial photography to be provided by the County).
        iii. Relevant hydrologic (major streams, streams receiving waste discharges), geologic, soil types, watersheds, flood-prone areas, areas designated prime farmland, and topographic features (including topographic contours). (Note: Depiction of topography shall be based on the most current USGS LIDAR elevation survey, or equal).
        iv. Areas with potential for discharge of blended water supplies for groundwater basin recharge.
        v. Environmental features including mapped wetlands, riparian habitat corridors, etc.
        vi. Cultural features, including roadways, railroads, bridges, utilities (overhead and buried), and other relevant man-made structures.
        vii. Locations of existing wells, stream gages, climatologic stations shall be depicted. (Well location data to be provided by the County).
        viii. Property boundaries, including parcels, rights-of-way, and other relevant property boundaries. (Property boundary / parcel data sets to be provided by the County)
        ix. Water Suppliers Service Areas and Groundwater Sustainability Agency (GSA) boundaries.
        x. Project site and service/study area boundary including service area boundaries.
        xi. Wholesale and retail water supply and water district entity boundaries within study area and adjacent to study area.
        xii. Wastewater agency boundaries within and adjacent to study area.
        xiii. Groundwater basin boundaries. (DWR Bulletin 118 and Fugro Boundaries)
        xiv. Existing and proposed recycled water distribution pipelines, storage, appurtenances, and existing and potential future users.
        xv. Existing and proposed untreated and treated water supply distribution and transmission pipelines, storage, appurtenances, and existing and potential future users.
    b. Existing land use, trends, and projected land use. Agricultural crop type shall be identified. (The most recent land use data from Land IQ shall be used).
    c. Existing population, trends, and population projections of study area (population projections must be cited from an independent source(s)).

2. Lake Nacimiento Water Supply Characteristics and Facilities

    a. Description of existing facilities, including conveyance, pumping, storage, and treatment processes and schematic(s), design criteria, current capacities, current

flows, current water quality characteristics and the current discharge turnout location(s).

b. Results of investigations shall be used to estimate and characterize the availability of water from the Nacimiento Water Project from a volumetric and temporal basis. The results of the investigations shall be used to develop an understanding of how much water will be available and the timing of when during the year it will be available, including a description of the Lake Nacimiento Project flow variations, on an hourly, daily, and seasonally basis. The availability of Nacimiento water for the project will be dependent upon nominations of turn back pool water by NWP participants. An assessment of supply uncertainty shall be included. This information is critical to the water system design, including pipe sizes, pump station and treatment system capacity and configuration and the placement/ sizing of irrigation water storage facilities.
c. Analysis of the quality of the Lake Nacimiento Project source water to determine the overall suitability of the source for agricultural irrigation purposes. Identify any problem constituents and develop recommendations for control measures. This analysis shall address the potential variation in water quality from both a seasonal perspective and as water levels in the lake vary between normal, drought, and wet cycles to determine what, if any, treatment will be required to meet the requirements of the end users.
d. Description of existing water rights for use as an agricultural irrigation water supply.

3. City of Paso Robles Recycled Wastewater Characteristics and Facilities

a. Description of existing facilities, including conveyance, pumping, storage, and treatment processes and schematic(s), design criteria, current capacities, current flows, current water quality characteristics and the current and proposed discharge and customer turnout location(s).
b. Results of investigations shall be used to estimate and characterize the availability of water from the City of Paso Robles Recycled Water Treatment Facility on a volumetric and temporal basis. The results of the investigations shall be used to develop an understanding of how much water may be available and the timing of when during the year it will be available, including a description of the recycled wastewater flow variations, from an hourly, daily, and seasonally basis. An assessment of supply uncertainty shall be included. This information is critical to the water system design, including pipe sizes, pump station and treatment system capacity and configuration and the placement/ sizing of irrigation water storage facilities.
c. Analysis of the quality of the City of Paso Robles Recycled Water Treatment Facility source water to determine the overall suitability of the source for agricultural irrigation purposes. Identify any problem constituents and develop recommendations for control measures. This analysis shall address the potential variation in water quality from both a seasonal perspective and as water levels in the lake vary between normal, drought, and wet cycles to determine what, if any, treatment will be required to meet the requirements of the end users. In conjunction with this task, the Consultant shall perform an analysis to determine how blending of the available source waters can be utilized to produce irrigation supplies that are acceptable to the end users. The blending analysis will include the contribution of groundwater from existing wells which are located on properties currently owned by the end users.
d. Description of existing water recycling users, quantities, and contractual arrangements.

e. Description of existing water rights for use of treated effluent after discharge.

4. Blended Water Supply Analysis

    a. Consultant shall perform an analysis to determine how blending of the available source waters can be utilized to produce irrigation supplies that are acceptable for the irrigation of wine grapes. The blending analysis will include the contribution of groundwater from existing wells which are located on properties currently owned by the future end users. As part of this analysis, the Consultant shall perform a water treatment / blending study using available historic water quality data to evaluate potentially viable treatment processes and / or optimal blending proportions of the two supplies. Based on the results of the blending study, one or more water treatment technologies and / or blending protocols will be identified for further consideration during the preliminary engineering alternatives task. The ultimate goal of this task is to determine the most efficient treatment / blending process by which a supplemental water supply can be produced and delivered to the end users of the Blended Water Supply Project which meets or exceeds the requirements for vineyard irrigation on the properties of the end users.

5. Water Demand Analysis

    a. Consultant will work with GSA staff, members of the Blended Water Supply Project Technical Advisory Committee (TAC), industry stakeholders, and potential identified end users of the Paso Basin Blended Irrigation Water Supply Project to develop an understanding of the anticipated demand and water quality requirements for the blended water supply. The demand analysis will include quantification of the volumetric and temporal demand criteria and shall be representative of the actual irrigation practices that are currently being applied in the project area. It shall be understood that the demand for water by the end users will change seasonally and from year to year, depending on climatic conditions, number of end users, and crop type. The Consultant will work with the end users to develop reasonable demand profiles for near term and future anticipated conditions.

    b. The Consultant shall utilize available datasets during the water demand analysis, including satellite based Et data, historic metered pumping data, and other datasets that may be identified during the course of this project to refine the water demand estimates for the ultimate end users of the blended water supply.

6. Preliminary Engineering & Evaluation of Project Alternatives

    a. Utilizing information acquired through the previous work tasks, Consultant will identify potentially feasible alternative design configurations for the Blended Water Supply Project. It is anticipated that distribution system alternatives will include service areas of varying sizes or locations with a greater extent of infrastructure required to reach irrigated parcels in larger and more distant service areas. The Consultant will develop a conceptual and schematic level design for each of the identified design alternatives. Appropriate design criteria will be established for all major design elements. At minimum, the following design elements will be addressed:

        i. Source of water
            1. Work with each of the source water agencies to establish

the requirements for connecting to their individual systems.
2. Point of Connection (POC) design including structure, piping, mechanical, electrical, control, and other required components.

ii. Treatment & Blending
1. Provide schematic of proposed plant location (if applicable).
2. Detail proposed treatment process to attain requirements for quality and quantity.
3. Discuss any process residual discharges & options for disposal.

iii. Storage
1. Identify size, type & site location for each existing and proposed storage facility (if applicable).
2. Discuss hydraulic interactions with the water supply system, storage facilities, and end users.

iv. Pump Stations (if applicable)
1. Identify size, type, site location and any special power requirements.

v. Transmission & Distribution Pipeline Infrastructure Layout
1. Identify proposed location of pipeline alignments and improvements including lengths, sizes, and key components & appurtenances.
2. Identify end user POC / turn-out locations.
3. Provide hydraulic information as described in the next section.
4. Identify any easement or ROW requirements.
5. Identify any creek crossings or other alignment segments that will require special construction techniques and / or special permits.

vi. Hydraulic Calculations
1. Perform hydraulic modeling as required to develop an optimal design for all infrastructure.
2. Develop hydraulic design criteria for all proposed improvements, with respect to all anticipated static and dynamic conditions.

vii. Cost estimates
1. Capital construction costs of all Blended Water Project Infrastructure
2. Non-construction and other project costs
3. Annual O&M for proposed improvements
4. Proposed contingency allowance.

viii. Pollution Control Requirements
1. if applicable, identify any pollution control requirements needed to comply with waste discharge requirements, and possible allocation of costs between recycling and pollution control.

ix. Environmental Impacts
1. Provide information about how the specific alternative may impact the environment. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to each specific alternative evaluated.

x. Land Requirements

1. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired, leased, or have access agreements.

b. Information supplied for each alternative to include, but not be limited to:
   i. Cost tables for each alternative with breakdown of costs by total capital (without grants), O&M, unit processes, equivalent annual cost, and per acre- foot cost.
   ii. List of potential users assumed for each alternative.
   iii. Economic analysis in dollars per acre-foot of recycled, Lake Nacimiento, and blended water produced or delivered.
   iv. Water quality impacts:
      1. Effect on receiving water by removing or reducing discharge of effluent, including effect on beneficial uses resulting from reduced flow.
   v. Summary of environmental analysis and identification of potential regulatory impacts that would be required to comply with CEQA.
   vi. Summary of all permits that would be required to fully implement the alternative.

c. Based on the information developed in the previous work tasks, each of the identified design alternatives for the Blended Water Supply Project will be comparatively evaluated. For this task, the Consultant will prepare an evaluation matrix for use in assessing the viability and comparative advantages/ disadvantages of each alternative and combination thereof. Evaluation criteria should include as primary criteria delivering in-lieu irrigation water to areas that would provide the most benefit to achieving GSP goals/ objectives. These criteria will include system hydraulic & energy efficiency; water quality & suitability for irrigation by the end users; infrastructure proximity to & compatibility with the requirements of the end users; probable treatment / blending requirements; cost of development & operation; dependability; environmental impacts & sustainability; and other factors as may be defined during the course of the assessment. The matrix based ranking system will be utilized to provide for an unbiased comparison of the alternatives considered. The outcome of this process will be the identification of the Recommended Alternative for the Blended Water Supply Project.

d. The Consultant will periodically solicit input from GSA staff, members of the Blended Water Supply Project Technical Advisory Committee (TAC), industry stakeholders, and potential identified end users of the Paso Basin Blended Irrigation Water Supply Project, as well as regulatory officials as part of the evaluation process. It is imperative the stakeholders in this project have the opportunity to contribute thought, experience and recommendations in advance of the determination of the recommended project.

7. Recommended Project

a. Consultant will prepare a Final Preliminary Engineering Report (PER) which will document the process by which the Recommended Alternative was selected and summarize the relevant data which was considered. The DRAFT document will be distributed to the GSA staff, members of the Blended Water Supply Project Technical Advisory Committee (TAC), industry stakeholders, and potential identified end users of the Paso Basin Blended Water Supply Project for review and comment. The Consultant should anticipate that formal informational presentations will be made to these groups as deemed appropriate. Upon receipt

of all comments and with direction from the GSA staff, the Consultant will produce the FINAL report. At minimum, the Consultant shall include in the recommended project description, the following:

i. Description of all proposed facilities and basis for selection.
ii. Preliminary design criteria.
iii. Cost estimate based on time of construction:
    1. Selected project alternative total cost.
    2. Cost index.
    3. Discount rate.
    4. Useful life (years).
    5. Life cycle costs (present worth included O&M costs).
    6. Operations and maintenance yearly costs.
    7. Replacement costs.
iv. List of all potential users, quantity of recycled water use, peak demand, and commitments obtained.
v. Reliability of facilities as compared to user requirements.
vi. Implementation plan:
    1. Coordination with water suppliers, determination of recycled water supplier and needed agreements or ordinances.
    2. Tentative water recycling requirements of RWQCB.
    3. Water rights impact.
    4. Permits required for project implementation.
    5. Detailed schedule including, but not limited to, notice-to proceed, construction completion, initiation of operations, etc.
vii. Operational plan - responsible people, equipment, monitoring, irrigation scheduling, etc.
viii. Description of any key issues to be resolved, particularly items that may significantly impact the project budget or schedule.

8. Construction Financing Plan and Revenue Program

    a. Sources and timing of funds for design and construction.
    b. Pricing policy for recycled, Lake Nacimiento, and blended water supplies.
    c. Costs that can be allocated to water pollution control.
    d. Annual costs (required revenue) of recycling project.
    e. Sunk costs and indebtedness

9. Appendices

    a. Hydraulic calculations, model output summaries, other related supporting information which supports conclusions and recommendations.

10. Meetings and Progress Reporting

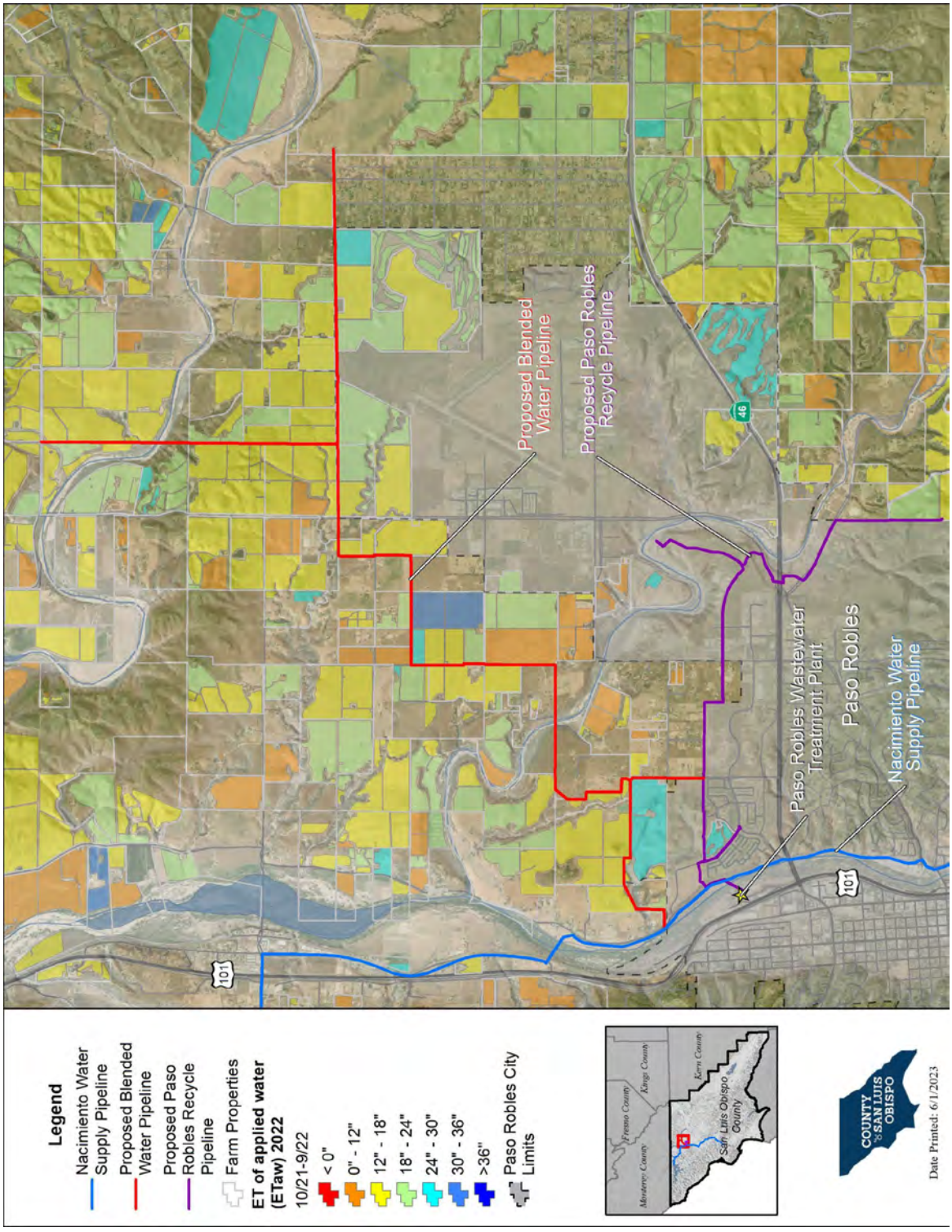
    a. The Consultant will work with GSA staff, members of the Blended Water Supply Project Technical Advisory Committee (TAC), industry stakeholders, and potential identified end users of the Paso Basin Blended Irrigation Water Supply Project. For the purposes of developing the project fee estimate, the Consultant

should anticipate attending a project "kick-off" meeting, twelve (12) monthly meetings with the TAC, and six (6) meetings with the Paso Basin Cooperative Committee). The Consultant should plan to prepare written progress report in advance of each of these meetings and provide the progress reports to the County's project manager a minimum of 1-week prior to each meeting so that the reports can be distributed in the respective meeting agenda packets. Additionally, the Consultant shall prepare and deliver a presentation summarizing the project status during the TAC and PBCC meetings.

11. Project Deliverables and Schedule

    a. The Consultant shall develop and include in the proposal a complete list of project deliverables that are anticipated to be developed and provided during the course of the project. A project schedule, including all key milestones and deliverables delivery dates shall also be included in the proposal.

Figure 1
Initial Conceptual Alignment
For
Paso Robles Groundwater Basin Blended Water Supply Project



APPENDIX B – SAMPLE CONTRACT

(Attached as a separate document.)

APPENDIX C – LOCAL VENDOR PREFERENCE

The County has established a local vendor preference. When quality, service, and other relevant factors are equal, responses to Requests for Proposals will be evaluated with a preference for local vendors. Note the following exceptions:

1. Those contracts which State Law or, other law or regulation precludes this local preference.
2. Public works construction projects.

A "local" vendor preference will be approved as such when, 1) The vendor conducts business in a fully staffed office with a physical address within the County of San Luis Obispo; 2) The vendor holds a valid business license issued by the County or a city within the County; and 3) The vendor has conducted business at the local address for not less than six (6) months prior to the due date of this Request for Proposal.

Proposals received in response to this Request for Proposal will be evaluated by the Selection Committee considering the local vendor preference described above when quality, service and other relevant factors are equal. The burden of proof will lie with proposers relative to verification of "local" vendor preference. Should any questions arise, please contact a buyer at (805) 781-5200.

	YES	**NO**
Do you claim local vendor preference?		
Do you conduct business in an office with a physical location within the County of San Luis Obispo?		
Business Address: _____		
Years at this Address:		
Does your business hold a valid business license issued by the County or a City within the County?		
Name of Local Agency which issued license: _____		

Business Name: _____

Authorized Individual: _____ Title: _____

Signature: _____ Dated: _____

APPENDIX D – RISK ASSESSMENT QUESTIONNAIRE

Required Submittal

1. List the full names of any partners, owners, officers or other persons occupying a position of authority or responsibility in your organization, as well as their DUNS number.

DUNS Number	Organization

NOTE: A DUNS number is not required but must be listed if the entity has one.

2. Have the individual(s) in item #1 been subject to bankruptcy, insolvency or receivership proceedings in the last five (5) years? Yes ❒ No❒ If yes, please enclose details.

3. Has your business/company/organization filed for bankruptcy within the last five (5) years? Yes ❒ No❒ If so, please enclose details.

4. Has your business/company/organization/individual(s) in item #1 ever had a contract for the general type of services/product sought by the County terminated for non-compliance or inadequate performance? Yes ❒ No❒ If yes, please enclose details.

5. Has your business/company/organization/individual(s) in item #1 ever defaulted on a contract for the general type of services/product being sought by the County?

   Yes ❒ No❒ If yes, please enclose details.

6. Has there been, in the last five (5) years, or is there now pending or threatened, any litigation, arbitration, governmental proceeding or regulatory proceeding involving claims in excess of $100,000 with respect to the performance of any services or the provision of any product by your business/company/organization/individual(s) in item #1? Yes ❒ No❒ If yes, please enclose details.

7. Has your business/company/organization/individual(s) in item #1 ever defaulted in fulfilling all of its obligations relating to the payment of county taxes, fees, or other obligations?

   Yes ❒ No❒ If yes, please enclose details.

8. In the last five (5) years, has your business/company/organization/individual(s) in item #1, been or currently involved in any action, audit or investigation brought by any federal government agency or authority or by any state or local governmental agency? Yes ❒ No❒ If yes, please enclose details.

9. In the last five (5) years, has your business/company/organization/individual(s) in item #1 been debarred or suspended for any reason by any federal, state or local government or refrained from bidding on a project due to an agreement with such governmental agency? Yes ❒ No❒ If yes, please attach a full explanation.

10. In the past five (5) years, has your business/company/organization/individual(s) in item #1 had its surety called upon to complete any contract, whether government or private sector? Yes ❒ No❒ If yes, please enclose details.

11. In the past five (5) years, has your business/company/organization/individual(s) in item #1 had a revocation, suspension or disbarment of any business or professional permit and/or license? Yes ❒ No❒ If yes, please enclose details.

12. Has your firm or any of its owners, officers or partners ever been convicted of a federal or state crime of fraud, theft, or any other act of dishonesty?

    Yes ❒ No❒ If "yes," identify on a separate signed page the person or persons convicted, the court (the county if a state court, the district or location of the federal court), the year and the criminal conduct.

Signature

THE UNDERSIGNED HEREBY CERTIFIES THAT THE RESPONSES PROVIDED ARE CORRECT AND TRUTHFUL TO THE BEST OF MY KNOWLEDGE AND FOR THOSE RESPONSES GIVEN WHICH ARE BASED ON INFORMATION AND BELIEF, THOSE RESPONSES ARE TRUE AND CORRECT BASED ON MY PRESENT BELIEF AND INFORMATION.

Dated this _____ day of _____ of the year _____

Name of organization: _____

Signature: _____

Printed Name and title: _____

APPENDIX E – COUNTY TRAVEL POLICY

(Attached as a separate document)

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APPENDIX F – DESIGNATION OF SUBCONTRACTORS FORM

In compliance with the provisions of Sections 4100-4113 of the Public Contract Code of the State of California, and any amendments thereto, the undersigned proposer sets forth the following:

a. The name, License No. if applicable, DIR Registration No., and location of the place of business of prime contractor and each subcontractor who will perform work or labor, or render service to the undersigned Prime Contractor in or about the scope of the work.

	Business Name	**License No.**	**DIR Reg. No.****	**Address**
Prime Contractor (your information)				
Subcontractors				

By: _____
(Proposer's Signature/Printed Name and Title/Company Name)

NOTE: Contractors, and all applicable subcontractors listed in your proposal, MUST register with the DIR prior to the RFP closing. The County will not consider any proposal submitted in response to this RFP where prevailing wages shall be paid to either the prime contractor, or their subcontractor(s), if the prime contractor (and its subcontractors, if applicable) are not registered with the Department of Industrial Relations at the time the RFP closes.

If you are already registered with the DIR, please double check that you have renewed your registration for the fiscal year before submitting your proposal.

The following link will take you to the registration page of the DIR website:

http://www.dir.ca.gov/Public-Works/Contractor-Registration.html

APPENDIX G – PROPOSER CHECKLIST

Please check all documents in which you have included with your submittal.

Technical Proposal (Required) ..... ☐
(Including resumes)

Cost Proposal (Required) ..... ☐

Local Vendor Preference ..... ☐

Risk Assessment Questionnaire (Required) ..... ☐

Designation of Subcontractors Form (Required) ..... ☐

Agenda Item No. 20 – Correspondence

From: susan ifsusan.com <susan@ifsusan.com>
Subject: [EXT]comments for the Expanded Monitoring Network Technical Advisory Committee

The Expanded Monitoring Network TAC
Mr. Blaine Reely

Hi Blaine – Please share our comments with the Expanded Monitoring Network TAC.

The recent Grand Jury Report on the state of the Paso Basin focuses on the deficiencies of the GSP and immediate need to reverse Basin decline. The Grand Jury Report is a stark presentation of what is at stake and the need for immediate remedy.

Here are key areas from the GJ Report that need immediate attention. We hope the TAC will focus on implementing an aggressive timeline to address these problems:

- The Basin is in decline and the water deficit continues as shown in the GSP and Annual Reports. Annual Basin overdraft is approximately 12,600 AFA based on historical data (1981-2011). Will the Monitoring Network TAC be discussing and recommending remedies for the immediate reversal of the ongoing decline, including mandatory cutbacks? Is voluntary fallowing likely to be implemented by Spring 2024?

- The well monitoring network (water levels) data set is incomplete and does not provide information for key areas. We urge the TAC to recommend an aggressive timeline for bringing new monitoring wells online and incorporating additional data from new monitoring wells and expanded historic well records in data deficient areas.

- The data set on agricultural user pumping volumes (extractions) is incomplete. What is the plan and timeline for correcting this deficiency? The longer it takes to regulate pumping, the more draconian the cutbacks will be.

- It is clear from data that neither feasible supplemental water options nor conservation measures can balance the basin. What short term and long term actions will be considered? We urge you focus on actions that will offer immediate reversal of Basin decline, including the need for mandatory cutbacks in pumping.

- Municipal groundwater agencies have Master Water Plans with conservation programs to regulate usage while the unincorporated lands and agricultural areas have none. Does the TAC expect to examine possible remedies?

- The greatest hurdle facing the success of a basin wide GSP is the establishment of an overarching governing entity to implement the recommendations and solutions from your committee. We urge you to recommend expedited establishment of JPA to enact the GSP.

Also, the Groundwater Leadership Forum just released its report on its review of every GSP approved by DWR to date. *"Achieving Groundwater Access for All - Why Groundwater Sustainability Plans are Failing Many Users".*
The Forum found that GSPs are generally failing to achieve the goals of SGMA. Here are links to look at the report and an interactive map.

> The URL for finding the summary report for download is on The Nature Conservancy's website: https://www.groundwaterresourcehub.org/where-we-work/california/groundwater-sustainability/. You may also access the PDF using this direct
> link: https://www.groundwaterresourcehub.org/content/dam/tnc/nature/en/documents/groundwater-resource-hub/AchievingGroudwaterAccessforAll.pdf. For those who would like to download and print out the summary report in a spread format, the link for those are here.
> For details and methods on the scientific analysis of the summary report, you may find that via The Nature Communications journal article link
> here: https://www.nature.com/articles/s41467-023-39363-y
> Lastly, the online visual tool is here for your review: www.sgmareview.org/.

Thank you for your consideration of our comments.

Susan Harvey, Chair
Conservation Committee
Santa Lucia Chapter, Sierra Club