Vina Groundwater Sustainability Agency
308 Nelson Avenue, Oroville, CA 95965
(530) 552-3592 · VinaGSA@gmail.com

MEMORANDUM

To: Vina GSA and Rock Creek Reclamation District GSA Boards

From: Christina Buck, Asst. Director Butte County Dept. of Water and Resource Conservation

Date: May 6, 2026

Subject: Consideration of a Well Mitigation Program in the Vina Subbasin

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Overview

The Vina Groundwater Sustainability Plan (GSP) was adopted in December 2021 by the Vina Groundwater Sustainability Agency (GSA) and Rock Creek Reclamation District GSA and subsequently reviewed and approved by the California Department of Water Resources (DWR) in July 2023. As part of its review, DWR provided recommended corrective actions (RCAs) in its Determination Letter identifying several areas for improvement with an expectation that the RCAs should be considered by the GSAs in the first periodic evaluation of the GSP. The Sustainable Groundwater Management Act (SGMA) requires the GSAs to submit the first Periodic Evaluation (PE) by January 2027. The PE is the GSA's written assessment of its GSP implementation. The Vina GSA received funding through the Sustainable Groundwater Management Round 2 grant program to support work to address data gaps identified in the plan and complete the Periodic Evaluation. Larry Walker and Associates (LWA) was competitively selected to complete this work.

Direction from the Vina GSA and RCRD GSA Boards

The GSAs have continued to receive feedback from stakeholders regarding the need to protect domestic wells from potential impacts associated with changes in groundwater levels. Adjacent groundwater subbasins have developed well mitigation programs in response to DWR's "inadequate" GSP determinations. The Vina Subbasin's GSP already identified a well mitigation program as a management action, although this would be a future action and an expected schedule is not specified in the GSP.

At the December 10, 2025 joint meeting of the Vina and Rock Creek Reclamation District GSA Boards, staff received direction to bring back information regarding what other subbasins are doing related to well mitigation and well registries to inform an initial framework for the Vina subbasin.

In addition, the Boards also requested that staff prepare a summary of the number of domestic wells impacted at MT levels using the GSP (2022) dataset of domestic wells and using the 2025 refined dataset of domestic wells resulting from a desktop survey completed by LWA. LWA has prepared these results which are included in Attachment A. This information is necessary to begin to address DWR's Recommended Corrective Action 3 which in part requests quantification of "domestic wells that will be impacted by the proposed minimum threshold."

This staff memo provides information to support discussion and potential Board action to:

1. Clarify in the Periodic Evaluation the intended path for the timing and development of a well mitigation program.

2. Consider allocating funds in the 2026-2027 fiscal year budget funding to initiate development of a Well Mitigation Program in early 2027.

Background

Stakeholder Feedback to the GSAs regarding Domestic Well Mitigation

In Fall 2025, the Vina GSA hosted a series of stakeholder meetings to gather input on developing the Vina GSP Periodic Evaluation. Key topics of discussion related to DWR recommended corrective actions including interconnected surface water, monitoring networks, and groundwater level minimum thresholds. Additionally, one of the posed discussion questions was, "What are your reactions or suggestions regarding the development of a Domestic Well Mitigation (DWM) program as part of the Periodic Evaluation work?" At the meeting of the Domestic Well Users (October 27, 2025), participants expressed strong concern that 2022 GSP Minimum Threshold levels are too low to protect domestic wells and there was consensus that wells should be protected from going dry and that the GSA should develop a mitigation program and conduct more proactive communication with at-risk well owners. At the Agricultural Stakeholder meeting, while supportive of domestic well protection, they asked for more detail on the purpose, scope and funding responsibilities of any future well mitigation program.

On December 3, 2025, after hearing a report out on feedback received at the series of stakeholder meetings, the Vina GSA Stakeholder Advisory Committee (SHAC) supported staff further exploring options for a Domestic Well Mitigation Program, including reviewing approaches taken by neighboring basins. SHAC members noted the importance of clearly defining the GSA's role relative to Butte County's existing mitigation program to ensure the effort remains aligned with SGMA's intent and avoids duplicating responsibilities. It should be noted that the County's Drought Resilience and Outreach Project (DROP) program, which includes a well mitigation program, is a temporary short-term program that is funded by the State Water Resources Control Board for domestic well owners that have been impacted specifically by drought, meet low-income disadvantage community requirements, and/or are located within burn-scar/disaster recovery areas.

While some SHAC members underscored that private well owners retain responsibility for maintaining their wells, others felt a GSA-level mitigation program could still be appropriate if groundwater conditions or management of the subbasin (i.e. MT levels) contribute to well impacts. Members also indicated that development of any program should be informed by a more complete domestic well inventory and consideration of agricultural well data.

Other specific input or ideas received from the Fall stakeholder meetings related to DWM are listed below, for reference:

- Include triggers or early-warning levels to prompt GSA action before MTs are reached.

- Notify domestic well owners in areas where groundwater levels approach MTs.
- Establish a domestic well mitigation program to assist with repair, deepening, or replacement when wells are impacted.
- Recognize the disproportionate impacts on domestic users compared with agricultural and development sectors and consider equity in mitigation funding.
- Evaluate the economic impacts of potential MT changes and any mitigation program, particularly for agricultural operations.
- Clarify the purpose, responsibilities, and funding sources for any potential domestic well mitigation program.
- Consider limiting mitigation responsibility to wells constructed after a certain year and requiring well registration, as other basins have done.
- Clarify the GSA's approach and potential commitment to mitigating dry wells.

These bullets are pulled from the individual stakeholder meeting summaries.

Domestic Well Mitigation Management Action in the Vina GSP

The Vina GSP includes Domestic Well Mitigation as a management action (Section 5.3.2). It states the following:

> *"If an increasing number of domestic groundwater wells go dry in the Vina Subbasin, the GSAs could propose a series of steps to help mitigate this issue. The following steps are proposed under this management action: 1. Establish a voluntary registry of domestic wells. 2. Compile domestic well logs, screen depths, and locations. 3. Secure financial resources to improve, deepen or replace select domestic wells. 4. Provide emergency response to homes with dry domestic wells, including supplying bottled water and potable water for sanitation.*
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> *Priority would be given to disadvantaged communities dependent on groundwater as a drinking water resource. Creating a registry of domestic wells in the region, with information on well location and screen depths, would help the GSAs compile important data into a centralized location. This would allow the GSAs to determine which wells need to be updated to the current standards and which may need to be deepened, as well as to help them prioritize certain communities for emergency response."*

Section 4 of the Periodic Evaluation annotated outline is, "Status of Projects and Management Actions." Receiving Board direction on the expected scope and schedule of this management action will inform how its status and expected schedule is described in the Periodic Evaluation.

The existing management action in the GSP is therefore directional rather than fully programmatic. It identifies the types of actions the GSAs could pursue, but it does not establish eligibility criteria, funding mechanisms, administrative procedures, or implementation triggers. Clarifying the intended scope and schedule of this management action in the Periodic Evaluation would provide transparency on next steps.

Domestic Wells and Sustainable Management Criteria in the Vina GSP

The Vina GSP uses the concept of "sustainably constructed" domestic wells in connection with Groundwater Level Sustainable Management Criteria (SMC) for chronic lowering of groundwater levels. The GSP states that sustainably constructed wells are wells installed following the relevant County well standards within permeable aquifer material and appropriately maintained, meaning the issue is not attributable to factors such as clogged well screens or silting of the well.

In establishing MTs, the GSP refined the domestic well dataset available from the DWR OSWCR database by removing wells installed before 1980. The stated rationale is that this excludes the oldest wells and wells likely to have been replaced following historically low groundwater conditions during the 1976–1977 drought; as a result, the remaining wells were considered more likely to be consistent with current County well standards and still serving domestic water needs. In this way, the 1980 date was used as a dataset-refinement proxy tied to construction standards and likely continued use, not simply as a stand-alone policy conclusion that older wells are not relevant.

The GSP then used the refined dataset within Representative Monitoring Site (RMS)-based zones/polygons to establish MTs intended to be protective of the majority of sustainably constructed domestic wells in each RMS zone. This distinction is important in discussion of cutoff dates: the GSP's approach was to use a proxy to work with an imperfect dataset, whereas DWR's more recent feedback (described further below) suggests GSAs should clearly explain and justify any such screening assumptions and, where feasible, focus on whether wells are active rather than relying solely on construction year.

DWR's Perspective on GSA Policies and Domestic Well Impacts

As part of a separate effort, County technical staff recently met with DWR Sustainable Groundwater Management Office (SGMO) staff along with other GSA managers from the Butte Subbasin to receive feedback on the Butte Subbasin Periodic Evaluation materials. During these discussions, it was asked whether excluding older domestic wells (e.g., constructed prior to a specified cutoff date) from the total number of wells that could be impacted would align with DWR's review and approval criteria for a GSP or PE.

DWR staff emphasized that, with respect to establishing Minimum Thresholds (MTs) and determining Undesirable Results, GSAs are responsible for defining what constitutes a significant and unreasonable impact. However, DWR staff indicated that filtering wells based solely on their construction year is not preferred. Instead, a more appropriate criterion is whether a well is currently active. GSA staff acknowledged that basis would be ideal, but is difficult or impossible given the nature of existing well data.

DWR staff emphasized that setting an arbitrary cut-off date for well inclusion is generally discouraged. As Paul Gosselin, Deputy Director of Sustainable Groundwater Management, has noted publicly on several occasions, if a well that was constructed decades ago (for example, in 1970) remains functional and groundwater level declines subsequently cause that well to go dry, it is difficult for a GSA to argue that the impact is not significant and unreasonable solely because of the well's age. In such cases, the impact would still be considered relevant for evaluating groundwater condition impacts.

Review of Domestic Well Mitigation Programs and Policy Considerations

The GSA Boards requested information be provided on domestic well mitigation programs in subbasins around the state. The attached program matrix (Attachment B) provides information on key aspects of mitigation programs including a summary of the eligibility/qualifications, application/process, mitigation and costs covered, funding/cost estimates, and other notes.

The following subbasins are included in the review:

1. Colusa and Corning Subbasins
2. Subbasins in Tehama County

3. Kings Subbasin
4. Tule Subbasin
5. Madera Subbasin
6. Chowchilla Subbasin
7. Kaweah Subbasin

Key Observations from the Summary:

- Comparable programs vary substantially in form. Some are adopted, operational programs with specific eligibility rules and payment structures, while others are pilots, memoranda of understanding, or conceptual proposals that still leave implementation details to be developed.
- Most programs distinguish between interim assistance and long-term mitigation. Interim measures commonly include bottled water, bulk water, or temporary tanks; long-term measures commonly include pump lowering, deepening, replacement wells, or connection to an existing system.
- Most programs also limit eligibility in some way. Common filters include well type, ownership, causation, permit compliance, age of well, good standing with the GSA, household income, or a post-2015 / post-program-adoption timing threshold.
- Several programs use third-party or partner entities for implementation. The Kaweah review is the most developed example of a partnership approach, with Self-Help Enterprises involved in administering drinking water claims while the GSAs retain broader mitigation responsibilities and funding obligations.

For reference, the table below (Table 1) lists and describes categories of policy choices that will need to be considered in development of a program. Choices in these categories affect program cost, equity, administrative complexity, and public expectations.

Table 1. Policy Choices to Consider in Development of Domestic Well Mitigation Program.

Category	Examples of Direction Needed	Why It Matters
Program timing and scope	Adopt now; prepare a ready-to-launch standby program; or adopt only a framework and return later with a full program.	This is the threshold policy issue and will determine the level of effort the GSA should undertake now.
Eligible well types	Domestic wells only; agricultural wells used for domestic supply; state small water systems; other drinking-water-serving wells.	Expanding the pool of eligible wells can significantly increase costs
Causation standard	Require linkage to declining groundwater levels associated with GSP implementation; include or exclude subsidence; include or exclude water quality impacts.	This determines which claims qualify and whether the program is limited to SGMA-related impacts or broader drinking water concerns.
Geographic focus	Entire Subbasin; mapped at-risk areas only; or phased implementation based on monitoring results.	A more targeted program may be easier to administer and budget.
Ownership and occupancy	Landowner only; claims initiated by tenants with owner follow-up; living trusts; owner-occupied versus non-owner-occupied homes.	These choices affect fairness, ease of implementation, and how readily affected households can access assistance.
Well age and permit compliance	Age cap; depreciation based on age; legal/permitted wells only; whether permit recommendations must have been followed.	These are common ways programs manage cost and avoid subsidizing older or non-compliant wells without limitation.
Income and equity approach	No income threshold; DAC / low-income priority; income-based eligibility; or tiered assistance levels.	This affects both equity outcomes and total cost.
Interim assistance	Whether to provide bottled water, bulk water, tanks, or only referrals; desired response time; maximum duration.	Even a trigger-based program may benefit from a defined interim response protocol.
Long-term mitigation menu	Pump lowering; well deepening; replacement well; connection to an existing system; treatment; other case-by-case measures.	The menu of measures should align with local conditions, legal authority, and available funding.
Funding approach	Program reserve, annual budget, application fee, reimbursement cap, cost share, liens/recordation, grants, partner administration, or GSA-fee funding.	Funding structure will shape both feasibility and claimant expectations.
Administration and appeals	Staff-administered, consultant-administered, or third-party/nonprofit-administered; Board approval for each claim or delegated approval; appeal process.	Programs with more formal administration may be more defensible but require more staff time and transaction cost.
Monitoring and readiness tools	Well registration, domestic well reporting, permit review, at-risk mapping, or notification triggers.	These tools can support either an active program or a trigger-based standby approach.

Program Development Considerations

The Vina GSA does not have a contracted consultant, available funding, or staff capacity to support the development of a mitigation program within the 2026 calendar year and current fiscal year. However, receiving Board direction on the timing and scope of developing a program has implications for the contents of the Periodic Evaluation, adoption of the FY 2026-2027 budget, and selection of a Technical Support Consultant team in the fall who will be tasked with completing activities to implement the GSP (ex. Annual Reports) over the next 5-year periodic evaluation cycle (2027-2032). Development of a mitigation program could be done by the future GSA consultant team with dedicated funding from the Board. In addition, to help minimize costs, DWR Facilitation Support Services (FSS) could be pursued to support outreach and engagement that contributes to development of the program. In addition, staff has recently learned through DWR's Prop 4 workshop on Thursday, April 30, that technical assistance to support development of well mitigation plans will be part of the DWR Underrepresented Communities, California Tribes, and Small Farmers Groundwater Technical Assistance Program (URCTA) supported with additional funds from Prop 4. The timing of the availability and scope of this potential assistance is uncertain at this time.

Developing a mitigation program commonly includes policy and procedure development, technical analysis, legal review, public outreach and facilitation, application process design, and funding framework development (refer to Table 1). The cost of developing a program will depend on the approach and to what extent in-house staff versus consultants are relied upon for the different aspects of the effort. Staff anticipates that a program could be developed within 12-14 months once consultant support and funding are identified.

SHAC Discussion and Recommendations

At their April 22, 2026 meeting, staff provided the SHAC with a similar set of materials to this staff memo and attachments to support discussion including: a staff memo outlining background, GSP context, and policy considerations, a summary matrix of domestic well mitigation programs from other subbasins, an appendix on well registry approaches and their linkage to mitigation, and technical results from the LWA domestic well inventory and risk assessment, including estimates of wells at risk under current Minimum Thresholds using both the 2022 GSP dataset and the 2025 refined dataset. The staff memo also described two potential paths forward, development of a trigger-based mitigation framework or development of an active mitigation program. Together, these materials were intended to inform discussion of program development timing and scope and to inform how this would be described in the Periodic Evaluation. Staff requested SHAC discussion and feedback on the scope, timing, and intended path for the Domestic Well Mitigation management action in the Vina Subbasin and how it would be reflected in the Periodic Evaluation.

SHAC Discussion

The SHAC engaged in a detailed discussion of domestic well mitigation, including technical and policy considerations. Members pointed out the relationship between groundwater level Minimum Thresholds (MTs) and the number and cost of at-risk wells, noting that higher MTs could reduce both risk and mitigation costs, while a mitigation program itself could serve as a practical tool to address impacts if they occur. There was recognition that DWR would expect the GSA to either demonstrate that impacts are not significant and unreasonable or identify how they will be addressed, such as through a mitigation program. Perspectives varied on timing, with some advocating for near-term development to ensure readiness given the time required to develop and implement a program, while others emphasized that recent groundwater conditions are stable, historical impacts (i.e. reported dry wells) have been limited, and there is time to develop a program when staff has more availability and not in haste. Additional discussion touched on

funding (with an expectation that local GSA funding would likely be needed rather than grant dollars), equity considerations, and the importance of tailoring a program to subbasin-specific conditions.

Key themes and perspectives included:

- **Proactive vs. phased approach:**
  Some members supported initiating program development immediately (as soon as funding and staff/consultant capacity could be secured) to ensure readiness for when the next drought comes, while others discussed a less specific timeline but namely to allow for additional analysis and cost-effective use of staff resources (may be less reliant on consultant support if staff have more availability).

- **Relationship to MTs and risk:**
  Discussion highlighted that the number and cost of at-risk wells are directly tied to Groundwater Level MTs, and that adjusting MTs or implementing mitigation are both potential ways to address impacts.

- **DWR expectations:**
  Although Vina did not receive an RCA specifically requiring a mitigation program be put in place, discussion acknowledged that DWR would likely expect the GSA to either justify why impacts are not significant and unreasonable or demonstrate how impacts would be addressed.

- **Equity and responsibility:**
  Comments highlighted concerns about the distribution of pumping impacts from agricultural water use and the importance of protecting domestic well users.

- **Timing and current conditions:**
  Public comments noted that historical dry well impacts have been relatively limited even through recent droughts years and recent wet years have improved conditions, suggesting there is time to plan deliberately.

- **Funding and implementation:**
  There was general understanding that program development and implementation would require local funding (i.e. through collected fees), and that staff and consultant capacity are key considerations in timing and do not lend themselves to program development in 2026.

SHAC Recommendations

Despite differing perspectives on timing and approach, the SHAC reached **unanimous consensus** on the following recommendations to the Board:

- **Periodic Evaluation Recommendation:**
  The SHAC recommends the Periodic Evaluation describe the following regarding the Domestic Well Mitigation management action: during the next implementation period, the GSA will develop a Well Mitigation Program that fits the needs of the subbasin.

- **Near-Term Action Recommendation:**
  In addition, the SHAC recommends the GSA Board dedicate funding in the FY 2026–27 Annual Budget to initiate the development of a Well Mitigation Program in early 2027 after all SGM Grant Projects are complete, as not to overload staff capacity.

Requested Action

Consider the following action:

1. Direct staff to include in the Vina Subbasin Periodic Evaluation a statement that the GSAs intend to develop a Domestic Well Mitigation Program during the next implementation period (2027–2032), with the program to be tailored to the specific conditions and needs of the subbasin.

2. Direct staff to include in the proposed FY 2026–2027 budget funding to initiate development of a Domestic Well Mitigation Program with planning to begin in early 2027.

Attachments

A. LWA Tech Memo: Vina Subbasin Domestic Well Survey & Well Risk Assessment

B. Domestic Well Mitigation Programs - Summary Matrix

C. Well Registry Programs and Linkages to Mitigation