CHOWCHILLA SUBBASIN GROUNDWATER SUSTAINABILITY PLAN (GSP)
REVISED GSP MATRIX (MAY 2023)

Deficiency Number	Deficiency Identified by DWR (January 2022 Incomplete Determination)	Additional Notes from DWR (March 2023 Inadequate Determination)	Corrective Actions Recommended by DWR	Sections where Deficiency was Primarily Addressed in the Revised GSP (May 2023)	How Deficiency was Addressed in the Revised GSP (May 2023)
1	The GSP does not provide sufficient information to support the selection of the chronic lowering of groundwater levels Sustainable Management Criteria (SMC).	• The Domestic Well Mitigation Program (Mitigation Program) is limited to "private domestic wells only" and the GSP does not discuss potential impacts to drinking water users relying on shallow wells, such as public water systems and state small water systems. • The GSP did not provide sufficient information showing that lowering groundwater levels would not contribute to further subsidence, potentially exceeding minimum thresholds and causing undesirable results as required by the GSP Regulations.	• The GSP must explain how the chronic lowering of groundwater level minimum thresholds represent groundwater levels that may lead to undesirable results. • The GSP should describe the specific significant and unreasonable effects on groundwater supply uses and users that the GSA intends to avoid. • The GSP should consider potential impacts to drinking water users relying on shallow wells, such as public water systems and state small water systems. • The GSP should clearly explain the relationship between the chronic lowering of groundwater levels minimum thresholds and those developed for subsidence and explain how allowing continued lowering of groundwater levels would avoid undesirable results for subsidence.	• 3.2.1 (groundwater level Measurable Objectives (MOs)) • 3.3.1 (groundwater level Minimum Thresholds (MTs)) • 3.4.1 (groundwater level Undesirable Results (URs)) • ES-3 (summary) • 4, Figure 4-1 (projects and management actions) • Appendix 3.A (hydrographs) • Appendix 3.D (Mitigation Program Documentation)	• The groundwater level MOs and MTs were set at the Fall 2011 groundwater elevation and the Fall 2015 groundwater elevation, respectively, at each representative monitoring site (RMS) well. These changes are consistent with maintaining long-term groundwater conditions at historical levels and avoiding URs for groundwater uses and users. • The Revised GSP further clarifies how groundwater levels below the MTs will cause significant and unreasonable impacts to beneficial uses and users (Section 3.4.1). • The Revised GSP further clarifies the specific significant and unreasonable effects on groundwater supply uses and users that the GSAs intend to avoid. (Section 3.4.1). • The Revised GSP clarifies that "the sustainability indicator with the most constraining MT will govern the determination of whether an undesirable result has occurred," consistent with SGMA. • The subsidence SMC were set as rates of subsidence, measured from subsidence benchmarks, accounting for the total rate of subsidence (i.e., the total combined "new" and "residual" subsidence). Groundwater levels are no longer used as a proxy for subsidence. • The Revised GSP includes additional documentation of the Mitigation Program. The Mitigation Program has been updated to include shallow wells that supply drinking water users. • The GSAs are planning, to the extent feasible, to prioritize project implementation efforts in the vicinity of public supply wells, especially Flood-MAR, on-farm recharge projects, multi-benefit projects, and voluntary land repurposing efforts that can be flexibly targeted to specific areas of need. • The GSAs have proceeded with coordinating, planning, and implementing the Mitigation Program beginning in 2023 and continuing as needed until groundwater sustainability is achieved.

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2	The GSP does not provide sufficient information to support the selection of land subsidence SMC.	• SGMA and the GSP Regulations do not differentiate between residual and new subsidence. • The GSP does not adequately prove that groundwater levels are correlated to subsidence and that groundwater levels are a reasonable proxy for land subsidence. • The GSP does not adequately explain how groundwater level-based SMC effectively relate to the avoidance of subsidence undesirable results. • The GSP does not provide discussion of how the infrastructure sensitivity analysis was considered in the development of land subsidence SMC. • The GSAs have not developed SMC for subsidence to protect well structures. • The GSP did not provide sufficient information showing that lowering groundwater levels would not contribute to further subsidence, potentially exceeding MTs and causing URs as required by the GSP Regulations. • The GSP does not propose any specific projects and management actions related to subsidence in the Eastern Management Area, nor does it explain how implementation of the projects and management actions is consistent with avoiding or minimizing subsidence.	• The GSAs must consider all subsidence when establishing SMC. • The GSAs must provide adequate supporting information for using groundwater levels as a proxy for subsidence. • The GSP should clearly explain the relationship between the chronic lowering of groundwater levels SMC and those developed for subsidence. • The GSAs should revise their SMC to reflect the intent of SGMA that subsidence be avoided or minimized once sustainability is achieved. • The GSP must explain infrastructure sensitivity was considered in the development of the land subsidence SMC. • The GSAs should evaluate the potential for subsidence impacts (i.e., substantial interference for surface land uses) related to any allowable further groundwater level decline. • The GSAs should explain how implementation of the projects and management actions is consistent both with achieving the long-term avoidance or minimization of subsidence. • The GSP should explain how implementation of proposed projects and management actions is consistent with avoiding or minimizing subsidence.	• 3.2.3 (subsidence MOs) • 3.3.3 (subsidence MTs) • 3.4.3 (subsidence URs) • ES-3 (summary) • 4 (projects and management actions) • Appendix 3.E (Infrastructure Sensitivity Assessment) • Appendix 3.H (Subsidence Data Gaps Workplan)	• The subsidence SMC were set as rates of subsidence, measured from subsidence benchmarks, accounting for the total rate of subsidence (i.e., the total combined “new” and “residual” subsidence). Groundwater levels are no longer used as a proxy for subsidence. • The subsidence MOs and MTs have been set at 0 feet/year, subject to uncertainty of +/-0.16 feet/year. Zero subsidence during the GSP sustainability period (i.e., 2040 and thereafter) is consistent with avoidance of URs for all infrastructure and land surface beneficial uses and users. • The Revised GSP includes a revised subsidence workplan that will improve understanding of subsidence conditions and fill related data gaps. • The Revised GSP clarifies that all projects and management actions are also expected to benefit subsidence.

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3	The GSP does not provide sufficient information to support the determination that interconnected surface water or URs related to depletions of interconnected surface water are not present and are not likely to occur in the subbasin.	**At this time, DWR staff conclude that sufficient action has been taken on this deficiency and believe the GSAs can work with DWR to further efforts on interconnected surface water.**	*See July 2022 Revised GSP.*	*See July 2022 Revised GSP.*	*See July 2022 Revised GSP.*