

TEHAMA COUNTY GROUNDWATER DEMAND MANAGEMENT PROGRAM

Framework for the Antelope, Red Bluff, Corning, and Los Molinos Subbasins

(with potential future application in additional Tehama County basins)

1. Program Basis and Authority

1.1 Program Authorization

This Groundwater Demand Management Program (Program) is established to review, consider, and undertake mitigation actions for demand management to address overdraft and groundwater level declines in the Antelope, Red Bluff, Corning, and Los Molinos Subbasins. Nothing in this Program precludes the GSA Board from considering whether similar demand-management concepts, in whole or in part, should later be applied, adapted, or coordinated in other Tehama County basins or areas, to the extent consistent with SGMA, basin conditions, and any required future GSA Board action.

Projects and management actions are needed to achieve and maintain sustainable groundwater conditions by or before 2042 and acknowledge that hydrologic variability and project timing may increase the need for demand management. The Program is intended to provide a framework for those four Subbasins while preserving flexibility for future refinement, coordination, or geographic expansion if later determined to be appropriate by the GSA Board based on basin conditions, available data, stakeholder input, and legal authority.

1.2 Purpose and Objectives

This Program is being developed to define the purpose, objectives, scope, roles and responsibilities, requirements, and potential outcomes for groundwater demand management in the four Subbasins. The anticipated goal of the Program is to address and mitigate overdraft and groundwater level decline, and related undesirable results, by reducing demand for groundwater during the GSP implementation period. The Program is intended to provide a sufficiently clear framework for future implementation while preserving flexibility to refine specific measures, triggers, protections, and implementation details as technical information, stakeholder input, and the administrative record develop.

1.3 Required Two-Phase Structure

The Program will consist of two categories of measures:

- **Phase I: Immediate Implementation Measures (Voluntary).**
Measures to be “moved forward for immediate implementation (at the Program start

date),” limited to voluntary actions such as best management practices, conservation, increased surface-water use in lieu of groundwater, multi-benefit land repurposing, dry farming, and non-substitution fallowing.

- **Phase II: Phased Adaptive Implementation Measures (Mandatory).** Measures to be “moved forward for phased adaptive implementation,” developed so that they are “ready to implement in phases, commensurate with issues.” Phase II will consist of mandatory measures, which may include allocations, well restrictions, pumping restrictions, and water market/trading and/or fee structures.

1.4 “Commensurate with Issues” Standard

Phased adaptive measures must be implemented commensurate with (a) the amount of demand reduction required, and (b) the specific issues facing the relevant area(s), considering regional special zones, subbasin-wide conditions, and other geographically targeted applications, as appropriate.

For purposes of this Program, “commensurate with issues” means that any Phase II measure should be tailored to the severity, location, and nature of the groundwater condition being addressed, rather than applied more broadly than reasonably necessary. Depending on the available data and the issue presented, a Phase II measure may be considered for application in a localized area, a special zone, a subbasin, or another defined area supported by the administrative record.

1.5 Terminology

To promote clarity and consistency, the Program will use defined terms consistently throughout. Unless otherwise specifically defined, the Program avoids use of terms that may create confusion under SGMA or the GSPs, including management area and focus area, except where quoting or referring to existing source documents. For the purposes of this Program, the following definitions apply:

District: The Tehama County Flood Control and Water Conservation District, acting under its general statutory authority.

GSA: The District acting specifically in its capacity as the Groundwater Sustainability Agency under the Sustainable Groundwater Management Act (SGMA).

GSP: The Groundwater Sustainability Plan adopted under SGMA applicable to the particular subbasin.

Measurable Objective (MO) and Minimum Threshold (MT): The exact quantitative thresholds as defined in each subbasin’s GSP in compliance with SGMA.

Polygon: For the purpose of spatial implementation, a flat, two-dimensional shape bounded by straight lines.

RMP/RMS: Representative Monitoring Points or Representative Monitoring Sites. Monitored facilities identified in the GSPs used to track groundwater levels.

Sustainable Yield: The maximum quantity of water, calculated over a base period representative of long-term conditions in the subbasin, that can be withdrawn annually without causing an undesirable result under SGMA.

Spatial Implementation Unit / Special Zone: Geographically targeted areas, such as Thiessen (or other) polygons or distinct zones, developed by hydrogeologic information, groundwater conditions, monitoring density, land-use patterns, surface-water availability, updated modeling, and other relevant technical information, where specific management actions or triggers are applied based on localized conditions.

Trigger: A set point for a sustainability indicator at which a specific review process or action is initiated.

2. Stakeholder Communication and Engagement

Phase I voluntary measures may proceed concurrently with stakeholder communication and engagement under this Section, while Phase II mandatory measures remain subject to Section 2.5.

2.1 Legal and Policy Basis

Under SGMA, GSAs must consider the interests of all beneficial users and “encourage the active involvement of diverse social, cultural, and economic elements of the population within the groundwater basin prior to and during the development and implementation of the groundwater sustainability plan.” (Wat. Code, § 10727.8; *see also* § 10723.2.) The Department of Water Resources’ Guidance Document for Groundwater Sustainability Plan: Stakeholder Communication and Engagement and Best Management Practices material emphasize early, continuous, and documented engagement as a core element of SGMA implementation. This direction and guidance make clear that GSAs should:

- Identify all beneficial uses and users and maintain a list of interested parties.
- Encourage active involvement of diverse stakeholder groups throughout planning and implementation.
- Document outreach activities and how public input is incorporated into decisions.

2.2 Program Communication and Engagement Plan

Concurrent with the initiation of Phase I voluntary measures and prior to adoption of Phase II regulatory measures (allocations, restrictions, fee structures), the GSA will prepare and maintain a written Program Communication and Engagement Plan (C&E Plan) for the Program. The C&E Plan should be:

- Aligned with DWR’s Stakeholder Communication and Engagement Guidance and related SGMA Best Management Practices materials;
- County-wide in structure, with subbasin-specific or area-specific outreach components for the Antelope, Red Bluff, Corning, and Los Molinos Subbasins where warranted; and
- Integrated with any broader GSP communication and engagement planning to the extent practical.

At a minimum, the Program C&E Plan will:

1. Identify stakeholder groups and beneficial users, including but not limited to: agricultural pumpers, domestic well owners, small water systems, municipalities, disadvantaged communities, tribal governments (respecting individual tribes’ preferences regarding participation), environmental interests, and industrial/commercial users.
2. Describe key messages and anticipated questions related to both Phase I and Phase II measures.
3. Set out engagement methods and tools, such as public workshops, focused small-group meetings, surveys, mailings, website content, and use of DWR’s digital toolkit examples.
4. Include an engagement schedule and milestones tied specifically to Program decision points, including ongoing Phase I implementation activities and any future Board actions on Phase II ordinances, resolutions, or other mandatory measures.
5. Describe how feedback will be documented and used, including preparation of appropriate engagement summaries or other documentation for Phase I implementation activities, and preparation of a “Response to Comments / Engagement Summary” prior to Board adoption of Phase II mandatory measures.
6. Describe the process for maintaining a public-facing or otherwise accessible comment log, issue tracker, or similar record showing material comments received and how they were considered or addressed.

2.3 Outreach Milestones Prior to Phase I and Phase II Adoption

As a matter of Program policy, the GSA will not bring Phase II allocations or other mandatory Program measures forward for Board adoption until the following outreach milestones have been completed and documented. Phase I voluntary measures, however, may be initiated, approved, and implemented while these outreach milestones are being completed, provided the GSA continues stakeholder communication and engagement consistent with this Section 2.

- a. **Baseline Listening Sessions.** At least one listening session in each Subbasin (Antelope, Red Bluff, Corning, Los Molinos) focused on concerns and questions about potential allocations, restrictions, and fees.
- b. **Stakeholder Workshops.** One or more technical but accessible workshops explaining the need for demand management, the “commensurate with issues” standard, and the conceptual structure of Phase I and/or Phase II tools (without locking in specific numbers or maps).
- c. **Targeted Engagement.** Direct outreach to domestic well users and disadvantaged communities, and invitations to tribal governments and small systems, consistent with DWR guidance on inclusive engagement.
- d. **Public Review of Draft Phase I and Phase II Framework.** A publicly noticed comment period (e.g., 45 days) for draft Program materials addressing Phase II concepts, and for any Phase I materials the GSA determines should be circulated in draft form, supported as appropriate by plain-language summaries, graphics, or other explanatory materials.
- e. **Engagement Summary Report.** A written summary documenting outreach methods used, meetings held, comments received, and how substantive input was incorporated or addressed, to be presented to the Board alongside any proposed Phase I and/or Phase II ordinance or resolution.

In applying these milestones, the GSA may credit and build upon stakeholder communication and engagement activities already completed as part of Program development, to the extent those activities are documented in the administrative record.

2.4 Ongoing Engagement During Implementation

The Program C&E Plan will also address ongoing engagement during implementation of both phases, including:

- Regular updates at Board or committee meetings;
- Periodic fact sheets and website updates;

- Opportunities for growers, domestic users, and other stakeholders to review data and account information;
- A standing process for submitting questions and requests for clarification; and
- Maintenance of a comment log, issue tracker, or similar record, as appropriate, documenting material implementation questions and responses.

2.5 Outreach Requirements

Except where the GSA Board determines, based on the administrative record, that an undesirable result (as defined in the applicable GSP) exists and requires immediate regulatory action, no Phase II allocations, restrictions, or related regulatory ordinances will be adopted unless and until:

- a. The Program C&E Plan described above has been adopted;
- b. The outreach milestones described in this Section 2 have been satisfied and documented; and
- c. The Board finds, based on substantial evidence in the administrative record, that stakeholder engagement has been reasonably conducted consistent with DWR's Stakeholder Communication and Engagement Guidance and SGMA's requirements to consider beneficial users.

Phase I voluntary and incentive-based measures, however, may be approved and implemented before completion of the full C&E Plan and outreach milestones, provided such measures remain voluntary and the GSA continues to carry out stakeholder communication and engagement during implementation.

3. Program Structure Overview

3.1 Two-Phase Program

The Program has two phases:

- **Phase I: Voluntary Measures.**
Implemented at Program start as soon as practicable, and may proceed concurrently with stakeholder communication and engagement activities under Section 2, and focused on voluntary, incentive-based demand reduction and land/water management practices.
- **Phase II: Phased, Adaptive Mandatory Measures.**
Developed during the Program design period so they are ready to implement in phases, commensurate with issues, but only advanced to adoption after the engagement milestones in Section 2 are completed and documented.

3.2 Conceptual Plan

To keep this Program framework policy-focused, the Program identifies the general structure of Phase I and Phase II measures in this framework document, while allowing additional technical detail, implementation steps, and supporting concepts to be refined through future Board action, annual reporting, periodic GSP evaluations, and supporting materials included in the administrative record.

4. Phase I Measures (Voluntary)

4.1 Possible Measure Categories

Phase I measures may include:

- a. Best management practices for irrigation and crop management;
- b. Water conservation focused on reducing consumptive use and groundwater extractions;
- c. Increased use of available surface water in lieu of groundwater;
- d. Multi-benefit land repurposing (e.g., recharge, habitat, renewable energy, recreation);
- e. Incentivized land use changes that provide a net groundwater benefit;
- f. Dry farming; and
- g. Fallowing not associated with groundwater substitution transfers.

4.2 Program Design Elements

For each Phase I measure, the Program may define:

- Eligibility criteria and geographic applicability;
- Enrollment process and any required documentation;
- Incentives or support (if applicable);
- Verification methods; and
- How demand-reduction benefits will be estimated and incorporated into GSP implementation.

Not every Phase I measure will require the same level of program design or geographic specificity. Phase I measures are intended to remain voluntary and flexible, and may be implemented broadly, by subbasin, or in more targeted areas as supported by the measure, available information, and future Board action. Phase I measures need not depend on prior establishment of final management boundaries, sustainable yield values, allocation

systems, or credit-trading mechanisms, unless the GSA later determines that a particular voluntary measure would benefit from such tools and supports that determination in the administrative record.

5. Phase II Measures (Phased Adaptive / Mandatory Tools)

5.1 Measure Types

Phase II will include mandatory tools. The GSA shall consider, and may include, the following tools:

- Groundwater use allocations and credit system;
- Well or pumping restrictions;
- Water market / trading; and
- Demand-management fee structures.

5.2 Implementation Protocol (Required Items)

The Program will address, for Phase II measures:

- Identification of areas where measures may be applied (e.g., subbasins, special zones, polygon-based groupings, or other spatial implementation units supported by the administrative record);
- Determination of how applicable sustainable yield estimates, if any, will be used for monitoring, planning, allocations, restrictions, fees, or other Program purposes;
- Determination of sustainable yield for any relevant area using Board-adopted methodology supported by the administrative record;
- Determination of a transition period to sustainable conditions prior to 2042, considering uncertainty and project timelines; and
- Processes and timelines for implementing, evaluating, and adopting measures through annual reports and periodic GSP evaluations.
- Establishment of an explicit annual review process to evaluate Program performance, budget and funding, groundwater trends, and trigger criteria, which shall operate independently of the statutory SGMA annual reporting process.

5.3 Allocation and Enforcement Concepts

The Program will develop an allocation and enforcement framework that:

- Applies the “commensurate with issues” standard (Section 1.4);

- May use special zones, polygon-based groupings, or other appropriate spatial implementation units where supported by the administrative record; and
- Addresses development and enforcement of allocations related to extracted groundwater.

Where spatial boundaries are used for monitoring, allocations, fees, restrictions, or other regulatory purposes, the GSA will establish the applicable methodology, criteria, and supporting findings in the administrative record. Such boundaries may be informed by Thiessen polygons, hydrogeologic information, groundwater conditions, monitoring density, land-use patterns, surface-water availability, updated modeling, and other relevant technical information, as appropriate to the action under consideration.

Any future allocation, restriction, or fee mechanism tied to sustainable yield, Measurable Objectives, or Minimum Thresholds will be supported by adopted methodology, defined criteria, and substantial evidence in the administrative record. The GSA may consider MOs, MTs, groundwater-level trends, storage-change information, monitoring-network data quality, hydrogeologic conditions, model results, and other relevant technical information in combination, as appropriate to the action under consideration.

For Program purposes, the GSA may refine, supplement, or distinguish use of existing GSP Measurable Objectives and Minimum Thresholds where supported by technical analysis and substantial evidence in the administrative record.

The Program may use trigger criteria informed by, but not necessarily identical to, existing GSP MOs and MTs, provided the basis for any such criteria is clearly explained and supported in the administrative record. In general, earlier-warning criteria may inform voluntary or incentive-based responses or trigger a mandatory technical review, while more serious threshold conditions may trigger consideration and potential implementation of mandatory Phase II regulatory measures.

If the GSA later considers any allocation-credit, transfer, or trading mechanism as part of a Phase II measure, such mechanism should include eligibility criteria, verification requirements, and guardrails sufficient to prevent speculative credit creation or a net increase in groundwater demand inconsistent with Program objectives.

5.4 Delineation of Spatial Implementation Areas and Similar Boundaries

The Program need not establish final special zone, polygon-grouping, or other spatial boundaries for all future Phase II actions at the time of framework adoption. Instead, the Program may commit to a methodology, criteria, and process for delineating, refining, combining, or revising such boundaries as better technical information becomes available and as specific actions are developed for Board consideration. In developing or revising any such methodology or criteria, the GSA may consider groundwater conditions and

trends, hydrogeologic information, monitoring-network density and data quality, land-use patterns, surface-water availability, updated modeling, and practical administrability, as appropriate to the action under consideration.

Any future delineation of boundaries for regulatory purposes will be supported by substantial evidence in the administrative record and may be revisited through adaptive management, periodic review, and future Board action.

5.5 Yield Methodology, Application, and Updates

The Program need not fix final sustainable yield values for every special zone, polygon-based grouping, or other spatial implementation area at the time of framework adoption. Instead, the Program may commit to a methodology and process for calculating, validating, applying, and periodically updating such values as additional data and technical work become available.

At a minimum, future implementing actions should identify: (a) the methodology used to calculate the applicable sustainable yield value; (b) the geographic area to which that value applies; (c) whether the value is being used for monitoring, planning, allocation, restriction, fee, or other Program purposes; and (d) the schedule or criteria for future review and revision.

5.6 Technical Support and Administrative Record

The GSA will support development and implementation of the allocation and enforcement framework with technical data, analyses, and memoranda prepared by the GSA's consultants and technical team, and may incorporate those materials into the Program's administrative record (e.g., the Luhdorff & Scalmanini Consulting Engineers (LSCE) Technical Memorandum dated November 19, 2025, titled "*Technical Foundations for Safe Yield, Sustainable Yield, and Groundwater Demand Management in Tehama County*," and any subsequent updates or successor memoranda). Reference in this Program to the LSCE Technical Memorandum, or any other technical memorandum, does not constitute blanket adoption or endorsement of every assumption, method, conclusion, or recommendation therein. Rather, such materials may be considered, together with other information in the administrative record, in connection with future Board determinations regarding specific Program elements.

6. Monitoring, Reporting, and Adaptation

6.1 Monitoring and Enforcement

The Program will define monitoring, reporting, and, where applicable, enforcement processes for both voluntary and mandatory measures, including:

- Data sources and monitoring tools;

- Compliance-tracking methods; and
- Consequences for non-compliance with Phase II allocations and rules.

6.2 Reporting and Adaptive Management

Program performance and conditions will be evaluated through:

- Annual reporting consistent with Section 5.2;
- Periodic GSP evaluations, with Program-related findings and any recommended adjustments documented in the record; and
- Measurement and evaluation of groundwater levels at RMPs or RMSs, as applicable, in relation to applicable Measurable Objectives, Minimum Thresholds, and other adopted Program criteria.
- Periodic review of any polygon-grouping, special-zone, or other spatial implementation methodology and boundaries in light of improved monitoring, modeling, hydrogeologic information, and implementation experience.
- Periodic review and, where appropriate, refinement of sustainable yield methodologies, MOs, MTs, trigger criteria, and related implementation criteria based on updated monitoring, modeling, hydrogeologic information, and implementation experience.

7. Funding

7.1 Board Authority; Separate Fee Process

The GSA Board retains sole authority to determine whether, when, and how SGMA-related fees, assessments, or other funding mechanisms will be considered and adopted, subject to applicable law. This Program does not itself establish any fee, assessment, rate, or charge, and nothing in this Section limits the GSA Board's discretion in any future funding proceeding.

Implementation of Phase I and Phase II measures, and related projects, incentives, mitigation programs, administration, monitoring, and enforcement, may require separate and additional funding mechanisms. Where practicable and legally appropriate, any future demand-management fee or similar charge for non-*de minimis* groundwater use should be considered on a volumetric or other usage-based basis. For this purpose, groundwater use may be determined through metering, self-metering and reporting, satellite-based or other estimated consumptive-use methods, assumed pumping volume per irrigated acre, or other reasonable methodologies supported by the administrative record and future implementing Board action.

Any such funding mechanism will be considered and implemented, if at all, only through the applicable Proposition 26 and/or Proposition 218 process, depending on the fee structure and purpose. As part of any future fee implementation, the Board will consider a sunset or ramp-down mechanism for demand management fees to be applied once sustainability goals are met and reliably maintained.

8. Term and Timeline

8.1 Program Start Date

The Program is intended to be developed and begin implementation no later than January 1, 2026 (for the Antelope, Red Bluff, and Los Molinos Subbasins) and January 1, 2027 (for the Corning Subbasin). To the extent implementation did not begin on those dates, the Program will be implemented as soon as practicable.

8.2 Program Duration

Upon implementation, the Program is intended to continue until amended, replaced, or discontinued by future GSA Board action unless otherwise directed by the GSA Board.

8.3 Program Timeline

The Program will be implemented and refined over time through future Board action, annual SGMA reporting, periodic GSP evaluations, continued technical work, and ongoing stakeholder communication and engagement. While specific details remain to be set, the Program targets the following milestone schedule:

- a. Phase I initiation and refinement (2026). Initiation and ongoing refinement of voluntary and incentive-based Phase I measures, together with continued stakeholder communication and engagement.
- b. Communication and engagement planning (2026). Preparation, implementation, and periodic updating of the Program C&E Plan, including basin-specific outreach as appropriate.
- c. Phase II policy consideration (2026). Initial Board and stakeholder discussion of water trading, enforcement structures, and the Phase II roadmap.
- d. Technical foundation development (2027). Continued technical work regarding monitoring networks, groundwater conditions, spatial implementation methodology, and sustainable-yield methodology, as additional data and analysis become available.
- e. Spatial implementation methodology (2027). Development and refinement of methodology and criteria for any special zones, polygon-based groupings, or other spatial implementation areas that may be used for future Phase II measures.

- f. Yield and trigger methodology (Initial 2026; Finalized 2027/2028). Development, validation, application, and periodic updating of sustainable yield and trigger methodologies for future Program use, as supported by the administrative record.
- g. Separate funding proceedings (2027/2028). Consideration, through separate Board processes, of any fee, assessment, or other funding mechanisms needed to support Program implementation.
- h. Phase II consideration, if warranted. If groundwater conditions and the administrative record warrant, future Board consideration of Phase II mandatory measures, including any associated ordinances, environmental review, appeals processes, and implementation milestones

9. Governance, Approval, and Environmental Review

9.1 Program Governance

A committee shall be formed to assist in developing the Program. Final approval, implementation, and ongoing administration of the Program, including Phase I and Phase II components, remain subject to approval by and under authority of the GSA Board through future Board action, as applicable. Any future mandatory allocation, restriction, or comparable enforcement measure should include an administrative appeal process and may include hardship provisions, as determined appropriate through future Board action.

9.2 Environmental Review

The GSA will conduct any environmental review required by law or otherwise determined by the GSA to be necessary or prudent for Program implementation and will integrate such review with adoption of Phase I and/or Phase II measures where appropriate.