TEHAMA COUNTY GROUNDWATER DEMAND MANAGEMENT PROGRAM

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

1. Program Basis and Authority

1.1 Resolution No. 4-2024

This Groundwater Demand Management Program (Program) is established pursuant to Resolution No. 4-2024 (Resolution), in which the District Board committed the District, as GSA, to "review, consider, and undertake mitigation actions for demand management" to address overdraft and groundwater level declines in the Antelope, Red Bluff, and Los Molinos Subbasins.

The Resolution recognizes the need for projects and management actions to achieve and maintain sustainable groundwater conditions by or before 2042 and acknowledges that hydrologic variability and project timing may increase the need for demand management.

1.2 Purpose and Objectives

Consistent with the Resolution, this Program is being developed to define the purpose, objectives, scope, roles and responsibilities, requirements, and potential outcomes for groundwater demand management in the three 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.

1.3 Required Two-Phase Structure

The Resolution specifies that 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." These include allocations, well restrictions, pumping restrictions, and water market/trading and/or fee structures.

1.4 "Commensurate with Issues" Standard

The Resolution requires that phased adaptive measures 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, and management-area-wide applications as appropriate.

2. Stakeholder Communication and Engagement

(Precondition to Phase I and Phase II Implementation)

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's Guidance Document for Groundwater Sustainability Plan: Stakeholder Communication and Engagement and Best Management Practices framework emphasize early, continuous, and documented engagement as a core element of SGMA implementation. This direction and guidance makes 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

Before the District advances to adoption of Phase I voluntary measures and Phase II regulatory measures (allocations, restrictions, fee structures), it will prepare and maintain a written Program Communication and Engagement Plan (C&E Plan) that is:

- Aligned with DWR's Stakeholder Communication and Engagement Guidance and related SGMA Best Management Practices materials;
- Basin-specific to the Antelope, Red Bluff, and Los Molinos Subbasins; and
- Integrated with, but distinct from, any broader GSP communication plans.

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, tribes (if any choose to participate), 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 any Board actions on Phase I or Phase II ordinances or resolutions.
5. Describe how feedback will be documented and used, including preparation of a "Response to Comments / Engagement Summary" prior to Board adoption of Phase I and Phase II measures, respectively.

2.3 Outreach Milestones Prior to Phase I and Phase II Adoption

As a matter of Program policy, the District will not bring Phase I voluntary measures or Phase II allocations or other mandatory Program measures forward for Board adoption until the following outreach milestones have been completed and documented:

a. **Baseline Listening Sessions.** At least one listening session in each Subbasin (Antelope, Red Bluff, 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) on a Draft Phase I Framework and Draft Phase II Framework, respectively, describing how allocations and related tools would function, supported by plain-language summaries and graphics.

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.

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; and
- A standing process for submitting questions and requests for clarification.

2.5 Outreach Requirements

No Phase I or 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 herein described have been satisfied and documented; and

c. The Board finds, based on substantial evidence in the 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.

3. Program Structure Overview

3.1 Two-Phase Program

- **Phase I: Voluntary Measures.**
  Implemented at Program start following Stakeholder Engagement 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 in Appendix A

To keep this Program framework policy-focused and responsive to the Resolution, a conceptual plan outlining future steps, including methods, metrics, and tools supporting Phases I and II is included in Appendix A.

4. Phase I Measures (Voluntary)

4.1 Possible Measure Categories (from Resolution)

Phase I measures may be drawn from the voluntary actions listed in the Resolution, including:

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 will define:

- Eligibility criteria and geographic applicability;
- Determination of management zones;
- Determination of sustainable yield for each management zone;
- Credit system;
- 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.

Supporting concepts are provided in Appendix A.

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

5.1 Measure Types (from Resolution)

Phase II measures will consist of mandatory tools such as:

- Groundwater use allocations;

- Well or pumping restrictions; and
- Water market/trading and/or demand-management fee structures.

5.2 Implementation Protocol (Required Items)

In accordance with the Resolution, the Program will address, for Phase II measures:

- Identification of areas where measures may be applied (e.g., subbasins, management areas, or special zones);
- Determination of sustainable yield for those areas;
- Determination of a transition period to sustainable conditions prior to 2042, considering uncertainty and project timelines; and
- Processes and timelines for implementing, evaluating, and adapting measures through annual reports and periodic GSP evaluations.

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);
- Uses management areas or special zones where appropriate; and
- Addresses development and enforcement of allocations related to consumed versus extracted groundwater, as called for in the Resolution.

Supporting concepts are described in Appendix A.

5.4 Technical Support and Administrative Record

The District will support development and implementation of the allocation and enforcement framework with technical data, analyses, and memoranda prepared by the District's consultants and technical team, and will incorporate those materials into the Program's administrative record (e.g., the Ludhorf & 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).

6. Monitoring, Reporting, and Adaptation

6.1 Monitoring and Enforcement

The Program will define monitoring and 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. [cite: 236–237]

Supporting concepts are described in Appendix A.

6.2 Reporting and Adaptive Management

Program performance and conditions will be evaluated through:

- Annual reporting consistent with SGMA; and
- Periodic GSP evaluations, with Program-related findings and any recommended adjustments documented in the record.

7. Funding and Financing

7.1 Funding approach and Board authority

The District will fund the Program through long-term GSA funding mechanisms as determined by the District Board. Anticipated funding sources may include: (i) GSA fees and assessments; (ii) funds generated through implementation of other projects and management actions (e.g., fines and/or penalties); (iii) county/state/federal funding, as available; and (iv) other sources, as identified.

Program funding must be available beginning at Program implementation to fund both Phase I and Phase II activities.

7.2 Base Fee (Administrative and Monitoring Costs)

To fund core administrative and monitoring costs for the three Subbasins, the District Board will consider approval of a Base Fee to be implemented on the 2026/2027 property tax bills (tax roll), following the applicable Proposition 218 or Proposition 26 process. This Base Fee is intended to cover baseline Program functions and costs, including:

- Legal services;
- Technical services;
- Administrative services;
- Operating expenses; and
- SGMA compliance expenses (including annual and periodic reporting requirements).

The Base Fee is intended to fund, among other things: administrative program costs; data collection, modeling, and monitoring (including automated monitoring systems for monitoring sites); annual satellite-based consumptive use reporting; consultant support to

refine sustainable yield and related technical assumptions as additional data becomes available; and public outreach activities required by Section 2 of this Program.

The Base Fee will be informed by the District's supporting budget materials, including Appendix B (Tehama County Groundwater Sustainability Agency Budget Forecast) as presented to the Groundwater Commission on August 13, 2025, which does not include budgeting for future projects or management actions).

7.3 Base Fee allocation methodology

The Base Fee will be allocated across user groups.

The District will define classification criteria (including how irrigated and non-irrigated acres are determined) through the implementing Board action(s) and supporting fee study.

7.4 Additional fees for demand management actions (Phase II and projects)

Separate and additional funding mechanisms will be required to support future phased demand management programs and actions (including, as applicable, projects, incentives, mitigation programs, allocations administration, and enforcement). Any such fees will be considered and implemented only through the applicable Proposition 26 and/or Proposition 218 process, depending on the fee structure and purpose.

8. Term and Timeline

8.1 Program Start Date

The Resolution directs that the Program be developed and that implementation begin no later than January 1, 2026.

8.2 Program Duration

Upon implementation, the Program is intended to continue in perpetuity unless otherwise directed by the District.

8.2 Program Timeline

See Section 9 of Appendix A.

9. Governance, Approval, and Environmental Review

9.1 Program Governance

The Resolution contemplates the formation of a committee to develop and set the final terms of the Program. Final implementation and management of the Program, including Phase I and Phase II components, will be approved by the District Board prior to the Program start date.

9.2 Environmental Review

The District will conduct any environmental review determined necessary for Program implementation and will integrate such review with adoption of Phase I and/or Phase II regulatory measures where appropriate.

APPENDIX A

(To Be Adopted by Resolution and Amended as Needed)

Proposal Appendix Updated: 1/12/2026 per Groundwater Demand Management Working Group 1/7/2026 Meeting Discussion

Priority Topics for DMWG discussion (Jan-Mar 2026). Not necessarily to be discussed in this order:

2: Plan Area and Management Zones
3: Sustainable Yield Determination
4. Pumping Allocation
5. Credit System
6. Penalty Fee Structure
7. Curtailment

1. **Executive Summary**
   1.1. Purpose and legal authority (SGMA, Tehama County ordinances)
   1.2. Plan goals: Achieve sustainable yield by 2042, protect critical domestic wells, maintain agricultural viability
   1.3. Key mechanisms - Establish:
   - Management Zones
   - Calculation of Safe Yield
   - Use of Measurable Objectives and Minimum Thresholds
   - Base Fee Structure for GSA Administrative Purposes – Baseline Fee for Users at or below Safe Yield
   - Fee Structure for Users above Safe Yield – Fees dedicated for projects to achieve sustainability goals
   - Allocation of transferable pumping credits + tiered fee structure
   - Other as determined to be necessary

2. **Plan Area and Management Zones**
   2.1. Subbasins (Antelope, Bowman, Los Molinos, and Red Bluff)
   2.2. Delineation of Management Zones (MZs) based on hydrogeologic conditions, historical pumping, and minimum threshold risks
   2.3. Map series showing Management Zones

Commented [SH1]: District straw proposal outlines a potential option for management zones approach (using Thiessen first, then integrate hydrogeologic conditions)

3. **Sustainable Yield Determination**
   3.1. Update and refine best available sustainable yield estimate for entire subbasin and for each Management Zone (acre-feet/year)
   - Sources: Updated GSP numerical model (2022–2025), DWR projections, local studies
   - Example: Tehama Subbasin sustainable yield ≈ 220,000–250,000 AFY (to be refined)

Commented [SH2]: District straw proposal outlines a potential option for calculating sustainable yield (combined safe yield areas)

3.2. Breakdown of sustainable yield components:

- Native yield
- Imported surface water (captured recharge)
- Managed recharge potential
- Climate change adjustment (–10% by 2070)

3.3. Allocation of funds for consultant in Q1&2 of 2026 to further refine sustainable yield based on future data in addition to work completed to date

4. Pumping Allocation ~~and~~

4.1. Base Allocation

- For Management Zones below Measurable Objectives – All irrigated parcels within such management zone receives a base allocation expressed in acre-feet per acre (AF/AC) tied to the parcel
- Example of Calculation for Base Allocation for Management Zones below Measurable Objectives: Allocation (AF/AC) = Total Sustainable Yield for Management Zone divided by Total Irrigated Parcel Acres
- De Minimis users (e.g. parcels using less than 2 acre-feet per year) exempt from curtailment

5. Credit System

5.1. A Credit System may be developed to include

- Credits provided for Base Allocation, Recharge, In-Lieu Activities, etc.

5.2. Transferability of Credits: A system may be developed to allow transfer or sale of credits between parcels and property owners.

5.3. Develop Consumption Tracking with Appeal System

6. Penalty Fee Structure (Demand Management Fee)

6.1. Excess Pumping Fee

- Where applicable, tiered escalating fee for every acre-foot pumped above Base Allocation to be determined based on economic analysis for fees
- Fees adjusted every 3–5 years based on recharge project costs and inflation
- Implement Penalty Fee Structure prior to 2032 (Interim Milestone) – Prop 26 or Prop 218

6.2. Dedicated Use of Excess Pumping Fee Revenue

- Groundwater recharge projects (on-farm, dedicated basins, in-lieu)
- In-lieu conversion (surface water)
- Well mitigation program for domestic wells impacted by overdraft
- Drought reserve storage projects

Commented [SH3]: Maybe we don't need this list in the official proposal (but could include as an attachment or additional notes)

Commented [SH4]: imported surface water includes SW imported for irrigation and for recharge.

Commented [SH5]: Ask legal counsel re: use of "may" vs. "shall"

Commented [SH6]: Suggestions to consider:
•3-tiered fee structure
•Additional backstop(s): For example, something more than a monetary-based backstop?

- Incentive programs (e.g. extended fallowing, multi-benefit land repurposing, development of surface water use infrastructure, irrigation efficiency, land purchase for areas in cone of depression, etc…)
- No use for general county funds

7. Curtailments and Increased Fees Based on Triggers – Rampdown to Safe Yield (Excess Pumping can't be perpetual)

7.1. Assessment in 2032 (Interim Milestone)

- Review data and adjust fees, if necessary
- Possible adjustment of total allowed average consumptive use

7.2. Assessment in 2037 (Interim Milestone)

- Review data and adjust fees, if necessary
- Possible adjustment of total allowed average consumptive use

8. ~~Metering,~~ Monitoring, Self-Metering, and Reporting

~~7.3.~~8.1. Potential monitoring, reporting, and voluntary metering mechanisms:

- Satellite-based consumptive use reporting with option for grower to self-meter
- Self-metering annual pumping reports due by December 31

~~8.~~9. Appeals and Hardship Provisions

~~8.1.~~9.1. Hardship committee for temporary relief (drought, crop failure, new permanent planting)

~~8.2.~~9.2. Appeals process for allocation disputes

~~9.~~10. Implementation Timeline

- 2026: Administrative Fee Collection (subject to Prop 26 or Prop 218); Finalize Management Zones; and Establish Safe Yield per Management Zone
- 2027: Issue initial parcel credit allocations
- 2028: Consumptive use program complete; credit trading platform live
- 2032: First excess pumping fees assessed (2031 pumping)
- 2032: Review and assessment of safe yield and fee structures, with adjustments as needed
- 2037: Review and assessment of safe yield and fee structures, with adjustments as needed
- 2042: Achieve sustainable yield (SGMA deadline)

~~10.~~11. Next Steps/Action Items

- Planned outline/framework approved and adopted by TCFCWCD Board in Q2 2026 – to be further developed consistent with Implementation Timeline above

Commented [SH7]: Flagging for future discussion to explore the potential specific approaches. For instance, District's straw proposal is a potential example approach.
Other example basins to explore: Ventura, S. Crl Valley basins

Commented [SH8]: J Hughes legal advice: Specify timelines and dates for DWR

Commented [SH9]: Consider alternatives for areas of higher concern (already at/below their GSPs' MTs):

Perhaps move up the timelines (similar to how SGMA treats critically over-drafted basins)

APPENDIX B

(To Be Adopted by Resolution and Amended as Needed)

Tehama Project - GSP Implementation Budget
Fee Study Item 2.4 - Financial Assurance Plan
Five Year Revenue Needs Assessment
Evaluate typical vs. minimal funding level scenarios

1 | 1.03 | 1.06 | 1.09 | 1.12 | Flood tax and GSA tax

Tehama County Groundwater Sustainability Agency Budget Forecast

EXHIBIT "A"

FIVE YEAR TEHAMA GSA BUDGET

(Optional: could be Operating/ SGMA Costs...)		Add 3% inflation	Add 3% inflation	Add 3% inflation	Add 3% inflation	
Category	Proposed	Proposed	Proposed	Proposed	Proposed	Comments
OPERATING EXPENSES	FY2027	FY2728	FY2829	FY2930	FY3031	
Legal Services						
General Legal Support	$55,000	$55,000	$55,000	$55,000	$55,000	Assumed County Counsel SGMA Compliance Support With Some Outside Counsel in Specialties
Total Legal Services	$55,000	$55,000	$55,000	$55,000	$55,000	
Technical Services						
Fee Process	$7,000	$7,000	$7,000	$7,000	$7,000	Reflect fee update costs
Special Studies/Consultant Support	$30,000	$30,000	$30,000	$30,000	$30,000	Project studies, model calibrations, feasibility analysis, related items.
Total Technical Services	$37,000	$37,000	$37,000	$37,000	$37,000	
Administrative Services						
Administration and Management (0.75 FTE)	$150,000	$150,000	$150,000	$150,000	$150,000	County SGMA Program Manager/Technician Positions
Administrative Support (0.5 FTE)	$51,000	$51,000	$51,000	$51,000	$51,000	County SGMA Admin Assistant Support Position
District Overhead	$32,000	$32,000	$32,000	$32,000	$32,000	office, insurance, vehicles, etc.
Audits	$10,000	$10,000	$10,000	$10,000	$10,000	Covers cost of minimum bi-annual audit requirement for GSA
Outreach Materials/Printing & Copying	$15,000	$15,000	$15,000	$15,000	$15,000	Changed to $1,000 per month
Postage	$3,000	$3,000	$3,000	$3,000	$3,000	Prudent to have in budget
Website Development/Maintenance	$6,000	$6,000	$6,000	$6,000	$6,000	Necessary for GSP implementation occurs
Financial Services/Bookkeeping	$12,000	$12,000	$12,000	$12,000	$12,000	Regular reporting, preparation for audits
Total Administrative Services	$259,000.00	$259,000.00	$259,000.00	$259,000.00	$259,000.00	
OPERATING EXPENSES SUBTOTAL	$351,000.00	$351,000.00	$351,000.00	$351,000.00	$351,000.00	
Operating Expenses Reserve (10%)	$35,000	$35,000	$35,000	$35,000	$35,000	Prudent to have in budget
TOTAL OPERATING EXPENSES	$410,000	$410,000	$410,000	$410,000	$410,000	
SGMA COMPLIANCE EXPENSES						
GSP Annual Monitoring/Reporting	$225,000	$225,000	$225,000	$225,000	$225,000	Assumed five (5) AR per year for SGMA compliance.
GSA Subbasin Coordination	$20,000	$20,000	$20,000	$20,000	$20,000	Assumes quarterly GSA communications and coordination with subbasins during GSP implementation.
GSP Periodic Evaluation/Amendments (@ 5 Yrs.)	$400,000	$400,000	$400,000	$400,000	$400,000	Assumed five (5) GSP updates with modeling every five years for SGMA compliance.
Monitoring Data Management	$25,000	$25,000	$25,000	$25,000	$25,000	Assumed annual data updates with expanded monitoring network in A and C subbasins.
GSP Implementation Grant Funding Application	$20,000	$20,000	$20,000	$20,000	$20,000	Assumed availability of grant funds for GSP implementation activities.
SGMA COMPLIANCE EXPENSES SUBTOTAL	$690,000	$690,000	$690,000	$690,000	$690,000	
SGMA Compliance Expenses Reserve (10%)	$69,000	$69,000	$69,000	$69,000	$69,000	
TOTAL SGMA COMPLIANCE EXPENSES	$759,000	$759,000	$759,000	$759,000	$759,000	
TOTAL ANNUAL BUDGET	$1,169,000	$1,169,000	$1,169,000	$1,169,000	$1,169,000	
		$1,204,070	$1,335,640	$1,548,910	$1,596,000	Includes inflation

Notes:
Assumes GSA would meet quarterly with Glenn County/Water Commission Coordination.
Assumes Tehama County FCWCD would support GSA organizational operations including administrative, legal, insurance, and financial services aspects during post-GSP implementation period.
Assumes Admin/Mgmt. staff costs are based on County's approved 2025 Salary Schedule with 1.7 overhead multiplier to calculate full charge out rates.
Assumes GSP monitoring and reporting would be handled as an ongoing GSP implementation cost with consultant support.
Assumes Five Year Periodic Evaluations/Amendment updates would be funded over (seven) budget years.
Assumes ongoing grant funding procurement process to secure available State and Federal grants for GSP implementation.