



# Demand Management Working Group Kick-Off Meeting

---

August 21, 2024



# Welcome & Introductions

- Working Group Members
  - Bill Borrer (rangelands)
  - Brenden Flynn (ag operations)
  - Steve Gruenwald (CSAB, small ag operations)
  - Ben Myhre (environment)
  - Ian Turnbull (CSAB, rural communities)
  - Commission Ad Hoc
    - Hal Crain (Ci of Tehama)
    - Todd Hamer (Los Molinos CSD)
    - Mike Ward (District 4)
- Staff and Support
  - Justin Jenson, GSA Program Manager (District)
  - Nichole Bethurem, Administrative Assistant (District)
  - Stephanie Horii, Facilitator (CBI)

- 8:30 Welcome and round-robin introductions
- 8:35 Agenda review and participation
- 8:40 Background
- 9:00 What are we're trying to solve?
- 9:15 What is in a demand management program?
- 9:35 What does success look like?
- 9:45 Knowns and unknowns
- 10:15 What's most important to discuss?
- 10:50 Next Steps and Wrap Up
- 11:00 Adjourn

# Agenda

## Participation Procedures

- Contribute
- Make room for others
- All thoughts have value
- Ask questions of one another
- Not consensus-seeking
- Consider those listening in (state name, one voice at a time)

- Impetus, timeline, and intended outcomes
- Assumptions, sideboards, and constraints
- Commission Ad Hoc and Working Group roles and meeting framework

## Background

# Demand Management Programs | Impetus, Timeline, and Intended Outcomes

- GSP revisions per DWR review early 2024; adopted/submitted April 2024
- Resolutions 4-2024 and 2-2024: Demand Management Programs
  - Red Bluff, Antelope, and Los Molinos Subbasins by Jan 1, 2026; Corning Subbasin by Jan 1, 2027
    - *The District shall, as part of Program development, define the Program's purpose, objectives, scope, roles and responsibilities, requirements, and potential outcomes.*
    - *The anticipated goal of the Program is to address and mitigate overdraft and groundwater level decline, and related undesirable results during the GSP Implementation Period, as defined in the Revised GSP, by reducing demand for groundwater.*
- Formation of Groundwater Commission Ad Hoc committee and stakeholder advisory Working Group
- Intended Outcomes
  - Memo outlining recommendations from the Ad Hoc and Working Group, documenting areas of alignment and divergence
  - Draft elements for the demand management programs



# Demand Management Programs | **Assumptions, Sideboards, and Constraints**

- Working with the information we have within the designated timeframes
- Co-developing the Corning Subbasin Demand Management Program along with Corning Sub-basin GSA and Corning Subbasin Advisory Board (CSAB)
- Tehama County District Board of Directors maintain final decision-making authority within the county boundaries
- Others?

# Demand Management Programs | Ad Hoc and Working Group

## Working Group

- Represent interests of their respective group(s).
- Provide input and feedback on groundwater demand management strategies.
- Assist in identifying potential impacts and benefits of proposed management strategies.
- Facilitate communication between the Ad Hoc, Commission, and stakeholders.
- Support the implementation of the Groundwater Demand Management Programs.

## Ad Hoc

- Same as above as well as present recommendations for the Commission to discuss and consider

- Bill Borrer (rangelands)
- Brenden Flynn (ag operations)
- Steve Gruenwald (CSAB, small ag ops)
- Ben Myhre (environment)
- Ian Turnbull (CSAB, rural communities)

## Commission Ad Hoc

- Hal Crain (Ci of Tehama)
- Todd Hamer (Los Molinos CSD)
- Mike Ward (District 4)



# Demand Management Programs | Ad Hoc and Working Group Meetings and Communications

- Working Group – meeting monthly; Ad Hoc – every other month, or as needed
- Not subject to Brown Act
- Public can listen in
- Audio recordings posted to website
- Designated Working Group (Chair)/Ad Hoc will report back to the Commission
- Staff will develop high-level outcome meeting notes
- When talking to external parties, members are asked to represent their own views only.
  - Only the GSA Program Manager or Working Group Chair may speak for the Working Group.
  - Any member may speak about the Working Group.

# Demand Management Programs | Ad Hoc and Working Group Meeting Framework

## 1. Form Groups & Prepare

- Formation & Planning
- Defining Goals, Objectives, and Priorities

## 2. Gather Info and Generate Ideas

- Information Collection and Analyses/ Assessments
- Identify Management Strategies

## 3. Explore and Package Ideas

- Build Out Specific Elements and Strategies
- Outreach Coordination

## 4. Refine

- Vet and refine program elements and strategies

## 5. 'Finalize' and Implement

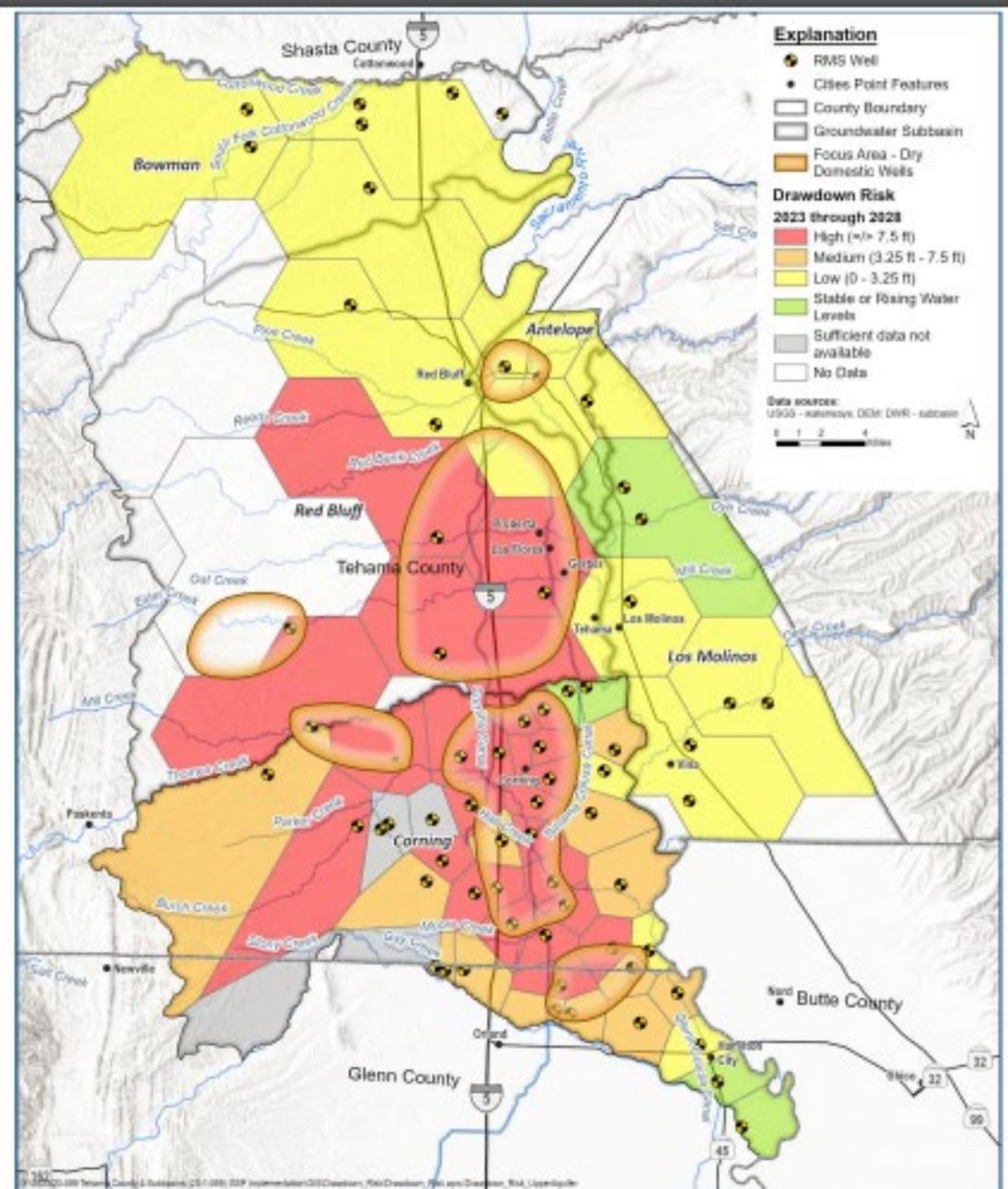
- Finalize elements for Ad Hoc recommendations
- Identify considerations and opportunities to improve implementation feasibility

What are we  
trying to solve?

- Groundwater conditions, water budget, etc.
- Rationale for developing demand management programs

# Predicted Drawdown – 2023-2028

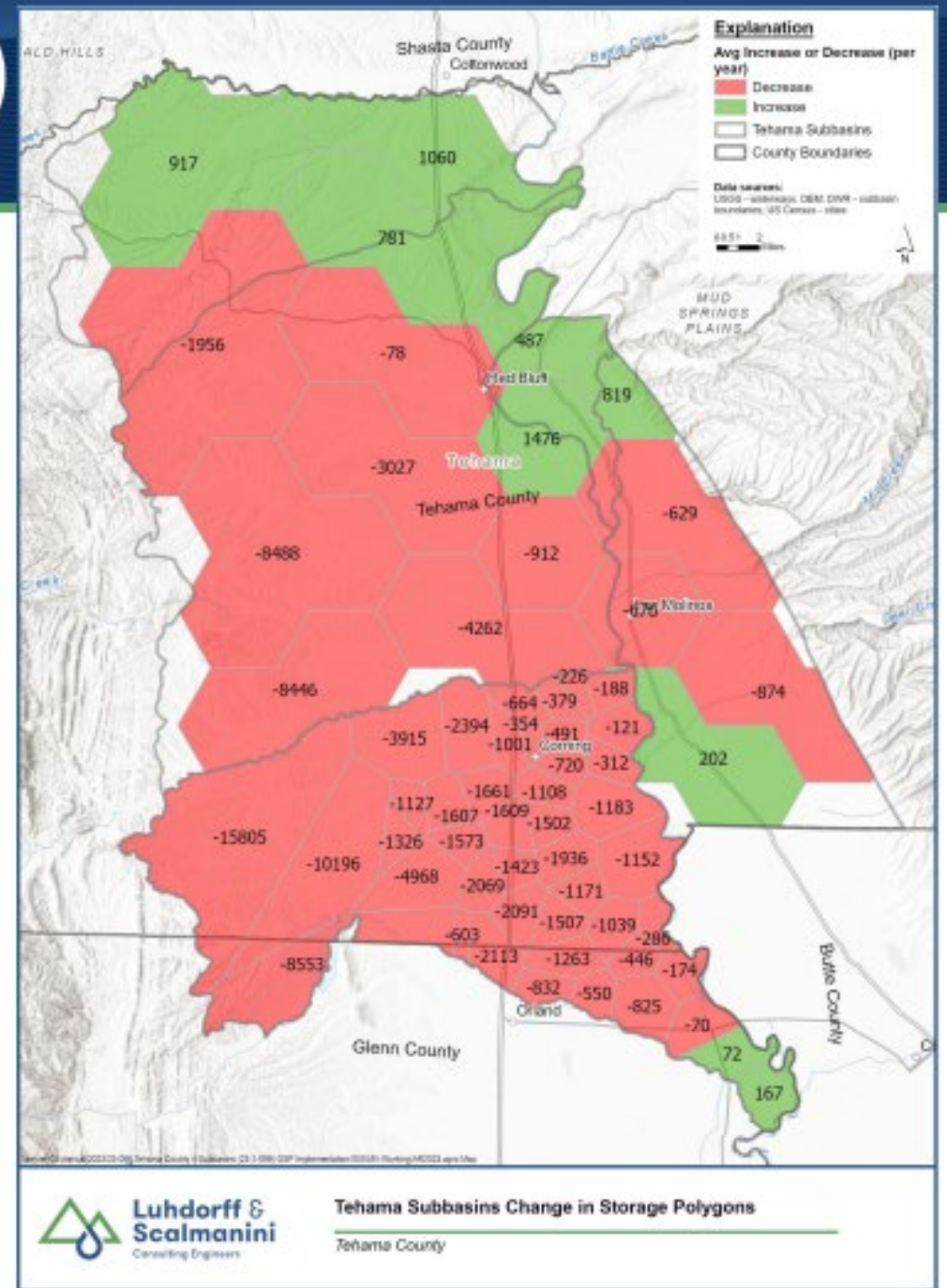
- Avg GWL declines over next five years in each RMS Well
- Each polygon assigned a risk value to identify problem areas
- Focus areas overlain to illustrate areas already in trouble
- Upper aquifer only - results are assumed to suggest lower aquifer risk at well sites





# Changes in Storage (Avg Per Year)

- Use of polygon area, Spring GWL at RMS wells, and C2VSim model data for avg. aquifer storage coefficients to calculate changes in storage
- Change in storage (AF) was calculated to an avg. change per year



# Land Use in Tehama and Glenn Counties

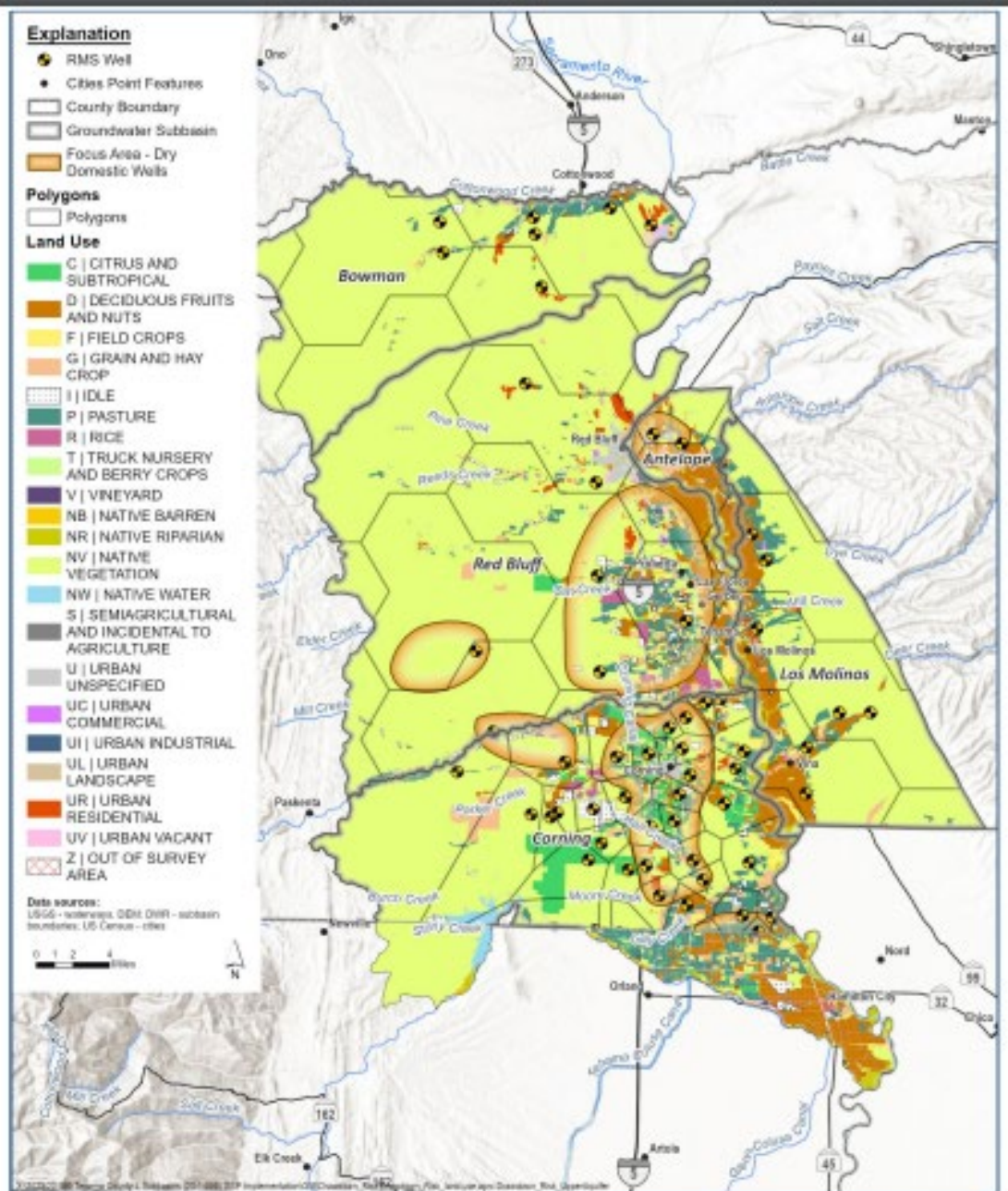


Figure 1

# Rationale for Developing Demand Management Programs

- Future availability of surface water is expected to decrease; not enough water to solve all basins' water problems.
- Over time, we are seeing increasing lengths and severity of dry periods.
- Increasing supply (e.g., recharge) is not enough to balance the water budget.
- Dry well mitigation and demand management must be part of the discussion.



- Elements of a demand management program
- Discussion

What is in a  
Demand  
Management  
Program?

# Demand Management Program Development

*(from Resolutions 2-2024 and 4-2024)*

Items for consideration during Program development include, but are not limited to:

## **Definitions**

### **Program measures, including:**

- Measures for **immediate implementation** (i.e., measures that will move forward at the Program start date)
- Measures for **phased adaptive implementation** (i.e., measures that will be developed further so that they are ready to implement in phases, commensurate with issues)

### **Public outreach and engagement process**

Coordination of Program with **other related programs** in the region, as applicable

# Demand Management Program Development

*(from Resolutions 2-2024 and 4-2024)*

Items for consideration during Program development include, but are not limited to:

*[Continued]*

Implementation considerations and protocol for phased adaptive implementation measures:

- **Identification of area(s)** where measures are applicable
- Determination of **sustainable yield** for those areas
- Determination of an appropriate **transition period** from current to sustainable conditions (prior to 2042), considering uncertainties of the basin setting and of the timelines for other projects.
- Process and **timeline for implementing** phased measures.
- Process and **timeline for evaluating and adapting** measures to respond to changing conditions (in annual reports and periodic GSP evaluations).
- Considerations for **allocation development and enforcement**, as applicable, related to consumed versus extracted groundwater
- **Monitoring and enforcement** process
- **Funding and financing**, including the planned annual program funding responsibilities.

# Potential Immediate Measures

*(from Resolutions 2-2024 and 4-2024)*

Measures to be considered and moved forward for immediate implementation (at the Program start date). Measures may include, but are not limited to, the following **voluntary** measures for reducing demand:

- Best management practices (agronomic practices, soil moisture monitoring and management, delayed irrigation and/or regulated deficit irrigation, runoff capture, etc. to **reduce groundwater extraction**)
- **Water conservation** (focusing on activities to reduce consumptive use and groundwater extraction)
- Encouraging use of all available **surface water in lieu** of groundwater pumping
- **Multi-benefit land repurposing** (e.g., recharge basins, renewable energy, habitat, recreational spaces)
- **Incentivized land use changes** that provide net groundwater benefit
- **Dry farming**
- **Fallowing** (not associated with groundwater substitution transfers)

# Potential Phased Measures

*(from Resolutions 2-2024 and 4-2024)*

Measures to be considered and moved forward for phased adaptive implementation (i.e., develop the actions further so that they are ready to implement in phases, commensurate with issues).

Measures may include, but are not limited to:

- **Allocations**
- **Well restrictions**
- **Pumping restrictions**
- **Water market/trading and/or fee structures**

Phased adaptive implementation measures are to be **implemented commensurate with:**

- The **amount of demand reduction** required.
- The **issue(s) facing the area(s)** where the measure(s) are to be implemented, considering, but not confined to:
  - Options for regional implementation of certain actions (around a “Special Zones” where undesirable results are occurring), and/or
  - Options for Subbasin-wide implementation of certain actions (equal treatment of the Subbasin as a whole).
  - Options for Management Area-wide implementation of certain actions (equal treatment for all subbasins within the Subbasin or the entirety of the Subbasin)

## Discussion Questions:

- Clarifying questions about a DM program components?
- Anything important missing?

What is in a  
Demand  
Management  
Program?

What does  
success look  
like?

- Principles and criteria
- Discussion



# What should the successful demand management programs include?

## Principles

- Long-term sustainability of local values (environmental, social, economical, etc.)
- Fair and equitable measures for all groundwater users and uses
- Transparent and clear process
- Inclusive and collaborative
- Flexible and adaptable to change
- Cost-efficient and optimize resources

### Discussion Question:

- Anything to add/edit?

## Criteria for evaluating

- Clear goals and objectives
- Data-driven decisions
- Legal and regulatory compliance
- Clear monitoring and evaluation procedures
- Adequate funding and resources
- Risk management/contingency planning
- Improving public outreach and engagement
- Supporting coordination/integration across sectors/ programs/agencies
- Accountability

- Existing Information
- Data Gaps and Needs
- Discussion

What do we  
know and not  
know?

# Knowns and Unknowns

## Existing Information

- Groundwater levels (most through spring '24)
- Calculated groundwater storage
- Models for predicting change in groundwater levels and storage
- Land-use data and existing information

## Data Gaps and Needs

- Groundwater monitoring covering large areas that could possibly not have the same groundwater conditions; future monitoring stations will help address these gaps
- Groundwater Dependent Ecosystems (GDEs); forthcoming state guidance, future monitoring and delineation will help address these gaps
- Current land-use data (as needed)

## Discussion Questions:

- What are key information needs and why?
- Do we have that information? If not, how/when can we get that information?
- Next meeting: Navigating data gaps during this process (per advice from LSCE, staff, etc.)

What do we  
know and not  
know?

Discussion

# What's Most Important to Discuss?

## Discussion:

- What do you care the most about and why?
- What should be priority for this group to discuss, or look to others?

What's Most  
Important to  
Discuss?

### **Initial Brainstorm:**

- Initial ideas to explore?
- Thoughts on how to approach these topics?

- Action Items and Next Steps
- Upcoming meetings
  - Groundwater Commission Special Meeting | Aug 22
  - Schedule next WG Meeting
    - 1-2 volunteers to help planning?

Next Steps and  
Wrap Up  
Thank you!