



MANAGING OUR GROUNDWATER
FOR THE FUTURE

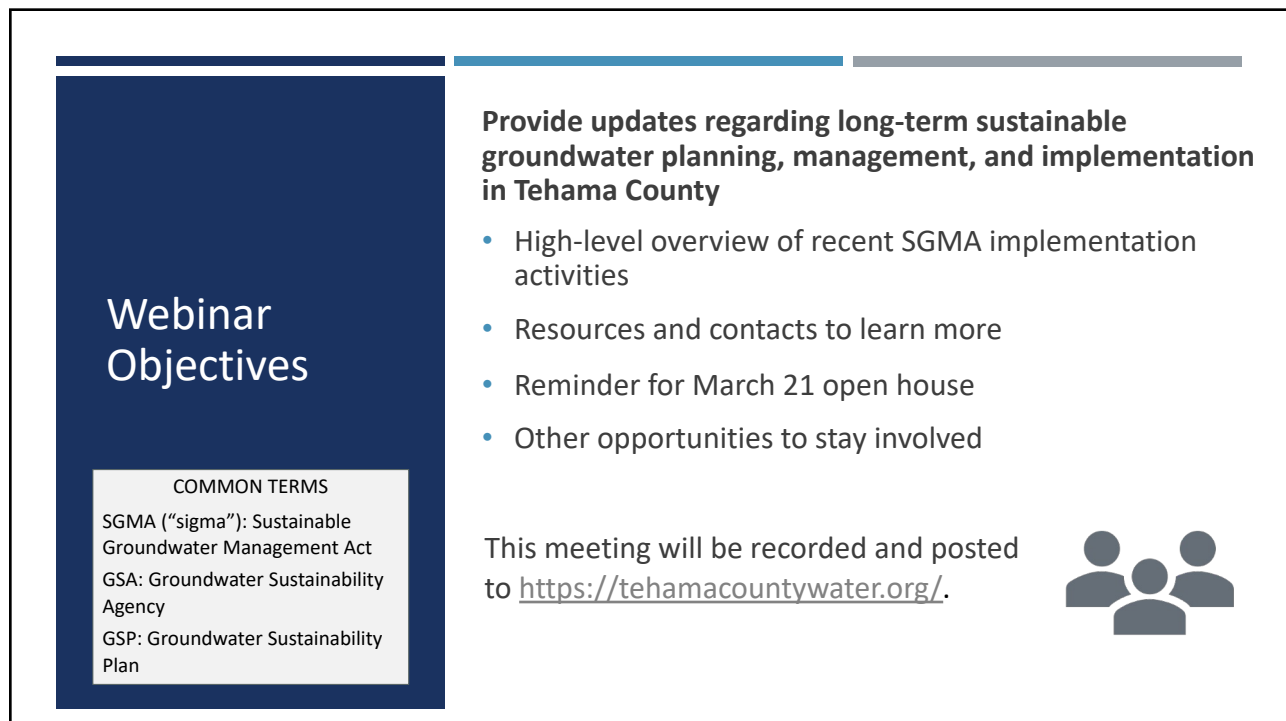


Tehama County Sustainable Groundwater Management

Recorded Webinar
March 19, 2023 (6:00 – 7:00 PM)

TehamaCountyWater.org

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Webinar Objectives

Provide updates regarding long-term sustainable groundwater planning, management, and implementation in Tehama County

- High-level overview of recent SGMA implementation activities
- Resources and contacts to learn more
- Reminder for March 21 open house
- Other opportunities to stay involved

COMMON TERMS

SGMA ("sigma"): Sustainable Groundwater Management Act
GSA: Groundwater Sustainability Agency
GSP: Groundwater Sustainability Plan

This meeting will be recorded and posted to <https://tehamacountywater.org/>.



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Meet The Project Team

Convener: Tehama County Flood Control & Water Conservation District



TEHAMA COUNTY
FLOOD CONTROL AND WATER CONSERVATION DISTRICT

- Justin Jenson
- Nichole Bethurem

Technical Consultant: Luhdorff & Scalmanini Consulting Engineers (LSCE)



- Eddy Teasdale

Facilitation Support: Consensus Building Institute (CBI)

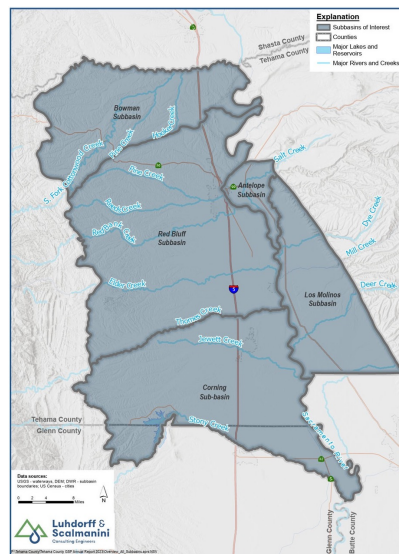
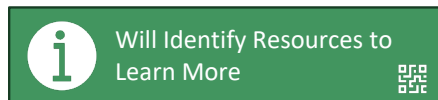


- Stephanie Horii

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Tonight's Agenda

- I. Welcome and Introductions
- II. Background
- III. Groundwater Conditions
- IV. Project and Management Actions
- V. Funding
- VI. Staying Involved
- VII. Open Q&A



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SGMA Basics

 The Sustainable Groundwater Management Act (SGMA) -- law was passed in 2014

 Values Local Control Groundwater Sustainability Agencies (GSAs)

 Management plans = Groundwater Sustainability Plans (GSPs)

 GSPs submitted to the State by January 31, 2022

 Sustainability must be achieved within 20 years (by 2042)

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What Is the Purpose of SGMA?

Promote sustainable management of groundwater basins

Enhance local management to protect our groundwater; State will step in if necessary

Improve data collection and understanding of groundwater resources and management

Avoid or minimize undesirable results to groundwater



Undesirable Results



Lowering GW Levels



Reduction of Storage



Land Subsidence



Degraded Quality



Surface Water Depletion



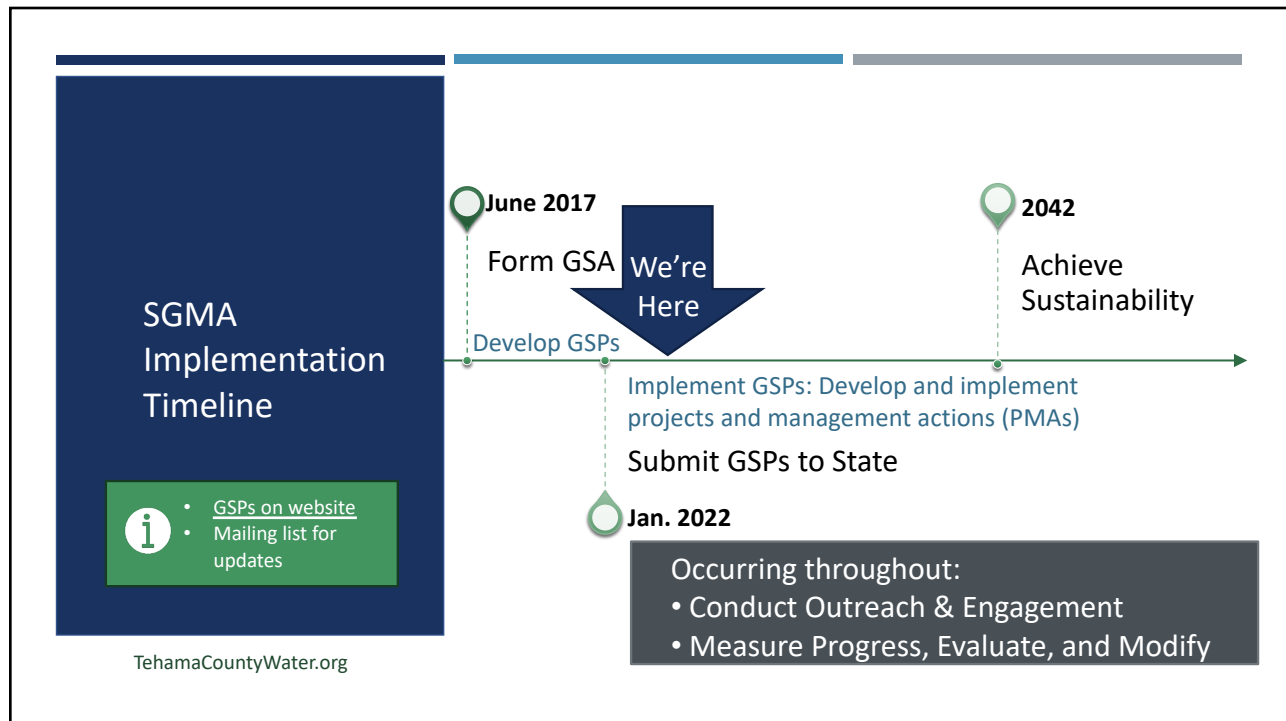
Seawater Intrusion



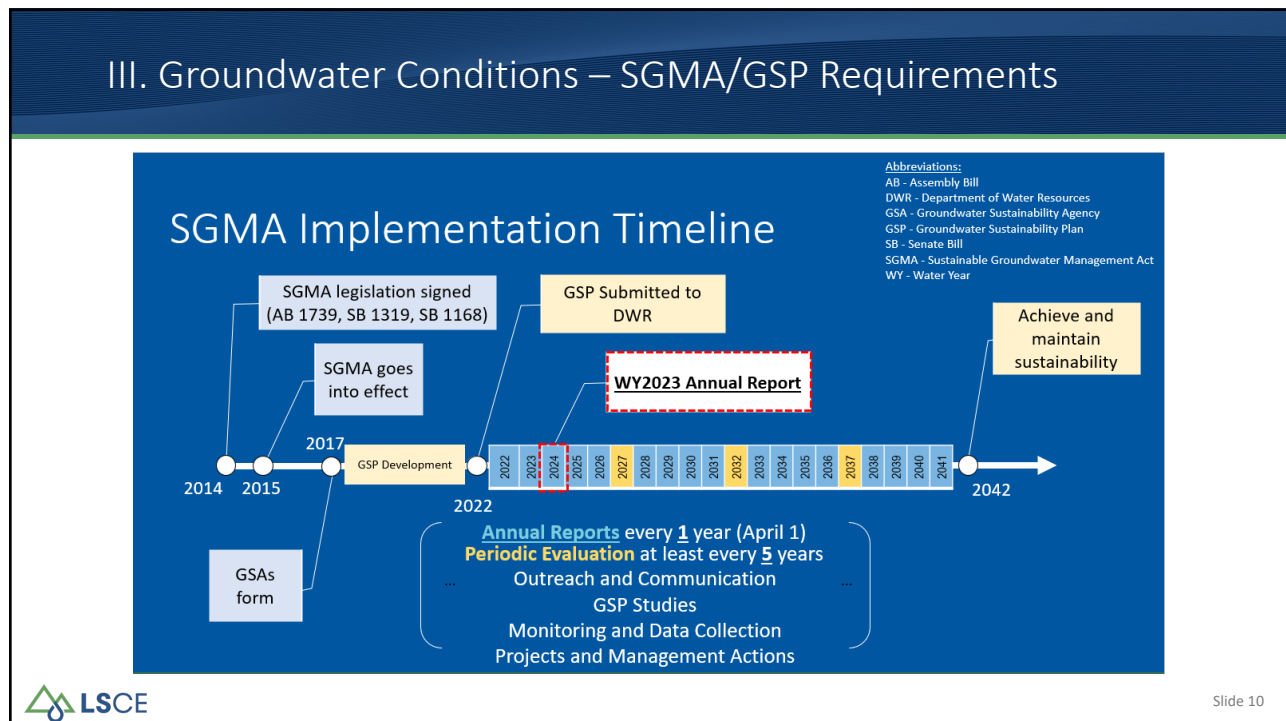
tehamacountywater.org/gsa/library/

SGMA Resources, including:

- Understanding groundwater video
- SGMA Overview
- GSP Development Factsheets



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III. Groundwater Conditions – GSP Overview

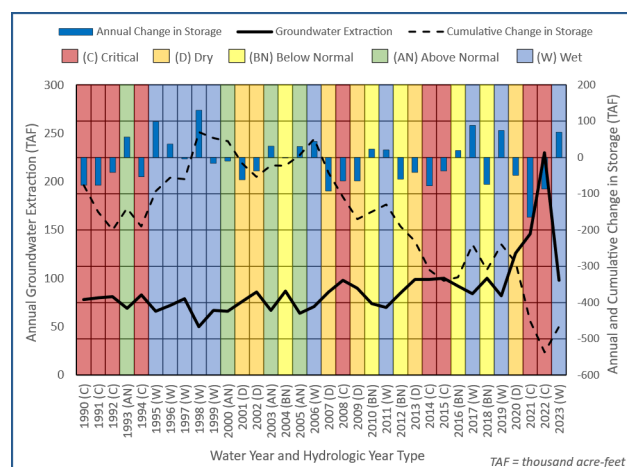
- The **GSP is a dynamic planning document** that is guiding how groundwater will be managed over the next two decades (through 2042).
- GSP describes groundwater conditions and how groundwater management will avoid adverse impacts related to five sustainability indicators.
- GSP revisions are in progress (April 2024 deadline), effort is being coordinated with these Annual Report updates where possible.



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III. Groundwater Conditions – Water Budgets

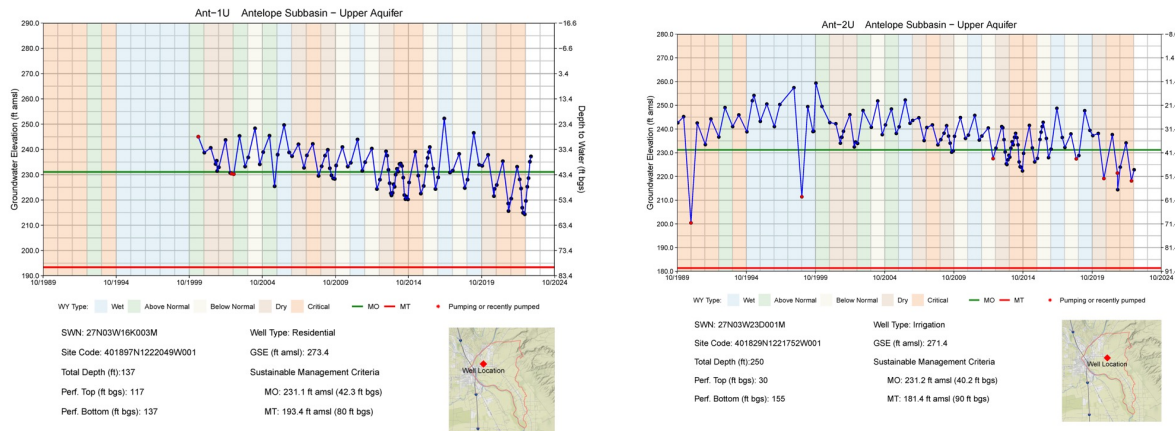
1. Required for GSPs and Annual Reports
2. Quantify Inflows and Outflows for each Subbasin
3. Groundwater Extraction
4. Change in Groundwater Storage



Red Bluff Subbasin

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Groundwater Conditions Groundwater Elevations Antelope Subbasin



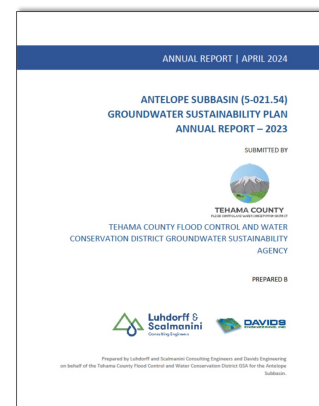
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III. Groundwater Conditions – What's Next

Annual Report Requirements (23 CCR §356.2) – Due to CA DWR on April 1

- Updates on Groundwater Conditions
 - Groundwater Elevation (Hydrographs, Contour Maps)
 - Change in Groundwater Storage
- Water Supply and Water Use
 - Groundwater Extraction
 - Surface Water Supplies
 - Total Water Use
- Progress Toward Plan Implementation
 - Groundwater Conditions Related to Sustainable Management Criteria (SMC)
 - Projects and Management Actions



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III. Groundwater Conditions – What's Next

CA DWR Determination Letters on 2022 GSPs– Responses Due to CA DWR on April 23

- **Overdraft Conditions (Corning and Red Bluff)**
 - Reevaluate the Assessment of Overdraft
 - Provide Reasonable Means to Mitigate
- **Chronic Lowering of Groundwater Levels**
 - Refine Description of Undesirable Results
 - Revise Minimum Threshold (MT) for Groundwater Levels
- **Groundwater Quality in Antelope Subbasins**
 - Develop Measurable Objective (MO) and Minimum Threshold (MT) for Nitrate



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III. Groundwater Conditions – What's Next

CA DWR Determination Letters on 2022 GSPs– Feedback from six (6) meetings with CA DWR

- DWR wants commitment, specificity, funding, and timeline.
- Considering PMAs, from recharge to demand management, focused in special zones & commensurate with conditions (triggers)
- GSA resolutions, demonstrates commitment, would spell out agreement, a plan with specific timeline and conditions for action. Time to deliberate, plan, and better engage the community.
- SMC Revisions – more detail on analysis requested
- MTs should be tied to undesirable results definition, likely need to change

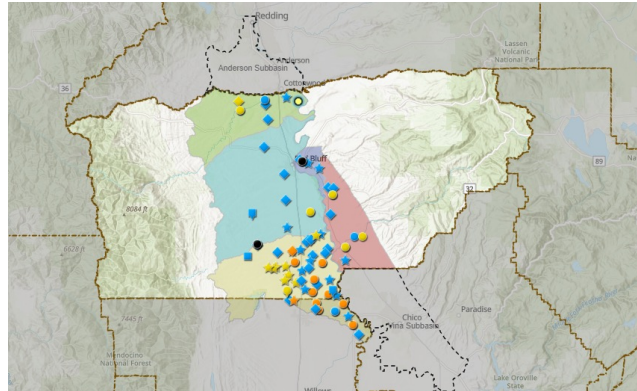


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III. Groundwater Conditions – Where Can You Learn More

- Attend Board and Groundwater Commission Meetings
- Provide Feedback on Annual Reports and Groundwater Sustainability Plans
- Data Map Viewer
bit.ly/TehamaGlennSGMADataMapView



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IV. Projects and Management Actions

- A. Projects and Management Action Updates
- B. Management Actions
 1. Well Registration – On Going
 2. Demand Management – Resolution being developed
 3. Well Mitigation – Resolution being developed
- C. Projects
 1. Recharge Focused
- D. How You Can Learn More
 1. Recharge
 2. Domestic Well Monitoring Network



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IV. Projects and Management Actions – Well Registration (LSCE)

Tehama County Groundwater Sustainability Agency Well Registration Form

Antelope, Bend, Bowman, Corning, Los Molinos, Red Bluff, South Battle Creek

General Information

In June 2022, the Tehama County Flood Control and Water Conservation District Board of Directors adopted Resolution No. 9-2022 setting the annual fee of \$0.29 per acre to fund the creation, implementation, and administration of a county-wide well registration program. The \$0.29 per acre fee is solely for well registration and the necessary data management. Data collected through the well registration program will be used to support the development of a well size/use type based funding method to provide long-term funding for the Groundwater Sustainability Agency. The fee is in place for three years but for those that register their wells prior to April 10 there will be an exemption from future registration fees for the remaining years.

To qualify for exemption there are five minimum requirements:

- A) Well registration form must be submitted in person, by email through online registration or postmarked by April 10 in the given year; and
- B) Well registration form must have the APN or address of the property that has the well or does not have a well, legibly identified so that there is no possibility of confusion as to where the well is located or what parcel claimed to have no well; and
- C) Well registration form must have identified the well use as either residential, agricultural, or other; and
- D) Parcels with well use identified as agriculture must identify either well size and typical annual volume, or current crop type and acreage used for each crop identified; and
- E) Parcels with well use identified as other/combination must include a detailed description of what exactly the other/combination activity is.

The information collected by filling out the survey is confidential and private, will be used only for the purposes of sustainable groundwater management, will improve information on groundwater in our region, and will not be disclosed unless required by law.

Please complete all four sections. For most people, this survey will take less than 15 minutes to complete. All required information is noted with an asterisk. Please complete as much of the form as you can, to the best of your knowledge.



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IV. Projects and Management Actions – Demand Management

Demand Management– Resolution being developed

2011-2023	2012-2023	2013-2023	2014-2023	2015-2023	2016-2023	2017-2023	2018-2023	2019-2023
-25,385	-32,750	-32,182	-31,300	-24,556	-21,875	-26,143	-38,833	-31,600

A deficient of ~21,900 to ~38,800 AF

Considerations:

- Land Use Changes
- Variable Water Year types
- Hybrid of model and empirical based methods
- Weighted for current conditions

Average Change in Storage from 5 to 13 years



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IV. Projects and Management Actions – Well Mitigation

Formal Resolution being developed

- Well permitting and ordinance to spatially and vertically isolate new wells to minimize impact on wells
- Note: Well permitting is the jurisdiction of the Counties
- Delivery of water and storage tanks
- Well deepening
- Well consolidation (many to one)



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IV. Projects and Management Actions – Well Mitigation

Dry Well
Mitigation
Draft
Workplan

Items to consider in Program development:

- Program application process
- Public outreach
- Eligibility criteria (property/property owner)
- Preferred contractors (reputable services)
- Initial well evaluation
- Program form development (participation terms, agreement, education process/requirement)
- Priority (first-come-first-served)
- Eligible mitigation (supply focused) vs. non-eligible services (landscaping, ongoing maintenance, etc.)
- Mitigation award (how costs will be reviewed/approved)
- Recordation of mitigation award
- Coordination with counties, other programs
- Post-mitigation responsibility

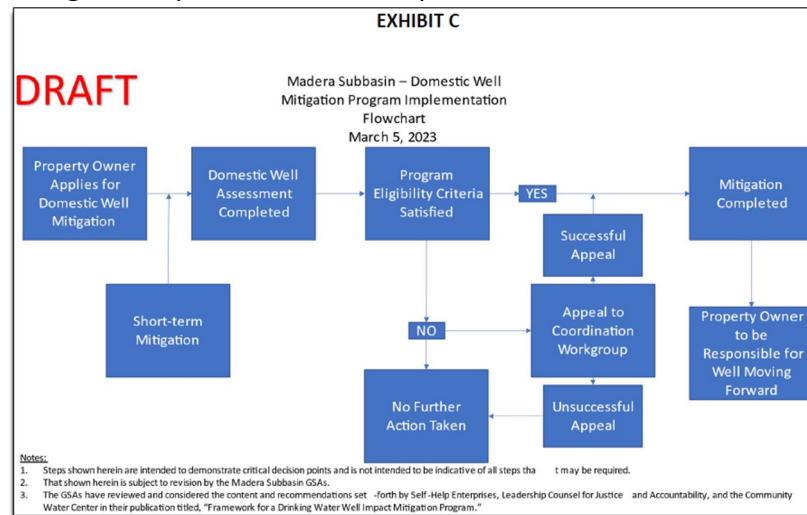


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IV. Projects and Management Actions – Well Mitigation

Formal resolution being developed, but the concept is.....

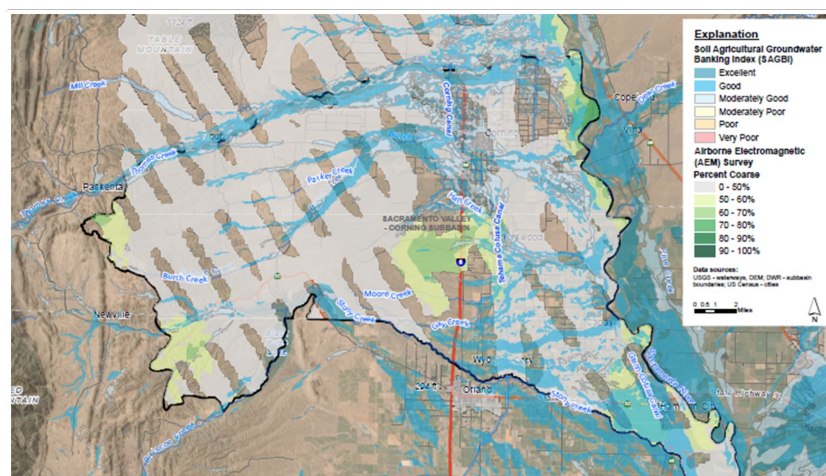


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IV. Projects and Management Actions – Recharge Focused

- 5 site visits completed
- 20 additional projects identified
- Always looking for more



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IV. Projects and Management Actions – Recharge Focused

- Riparian Rights
 - Opportunity for in-lieu recharge
 - Properties located along creeks/streams
 - Water cannot be utilized for direct recharge

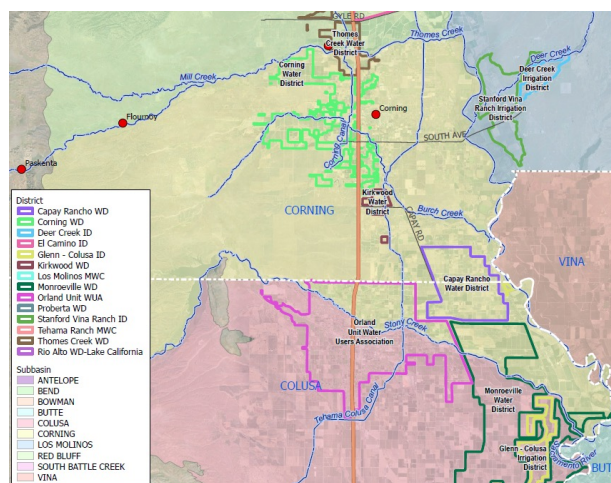


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IV. Projects and Management Actions – Recharge Focused

- Initiated discussions with the key surface water purveyors
- Started identifying districts and growers interested in receiving surface water in-lieu of groundwater
- Developed draft grower surveys to understand barriers to increase use of surface water
- Launched water availability analysis for characterizing surface water availability



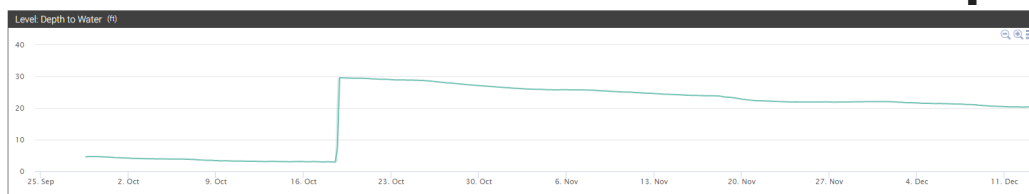
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IV. Projects and Management Actions – How to Participate Domestic Monitoring (Telemetry Equipment)

- Telemetry equipment will be installed in volunteer wells
- Involves sensors installed in/near the well; remote data transmittal
- Data collected long-term, available via dashboard
- In progress: Finalizing vendor and purchasing first-round equipment

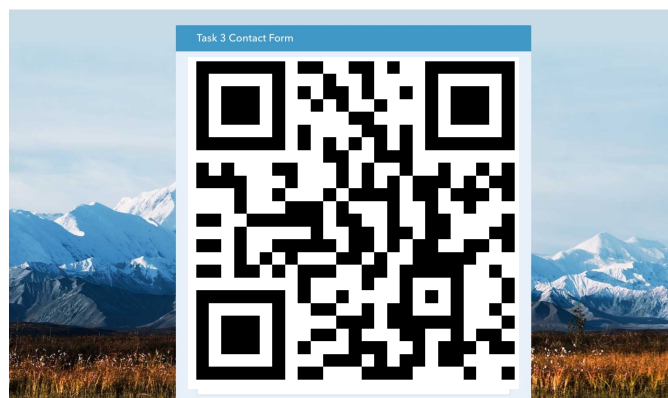


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IV. Projects and Management Actions – How to Participate: Domestic Monitoring

- Interested in providing a location for installing of multi-completion wells
- Interested in providing access for a stream SW/GW station (access to stream)
- Interested in Domestic Well Monitoring
- Interested in sampling for TDS in Corning Subbasin



bit.ly/DomesticWellMonitoring-InterestForm



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IV. Projects and Management Actions – How to Participate: Recharge Opportunities

- Interested in exploring recharge opportunities on your property?



bit.ly/Recharge-InterestForm



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V. Funding

- A. Current Funding Strategy
 1. Utilizing CA DWR Funding Sources (when applicable)
 2. Prop 1 (\$3M) Grants – Funded GSP Development (2018-2022)
 3. Prop 68 (\$16M) Grants – Funding GSP Implementation & DWR GSP Responses (2024 – 2026)
 - Task 1 – Grant Management
 - Task 2 – GSP Implementation, Outreach and Compliance
 - Task 3 – Ongoing Monitoring
 - Task 4 – Groundwater Recharge
 - Task 5 – Projects and Managements Actions – Corning Regional Conjunctive Use



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V. Funding

A. Future Funding Strategy

- A. GSA will have to eventually fund locally (per CA DWR)
- B. GSA administration fees estimate to be ~ \$900K/year
- C. Options for Funding:
 - Fees based on groundwater well diameter and/or usage – Driver for Well Registration
 - Fees based on land usage
 - Fees based on water use type (groundwater/surface water/dry land farming, etc.)

B. If We're Not Successful: State Board Intervention Fee Options

- A. \$300 annual fee per well (excludes de minimis extractors, i.e., domestic well users)
- B. \$100 per well for de minimis extractors in probationary basins
- C. \$25 - \$40 per acre foot
- D. File groundwater extraction reports and pay fees April 1



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VI. Staying Involved | March 21 Public Open House

County Administrative Office
 Tuscan Room (next to Board Chambers)
 727 Oak Street, Red Bluff
 6:00-8:00p

RSVP (optional, logistics purposes)

bit.ly/Mar21-SGMA-OpenHouse-RSVP

- Arrive anytime during open house hours
- Open format stations
- 1-on-1 conversations



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VI. Upcoming Meetings

Public Meetings

- Public Open House | Mar 21 - County Admin. Office, 727 Oak St., Red Bluff

Tehama County Regular Meetings

- Groundwater Commission at 8:30a in Board Chambers Room, 727 Oak St., Red Bluff:
Mar 27 | Apr 24 | May 22
- Flood Control Board of Directors at 10a in Board Chambers Room, 727 Oak St., Red Bluff:
Mar 25 (Special Meeting at 11a) | Apr 4 (Joint GSAs, Tentative) | Apr 15 | May 20

Corning Subbasin Regular Meetings

- Corning Subbasin Advisory Board (CSAB) at 1:30p in Ci of Corning Council Chambers, 794 Third State, Corning
 - Mar 27 (Special Meeting at 2p) | Jun 5 | Aug 7
- Corning Sub-basin GSA Committee (Glenn County) at 2p in Glenn-Colusa Irrigation Pump Station, 7854 County Rd 203, Orland
 - Mar 28 | Apr 4 (Joint GSAs, Tentative) | Apr 11 | Apr 25 | May 23



TehamaCountyWater.org
CorningSubbasinGSP.org | bit.ly/Shortlinkto-CSGSA

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VI. Stay Involved and Connect with Us

Updates

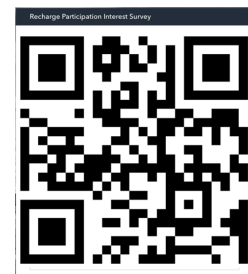
- Join the Interested Parties email list at TehamaCountyWater.org/GSA/ or by emailing TehamaGSA@tcpw.ca.gov
- Facebook: Tehama County Flood Control & Water Conservation District
- District Staff office hours:
Mon-Thur, 7:30a-4:30p
1509 Schwab Street, Red Bluff

Monitoring & Projects

- Data Viewer Map:
bit.ly/TehamaGlennSGMADataMapView



Domestic Well Monitoring



Recharge Opportunities

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VII. Open Q&A

Ask general questions now! Raise your hand or ask in the chat.

Reminders:

- March 21 Open House 6:00-8:00p
- Presentation slides & a recording of this webinar will be posted to TehamaCountyWater.org/Meetings/



Thank You!

Contact us: (530) 690-0700 or
TehamaGSA@tcpw.ca.gov

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Informational Resources - Compiled

- | | |
|---|---|
| <ul style="list-style-type: none"> ■ Websites <ul style="list-style-type: none"> ■ TehamaCountyWater.org ■ CorningSubbasinGSP.org ■ Corning Sub-basin GSA (Glenn County website): bit.ly/Shortlinkto-CSGSA ■ SGMA Resources <ul style="list-style-type: none"> ■ tehamacountywater.org/gsa/library/ ■ DWR resources (compiled QR 1-pager) -- https://bit.ly/DWR-Handouts-QRcodes ■ Groundwater Sustainability Plans <ul style="list-style-type: none"> ■ tehamacountywater.org/gsa/groundwater-sustainability-plans/ | <ul style="list-style-type: none"> ■ Well Registration (2024 Program) <ul style="list-style-type: none"> ■ tehamacountywater.org/updates/2024/01/17/2024-well-registration-program-flyers/ ■ Data Map Viewer <ul style="list-style-type: none"> ■ bit.ly/TehamaGlennSGMADataMapView ■ Monitoring and Projects <ul style="list-style-type: none"> ■ Recharge bit.ly/Recharge-InterestForm ■ Monitoring Network bit.ly/DomesticWellMonitoring-InterestForm ■ Subscribe to Interested Parties Mailing List <ul style="list-style-type: none"> ■ tehamacountywater.org/gsa/ or by emailing TehamaGSA@tcpw.ca.gov |
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