



Corning Subbasin Public Open House



TEHAMA COUNTY
FLOOD CONTROL AND WATER CONSERVATION DISTRICT

***Groundwater Sustainability Plan Implementation
Updates with a Focus on Addressing Data Gaps***

November 20, 2024

Image Credit: Luhdorff & Scalmanini Consulting Engineers

Welcome!

- This Open House is divided in two sections:
 - Full-group presentation and information-sharing, including online participants
 - Self-guided stations and one-on-one conversations with staff
- We are broadcasting and recording the informational portion of this open house!
 - Those joining us live are invited to type questions into the Zoom chat feature.
 - Individuals watching this asynchronously are encouraged to reach out to the Groundwater Sustainability Agency (GSA) managers with their questions directly via email.
 - The webinar will be posted on both the Tehama County and Glenn County websites.

Introductions

- **Conveners:** GSAs in the Corning Subbasin

- **Lisa Hunter**, Glenn County staff, support to the Corning Sub-basin GSA.



- **Justin Jenson**, Tehama County Flood Control and Water Conservation District staff, support to the Tehama County GSA.



TEHAMA COUNTY
FLOOD CONTROL AND WATER CONSERVATION DISTRICT

- **GSP Implementation Consultant**

- **Eddy Teasdale**, Luhdorff & Scalmanini Consulting Engineers (LSCE)
- **Will Anderson**, LSCE



Luhdorff & Scalmanini
Consulting Engineers

- **Facilitation Support**

- **Marisa Perez-Reyes**, Stantec Consulting Services
- **Stephanie Horii**, Consensus Building Institute



Agenda

6:00 – 6:45 **Informational Overview**

- Sustainable Groundwater Management Overview
- Corning Subbasin Conditions & the Revised GSP
- Data Gaps and Monitoring
- Overview of Recharge Projects
- Open House Station Overview
- Questions & Answers

6:45 – 7:30 **Open House Stations**

- General SGMA Questions and Getting Involved
- Groundwater Conditions and Data Gaps/ Monitoring
- Recharge Projects and In-Lieu Surface Water Use
- Management Actions and Funding

Sustainable Groundwater Management Basics



The Sustainable Groundwater Management Act (**SGMA**) was passed in 2014.



SGMA emphasizes local control through Groundwater Sustainability Agencies (**GSAs**).



Basins are required to manage their resources through Groundwater Sustainability Plans (**GSPs**).



GSPs were submitted to the California Department of Water Resources (**DWR**) by January 31, 2022 for evaluation.



Sustainability must be achieved within 20 years (by 2042).

The Purpose of SGMA

- **Promote sustainable management** of groundwater basins
- Enhance **local management** to protect **our** groundwater; the State will step in if necessary
- **Improve data collection and understanding** of groundwater resources and management
- **Avoid** or minimize **undesirable results** to groundwater



Lowering GW Levels



Reduction of Storage



Land Subsidence



Degraded Quality



Surface Water Depletion



Seawater Intrusion

SGMA in the Corning Subbasin

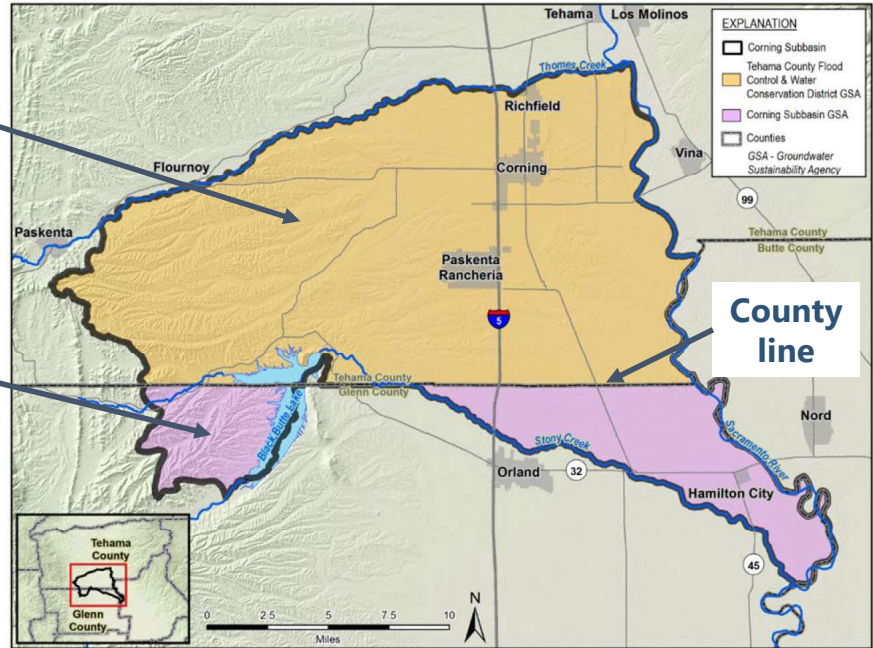
2 GSAs jointly manage the Subbasin through 1 GSP.

Tehama County Flood Control and Water Conservation District (FCWCD) acts as **GSA for the Tehama County portion** of Corning Subbasin

Corning Sub-basin GSA (CSGSA) – MOU between:

- Glenn County
- Glenn-Colusa Irrigation District
- Monroeville Water District

Acts as **GSA for the Glenn County portion**

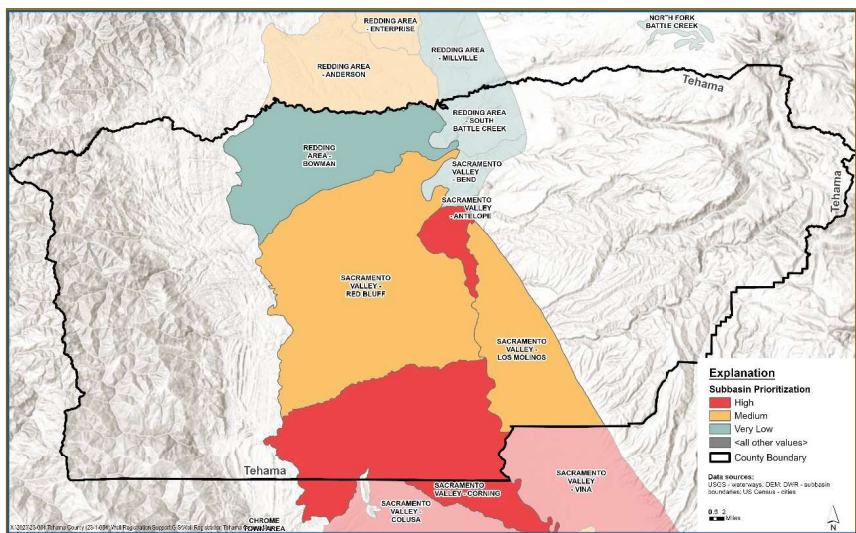
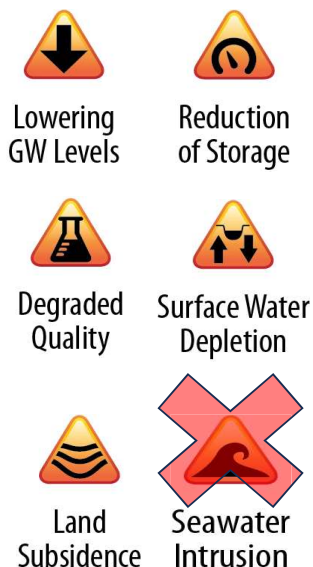


SGMA in the Corning Subbasin

- ▲ Related to Tehama County side
- ★ Related to Glenn County side

- The GSAs in the Corning Subbasin each have **their own decision-making authority:**
 - ▲ • The Tehama County FCWCD Board of Directors
 - ★ • The CSGSA Committee
- ★▲ • The GSAs are **jointly advised** by the Corning Subbasin Advisory Board (CSAB).
- ▲ • Tehama County FCWCD is also **advised separately** by the Tehama County Groundwater Commission. They also manage the Antelope, Bowman, Los Molinos, and Red Bluff Subbasins.
- ★▲ • The advisory groups can **form ad hoc working groups** on specialized topics (relevant later in presentation)

The Corning Subbasin is classed as "High Priority" for management

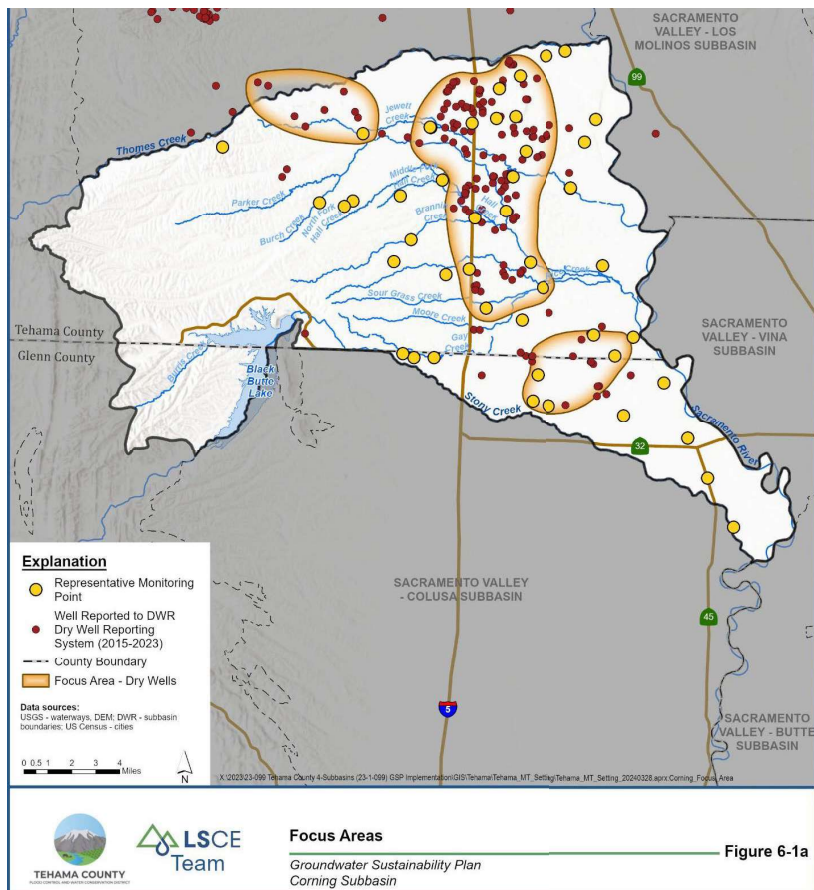


The Initial Corning GSP was Determined to be Incomplete

- **October 2023:** DWR determined that the Corning Subbasin GSP was incomplete and needed to be revised to address to the following issues:
 - **Correct Overdraft** by addressing excessive groundwater withdrawals.
 - **Revise certain Sustainable Management Criteria** to meet sustainability goals.
 - **Mitigate domestic wells going dry** as a result of the GSAs' management approach and develop a means to manage **groundwater demand**.
- **April 2024:** The Revised GSP was submitted to DWR.
- **December 2024:** Feedback from DWR is anticipated on the Revised GSP.

Features of the Revised GSP: Focus Areas

- Focus Areas (***shown on next slide***) were identified through “dry well” reports, and areas where declining groundwater levels were observed.
- **Focused efforts** will be made to address the regions that are experiencing critical water shortages.



Features of the Revised GSP: Focus Areas

Aggressive Sustainable Management Criteria (SMC)

- Implementing stricter SMC guidelines within these high-priority areas.
- Aims to mitigate overdraft risks and promote sustainable groundwater levels more effectively.

Enhanced Future Monitoring Capabilities

- Future improvements include deploying refined groundwater level and water quality monitoring systems.
- Enhanced data collection will enable more precise management and proactive response to potential issues.

Recent, Current, and Forthcoming Activities

GSP Implementation Grant Funded Work Underway

- Tasks include developing annual reports, enhancing monitoring network, and supporting recharge projects and in-lieu surface water efforts

Demand Management Program in Development

- Must be in place by January 2027
- Working groups/ad hoc committees to both GSAs have been formed.

Well Mitigation Program in Development

- Must be in place by January 2026
- Working groups/ad hoc committees to both GSAs have been formed.

Funding Efforts

Potential Options for Projects and Management Actions (PMAs)

Projects

- Direct Recharge
- In-lieu Recharge
- Reduce Non-beneficial ET

Demand Management

- Multi-benefit land repurposing
- Incentivized land use changes
- Dryland farming
- Fallowing

Well Management

- Well Inventory
- Education and Outreach
- Well Incident Reporting System
- Well Mitigation Program

Note: Underlined Items were identified as high priority PMAs during GSP development

Policy and Ordinances that Control Pumping Growth

- Land Use Ordinances
- Well Permitting Revisions

Water Transfers / Contracting

- Full use of Surface Water Allocations

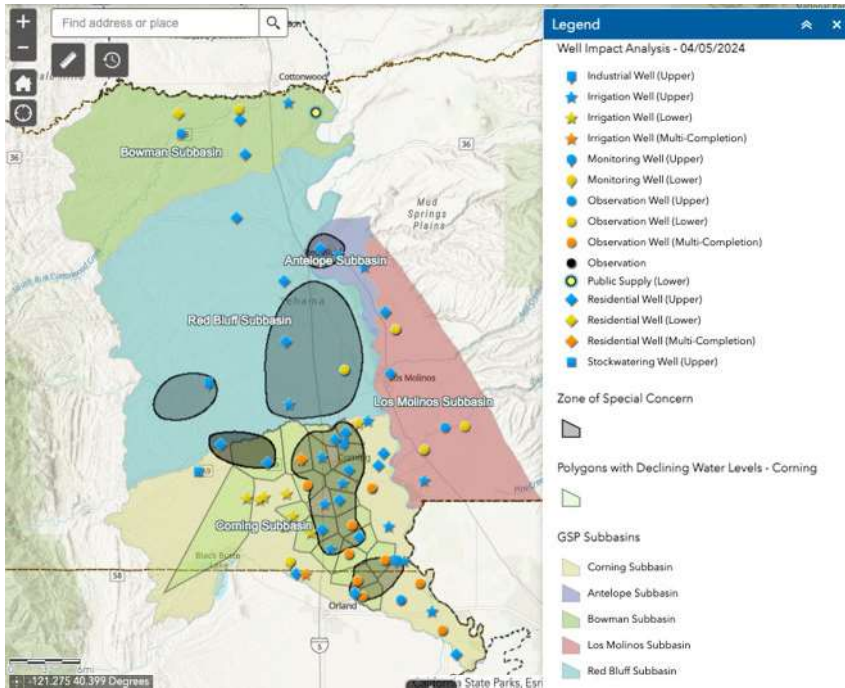
Grower Education / Best Management Practices

- Water Use Efficiency
- Conjunctive Use

Data Gaps and Monitoring

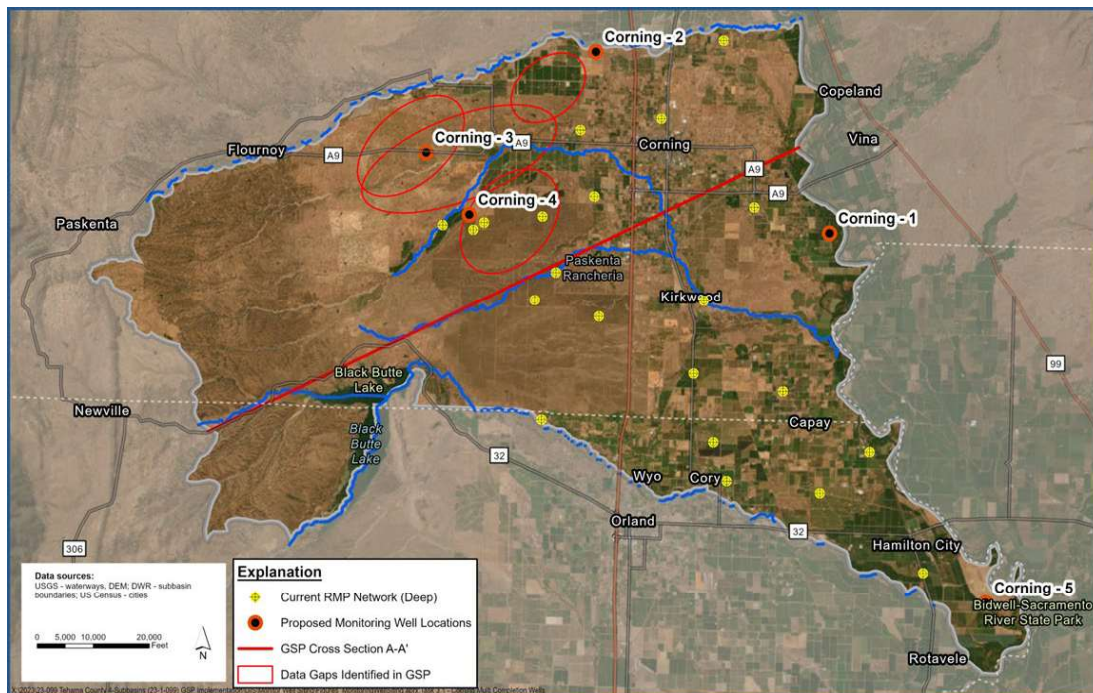
- **Installation of Multi-Completion Monitoring Wells**
- Installation of Surface Water/Groundwater Wells
- Stream Gauging
- **Biological Investigations**
- **Develop Community Domestic Monitoring Programs**
- Groundwater Level and Quality Monitoring

Data Map Viewer



<https://bit.ly/TehamaGlennSGMADataMapView>

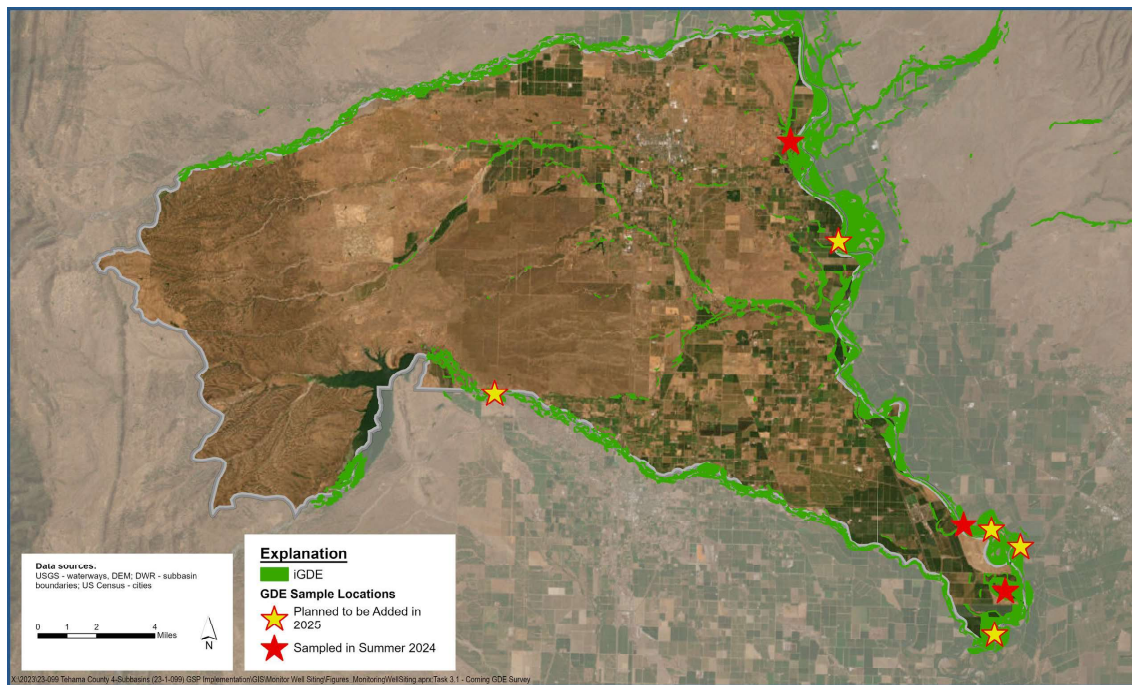
Installing New Monitoring Wells



Installing New Monitoring Wells

- The Subbasin received funds to install **five** new multi-completion monitoring wells
- Each location includes **three** wells at varying depths, between 100 and approx. 1,200 ft depending on conditions encountered while drilling
- Installation starts in **January**

Identifying/ Mapping Groundwater Dependent Ecosystems



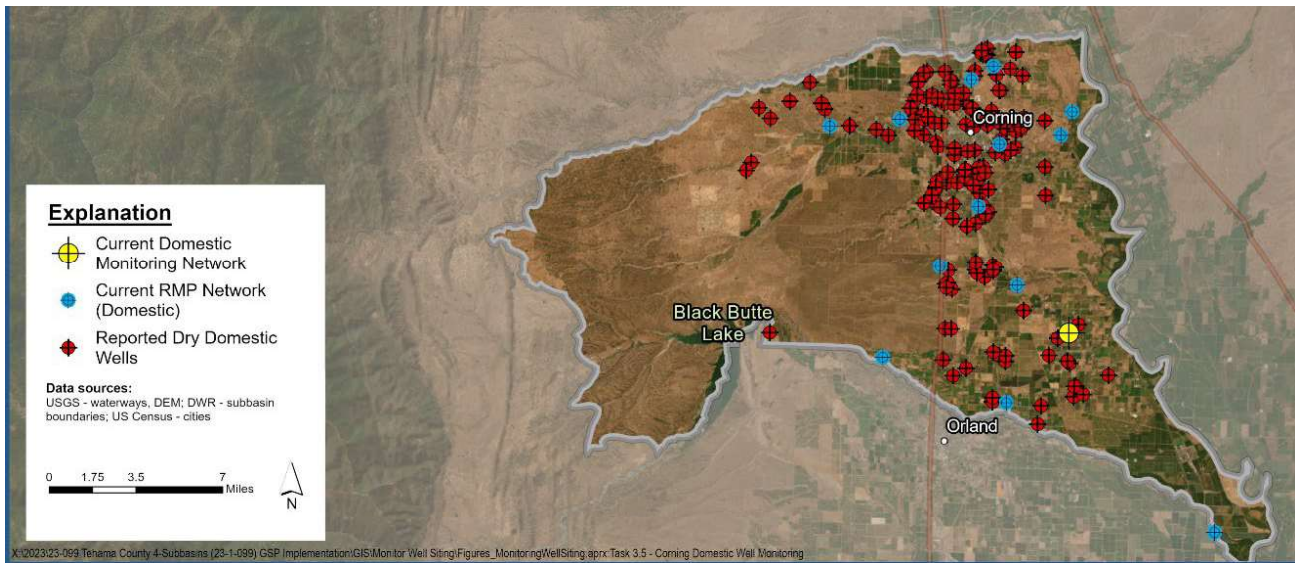
Identifying/ Mapping Groundwater Dependent Ecosystems

- Groundwater Dependent Ecosystems (GDEs) are a **protected type of groundwater user** under SGMA, and their needs must be considered in groundwater planning.
- Currently, the Subbasin has only been able to identify the locations of GDEs by reviewing satellite maps, which is **limited** and **may not be an accurate representation**.
- The GSAs received funds to **conduct field surveys** to verify and update the locations of GDE in the Subbasin, so their needs can be adequately planned for. Initial surveys have been conducted with more planned in the next year. Initial results will be reported in a **progress report planned for December**.

Community Domestic Well Monitoring Program: Why is it useful?

- **Dry well reports** need to be confirmed
- **Data gaps** need to be filled so the GSAs can make **informed management decisions**. Particularly in regards to:
 - The focus areas
 - Ensuring domestic well users are protected
- This approach has worked well in other Subbasins, such as Sonoma County Subbasins and the Yolo Subbasin

Community Domestic Well Monitoring Program: Why is it useful?

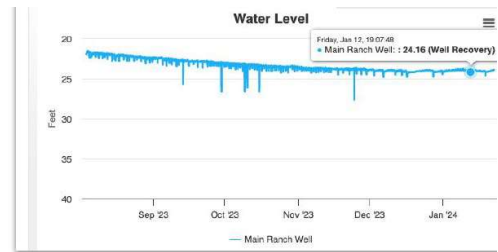
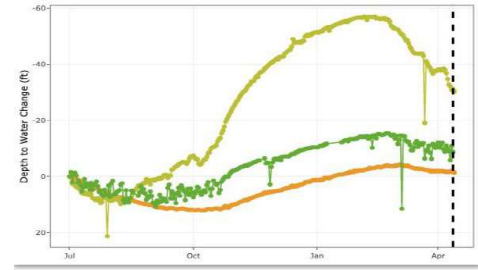


What does the program involve?

- Purchase and installation of **non-invasive monitoring equipment** on 25 volunteers' wells starting as early as mid-March 2025. The grant funds the program for **five years**. **Well Intel** provides and installs the equipment and manages the data.
- Well owners can see their groundwater levels via an **online data viewer**. Recorded water levels will be publicly available, but the **location and property data is kept private**.
- Enables the GSAs can **see whether groundwater levels are affected** due to their management actions. Data and progress will be reported annually.
- **Feedback and communication** with the domestic well user community will be facilitated through **meetings and workshops** such as this one.

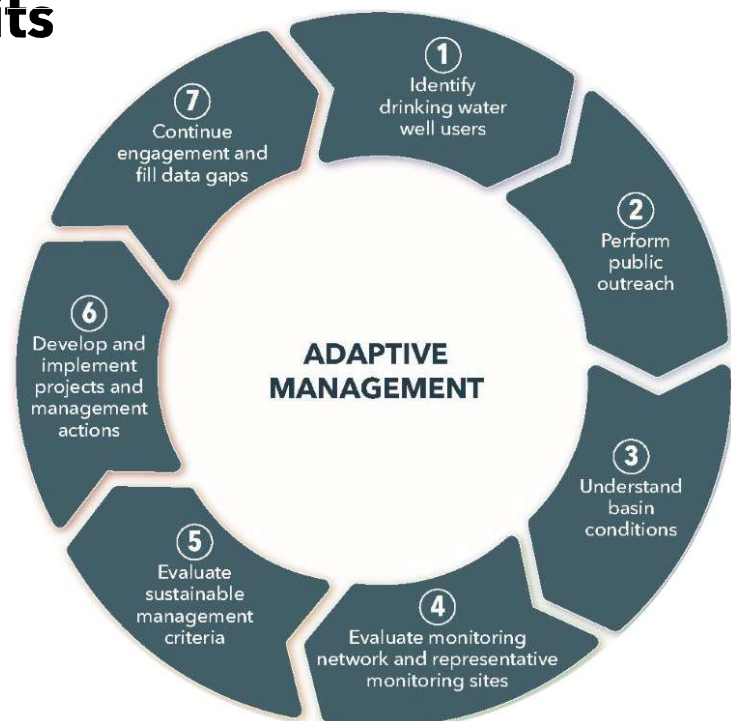
Community Domestic Well Monitoring Program: Benefits

- **Supports, protects, and minimizes risks** to shallow well users and domestic beneficial users of groundwater.
- Tracks changes in water levels across the network to **understand where and when** domestic wells are being **impacted**
- Allows users to **customize** their experience, **track** groundwater levels and well efficiency over time, **and set notifications and alerts** on their dashboard

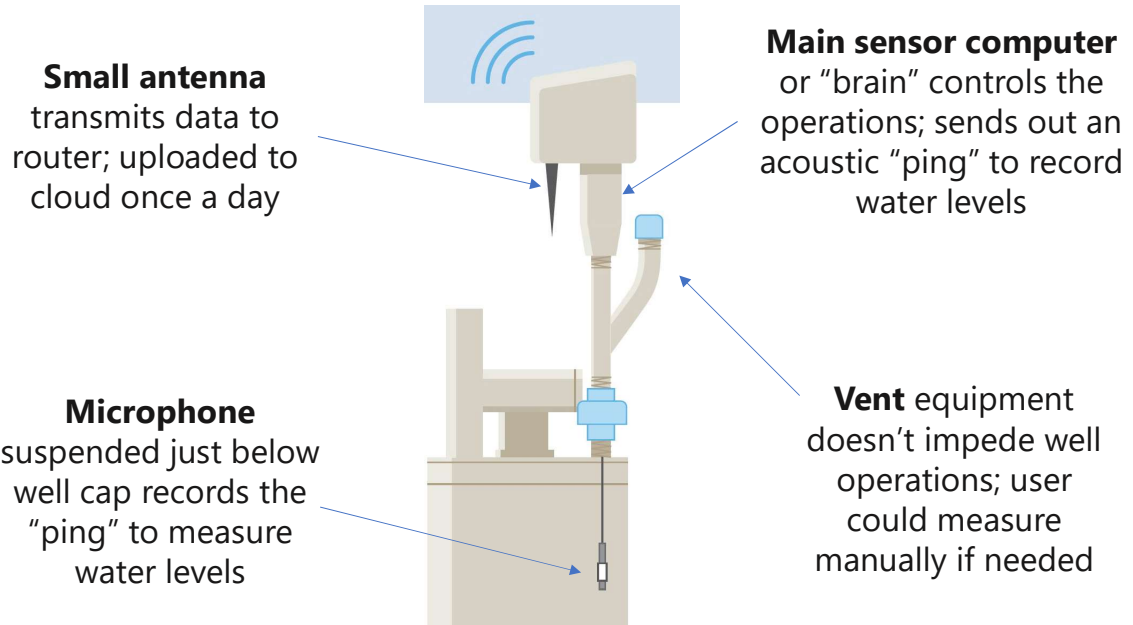


Community Domestic Well Monitoring Program: Benefits

- **Tracks the effects** of PMAs on domestic groundwater levels
- Gathers additional data points for the GSAs to draw on to make adaptive **groundwater management decisions**.



How does the monitoring equipment work?



Community Domestic Monitoring Program: Get Involved

- Minimum requirements to participate:
 - Have **WiFi** within 2,000 ft of the well
 - Have an available **opening on the well cap** for the equipment

November

- Public workshops
- Draft monitoring plan

December

- Contact interested parties and select candidates
- **Finalize participants** by end of the year

January 2025

- Communicate with selected volunteer participants

March

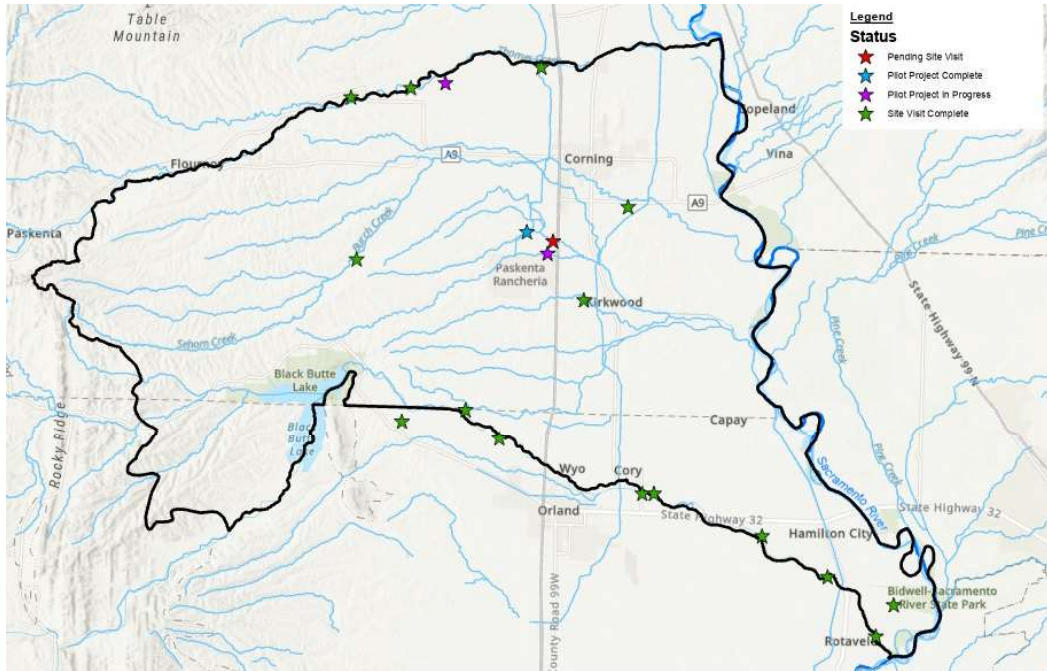
- **Install and calibrate systems.** Begin monitoring.
- Public workshop and overview of dashboard
- Integrate data into current online map viewer

Sign up here:

bit.ly/DomesticWellMonitoring-InterestForm



Recharge Projects and In-Lieu Surface Water Use

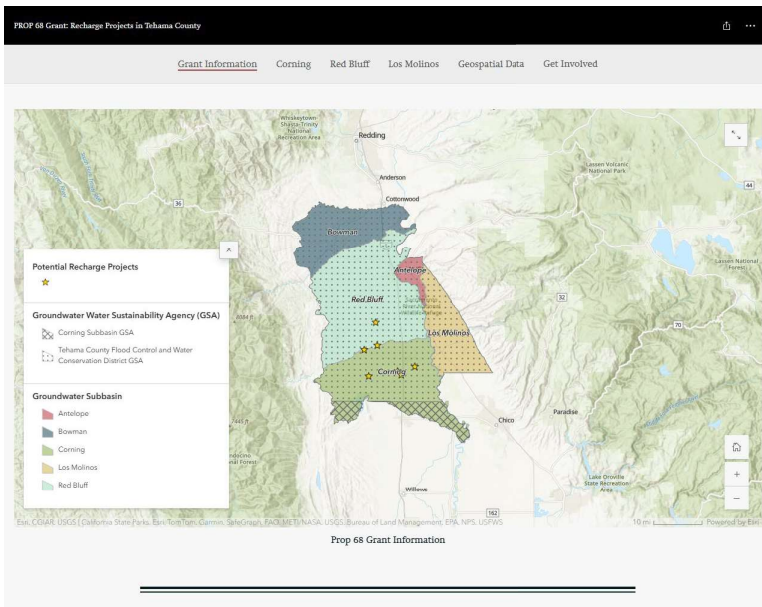


Corning Subbasin Public Open House



29

Recharge StoryMap



Prospective recharge projects are detailed in an **interactive web-based Story Map**.

Come by the **Recharge Station** during the Open House to peruse a draft version of the site: bit.ly/Recharge-StoryMap

Corning Subbasin Public Open House



30

Multi-Benefit Recharge Pilot Project



- Recharged **271 acre-feet** between September 3 and November 15
- Provided **habitat for shorebirds** and other **wildlife**
- Made possible in part through funding from **The Nature Conservancy**



Recharge Project Interest Form







Recharge Opportunities
bit.ly/Recharge-InterestForm

We want to hear from you!

If you are a **landowner** interested in participating in a recharge project or using surface water in lieu of pumping groundwater, please sign up by scanning the QR code, typing the bit.ly link into your internet browser, or connecting with us during the Open House.

Open House Stations

	General SGMA Questions, Getting Involved – Stantec, CBI	General SGMA background Outreach and Engagement Opportunities
	Groundwater Conditions and Data Gaps/Monitoring – LSCE	Explore the Data Map Viewer Information on the domestic well monitoring network
	Recharge Projects and In-Lieu Surface Water Use – LSCE	Recharge and in-lieu surface water use opportunities Explore the StoryMap
	Management Actions and Funding – GSA Managers	Demand Management and Dry Well Mitigation Program development Long-term funding considerations Well Registration (Tehama side)

Questions & Answers

Are there any questions, before we break for the open house segment? Online users, feel free to type your question(s) into the chat.

If you have questions after the presentation, please feel free to engage with us at the open house stations, or after the meeting:

- ▲ • Contact **Justin Jenson** at jjenson@tcpw.ca.gov or 530-690-0700 with questions about groundwater management in Tehama County or to receive email notices from Tehama County.
- ★ • Contact **Lisa Hunter** at lhunter@countyofglenn.net with questions about groundwater management in the Glenn County portion of the Corning Subbasin or to receive email notices from Glenn County.

Staying Involved

- ▲ Related to Tehama County side
- ★ Related to Glenn County side

Upcoming Meetings:

- ▲ ★ • **Corning Subbasin Advisory Board (CSAB)**, 1st Wednesdays bimonthly at 1:30p, 794 Third Street, Corning | **Dec 4**
- ▲ • Tehama County **Groundwater Commission**, 2nd Wednesdays at 8:30a, 727 Oak St., Red Bluff | **Dec 11**
- ★ • **Corning Sub-basin GSA (CSGSA)**, 4th Thursdays at 2p, 7854 County Road 204, Orland | **Dec 12**
- ▲ • **Tehama County Flood Control Board of Directors**, 3rd Mondays at 10a, 727 Oak St., Red Bluff | **Dec 16**
- ▲ • Tehama County Groundwater Commission **Demand Management Working Group**, listen-in at (530) 212 – 8376, conference code 142001 | **Dec 2 • Dec 18**

Interested Parties Lists

- Contact **Lisa Hunter** or **Justin Jenson** directly to be added to the email notification list for either County.

Thank you!

- ▲ Related to Tehama County side
- ★ Related to Glenn County side

The presentation slides and a recording of the webinar will be posted to:

- ▲ • <https://tehamacountywater.org/public-workshops/>
- ★ • <https://www.countyofglenn.net/corning-sub-basin-gsa> or <https://www.countyofglenn.net/corning-subbasin-open-house-nov-2024>

Open House Stations



General SGMA Questions, Getting Involved – Stantec, CBI

General SGMA background
Outreach and Engagement Opportunities



Groundwater Conditions and Data Gaps/Monitoring – LSCE

Explore the Data Map Viewer
Information on the domestic well monitoring network



Recharge Projects and In-Lieu Surface Water Use – LSCE

Recharge and in-lieu surface water use opportunities
Explore the StoryMap



Management Actions and Funding – GSA Managers

Demand Management and Dry Well Mitigation Program development
Long-term funding considerations
Well Registration (Tehama side)