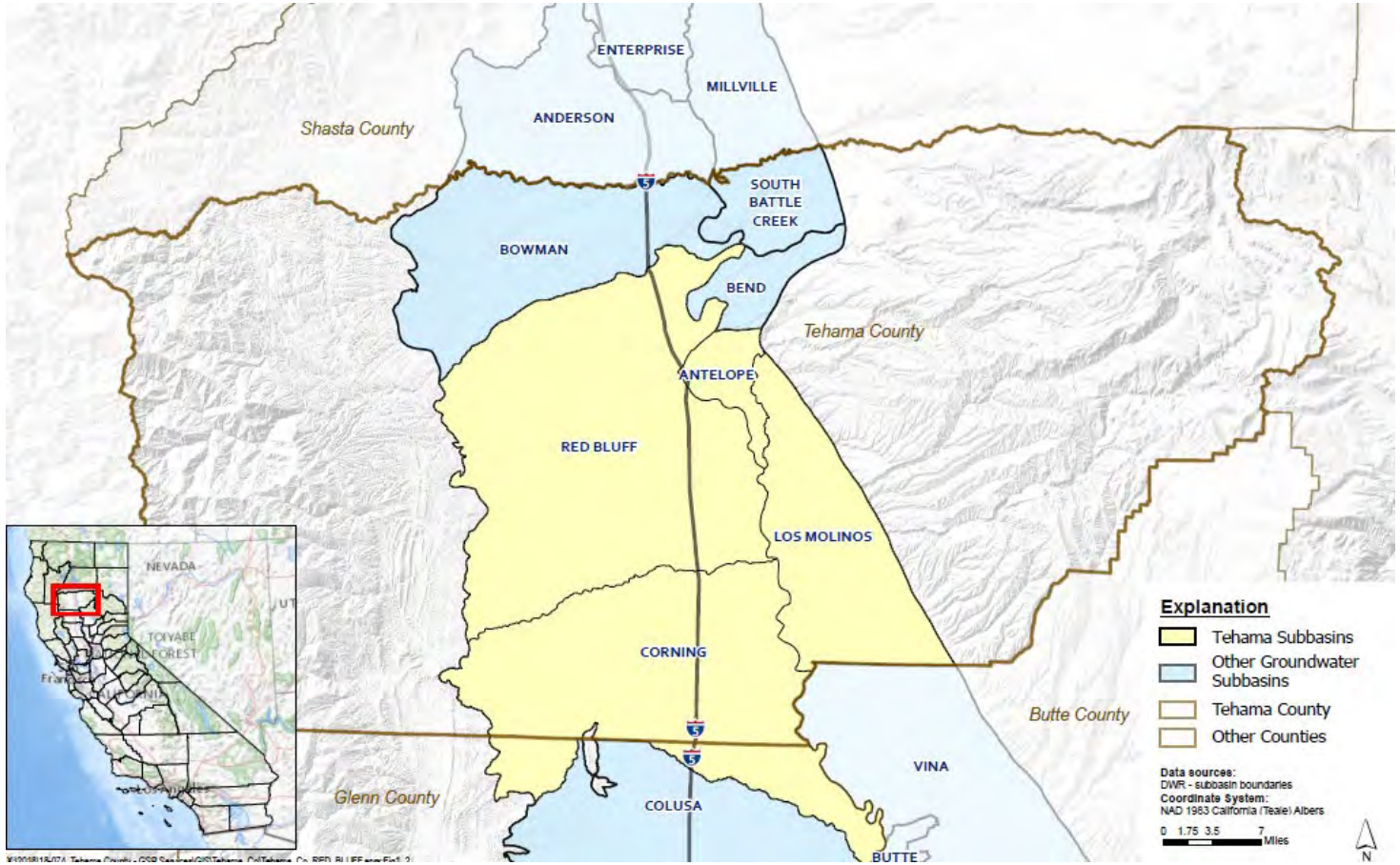
Sustainable Groundwater Management Grant Program:

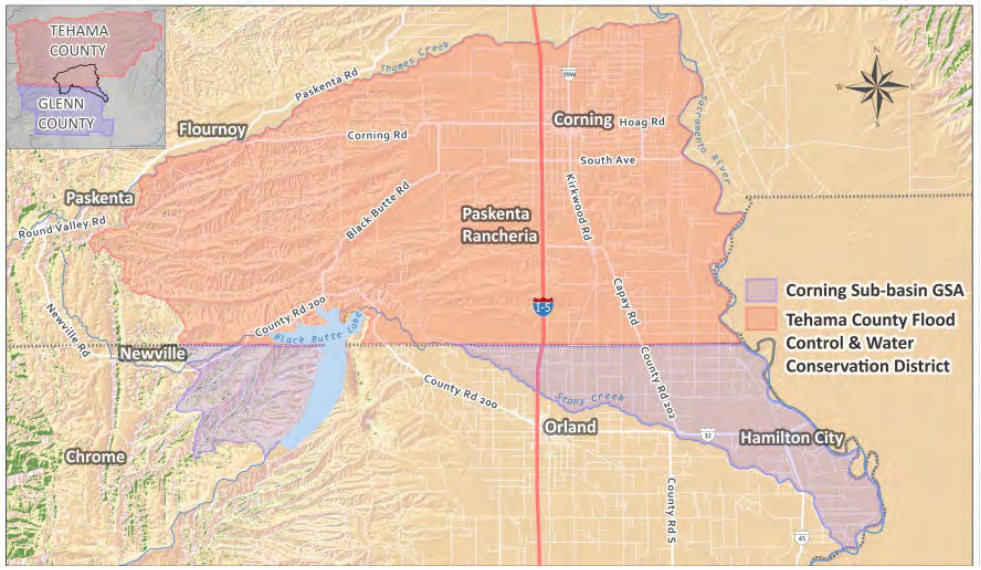
Prop 68 Round 2 Funding Application Public Workshop

November 15, 2022

Subbasins: Corning; Antelope; Los Molinos and Red Bluff

Subbasin Overview





Welcome!

Meet the Project Team

- **Conveners:** Tehama County GSA & Glenn County (Corning Subbasin)
  - Justin Jenson and Nichole Bethurem, Tehama County
  - Lisa Hunter, Glenn County
- **Technical Consultant**: Luhdorff & Scalmanini, Consulting Engineers (LSCE)
  - Eddy Teasdale, Evan Davis, and Angelica Rodriguez-Arriaga
- **DWR Grant Proposal Support: Tehama RCD**
  - Chris Wagoner
- **Facilitation/Tech Support:** Consensus Building Institute (CBI)
  - Stephanie Horii and Sophie Carrillo-Mandel

CBI

Note: The meeting will be recorded and posted to the website: TehamaCountyWater.org

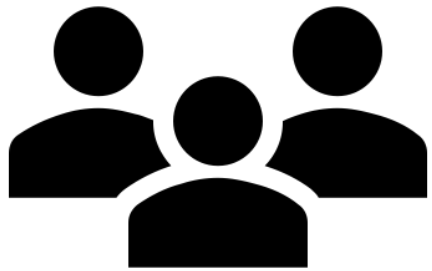
Workshop Objectives

For the public to understand:

- The content of Tehama GSA's grant application to DWR
- How the GSPs are being implemented, and potential projects in each subbasin
- How grant funding will benefit the region

For GSA staff to understand:

- How participants see priorities for GSP projects
- What questions the public has about GSP implementation



CBI

AGENDA

6:00 pm	**Open and Welcoming Remarks**
6:05 pm	**Workshop Overview**
6:10 pm	**Intro to DWR Grant Opportunity and Project List**
6:20 pm	**Overview of Tehama County SGMA Implementation**
7:05 pm	**Break - *End of online workshop***
	Breakouts discussions are in-person only
7:15 pm	**Breakout Groups by Subbasin: GSP Proposed Projects**
	Corning – Red Bluff – Los Molinos & Antelope
8:00 pm	**Adjourn**



Hybrid Meetings: Participating in the Workshop

-  “Raise Hand” on Zoom or in person
-  On Zoom, use “chat” to submit written questions
-  On Zoom, please keep yourself on MUTE when not speaking
-  Focus on Topic
-  Honor Time (~2-3 minutes per question or comment)
-  Tech-Adaptive Mind Set

Remote Participation

If participating through Zoom:

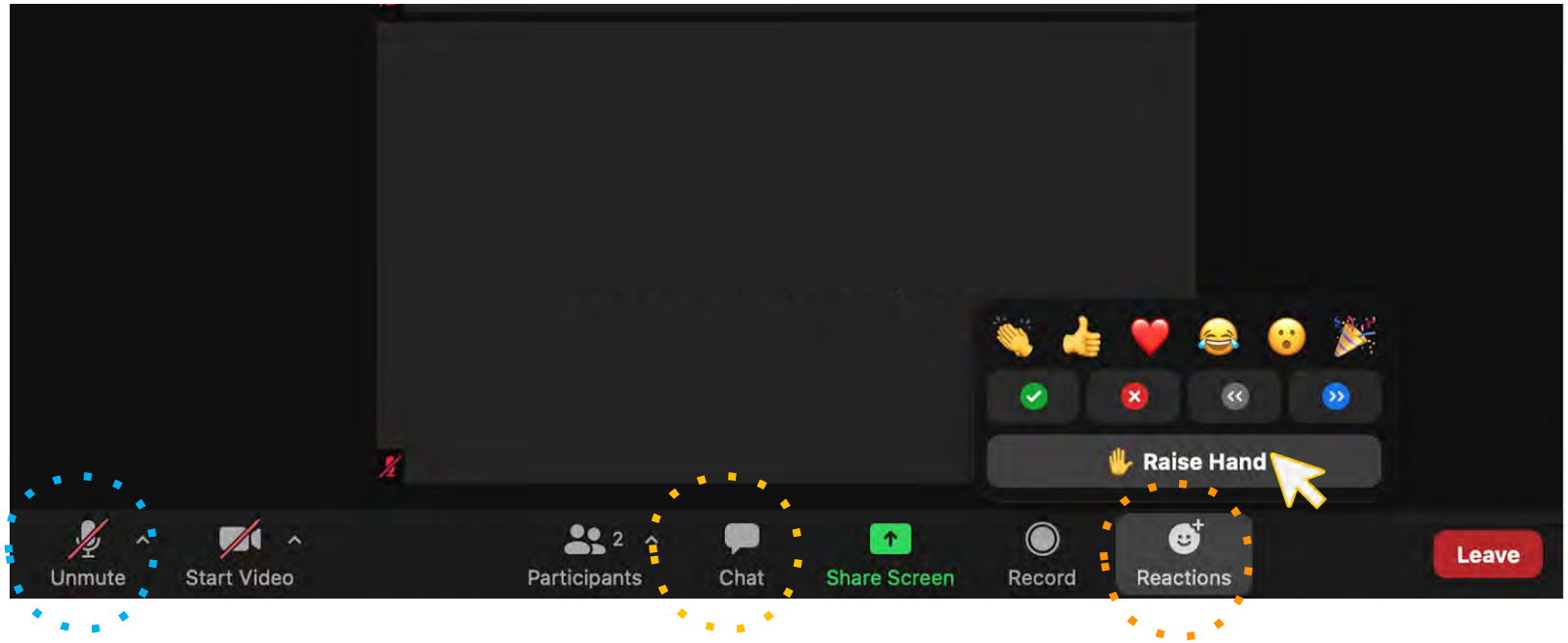
"Raise Hand" to speak
Or use **Chat** window

If dialing in by phone only:

Press *9 to "Raise Hand"

We will let you know when it is your turn to speak and can unmute yourself

*(Phone-Only Folks – Press *6 to unmute/mute)*



CBI

Questions?

TEHAMA COUNTY
Flood Control and Water Conservation District

How to Ask Questions Online:

Zoom Options:

Verbal – "Raise Hand" to speak

Written – Use Chat Box

Calling-In Options:

*9 to Raise Hand

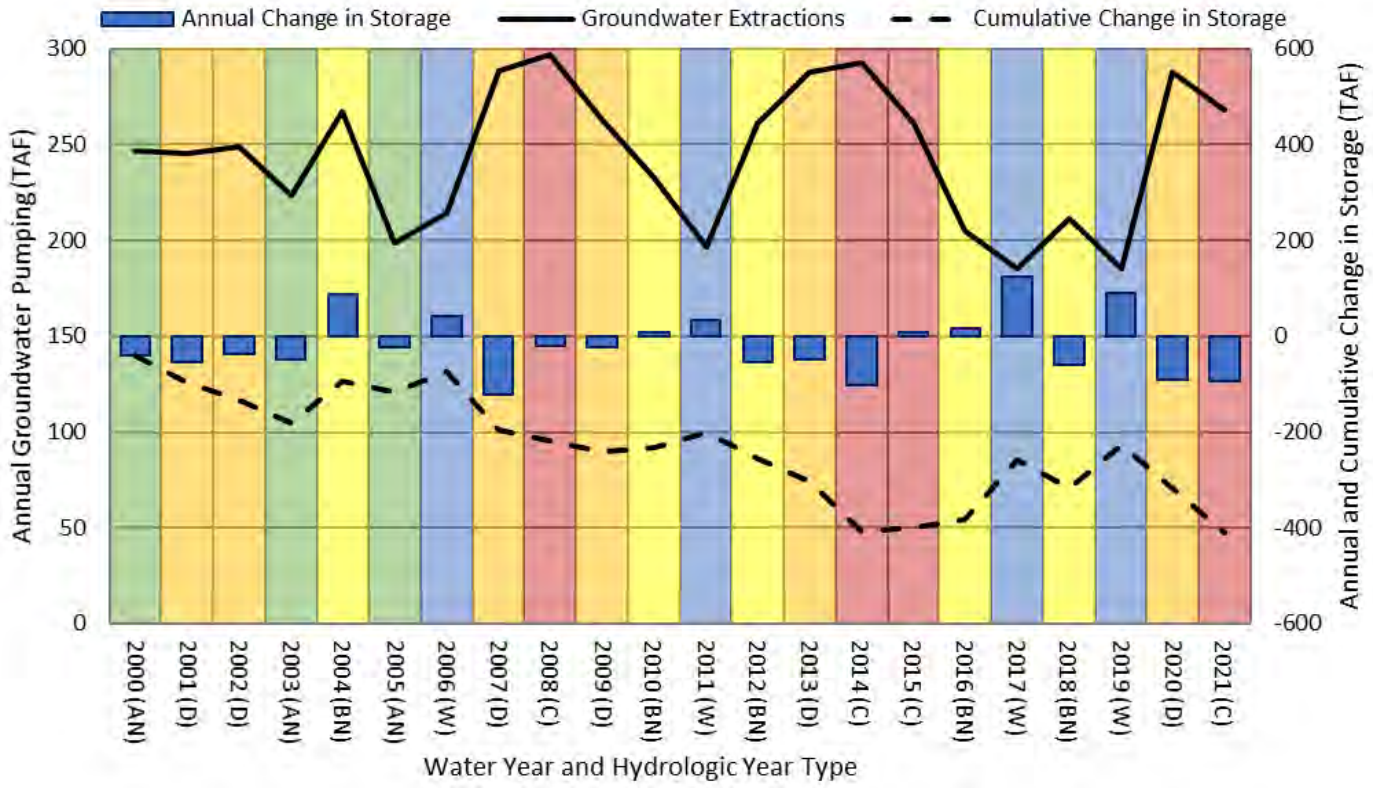
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COMMON TERMS

SGMA *("Sigma")*: Sustainable Groundwater Management Act • **GSA:** Groundwater Sustainability Agency • **GSP**: Groundwater Sustainability Plan

Maintaining and Achieving Sustainability Requires Action

- Action is required to address declining groundwater levels in the subbasins
- Action will also be required to continue to comply with SGMA (Annual Reports, Monitoring, Addressing Data Gaps, upcoming 5-year update)
- Sustainable Groundwater Management (SGM) Grant Program is an opportunity to obtain state funding to support some of these actions and activities



SGMA GSP Implementation

- Action Has Begun!
- Submission of Annual Report 2021. Early stages of 2022 report.
- Request for Proposals out for Long Term Financing study (Corning)
- Development of Well Registration Program (Tehama County)
- **Project Development**
  - **Prop 68, Round 2 Funding**
  - **Local Funding (Fees such as Prop 218/Prop 26)**
  - **United Stated Bureau of Reclamation**
  - **Drought Funding**
  - **Technical Support Services (TSS)**
  - **Resource Conservation Districts**

Intro to Prop 68

- DWR is administering the Sustainable Groundwater Management (SGM) Grant Program
- Final Guidelines and Proposal Solicitation Package (PSP) were released in December 2021
- Two rounds of grant solicitations.
  - Round 1 – funds were awarded spring 2022 for Critically Over drafted Basins ~$150 million
  - Round 2- solicitation opened October 4, 2022 (~$230 million)
- Deadline: **December 16, 2022** (recent change from Nov. 30, 2022)
- Grant awards will be: Minimum – $1 million per basin; Maximum– $20 million per basin
- Only one application will be accepted per basin/subbasin
- Eligible expenses incurred back to October 4, 2022; can be reimbursed

Intro to Prop 68

Funding Sources

Implementation: ~$231 million

- **$17 million** provided by SB-170 exclusively for San Joaquin Valley subbasins
- **$1.5 million** remaining in SB-170
- **$47 million** from AB-179
- **$47.2 million** from AB-211
- **~$62 million** in remaining Proposition 68 implementation funds
- **$57 million** in future appropriations in FY 23/24, dependent upon legislature approval

CALIFORNIA DEPARTMENT OF WATER RESOURCES

SUSTAINABLE GROUNDWATER MANAGEMENT (SGM) GRANT PROGRAM

- Est. 100+ applications
- $231 million/100 applicants
- $2 to 3 million/applicant

LSCE

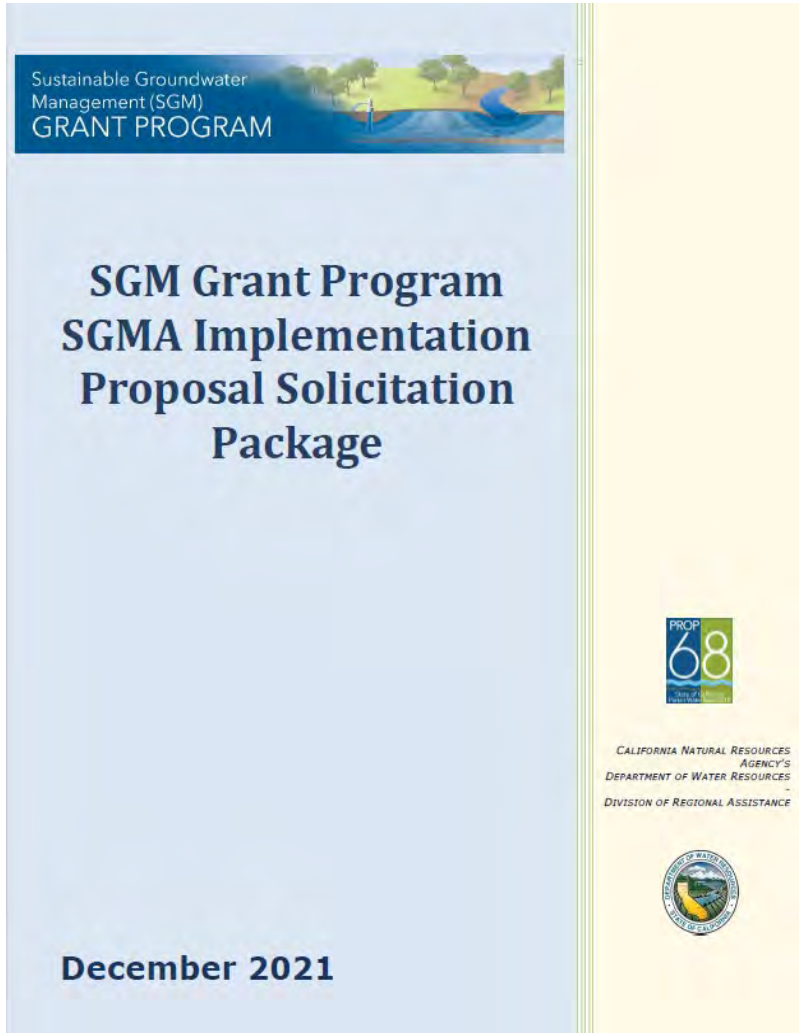
Intro to Prop 68 – Eligible Projects

Examples of eligible project activities, tasks, and/or components can include, but are not limited to, the following:

- Filling data gaps in a GSP(s) or Alternative to a GSP
- Project development activities (e.g., feasibility studies, design, permits, environmental documents)
- Long-term planning studies
- Technical and planning assistance for Underrepresented Communities
- Interested party outreach and engagement
- Vulnerability or risk assessments
- Technical assistance for Underrepresented Communities
- Engagement and outreach to Underrepresented Communities
- Evaluation of groundwater management needs

SGM Grant Program Proposal Solicitation Package 2021 11

- Impact studies on domestic and de minimis groundwater well users
- Annual reporting for GSPs and Alternative to a GSP
- Identifying and proper destruction of abandoned wells
- Identifying of recharge location(s)
- Soil carbon enhancement and Healthy Soil Initiative activities
- Native Yield studies
- Coordination activities with adjacent GSA(s)
- Instrumentation for monitoring wells (e.g., pressure transducers)
- Pilot or demonstration projects meeting the purpose of SB-170 and Proposition 68
- Installation of meters on groundwater production and agricultural wells
- Installation of monitoring well(s)
- Connection of communities to a municipal water supply (except laterals on private land)
- Groundwater recharge projects with surface water, stormwater, recycled water, and other conjunctive use projects
- Groundwater contaminant remediation or prevention projects for groundwater that serves as a source of drinking water
- Construction, rehabilitation, or expansion of conveyance facilities for groundwater recharge projects
- Wastewater treatment and water recycling facility upgrades for groundwater recharge project sources
- Stormwater and runoff capture projects that support groundwater recharge
- Groundwater recharge facility expansion
- Seawater barrier injection wells
- Groundwater recharge projects that address groundwater dependent ecosystems (GDEs)
- Projects and programs that support water supply reliability, water conservation, water use efficiency and water banking, exchange, and reclamation
- Planning, design, and environmental documentation only as a task of a Project or Component of an overall project (not a standalone task).



SGM Grant Program

- Applicable projects fall under 6 broad categories:
  - Groundwater recharge projects: feasibility studies, permitting, construction
  - Groundwater contamination cleanup
  - Projects that promote water supply reliability or water use efficiency
  - Hydrogeological investigations, monitoring networks and filling data gaps
  - Revisions, updates, or modifications to GSPs, including modeling and water budgets
  - Outreach and interbasin coordination

Projects should have a clear scope and goals to support sustainability per the Groundwater Sustainability Plan

Proposed Criteria

- Consider criteria that reflect Grant Program Preferences and Application Evaluation Criteria to maximize score
  - Achieves basin-wide or broad benefits
  - Achieves benefits in “areas of concern” (with emphasis on water levels and subsidence)
  - Directly benefits SDACs, Underrepresented Communities
  - Positively impacts small water systems, domestic well users
  - Has potential for cost-sharing by and among beneficiaries
  - Level of development (able to fully address DWR’s review questions in sufficient detail; emphasis on “shove ready” projects)
  - Has quantifiable benefits (with supporting information)

Application Evaluation Criteria (28 pts total)

- 4 – Fully addressed
- 3 – Mostly addressed, with minor details not included or unclear
- 2 – Mostly addressed, with significant details missing or unclear
- 1 – Marginally addressed
- 0 – Not addressed

- Project description and benefits: up to 26 pts (87% of total)
  - Scores of all projects evaluated separately and averaged -> ***critical that all projects have strong supporting information***
  - Equal emphasis on:
    - General project background description/map(s) (14 pts)
    - Address Human Right to Water, Underrepresented Communities, SDACs, small water systems/domestic well users (12 pts)
- Remaining points for budget (1 pts) and schedule (1 pt)
  - Full points for budget only possible if local cost share is provided

Application Evaluation Criteria

- 4 – Fully addressed
- 3 – Mostly addressed, with minor details not included or unclear
- 2 – Mostly addressed, with significant details missing or unclear
- 1 – Marginally addressed
- 0 – Not addressed

Scoring Criteria

General	1	Was a description of the proposed Project or Component provided? Did it explain the communities served, measurable objectives, minimum thresholds, plan implementation timeline, and feasibility? If an area above is not applicable, list area and state why it is not applicable. (Example "Measurable objective is not applicable because project is planning only".) Does the application demonstrate the goals, objectives, and needs of the proposed Project or Component and how the proposed Project or Component meet those? • *No funds will be awarded without clear justification for the proposed Project or Component.*	4	• 4 – Fully addressed • 3 – Mostly addressed, with minor details not included or unclear • 2 – Mostly addressed, with significant details missing or unclear • 1 – Marginally addressed • 0 – Not addressed
General Implementation Only	2-Imp	Does the Project or Component provide a description of the expected quantifiable benefits? Was an explanation of how those benefits will be evaluated and quantified provided? Did the justifications and outcomes of the benefits make sense? Are the benefits and quantitative measure of the benefit logical and reasonable given the information provided in the Work Plan? Do the claimed benefits use industry standard units of measurements? If the Project or Component is for planning activities or outreach only for a construction project, provide information on when the project will be constructed and how the funds will be obtained to complete the construction activities. For nontangible benefits, does the time of claimed benefit match the intended outcome of the proposed project?	4	• 4- Two quantifiable benefits with explanations and supporting documents. • 3 – Two quantifiable benefits lacking explanations and supporting documents. • 2 - One quantifiable benefits with explanations and supporting documentation. • 1 - One quantifiable benefit lacking explanations and supporting documents. 0 – Benefits provided but are not explained or quantified.
General Planning Only	2-GSP	Does the Project Description describe a well-coordinated proposal? If the planning activities are addressing DWR comments on their GSP, will the proposed activities fully address the DWR comments? Do the proposed activities help to fill data gaps or other areas in the GSP that was known to be lacking? Will the activities assist in the feasibility of implementation of the GSP or Alternative?	4	• 4 – Fully addressed • 3 – Mostly addressed, with minor details not included or unclear • 2 – Mostly addressed, with significant details missing or unclear • 1 – Marginally addressed • 0 – Not addressed

Application Evaluation Criteria

- 4 – Fully addressed
- 3 – Mostly addressed, with minor details not included or unclear
- 2 – Mostly addressed, with significant details missing or unclear
- 1 – Marginally addressed
- 0 – Not addressed

Scoring Criteria

General	3	Was there a regional and Project map(s) depicting the site location, current conditions, and benefitting areas? • *The information should be clear and easy to read. If not, points will not be given.*	2	• 2 – Provided and all necessary information provided • 1 – Provided but missing some information • 0 – Not provided
General	4	Does the project benefit an Underrepresented Community (-ies)? Was there a map(s) depicting the Underrepresented Community (-ies) that the project will benefit? Does the project benefit a Tribe or an SDAC? Was there a map(s) depicting the Tribe or SDAC(s) that the project will benefit? Please provide the amount of funding that will benefit the Tribe, Underrepresented Community, and/or SDAC. • *No points will be given if a map(s) is not provided.*	4	• 4 – Project benefits a Tribe or an SDAC(s) • 3- Project benefits an DAC(s) • 2- Project benefits Underrepresented Community • 1 – Project partially benefits either • 0 – Project does not benefit either

CALIFORNIA DEPARTMENT OF WATER RESOURCES

Application Evaluation Criteria

- 4 – Fully addressed
- 3 – Mostly addressed, with minor details not included or unclear
- 2 – Mostly addressed, with significant details missing or unclear
- 1 – Marginally addressed
- 0 – Not addressed

Scoring Criteria

General	5	Will the Project or Component positively impact issues associated with small water systems or private shallow domestic wells (e.g., groundwater contamination vulnerability, drawdown, etc.)? Was justification such as domestic well census results, water system maps, service area maps, etc. provided? Does the Project or Component help address the needs of the State Water Board's SAFER Program?	4	• 4 – Fully addressed • 3 – Mostly addressed, with minor details not included or unclear • 2 – Mostly addressed, with significant details missing or unclear • 1 – Marginally addressed • 0 – Not addressed
General	6	How does the proposed Project or Component address the Human Right to Water (AB 685 Section 106.3)? How will the Project or Component support the established policy of the State that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes?	4	• 4 – Fully addressed • 3 – Mostly addressed, with minor details not included or unclear • 2 – Mostly addressed, with significant details missing or unclear • 1 – Marginally addressed • 0 – Not addressed
Scope of Work	7	Did the proposal provide a description of the tasks/subtasks that will be completed as part of this grant Project? • *No funds will be awarded without clear justification for the proposed tasks/subtasks.* • *Please use the examples provided within the templates provided to ensure the scope of work and deliverables are consistent with the level of detail necessary for a DWR grant agreement, if awarded.*	4	• 4 – Fully addressed • 3 – Mostly addressed, with minor details not included or unclear • 2 – Mostly addressed, with significant details missing or unclear • 1 – Marginally addressed • 0 – Not addressed

CALIFORNIA DEPARTMENT OF WATER RESOURCES

Sustainable Groundwater Management (SGM) GRANT PROGRAM

Application Evaluation Criteria

- 4 – Fully addressed
- 3 – Mostly addressed, with minor details not included or unclear
- 2 – Mostly addressed, with significant details missing or unclear
- 1 – Marginally addressed
- 0 – Not addressed

Scoring Criteria

Budget	8	Is a budget summary table provided? Is the budget reasonable for the project? Is the budget table provided coincide with the scope of work and schedule table?	1	• 1 – Consistent and feasible • 0 – Not consistent and feasible
Schedule	9	Is the schedule table consistent with the budget table and the description in the application? Is the schedule feasible?	1	• 1 – Consistent and feasible • 0 – Not consistent and feasible
		Total Range of Possible Points	0-28	
		(a) Average of Questions 1 – 7 for Multiple Component Applications		
		(b) Total Score for Questions 8 and 9		
		Total Points Overall Project:		
		TOTAL FUNDING RECOMMENDED:		$

CALIFORNIA DEPARTMENT OF WATER RESOURCES

Sustainable Groundwater Management (SGM) GRANT PROGRAM

Grant Program Schedule

- Application due December 16, 2022
- Draft Award List Posted for Public Review – May 2023
- Final Award List Posted – August 2023
- Execute Agreements – September- November 2023
- Reimbursable grant funds from October 4, 2022 – April 30, 2026
- Final Payment Date – On or before June 30, 2026

Next Steps

- Overview of Projects (with a common theme)
- Breakout Groups by Subbasin
  - Corning
  - Red Bluff
  - Los Molinos/Antelope
- Meet with staff to discuss projects/components
  - Rank projects/components (1-4)
- Projects approval by groundwater commission/Board of supervisors (Nov/Dec)
- Finalize grant applications (Dec)



Questions?

TEHAMA COUNTY
Flood Control and Water Conservation District

How to Ask Questions Online:

Zoom Options:

Verbal – "Raise Hand" to speak

Written – Use Chat Box

Calling-In Options:

*9 to Raise Hand

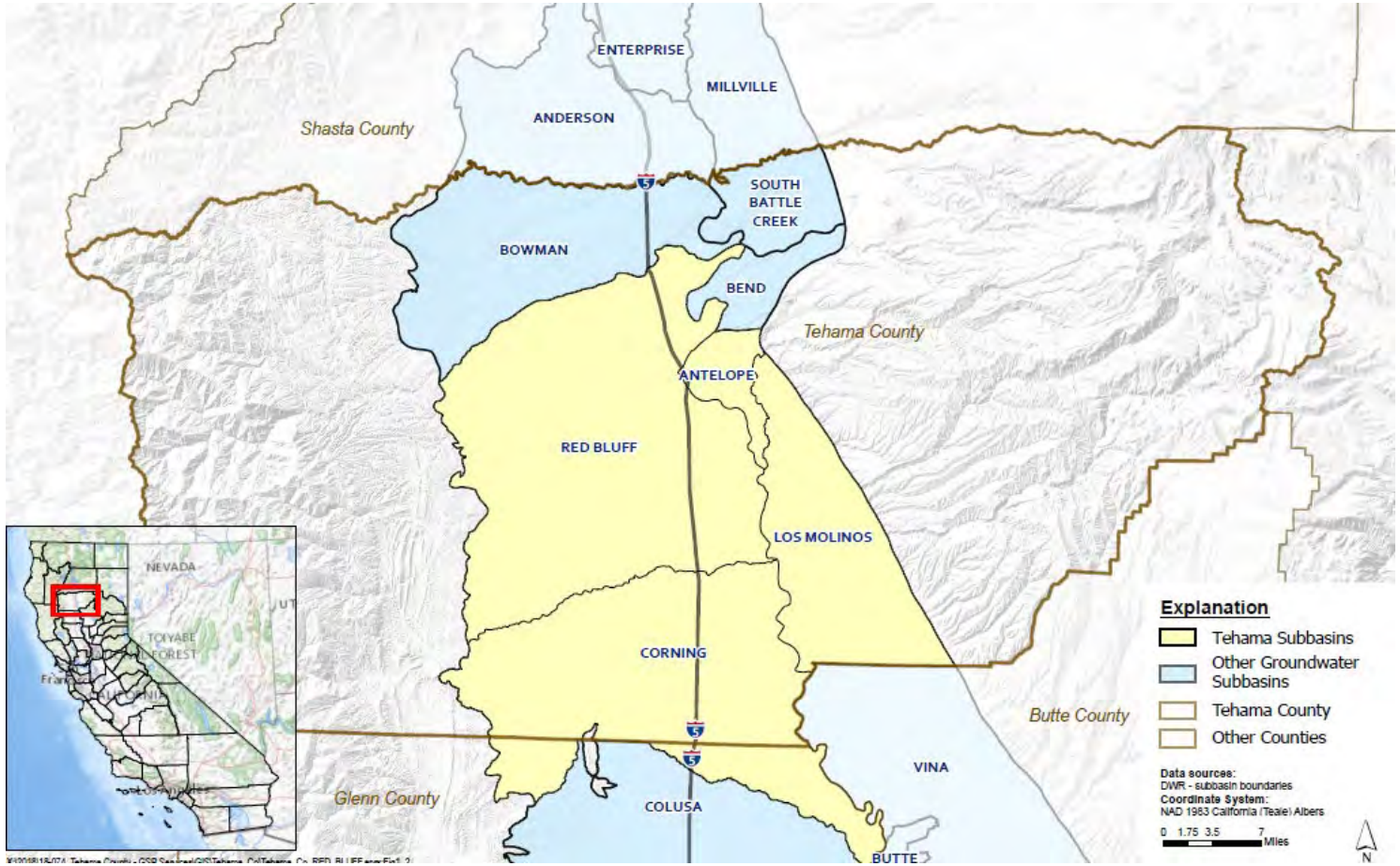
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COMMON TERMS

SGMA *("Sigma")*: Sustainable Groundwater Management Act • **GSA:** Groundwater Sustainability Agency • **GSP**: Groundwater Sustainability Plan

Component (Project) Overview

- Component 1: GSP Implementation, Outreach, and Compliance Activities
- Component 2: Monitoring Network Enhancements to Fill Data Gaps
- Component 3 (Red Bluff, Los Molinos, Antelope): Grower Education Program
- Component 4: Recharge Projects
- Breakout
  - Detailed Specifics of Subbasin Components



GSP Implementation, Outreach, and Compliance Activities (Component 1)

Annual Report	GSP Updates/ Responses to DWR Comments	5-year GSP Evaluation Report	GSP Implementation Program Management	Policy and Ordinance Update (Corning specific)
Collect and analyze data for previous water year	Review DWR evaluation letter and identify areas that need to be revised	Review any new information	Create fee study to provide funding fore future GSP implementation	Revise well permit process to protect nearby wells
Develop maps and calculations	GSA meetings to review and discuss DWR comments	Summarize current groundwater conditions	Support management activities including board/committee meetings and public outreach	Establish water and land use management restrictions on future well pumping and new agricultural growth
Write report	Identify revisions to be incorporated into the 5-year evaluation report	Evaluation of updated water budgets and overdraft conditions to include changes in water use	Fiscal management using existing bookkeeping methods and development of a fee study	
GSA Meeting	*IF* GSP deemed incomplete: • DWR consultations • GSP revisions and modifications during 180-day resubmittal period • Board adoption of revised GSP	Relevant actions taken by the GSAs, including a summary of regulations, ordinances, legal enforcement or action related to the implementation of the GSP	GSP website updates, Coordinate outreach materials and presentations	
Upload data and submit to DWR	Upload revised GSP and submit to DWR	Outreach activities and GSA meetings	Consultant management, grant administration and ensuring data is submitted correctly and on-time	

GSP Implementation, Outreach, and Compliance Activities (Component 1)

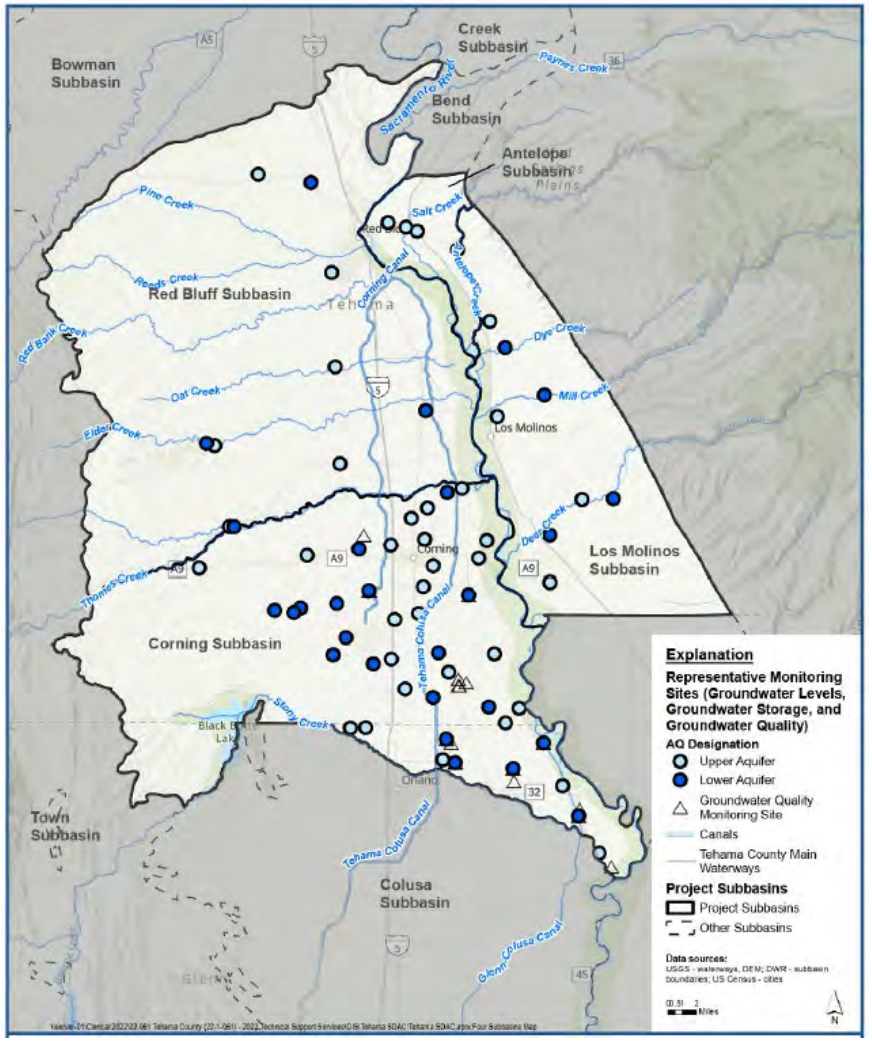
- **Budget**
  - Prepare Annual Reports - $120K to $135K (4 Annual Reports)
  - Modify GSP in Response to DWR Determination - $80K to $125K
  - Five-Year GSP Update - $320K to $375K
  - GSP Implementation Program Management (Fee Study to fund GSP) - $150K to $180K
  - Grant administration – 10%

Total: $929,500 to $1,100,000

- **Schedule**
  - Prepare Annual Reports – Start October 2022 Finish by April 2026
  - Modify GSP in Response to DWR Determination – Start October 2022 Finish by April 2026
  - Five-Year GSP Update – Start October 2022 Finish by April 2026
  - GSP Implementation Program Management (Fee Study to fund GSP) – Start October 2022 Finish by April 2026

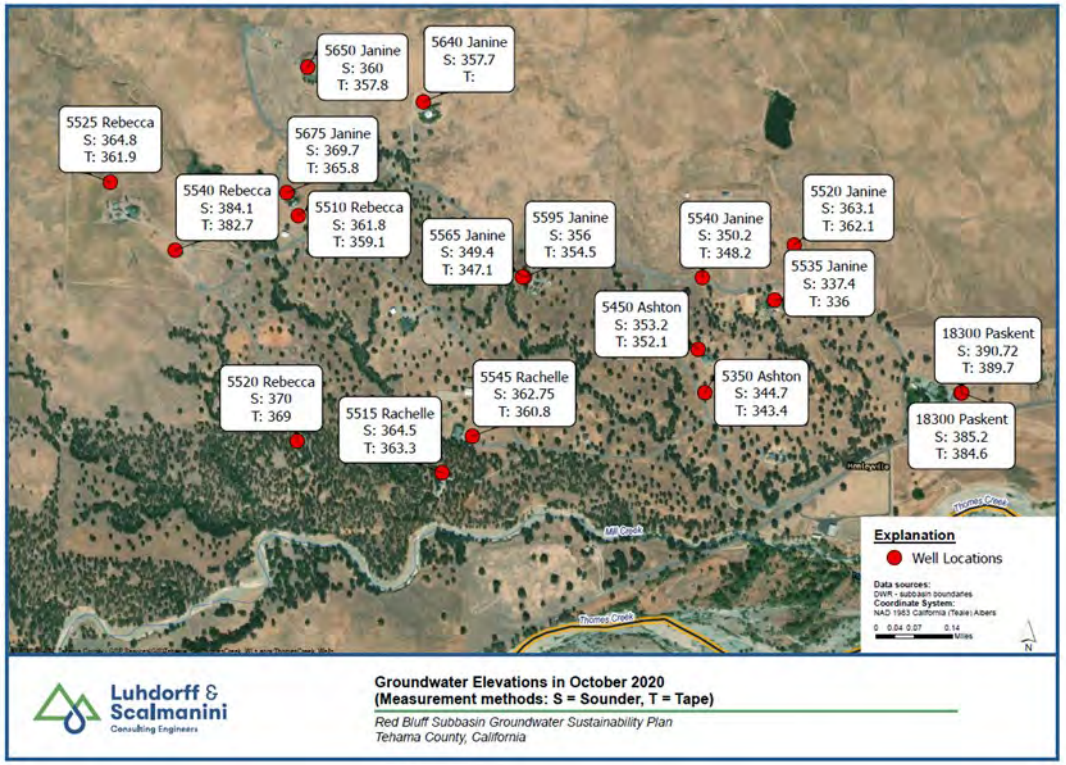
Enhancements to Monitoring Networks to Fill Data Gaps (Component 2)

- **Background and Summary**
  - Develop community domestic well monitoring program
    - Voluntary
    - Managed by landowners
    - Equip with data loggers and telemetry
  - Groundwater Levels & Water Quality Monitoring
    - Install new multi-completion monitoring wells
    - Equip with data loggers and telemetry
  - Surface Water Groundwater Monitoring
    - Install shallow (<30') monitoring wells and stream gauges
    - Support evaluation of groundwater dependent ecosystems
    - Conduct a synoptic stream gage study
    - Conduct a GDE biological survey



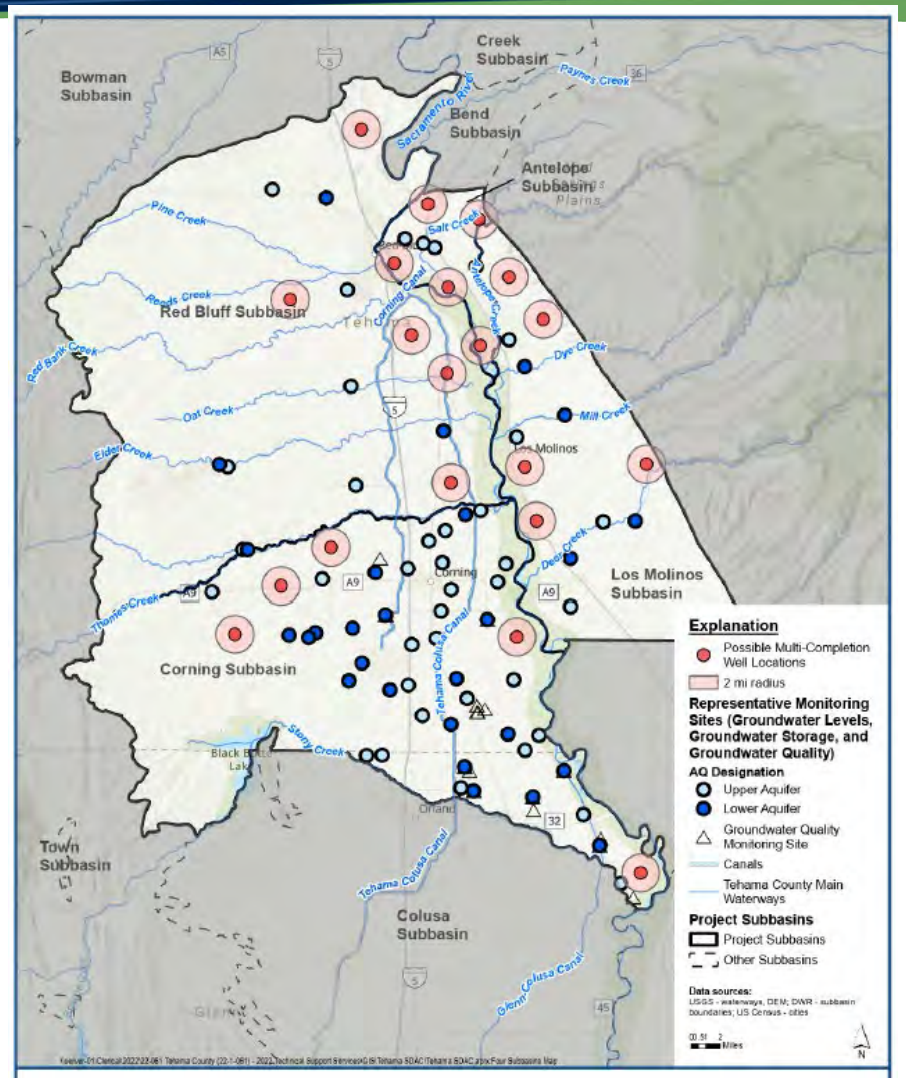
Enhancements to Monitoring Networks to Fill Data Gaps (Component 2)

- **Community Domestic Well Monitoring Program**
  - Outline domestic well-identification needs (i.e., to build a well inventory, and conduct water sampling)
  - Establish an inventory of domestic well materials and resources that can be used as part of education, outreach, and engagement efforts
  - Begin planning, scheduling, and budgeting for a focused domestic well program
  - Identify ways to strengthen and facilitate coordination between county and state agencies for dry well reporting, ordinances, and permitting



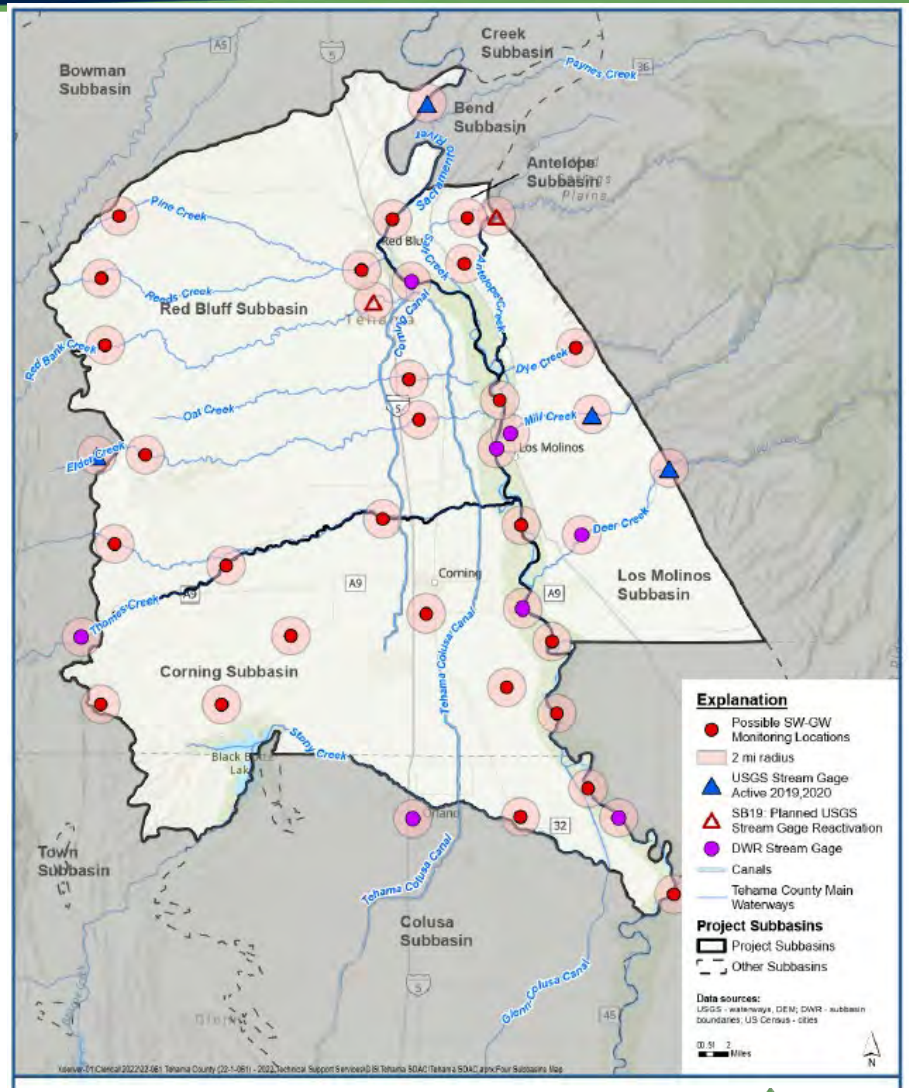
Enhancements to Monitoring Networks to Fill Data Gaps (Component 2)

- **Install New Multi-Completion Monitoring Wells**
  - Add up to 5 multi-completion monitoring wells
    - would help to further refine both the horizontal and vertical understanding of groundwater flow and water quality
  - Wells would be incorporated into the current monitoring well network



Enhancements to Monitoring Networks to Fill Data Gaps (Component 2)

- **Expand SW/GW Monitoring Network and GDE Monitoring**
  - SW/GW Monitoring
    - Add up to 10 Shallow wells
    - Add Stream Gages
    - would help to further refine both the horizontal and vertical understanding of surface water/groundwater connectivity
  - Perform a biological Study on potential GDE
  - Conduct synoptic stream gage study on major streams and channels



Enhancements to Monitoring Networks to Fill Data Gaps (Component 2)

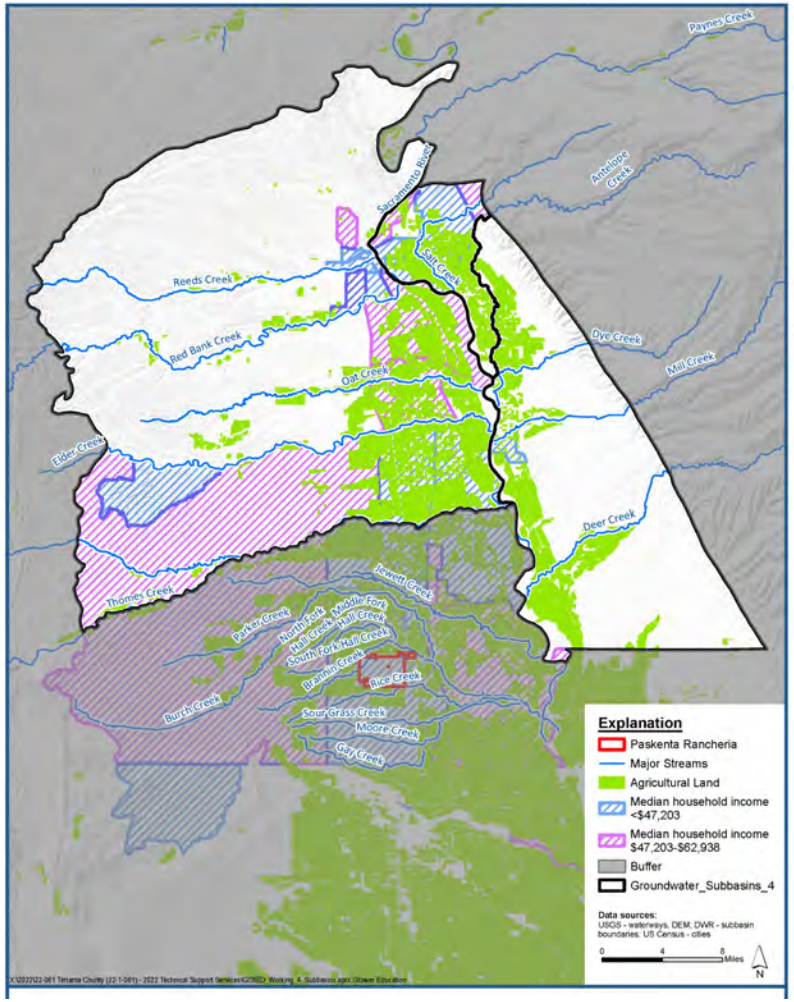
- **Budget**
  - Installation of multi-completion wells - $735K to $1.2 Million
  - Install SW/GW monitoring equipment- $225K to $450K
  - Synoptic Stream Gaging - $95K to $125K
  - Conduct Biological Survey- $75K to $110K
  - Develop Community Domestic Monitoring Program – $125K to $210K
  - Groundwater monitoring network enhancements – $165K to $260K
  - Grant Administration – 10%

Total: $1,624,000 to $2,618,000

- **Schedule**
  - Complete all enhancements – Start October 2022 Finish by April 2026

Grower Education (Antelope, Los Molinos, Red Bluff) (Component 3)

- **Background/Summary**
  - Establish an outreach/education program to teach on-farm practices for sustainable groundwater management
  - 4 topics include:
    - Maximizing use of surface water ("in-lieu" recharge)
    - Managing soil to improve infiltration and root zone soil moisture storage
    - Reducing non-beneficial evapotranspiration
    - Precision nutrient management



Grower Education (Component 3)

- **Key Tasks**
  - Partnership Development
    - Partner with the Tehama county mobile irrigation lab and other sub-consultants with educational experience
  - Program Development
    - Create defined curriculum and lesson plans as well as an implementation plan
  - Education Program Implementation
    - Conduct grower education and outreach activities based on the implementation plans. Provide growers the technical assistance they need to implement any farming practice changes as presented in the educational program materials







Source: 2021 MIL Brochure

Grower Education (Component 3)

- **Budget**
  - Education Topic Planning - $20K
  - Partnership Development - $40K
  - Program Development - $30K
  - Education Program Implementation - $40K
  - Grant Administration – 10%

Total: $143,000

- **Schedule**
  - Education Topic Planning – Start October 2022 Finish by April 2026
  - Partnership Development – Start October 2022 Finish by April 2026
  - Program Development – Start October 2022 Finish by April 2026
  - Education Program Implementation – Start October 2022 Finish by April 2026

Recharge Projects Overview (Component 4)

- **Background/Summary**
  - Multi-Benefit recharge project
    - Seeks to strategically flood agricultural fields to recharge groundwater supplies and create winter habitat for migratory birds
    - Growers would volunteer and would receive incentive funds
  - Direct groundwater recharge of stormwater and flood water
    - Uses existing infrastructure and conveyances to transport excess surface water in wet years to unlined canals and drainages for recharge
    - Corning seeks to divert from Sacramento River in winter of wet years

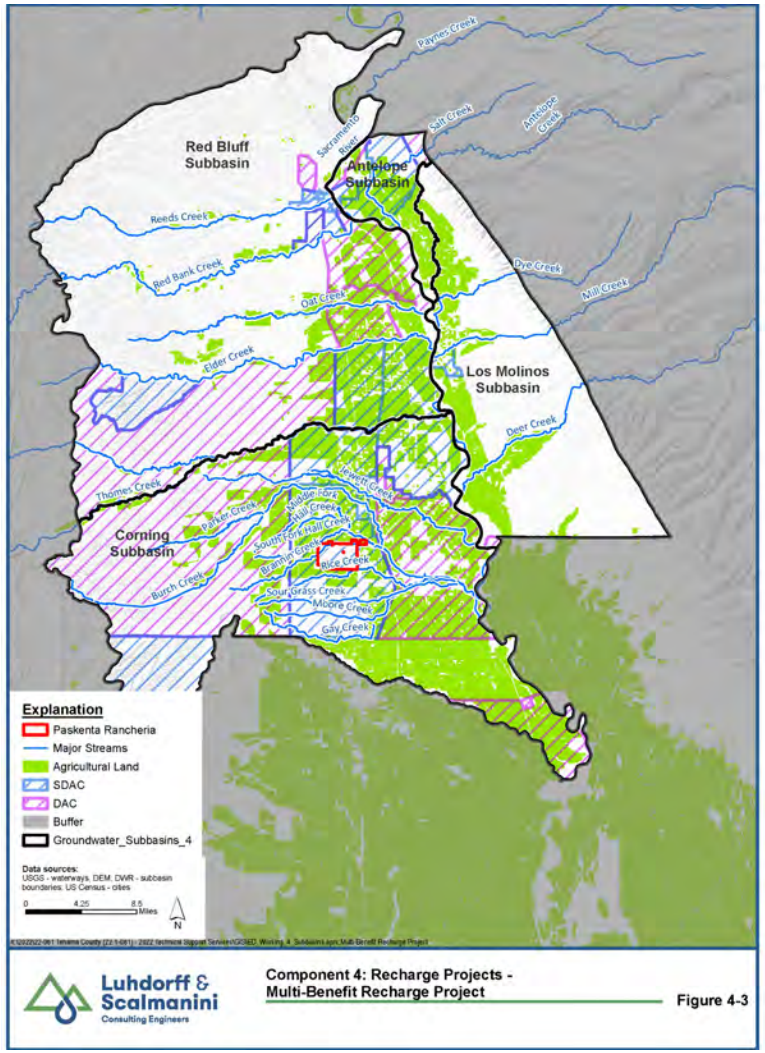
Table 4-12. Estimated Average Recharge Volume and Temporary Wetland Habitat Formation for the Thomes Creek and Elder Creek Groundwater Recharge Project (2022-2072).

PROJECT	ESTIMATED PARTICIPATING AREA (ACRES/ WATER YEAR)	ESTIMATED AVERAGE ANNUAL RECHARGE[1] (AF/WATER YEAR)	ESTIMATED AVERAGE ANNUAL RECHARGE DEPTH (AF/AC-WATER YEAR)	ESTIMATED ANNUAL HABITAT BENEFIT (ACRES/ WATER YEAR)
Thomes Creek and Elder Creek Groundwater Recharge Project	2,070	690	0.33	2,070

[1] Average annual increase in deep percolation in the Red Bluff Subbasin attributed to the Thomes Creek and Elder Creek groundwater recharge project, calculated as the difference between the Tehama IHM projected future water budget results with 2070CT climate change and projects, and the projected future water budget results with 2070CT climate change but without projects.

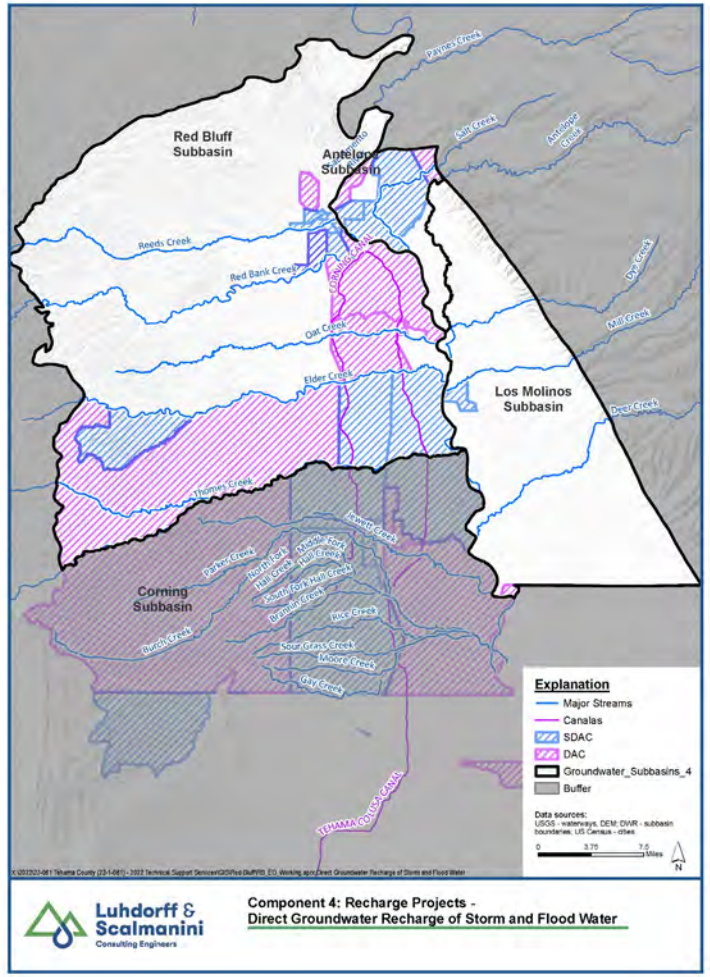
Recharge Projects Overview (Component 4)

- **Key Tasks**
  - Multi-Benefit recharge project
    - Planning and feasibility study
    - TNC coordination
    - Required environmental documentation for CEQA
    - Implementation planning
  - Direct groundwater recharge of stormwater and flood water
    - Feasibility study
    - 100% designs and plans
    - Required environmental documentation for CEQA-NEPA compliance



Recharge Projects Overview (Component 4)

- **Key Tasks**
  - Multi-Benefit recharge project
    - Planning and feasibility study
    - TNC coordination
    - Required environmental documentation for CEQA
    - Implementation planning
  - Direct groundwater recharge of stormwater and flood water
    - Feasibility study
    - 100% designs and plans
    - Required environmental documentation for CEQA-NEPA compliance



Recharge Projects Overview (Component 4)

- **Budget**
  - Antelope Recharge Projects - $473K
  - Los Molinos Recharge Projects - $473K
  - Red Bluff Recharge Projects - $2.2 Million
  - Corning Recharge Projects - $1.6 Million

- **Schedule**
  - Antelope Recharge Projects – Start October 2022 Finish by April 2026
  - Los Molinos Recharge Projects – Start October 2022 Finish by April 2026
  - Red Bluff Recharge Projects – Start October 2022 Finish by April 2026
  - Corning Recharge Projects – Start October 2022 Finish by April 2026

Projects Summary (Components 1 - 4)

- **Total Funding Requests**
  - Antelope Recharge Projects - $3,107,500
  - Los Molinos Recharge Projects - $3,938,000
  - Red Bluff Recharge Projects - $6,011,500
  - Corning Recharge Projects - $7,605,950

- **Schedule**
  - Antelope Projects – Start October 2022 Finish by April 2026
  - Los Molinos Projects – Start October 2022 Finish by April 2026
  - Red Bluff Projects– Start October 2022 Finish by April 2026
  - Corning Projects – Start October 2022 Finish by April 2026

Questions?

TEHAMA COUNTY
Flood Control and Water Conservation District

How to Ask Questions Online:

Zoom Options:

Verbal – "Raise Hand" to speak

Written – Use Chat Box

Calling-In Options:

*9 to Raise Hand

*(*6 to Unmute/Mute)*

COMMON TERMS

SGMA *("Sigma")*: Sustainable Groundwater Management Act • **GSA:** Groundwater Sustainability Agency • **GSP**: Groundwater Sustainability Plan

Next Steps

TEHAMA COUNTY
Flood Control and Water Conservation District

Staff will provide updates to GSA Boards and advisory groups

Tehama County (Corning, Red Bluff, Los Molinos & Antelope)

- Nov 21: Tehama Board Meeting (11:00a)
- Dec 7: Groundwater Commission Meeting (8:30a)

Glenn County (Corning Subbasin)

- Dec 7: Corning Subbasin Advisory Board (1:30p)
- Dec 15: Corning Sub-basin GSA Committee Meeting (2:00p)



DWR Grant due December 16

Workshop recording, presentations, and high-level summary will be posted online

Thank You!

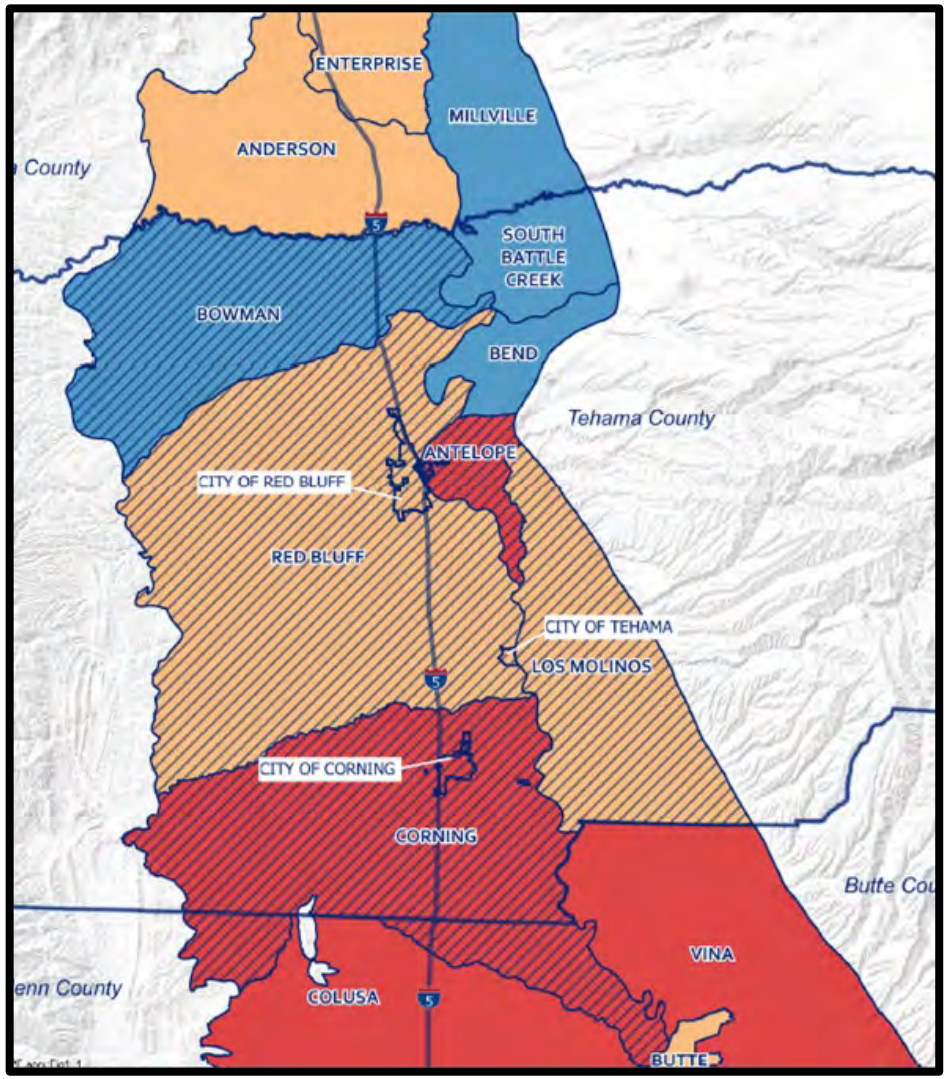
TEHAMA COUNTY
Flood Control and Water Conservation District

Learn more at the websites:
TehamaCountyWater.org | CorningSubbasinGSP.org

With questions or **to sign up for the mailing list**, contact GSA Staff:

Tehama County Subbasins - Nichole Bethurem
at (530) 690-0700
or via email nbethurem@tcpw.ca.gov

Corning Subbasin - Lisa Hunter
lhunter@countyofglenn.net



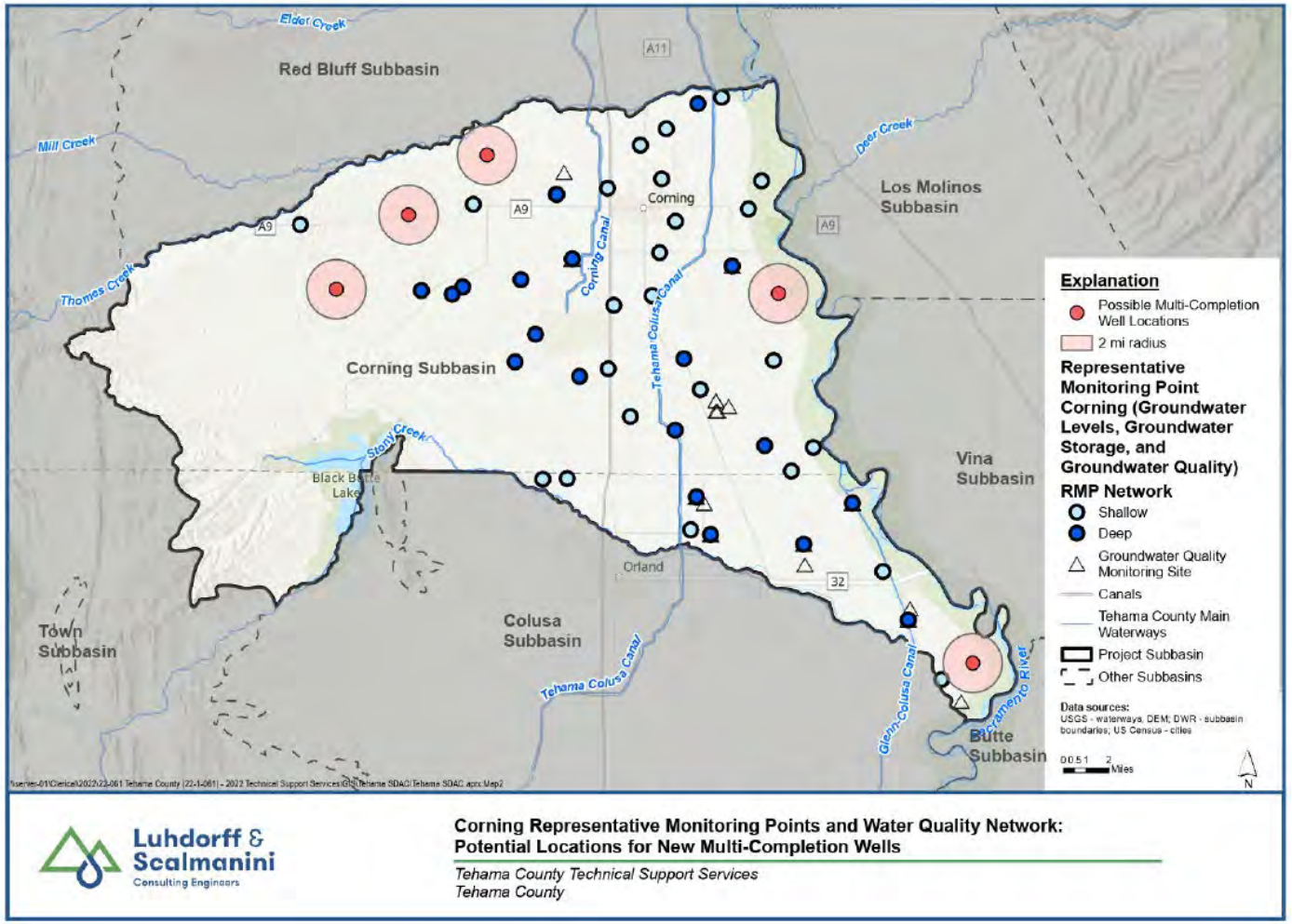
43

Breakout Groups

- Take a brief break
- Reconvene in one of three breakout groups:
  - Corning
  - Red Bluff
  - Antelope & Los Molinos
- GSA staff & consultants will review:
  - Subbasin-specific maps
  - Proposed projects
- Attendees will have the opportunity to:
  - Ask questions
  - Rank projects in order of priority
- GSA staff & consultants will capture questions and comments

Corning Enhancements to Monitoring Networks to Fill Data Gaps (Component 2)

- Expand groundwater level monitoring network to cover localized spatial data gaps
- Expand groundwater quality network to include domestic wells
- Videolog wells within monitoring network without construction information
- Perform aquifer tests
- Expand geologic understanding with AEM data and geophysical surveys
- Create well permitting and land use policy updates



Corning Enhancements to Monitoring Networks to Fill Data Gaps (Component 2)

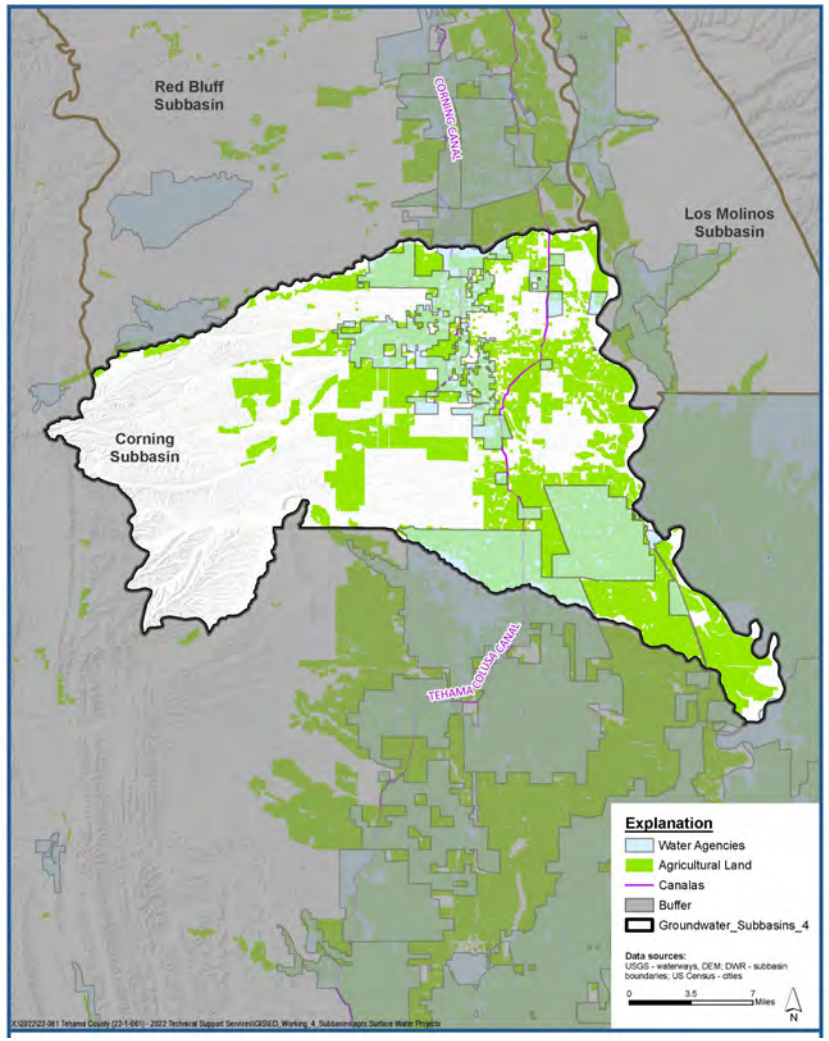
- **Budget**
  - Installation of multi-completion wells - $1.2 Million
  - Install SW/GW monitoring equipment- $450K
  - Synoptic Stream Gaging - $125K
  - Conduct Biological Survey- $110K
  - Develop Community Domestic Monitoring Program – $210K
  - Groundwater monitoring network enhancements – $260K
  - Expand groundwater quality network - $315K
  - Videolog wells with unknown construction - $150K
  - Perform aquifer tests - $275K
  - Expand geologic understanding with AEM - $135K
  - Well permitting and ordinance update - $225K
  - Grant Administration – 10%

Total: $3,531,000

- **Schedule**
  - Complete all enhancements – Start October 2022 Finish by April 2026

Regional Conjunctive Use Project (Component 3)

- **Background/Summary**
  - Groundwater is preferred to surface water for irrigation
    - Cheaper
    - Arrives pressurized
  - Current surface water allocations are not fully used
  - This project would aim to:
    - Create incentive program for use of surface water
    - Upgrade water districts conveyance systems to deliver pressurized water
    - Upgrade irrigation systems for dual source irrigation



Regional Conjunctive Use Project (Component 3)

- **Key Tasks**
  - Planning and design
    - Identify WD willing to be part of project
    - Identify upgrades needed
    - Create incentive program
    - Create 100% design plans
    - Complete all permits and environmental compliance documentation
  - Construction
    - Install conveyance system upgrades
    - Install dual source irrigation systems
  - Outreach
    - Establish coordination with growers willing to participate
  - Monitoring
    - Monitor the amount of surface water used in-lieu of groundwater

Regional Conjunctive Use Project (Component 3)

- **Budget**
  - Planning and design - $225K
  - Construction - $915K
  - Outreach - $30K
  - Monitoring - $45K

Total: $1,336,500

- **Schedule**
  - Planning and design – Start October 2022 Finish by April 2026
  - Construction – Start October 2022 Finish by April 2026
  - Outreach – Start October 2022 Finish by April 2026
  - Monitoring – Start October 2022 Finish by April 2026

Corning Recharge Projects (Component 4)

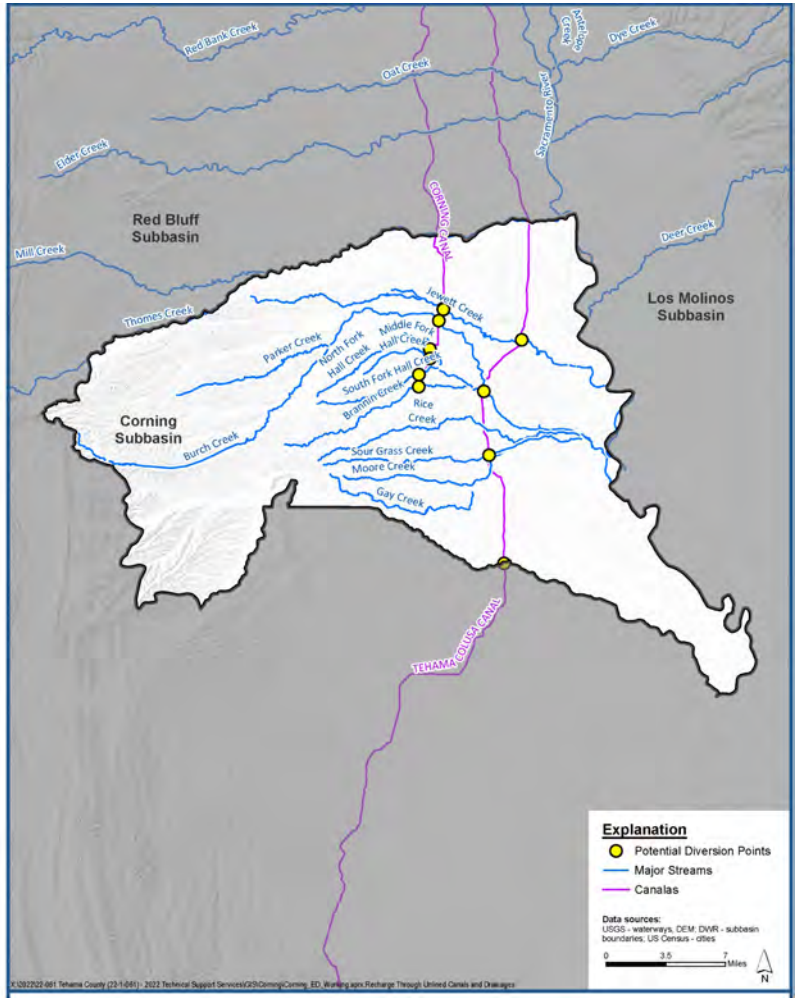
Background/Summary

Corning Subbasin is interested in pursuing five different recharge related projects:

- Recharge through unlined canals and drainages
  - Direct recharge through unlined canals during high flow periods. Water is diverted from Sacramento River in the off season.
- Groundwater recharge pond south of corning
  - Use the current USBR runoff and stormwater pond for holding water for irrigation (in-lieu) or direct recharge
- Multi-Benefit recharge project
  - Create an incentive program for farmers to maintain flooded fields to proved direct recharge and migratory bird habitat
- California Olive Ranch groundwater recharge
  - Divert water from the Tehama-Colusa Canal via existing irrigation canals for direct recharge
- Thomes Creek flood water diversions for recharge
  - Divert flood flows from Thomes Creek to be used for irrigation purposes

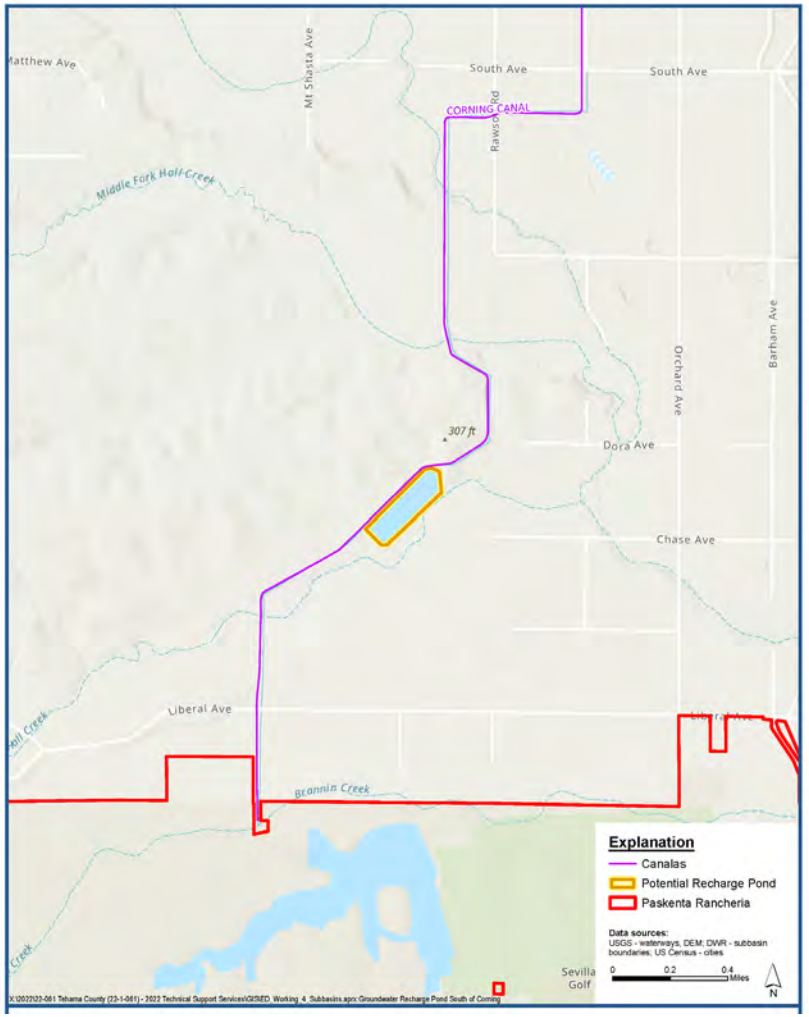
Corning Recharge Projects (Component 4)

- **Key Tasks**
  - Recharge through unlined canals and drainages
    - Conduct feasibility study, planning, and preliminary design activities associated with necessary infrastructure installation
    - Identify necessary CVPIA legislature updates required for this project.
    - Develop planning and design documents for conveying water to recharge areas
    - Acquire environmental permits and completion of CEQA-NEPA documentation.
    - Complete 100% design documents



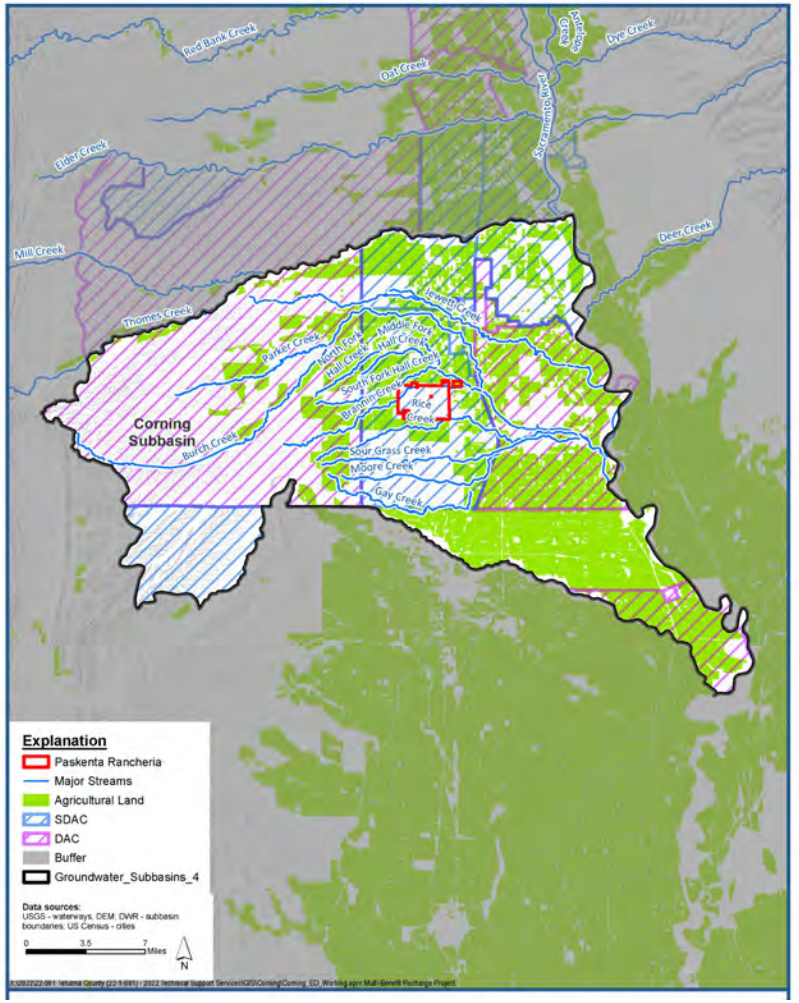
Corning Recharge Projects (Component 4)

- **Key Tasks**
  - Groundwater recharge pond south of Corning
    - Conduct planning and design activities associated with the use of the USBR storm control pond.
    - Develop planning and design documents necessary to update the existing pond.
    - Work with USBR to assess the feasibility and capacity of the existing pond as storage for in-lieu recharge.
    - Environmental permits and completion of CEQA documentation.
    - Acquire necessary access agreements required for GSA use of the pond.
    - Prepare final implementation report.



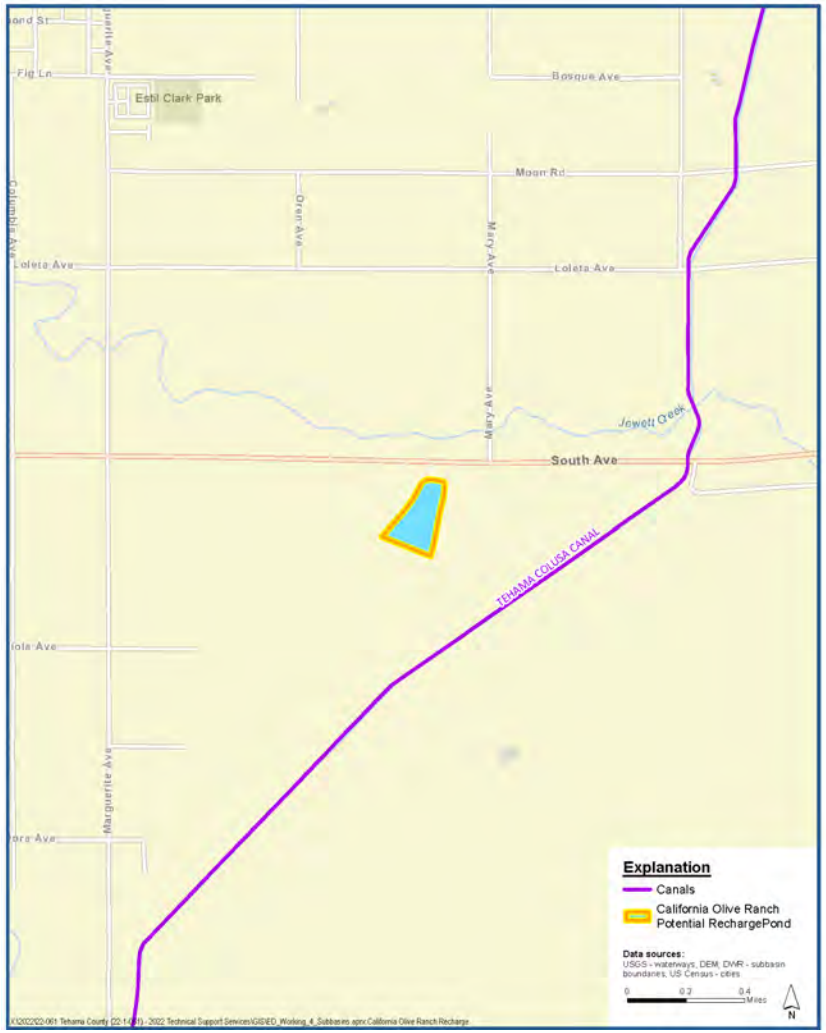
Corning Recharge Projects (Component 4)

- **Key Tasks**
  - Multi-Benefit recharge project
    - Conduct feasibility study, planning, and design to identify potential sites for recharge
    - Coordinate with growers willing to participate in this project.
    - Develop planning and design documents necessary for site preparation to enhance recharge potential and wetland habitat and conveyance system upgrades.
    - Install necessary conveyance infrastructure updates based on a technical assessment .
    - Prepare selected fields for flooding and install any necessary monitoring equipment.



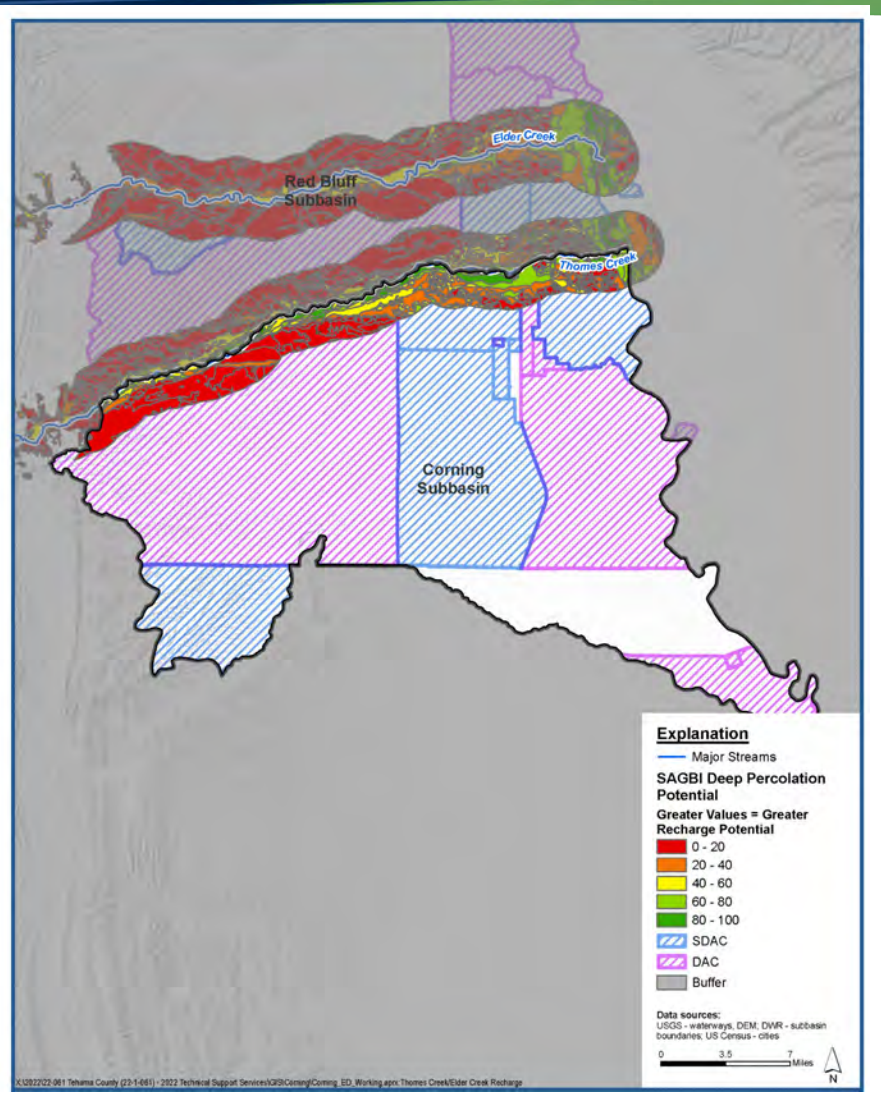
Corning Recharge Projects (Component 4)

- **Key Tasks**
  - California Olive Ranch groundwater recharge
    - Conduct planning and design activities associated with installation of necessary infrastructure
    - Develop planning and design documents
    - Work with the California Olive Ranch to assess the feasibility and capacity of the recharge project for in-lieu recharge
    - Acquire necessary permits and access agreements required for GSA monitoring of infiltration.
    - Prepare final implementation report.



Corning Recharge Projects (Component 4)

- **Key Tasks**
  - Thomes Creek flood water diversions for recharge
    - Conduct feasibility study, planning, and design activities
    - Develop planning and design documents Complete permitting and environmental/CEQA documentation
    - Install necessary recharge infrastructure, which may be ASR wells, recharge basins, detention structures, or fallowed fields.



Corning Recharge Projects (Component 4)

- **Budget**
  - Recharge through unlined canals and drainages - $200K
  - Groundwater recharge pond south of corning - $150K
  - Multi-Benefit recharge project - $430K
  - California Olive Ranch groundwater recharge - $230K
  - Thomes Creek flood water diversions for recharge - $480K

Total: $1,638,450

- **Timeline**
  - Recharge through unlined canals and drainages – Start October 2022 Finish by April 2026
  - Groundwater recharge pond south of corning – Start October 2022 Finish by April 2026
  - Multi-Benefit recharge project – Start October 2022 Finish by April 2026
  - California Olive Ranch groundwater recharge – Start October 2022 Finish by April 2026
  - Thomes Creek flood water diversions for recharge – Start October 2022 Finish by April 2026

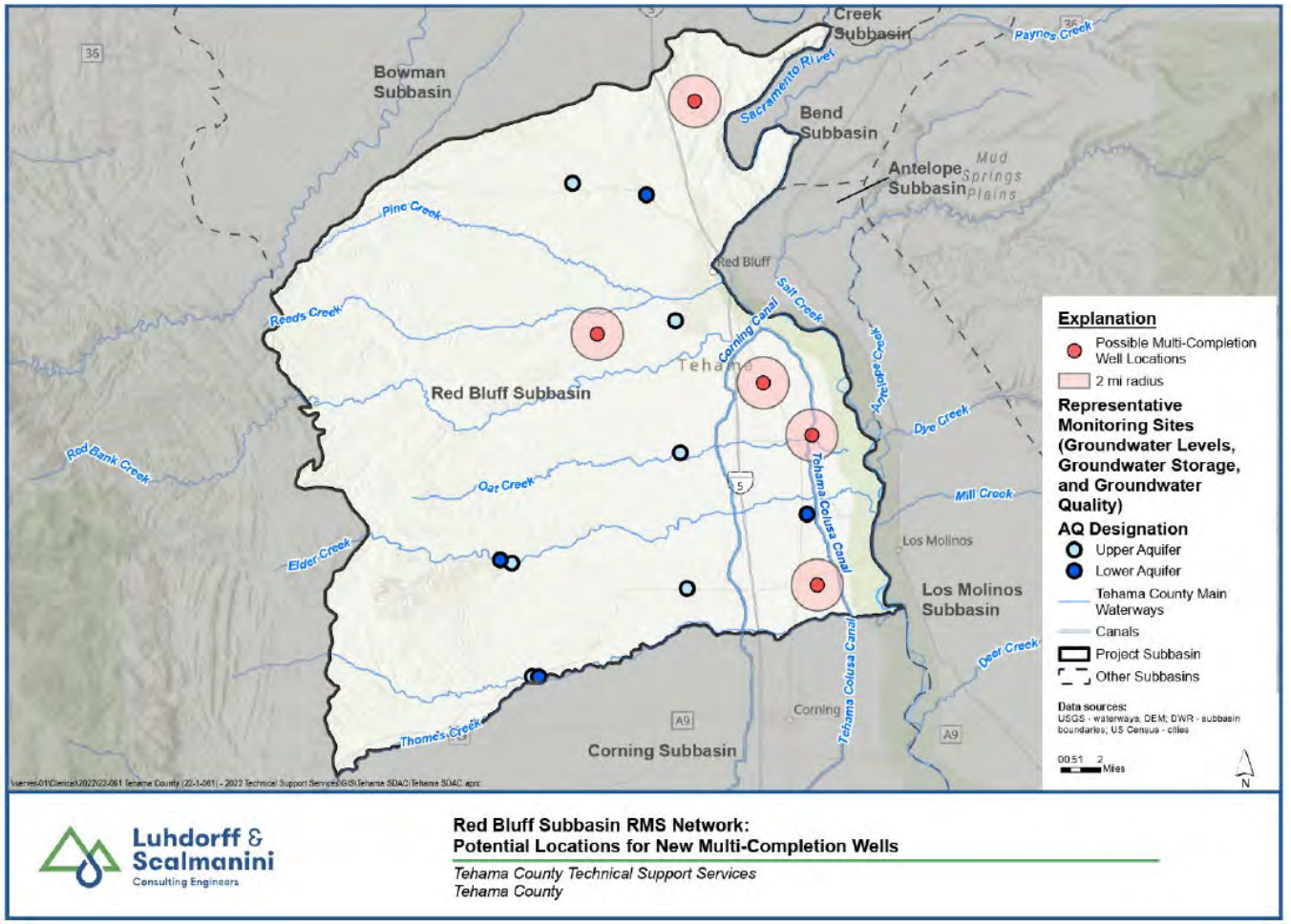
Corning Components

- **Components**
  - Component 1 - $968,000
  - Component 2 - $3,531,000
  - Component 3 - $1,336,500
  - Component 4 - $1,638,450
  - Total - $7,605,950

- **Ranking**
  - Give each component score 1-4 from highest priority to least

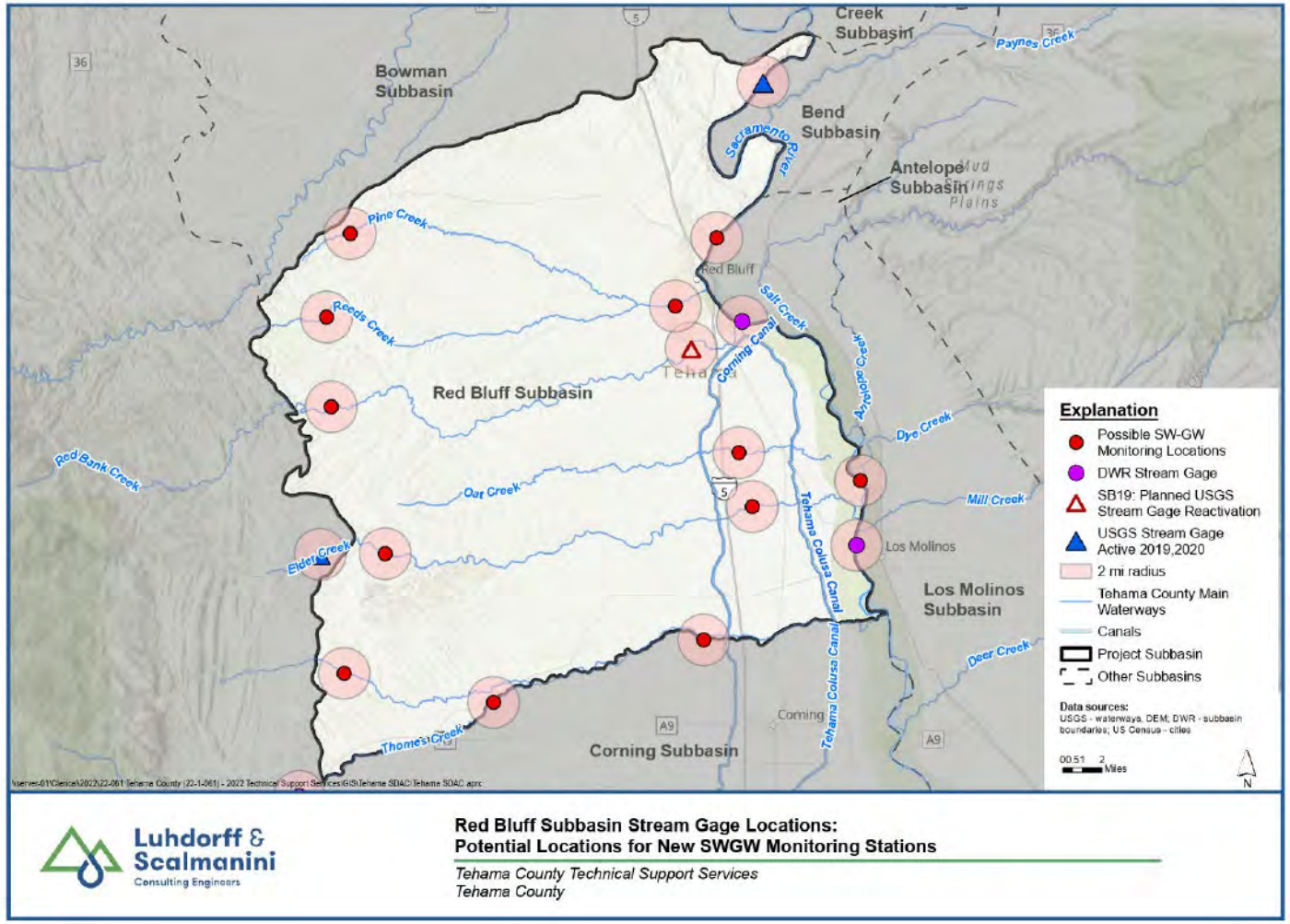
Red Bluff Monitoring Network Enhancements (Component 2)

- Multi-Completion Monitor Wells



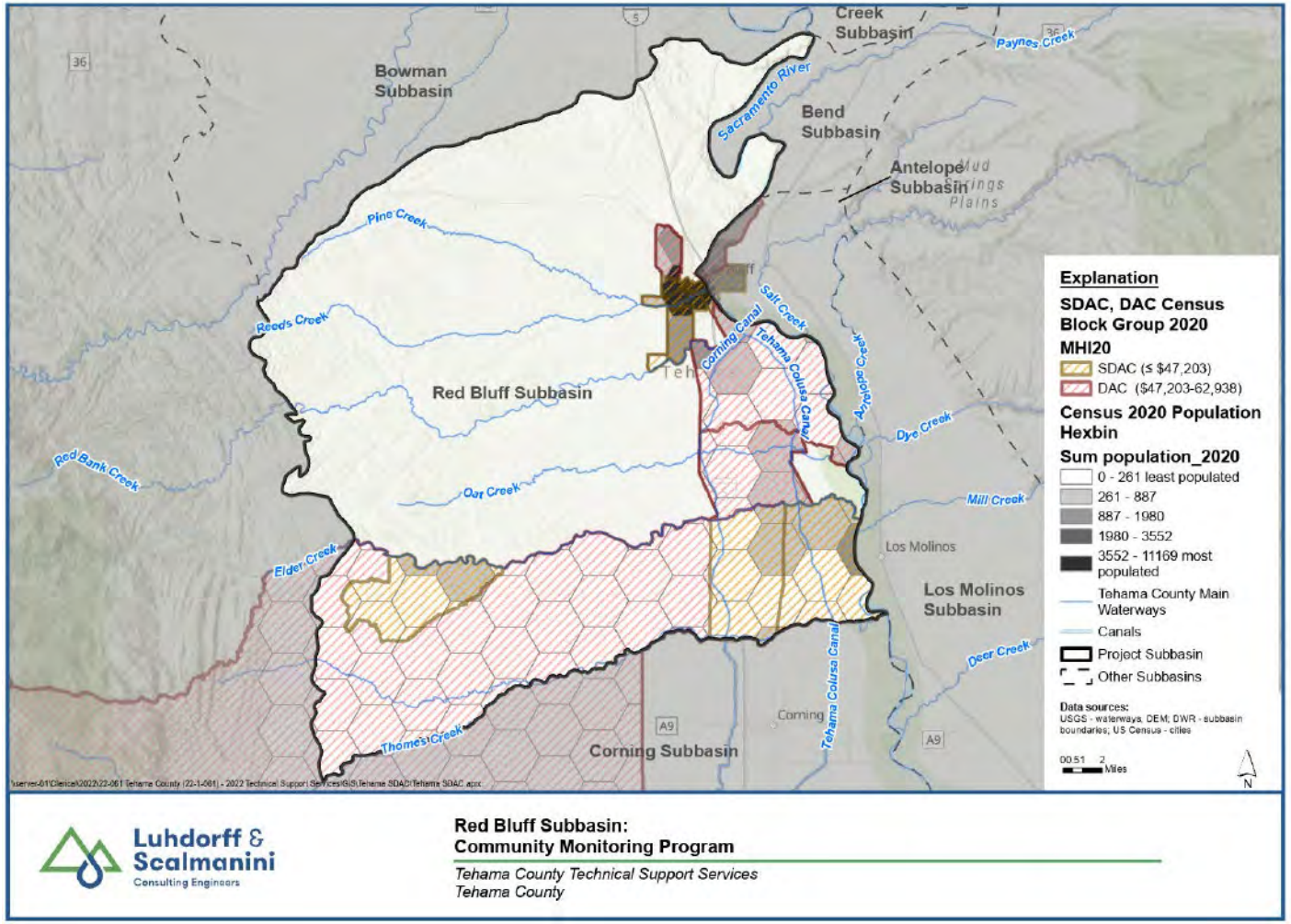
Red Bluff Monitoring Network Enhancements (Component 2)

- SW/GW Stations



Red Bluff Monitoring Network Enhancements (Component 2)

- Community Monitoring Program



Red Bluff Monitoring Network Enhancements (Component 2)

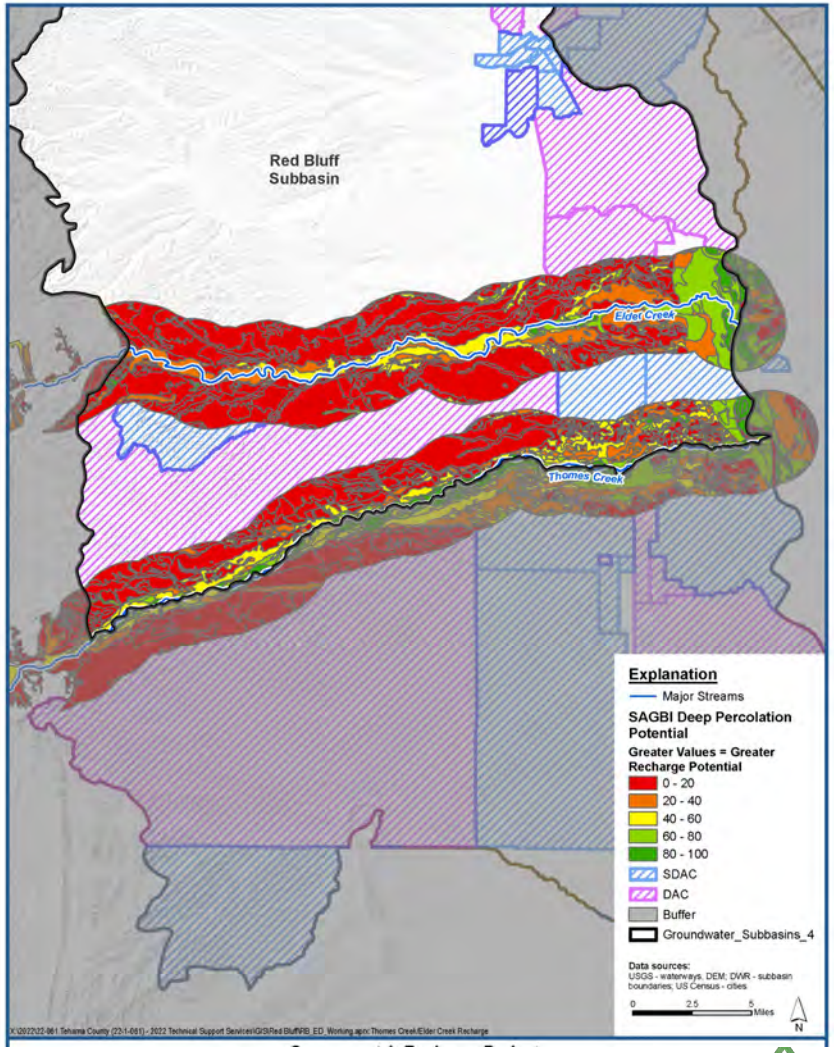
- **Budget**
  - Install Multi-Completion Monitoring Wells - $1.2 Million
  - Install SW/GW Monitoring Equipment - $450K
  - Conduct Synoptic Stream Gaging - $125K
  - Conduct Biological Survey - $110K
  - Develop Community Monitoring Program - $210K
  - Groundwater Monitoring Network Enhancements - $260K
  - Grant Administration – 10%

Total: $2,618,000

- **Schedule**
  - All enhancements - Start October 2022 Finish by April 2026

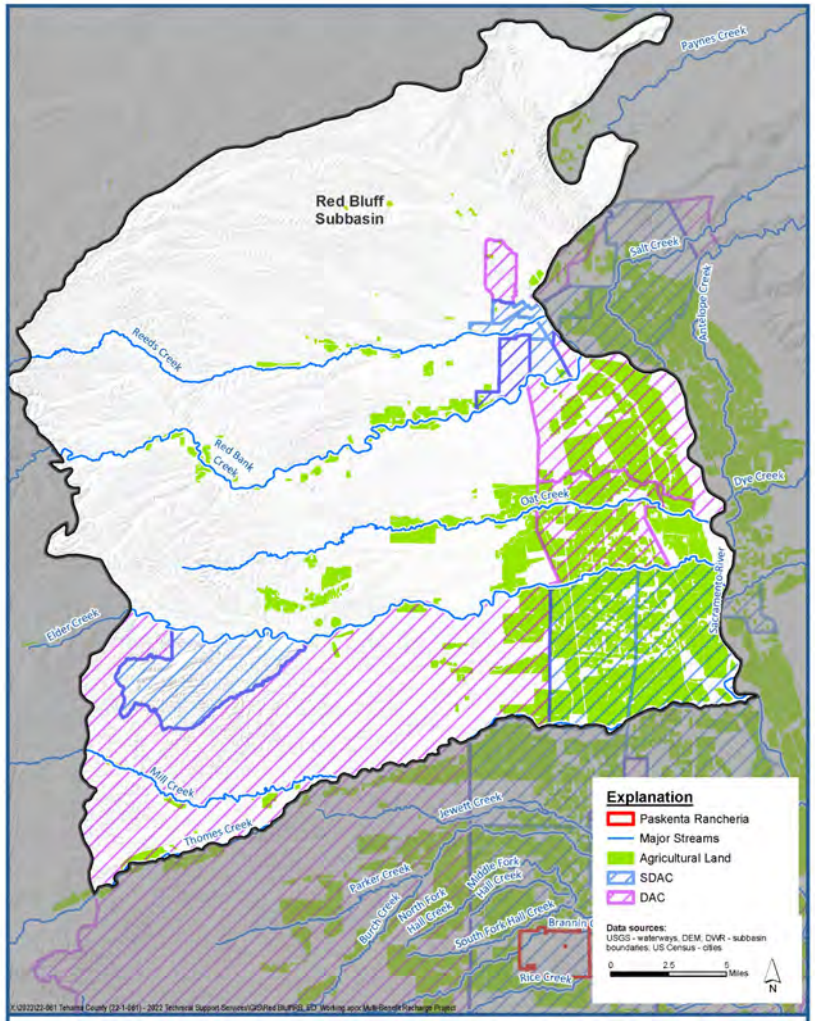
Red Bluff Recharge Projects Detail (Component 4)

- **Thomes Creek and Elder Creek Diversion for Direct or In-Lieu Groundwater Recharge**
  - Conduct feasibility study, planning, and design activities.
  - Develop planning and design documents.
  - Complete permitting and environmental/CEQA documentation.
  - Install necessary recharge infrastructure, which may be ASR wells, recharge basins, detention structures, or fallowed fields.



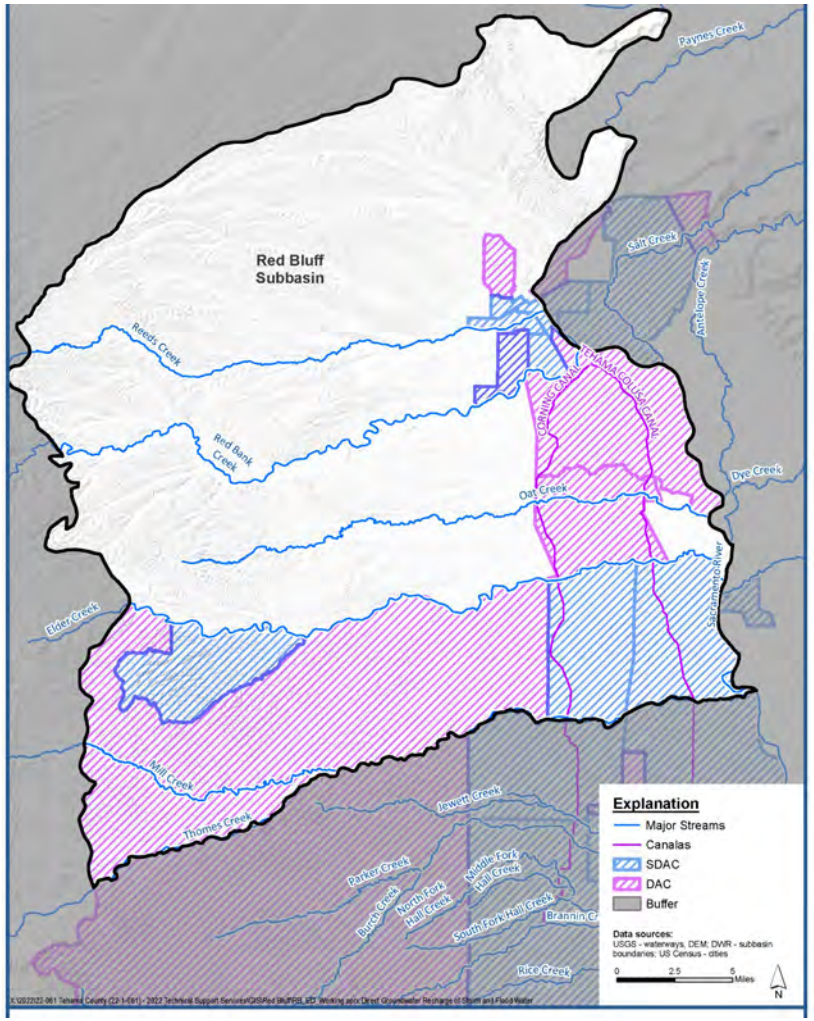
Red Bluff Recharge Projects Detail (Component 4)

- **Multi-Benefit Recharge Project**



Red Bluff Recharge Projects Detail (Component 4)

- **Direct Groundwater Recharge of Stormwater and Flood Water**



Red Bluff Recharge Projects (Component 4)

- **Budget**
  - Multi-Benefit recharge project - $405K
  - Direct groundwater recharge of stormwater and flood water - $180K
  - Thomes Creek and Elder Creek diversion for direct or in-lieu groundwater recharge - $1.3 Million
  - Grant Administration – 10%

Total: $2,150,500

- **Schedule**
  - Multi-Benefit recharge project - Start October 2022 Finish by April 2026
  - Direct groundwater recharge of stormwater and flood water - Start October 2022 Finish by April 2026
  - Thomes Creek and Elder Creek diversion for direct or in-lieu groundwater recharge - Start October 2022 Finish by April 2026

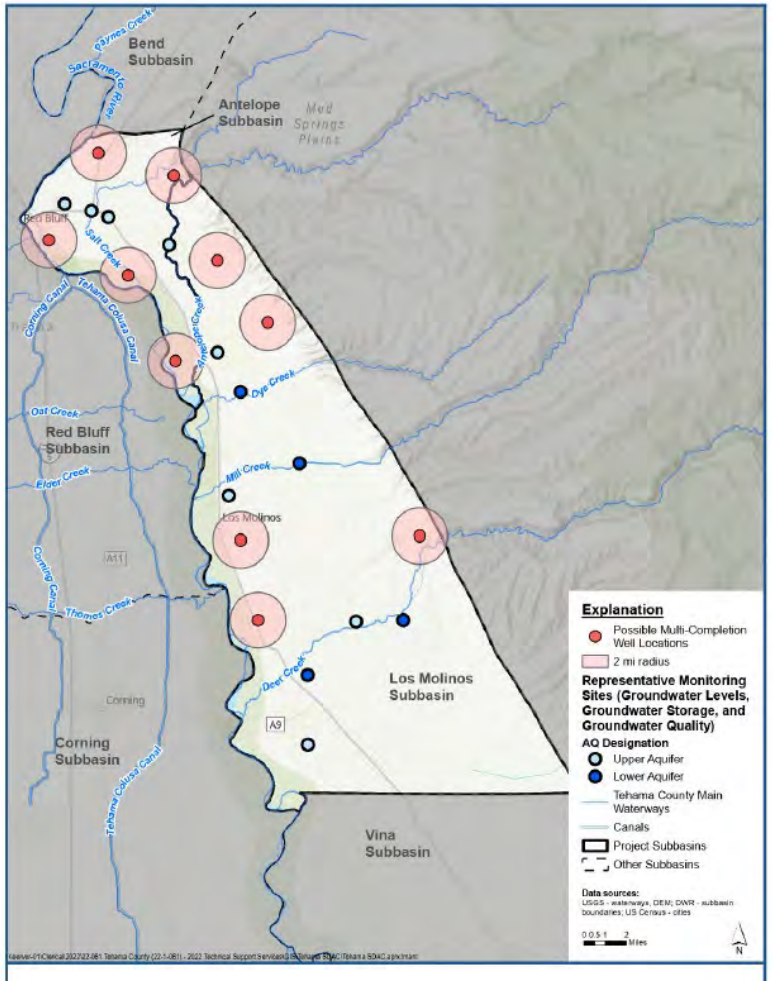
Red Bluff Components

- **Components**
  - Component 1 - $1,100,000
  - Component 2 - $2,618,000
  - Component 3 - $143,000
  - Component 4 - $2,150,500
  - Total - $6,011,500

- **Ranking**
  - Give each component score 1-4 from highest priority to least

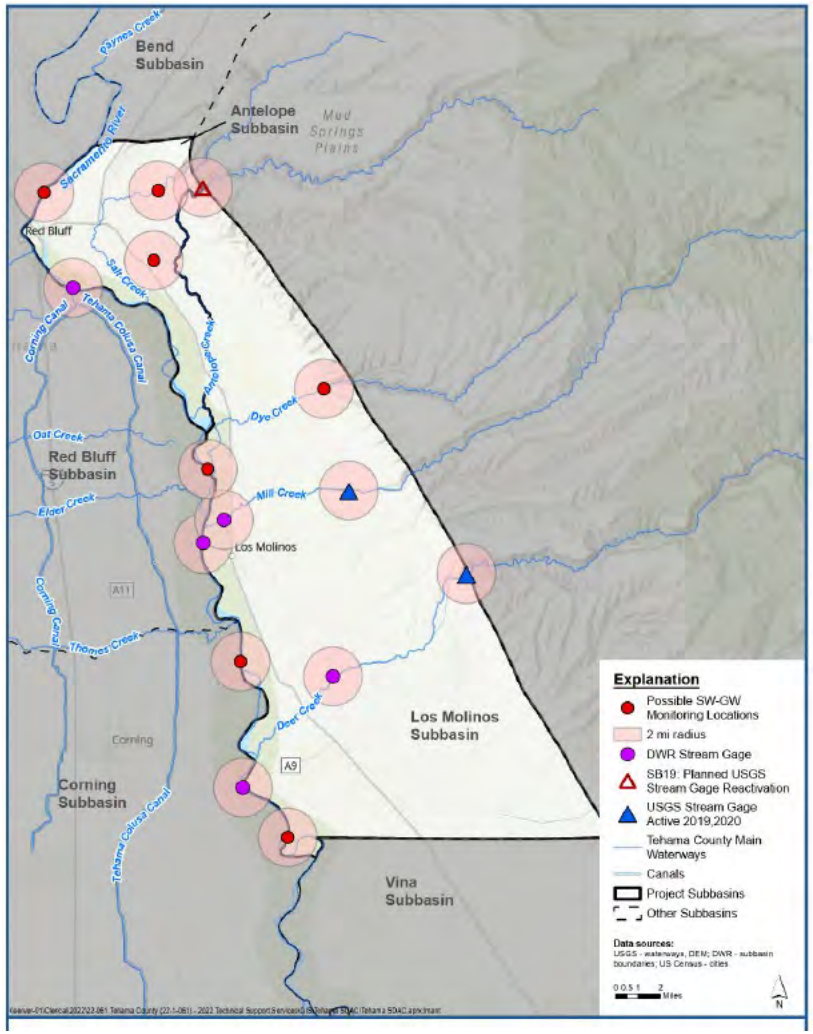
Antelope/Los Molinos Monitoring Network Enhancements (Component 2)

- **Multi-Completion Monitor Wells**



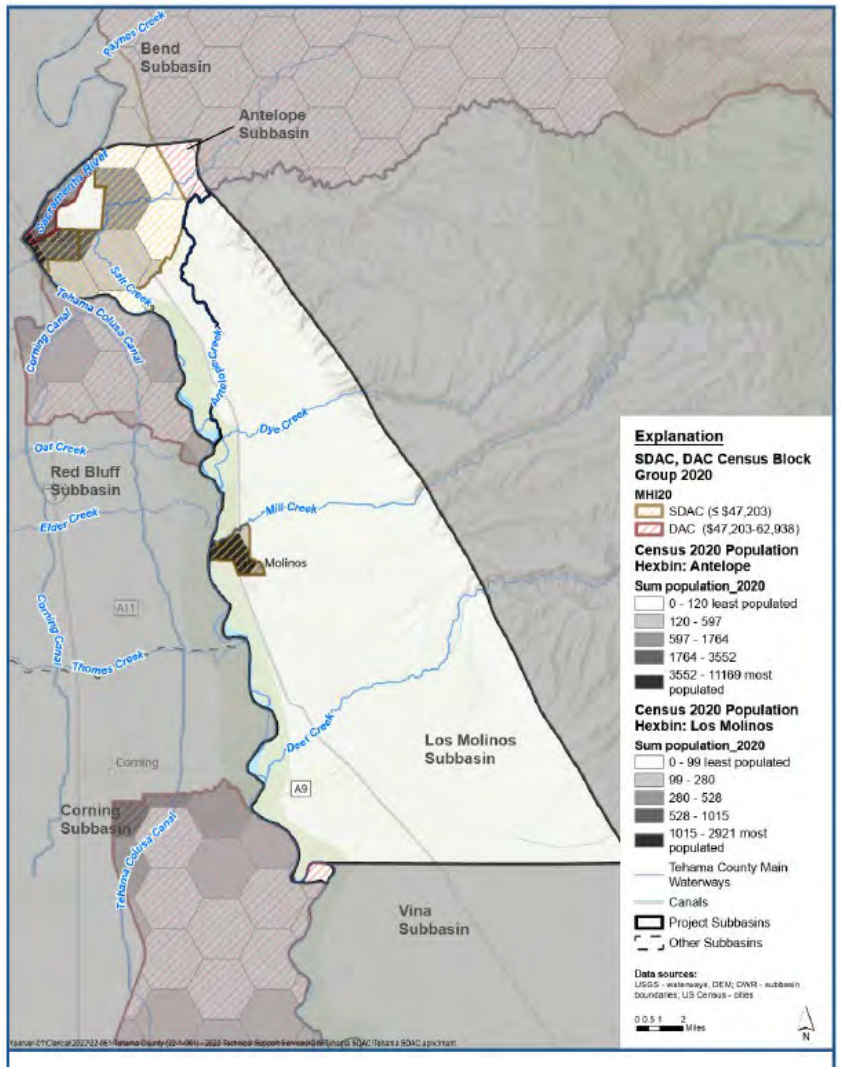
Antelope/Los Molinos Monitoring Network Enhancements (Component 2)

- **SW/GW Stations**



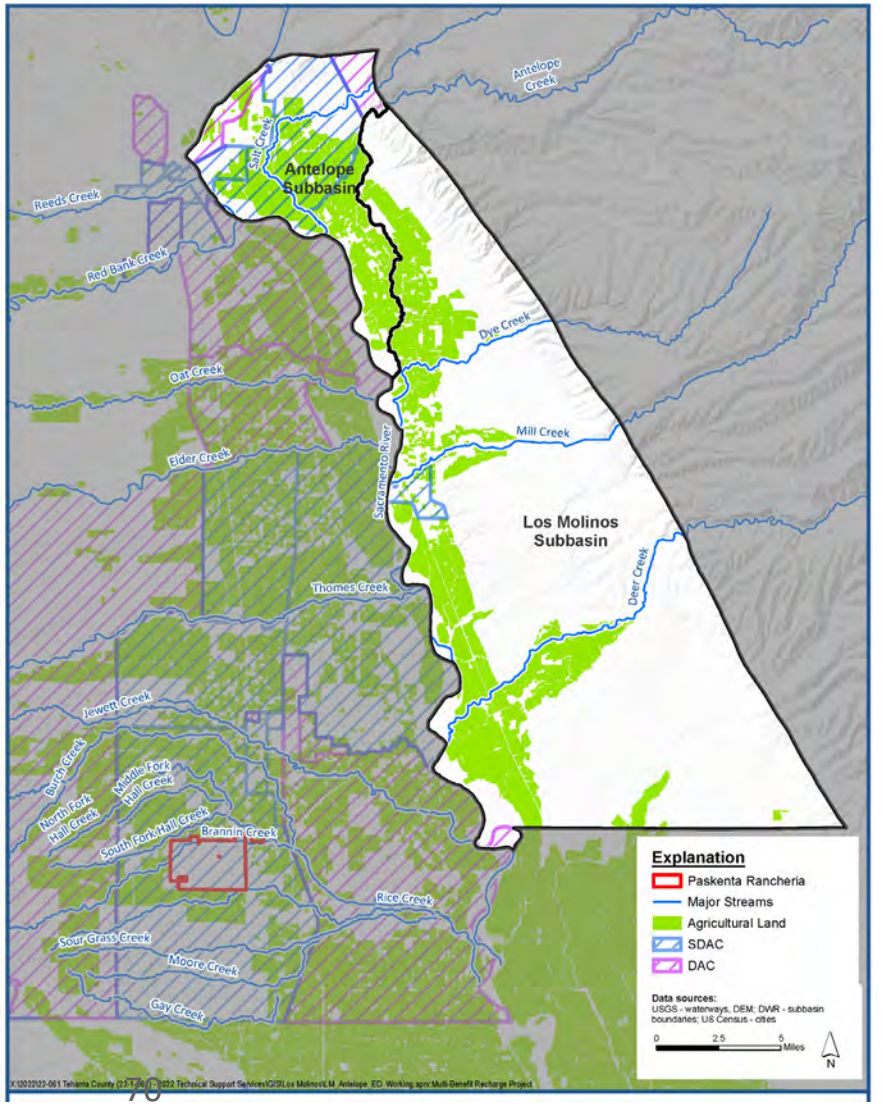
Antelope/Los Molinos Monitoring Network Enhancements (Component 2)

- **Community Monitoring Program**



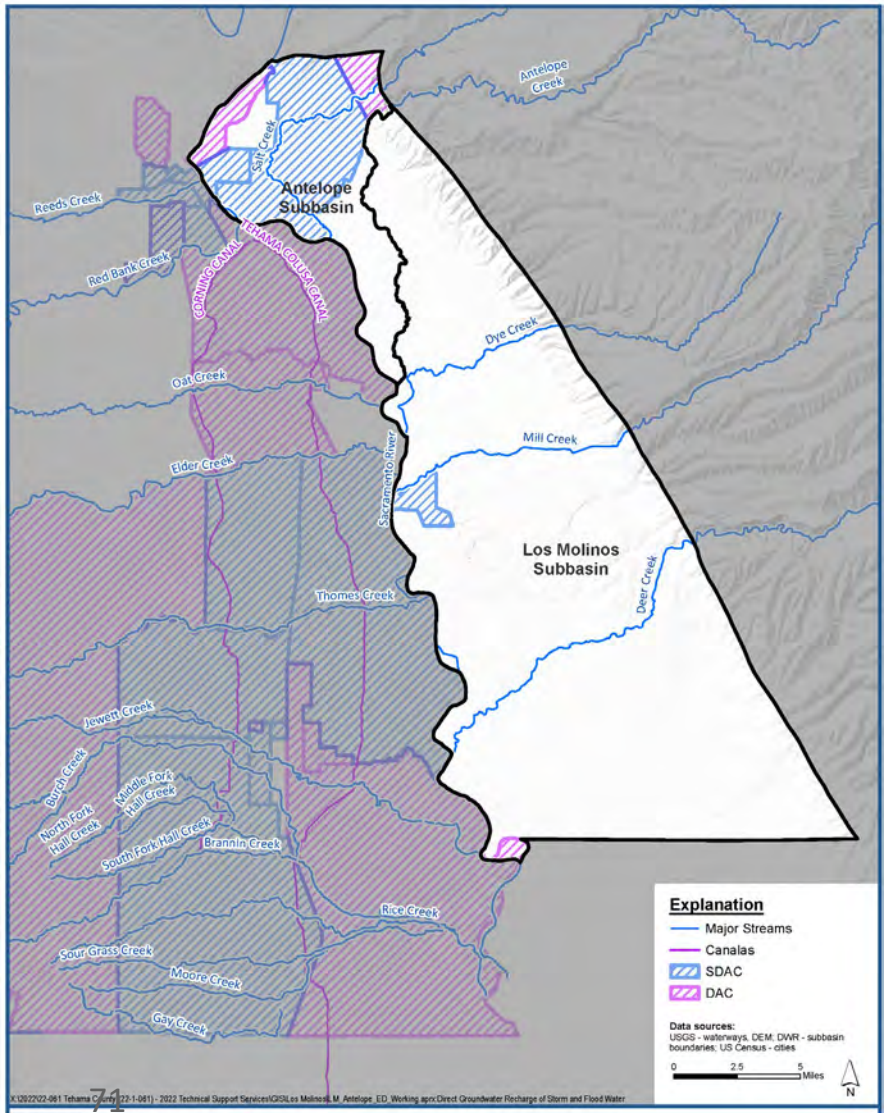
Antelope/Los Molinos Recharge Projects Detail (Component 4)

- **Multi-Benefit recharge project**



Antelope/Los Molinos Recharge Projects Detail (Component 4)

- **Direct groundwater recharge of stormwater and flood water**



Antelope/Los Molinos Recharge Projects Detail (Component 4)

- **Budget**
  - Multi-Benefit recharge project - $295K
  - Direct groundwater recharge of stormwater and flood water - $135K
  - Grant Administration – 10%

Total: $473,000

- **Schedule**
  - Multi-Benefit recharge project - Start October 2022 Finish by April 2026
  - Direct groundwater recharge of stormwater and flood water - Start October 2022 Finish by April 2026
  - Recycled water projects - Start October 2022 Finish by April 2026

Antelope Components

- **Components**
  - Component 1 - $929,500
  - Component 2 - $1,562,000
  - Component 3 - $143,000
  - Component 4 - $473,000
  - Total - $3,107,500

- **Ranking**
  - Give each component score 1-4 from highest priority to least

Los Molinos Components

- **Components**
  - Component 1 - $1,039,500
  - Component 2 – $2,282,500
  - Component 3 – $143,000
  - Component 4 – $473,000
  - Total - $3,938,000

- **Ranking**
  - Give each component score 1-4 from highest priority to least