Corning Subbasin Advisory Board
Meeting Packet

October 5, 2022

Corning Subbasin Advisory Board Meeting

October 5, 2022 | 1:30 p.m.

In-Person Location:

City of Corning Council Chambers
794 Third Street
Corning, CA 96021

Due to limited parking for Corning City Hall, meeting attendees are asked to park their vehicles in the parking lot across from City Hall, next to the railroad tracks.

Alternate Meeting Location:
1177 Magnolia Ave., Larkspur, CA 93939

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MEETING AGENDA

1. Call to Order
2. Roll Call
3. Meeting Minutes
    a. *Approval of September 7, 2022 meeting minutes
4. Period of Public Comment
5. Groundwater Sustainability Agency Updates
6. *Approve 2023 Meeting Schedule
7. Sustainable Groundwater Mangement Grant
    a. Discussion of grant application and project prioritization

b. *Recommendation to the GSAs on a list of projects to include in the SGM Round 2 grant application

c. *Recommendation to the GSAs on a grant applicant

8. Corning Subbasin Advisory Board Member Reports and Comments

9. Next Meeting

10. Adjourn

A complete agenda packet, including back-up information, is available for public inspection during normal work hours at 225 North Tehama Street, Willows, CA 95988 or 9380 San Benito Avenue, Gerber CA 96035. After posting of this Meeting Agenda, the public may request copies of support information for public agenda items listed.

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Corning Subbasin Advisory Board

September 7, 2022 | 1:30 p.m.
Meeting Minutes
Location | 794 Third Street, Corning, CA 96021
And Public Participation via Teleconference
Meeting Materials | CorningSubbasinGSP.org/CSAB-meetings

1. Call to Order

Bob Williams (Mr. Williams) called the Corning Subbasin Advisory Board (CSAB) meeting to order at 1:35 p.m.

2. Roll Call

Justin Jenson (Mr. Jenson) took the roll call for the CSAB members.

Tehama County Flood Control and Water Conservation District (TCFCWCD)		Corning Sub-basin Groundwater Sustainability Agency (CSGSA)	
	Steven Gruenwald		Grant Carmon
x	Dave Lester	x	Brian Mori
x	Bob Williams		Julia Violich
x	Ian Turnbull (Alternate)		John Amaro (Alternate)

Other participants: Lisa Hunter (Glenn County Water Resources Coordinator), Justin Jenson (Tehama County Deputy Director Public Works – Water Resources), Nichole Bethurem (TCFCWCD), Jenny Scheer, Kathryn Haefelfinger (landowner), Patricia Vellines (Department of Water Resources), Pete Dennehy (Montgomery & Associates), Ryan Fulton (Larry Walker Associates), Matt Hansen (landowner), Jacques DeBra (Luhdorff & Scalmanini, Consulting Engineers), Maryse Suppiger, Adam Englehardt (landowner), Donna Barry (landowner)

3. Meeting Minutes

a. *Approval of June 8, 2022 meeting minutes

Motion by Member Turnbull (Mr. Turnbull), second by Member Lester (Mr. Lester) to approve the June 8, 2022 meeting minutes as presented.

Ayes: Members Turnbull, Lester, Williams, Mori
Noes: None
Absent: Members Gruenwald, Carmon, Violich

4. Period of Public Comment

Donna Barry (Ms. Barry) discussed her dry well and neighboring dry wells and asked what recourse is available. It was noted she resides in Tehema County. Mr. Jenson discussed the DWR dry well registration website and bottled water distribution events in Tehama County.

Following discussion, Tehama County staff stated they would follow up with Ms. Barry.

5. Groundwater Sustainability Agency Updates

Mr. Jenson and Ms. Hunter reported to the CSAB on the TCFCWCD and CSGSA, respectively:

TCFCWCD

- The regulation regarding well sealing and drilling depths for agricultural and domestic wells is currently being revised to be presented to the Board of Directors. Tehama County is using the emergency regulation for agricultural well permits.
- A Request for Proposals (RFP) is being developed for the GSP Annual Reports and updates.
- TCFCWCD is working with the Resource Conservation District of Tehama County for grant writing assistance for GSP implementation funding.
- Tehama County well registration program flyers are expected to be mailed in the next few months.

In response to Mr. Lester, Mr. Jenson stated the upcoming grant funds are primarily for projects but there may be funding for data collection related to GSP updates.

Brian Mori (Mr. Mori) asked about the steps after mailing the well registration flyers. Mr. Jenson stated the direction will be determined based on the responses received. Mr. Jenson stated the data is internal and confidential; PR will play a role in voluntary compliance. Mr. Jenson stated the goal is to advise the GSAs on how much water is being pumped on an annual basis.

Mr. Turnbull advised staff to confirm the ability to keep the information private, specifically regarding public records requests.

CSGSA

There was no update from the CSGSA.

6. Meeting Schedule

a. *Set meeting schedule for the remainder of 2022

Ms. Hunter stated the CSAB had previously adopted meeting dates through September and the proposed dates will go through December. Ms. Hunter stated meetings can be canceled if necessary but should be scheduled to address grant and project-related items.

Following discussion, motion by Mr. Mori, second by Mr. Turnbull to adopt the meeting schedule as presented.

Ayes: Members Turnbull, Lester, Williams, Mori
Noes: None
Absent: Members Gruenwald, Carmon, Violich

b. Discussion on 2023 meeting schedule frequency

Mr. Jenson stated this item is for CSAB members to identify their preferred meeting frequency.

Mr. Mori stated he supports keeping the monthly meetings. Mr. Lester concurred with monthly meetings, as required. Following discussion, it was determined a monthly meeting schedule will be presented at a future meeting.

7. Funding Plan for Corning Subbasin Shared Costs

a. Discussion on cost-sharing mechanism between the Groundwater Sustainability Agencies

Mr. Jenson discussed the cost allocation approaches table and the challenges associated with identifying how to split the costs for some tasks. The example is based on the information provided in the Groundwater Sustainability Plan, which estimated a cost of $1 million per year. The costs for priority tasks in the first few years are expected to be lower than this estimate.

Mr. Mori asked if the dollar amount is being set to reach an assessment value and asked if funds will go into a contingency fund or be used for Projects and Management Actions (PMAs) during the ramp-up years. Mr. Jenson addressed the need for a conservative estimate to start due to the impact on the GSAs to identify funding. It is staff's goal to develop a recommendation on how to split funding. Ms. Hunter emphasized the focus is less on actual numbers and more on how GSAs should split the costs. Ms. Hunter added that grant writing and the 2022 Annual Report will be the first shared cost for the Corning Subbasin.

Ms. Hunter stated the Corning Subbasin is expecting to receive Facilitation Support Services (FSS) funds from DWR which, if granted, will be used for working through a long-term approach to address shared costs.

Mr. Mori asked if the $100,000 identified on the 'Estimated Planning-Level Cost for First 5 Years of Implementation' slide is for the first year. Mr. Jenson responded it is the best estimate at this time.

In response to Mr. Mori, Mr. Jenson stated assessments to cover these costs would likely need to begin in early 2023.

Mr. Turnbull provided a correction to the acreage presented in the Groundwater-Using Acres Cost Share table, noting the dollar amounts are correct.

Mr. Mori stated the cost share tables lean toward a two-thirds one-third split.

Mr. Turnbull discussed the need to review the 'Estimated Planning-Level Cost for First 5 Years of Implementation' table from the GSP and determine which line items are shared costs.

Mr. Mori stated he is comfortable making a one-year funding recommendation for the Corning Subbasin.

b. *Recommendation to the GSAs on a funding plan for Corning Subbasin shared costs

Motion by Mr. Lester, second by Mr. Turnbull to recommend to split Corning Subbasin shared costs with one-third allocated to Corning Sub-basin GSA and two-thirds allocated to Tehama County GSA for one year.

Ayes: Members Turnbull, Lester, Williams, Mori
Noes: None
Absent: Members Gruenwald, Carmon, Violich

8. Sustainable Groundwater Management Grant

a. Discussion of grant application and project prioritization

Mr. Jenson stated the project list presented is to serve as a starting point for discussion of projects to include in the grant application. Mr. Turnbull clarified the projects are not ranked.

In response to Mr. Mori, Ms. Hunter stated there was some project prioritization in the grant with projects being categorized as priority or alternate projects. The projects were split primarily by project readiness and data available.

Ms. Hunter stated DWR is looking for a variety of project types, some of which should provide immediate benefit. Ms. Hunter discussed the scoring process and the need for all projects to score high individually.

Discussion ensued around the need for realistic feasibility studies for recharge projects and potential costs associated with the studies. Mr. Jenson stated the data from DWR's Airborne Electromagnetic (AEM) survey should be available by early 2023.

Ms. Hunter stated projects that were not included in the GSP can be added to the Annual Reports.

Mr. Turnbull discussed the need for an improved monitoring network, specifically on the west side, and increased public outreach.

Mr. Mori suggested the CSAB review the project list holistically and set a priority list, with the expectation of reviewing at the October meeting. He further suggesting moving the October meeting to a later date if needed in order to have a productive meeting.

9. Corning Subbasin Advisory Board Member Reports and Comments

There were no CSAB member reports.

10. Next Meeting

The next CSAB meeting will be on October 5, 2022, at 1:30 p.m.

11. Adjourn

With no further business, the meeting adjourned at 2:35 p.m.

Corning Subbasin Advisory Board

2023 Meeting Schedule

Corning Subbasin Advisory Board Meetings will be held at **1:30 p.m.** unless otherwise noted. Meetings are expected to be held at the City of Corning Council Chambers at 794 Third Street, Corning, CA 96021. Meeting locations will be confirmed and included on each agenda.

January 4, 2023

February 1, 2023

March 1, 2023

April 5, 2023

May 3, 2023

June 7, 2023

July 5, 2023

August 2, 2023

September 6, 2023

October 4, 2023

November 1, 2023

December 6, 2023

Corning Subbasin Project List for Grant Planning Discussion

On electronic version, please use zoom function to read more clearly.

Project # (not ranking)	Project Name	Brief Description (including project objective(s)) (GSP Purpose/ Description) (DWR Eval Criteria Points= 4 points)	Proposed Tasks and Subtasks (3 points)	Project Status (GSP)	Quantifiable Benefits (GSP Expected Benefits/Evaluation of Benefits) (at least 3 to get full points) (4 points)	Notes
1	Well Management Program	Better understand domestic and small ad well issues in the subbasin and protect well owners from future impacts. Includes various projects, incentives, and actions noted in proposed tasks/subtasks.				GSP Section 7.3.2.1
1.a			Well Inventory			
1.b			Education and Outreach			budget is annual estimate
1.c			Well Incident Reporting System			
1.d			Well Mitigation Program			budget is annual estimate
2	Grower Education	Grower education relating to on-farm practices for sustainable groundwater management. This includes promoting conjunctive water use and water use efficiency. Provide information on water resource management for more flexible use. Educate growers on the value of using surface water over groundwater when available, replacing inefficient wells, adding organic amendments to improve moisture retention, soil mapping for custom irrigation timing and duration. Explore starting a groundwater users cooperative to coordinate pumping schedules (this could also happen in the Capay Area).				GSP Section 7.3.2.2; budget is annual estimate
2.a			Maximize surface water use			
2.b			Manage soils to improve infiltration and root zone soil moisture storage			
2.c			Reduce/minimize non-beneficil ET			
2.d			Establish groundwater user cooperative			
3	Policies and Ordinances	Establish water and land use management restrictions on future well pumping and new agricultural growth, for better sustainable groundwater management. Coordinate with counties to establish or revise county well permitting, water use, and land use ordinance or policies to align with GSP.			Policies and ordinances regarding land use restrictions (such as to curb new agricultural growth expansion), water use (such as pumping restrictions during certain water year types), and well permitting (to reduce effects in shallow wells), all provide benefits to beneficial users and uses in the Subbasin by reducing pumping growth and lessening the impacts on all well owners	GSP Section 7.3.2.3
3.a			Well tracking data			
3.b			Domestic well management			
3.c			Design criteria for new agricultural wells			
3.d			Requirements for deeper seals and/or placement of well seals at certain depths			
3.e			Restrict new pumping in specific areas			
4	Use of Full Surface Water Allocation	Incentivize growers within districts to use all contracted surface water for better conjunctive use. Implementation-Ready project in Corning WD. Needs infrastructure improvements in OUWUA, Thomes Creek WD, and Kirkwood WD.			Expected benefits from project implementation were evaluated using a groundwater model scenario that aims to simulate effects of Water Districts utilizing their full surface water allocations in the future. 10,500 AF decrease in annual gw pumping, 900 AF/yr additional gw storage (42,700 AF cumulative gw storage over 50 years), increase in gw level by up to 20 feet.	GSP Section 7.3.2.4
4 (cont)						
5	OUWUA Infrastructure Improvements for In-L	Improve surface water conveyance and irrigation infrastructure for surface water use in lieu of groundwater pumping		Pre-Design/Planning Stage	12,000 to 25,000 AF/yr additional surface water use in-lieu of gw pumping	GSP Section 7.4.3.1
5.a			Northside Phase II Modernization Project			
5.b			Lateral Pipeline Conversions			
5.c			Data Collection and Management			
5.d			Tehama-Colusa Canal Interties			
5.e			Potential Land Annexations			
5.f			Grower Outreach and Education			
6	Regional Surface Water Transfers for In-Lieu	Incentivize the use of surface water within the subbasin by transferring water into the Subbasin from other CVP districts		Implementation-Ready	Maximizing water transfers with the intent of facilitating in-lieu groundwater recharge has the benefit of increasing groundwater levels and groundwater storage. This stored groundwater can be extracted in years when no transfer water is available, or if delivery systems are capacity constrained	GSP Section 7.4.3.2
7	Invasive Plant Removal	Invasive plant removal to reduce shallow groundwater use and restore native habitat		Pre-Design/Planning Stage	The primary benefit of this project is increased surface water available for environmental flows, irrigation, and groundwater recharge due to reduced evapotranspiration. In addition to water savings and fire risk reduction, invasive plant removal has other benefits. Thick stands of invasive plants can over time lead to a narrower river channel, increase flow velocities, erode channel banks, and damage bridges when large portions of vegetation break loose. Removal of arundo would help restore the natural braided stream profile, which would in turn decrease flooding and improve conveyance in the Subbasin. Invasive species also crowd out native species and remove valuable	GSP Section 7.4.3.3; benefit to cost ratio 1.4 to 1.7
8	Groundwater Recharge through Unlined Conv	Groundwater recharge through unlined canals and natural drainages including ephemeral streams		Conceptual	Increase groundwater recharge in the Subbasin, that would benefit areas with groundwater pumping for irrigation and declining groundwater level trends. Increasing in-stream flows would benefit priority species, such as salmon and steelhead, by increasing stream stage, improving rearing habitat, and providing potential spawning habitat.	GSP Section 7.4.3.4

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9	Off-stream Surface Water Storage	Off-stream temporary storage of flood waters on private lands		Conceptual	Surface water storage and subsequent use for irrigation will provide a new surface water supply source that would reduce groundwater pumping, while increasing in-lieu groundwater recharge. This project may also provide flood reduction benefits to the extent high flow events are reduced by diversions.	GSP Section 7.4.3.5
10	City of Corning Stormwater Recharge	City of Corning stormwater improvements/ groundwater recharge		Conceptual	Decrease flood risks in areas where recent flood impacts have been noted. Improve stormwater capture and prevent flooding, while providing a source of groundwater recharge for the aquifer. More reliable groundwater supply.	GSP Section 7.4.3.6
11	Recycled Water Use for Crop Irrigation	Use treated wastewater from local cities for agricultural irrigation purpose for in-lieu groundwater		Conceptual		GSP Section 7.4.4.1
12	Groundwater Recharge Pond South of Cornin	A 2-4 AF pond managed by USBR collects stormwater and could be used to store 215 water for use during the irrigation season or for direct recharge.		Conceptual		GSP Section 7.4.4.2
13	TNC multi-benefit recharge projects	TNC is interested in partnering with growers for an on-farm, multi-benefit groundwater recharge program that provides critical wetland habitat for migratory birds.				GSP Section 7.4.4.3
14	California Olive Ranch Groundwater Recharge	Artificial recharge project diverting water from the Tehama Colusa Canal through existing irrigation canal into an exisitng unlined basin where it can percolate to groundwater.		Feasibility analysis ongoing		GSP Section 7.4.4.4; considering on-farm ponding test in winter 2022
15	Thomes Creek flood water diversions for rec	Evaluate the potential and feasibility of diverting flood flows on Thomes Creek to stroe off-stream to satisfy irrigation needs, or divert to a recharge pond.				GSP Section 7.4.4.5
16	Groundwater Substitution Transfers from oth	Capture surface water flows that were left upstream in streams tributary to the Sacramento River in the Los Molinos Subbasin for habitat restoration projects. 2 projects currently being evaluated conceptually before going into a feasibility study.		Conceptual	Habitat benefits; improve streamflow conditions for fish passage and other env	GSP Section 7.4.4.6
16.a			Trout Unlimited groundwater substitution transfer on Deer Creek			
16.b			TNC groundwater substitution transfer on Mill Creek- or release water down the crrek for habitat benefits that can be diverted to Corning Canal			
17	GSAs Administration, Communication, and Outreach					GSP Section 8.1.1
17.a			Subbasin GSA Coordination			Unlikely to be eligible for grant funding.
17.b			Internal GSA Coordination			Unlikely to be eligible for grant funding.
17.c			Inter-basin Coordination			Unlikely to be eligible for grant funding.
17.d			Public outreach and notification			Unlikely to be eligible for grant funding.
17.e			Advisory Board and GSA Board meetings			Unlikely to be eligible for grant funding.
17.f			Budget planning and funding oversight			Unlikely to be eligible for grant funding.
17.g			Oversight of consultants or contractors			Unlikely to be eligible for grant funding.
17.h			Collecting data and reporting sustainability progress			Unlikely to be eligible for grant funding.
17.i			Filling data gaps			
17.j			Implementation of PMAs			
18	Refinement of GSP Implementation Funding Sources and Mechanisms					GSP Section 8.2; unlikely to be eligible for grant funding.
19	Monitoring and Reporting					GSP Section 8.3
19.a		GSAs will coordinate with DWR and others to ensure data collectionn from the GSP monitoring network continues without interruption using the protocols specified in the GSP. Data collected will be compiled and stored in the DMS. Data quality will be assessed routinely to confirm it meets the	Monitoring			GSP Section 8.3.1; unlikely to be eligible for grant funding.
19.b		In accordance with GSP Regulation §356.2, annual reports will be submitted to DWR starting on April 1, 2022. The purpose of these reports is to provide monitoring and total groundwater use data to DWR, compare monitoring data to the SMC, and provide an update on adaptive implementation of projects and actions to achieve sustainability. Development of an annual report will begin following the end of the water year, September 30, and will include an assessment of the previous water year. The annual reports may also serve as amendment(s) to the GSP as the monitoring	Annual Reports			GSP Section 8.3.2
19.c		Five-Year GSP assessment reports will be provided to DWR starting April 1, 2027. The GSAs will evaluate the GSP at least every 5 years to assess whether it is achieving the sustainability goal in the Subbasin. The assessment will include a description of significant new information that has been made available since GSP adoption or amendment and whether the new information or understanding warrants changes to any aspect of the plan. The 5-Year updates will also include	5-Year GSP Assessment Reports			GSP Section 8.3.2
20	Address HCM and Groundwater Conditions D	Address HCM and groundwater conditions data gaps				GSP Section 8.4
20.a		There is some uncertainty where the western boundary of the alluvial basin is located, as there is anecdotal evidence that some wells in this portion of the Subbasin are drilled into fractured rock	Western Boundary of the Subbasin			GSP Section 8.4.1
20.b		The geologically complex environment created by the cotemporaneous deposition of the Tehama and Tuscan Formations is not entirely understood in all areas of the Subbasin. The interfingering of these heterogeneous formations could be mapped with greater certainty to improve the conceptual understanding of the principal aquifer. This information would be useful to better assess whether confining layers impede vertical movement of groundwater in some areas.	Tehama-Tuscan Transition Zone			GSP Section 8.4.1

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20.c		Existing knowledge of aquifer parameters can be considered incomplete for some of the Subbasin's formations, namely the Tuscan and Tehama Formations. Existing aquifer testing results are limited and sometimes potentially misleading, as described in Section 3.1.5. The aquifer properties of these heterogenous and interfingered formations could be refined to improve the groundwater model calibration, making it a more accurate tool for projecting future groundwater conditions and	Hydrogeologic Parameters			GSP Section 8.4.1
20.d		The location and extent of GDEs is estimated based on vegetation mapping and regional groundwater level data. Actual rooting depth data are limited and will depend on the plant species and site-specific conditions such as soil and aquifer types, and availability to other water sources. There are areas in the Subbasin with potential GDEs where insufficient data exist to say with certainty if GDE vegetation is supported by shallow groundwater or if vegetation is supported by surface water. This distinction is important as GDEs supported only by surface water are not subject to the depletion of interconnected surface water SMC. Priority species that are known to utilize	Groundwater Dependent Ecosystems			GSP Section 8.4.1
20.e		Analysis of groundwater elevations in the western Subbasin is limited by the low number of wells screened and monitored Corning Subbasin Groundwater Sustainability Plan. See Section 8.5.2 for the implementation plan for expanding the groundwater level monitoring network in the western	Groundwater Elevations in the Western Area of the Subbasin			GSP Section 8.4.1
20.f		Groundwater quality is not measured in many wells in the western area as most of the wells are private domestic wells and are not part of groundwater quality monitoring programs. See Section 8.5.2 for the implementation plan for collecting additional groundwater quality data in the western	Groundwater Quality in the Western Area of the Subbasin			GSP Section 8.4.1
20.g		Coordinate with DWR to improve understanding of the subsurface geology, including the complex interfingering of Tehama and Tuscan Formation. In addition, a better understanding of the edge of the western Subbasin boundary is necessary to assess if the most western areas are truly part of the alluvial aquifer as defined by DWR. Additional data gathering could be useful to support a future Basin Boundary Modification request to refine the Subbasin boundary, if appropriate. Build on DWR's planned state-wide AEM study and the Butte County AEM pilot project.	May include AEM or geophysical surveys (Implementation Plan for addressing data gaps)			GSP Section 8.4.2
20.h		Identify wells for aquifer testing to develop better estimates of aquifer properties, to help improve the groundwater model calibration and better understand subsurface characteristics as described above. In addition, aquifer testing could help with project and management action feasibility studies	May include Aquifer testing (Implementation Plan for addressing data gaps)			GSP Section 8.4.2
20.i		GDE mapping for this GSP was based on GDE-indicator vegetation mapping and historical groundwater level measurements. The GDE analysis may be refined should new wells be installed or added to the GSP monitoring network, or other sources of groundwater level data become available. This data gap investigation will focus primarily on the areas where insufficient groundwater level data exists near the potentially interconnected reaches of Thomes Creek. Additionally, remote sensing tools such as the Nature Conservancy's GDE Pulse or Google Earth Engine may be used to assess impacts to GDE vegetation vigor from groundwater level declines (if	May include GDE mapping (Implementation Plan for addressing data gaps)			GSP Section 8.4.2
21	Expand and Refine Existing Monitoring Networks					GSP Section 8.5
21.a		The well depth is known for each well used in the GSP groundwater level monitoring network; however, 14 of the 98 total wells have unknown well screen intervals. Since there is only 1 principal aquifer in the Subbasin, the lack of well screen data for some groundwater level monitoring wells does not preclude these wells from being used to understand and manage groundwater in the basin. However, understanding of relative water levels, pumping areas, and vertical gradients is	Lack of Well Screen Informaiton for some RMP Wells			GSP Section 8.5.1
21.b		There are a few localized spatial data gaps identified in Section 5 where monitoring wells at 1 or more depths could be used to help further refine the understanding of groundwater conditions in areas of high groundwater use. These data gaps are noted near Thomes Creek to the northeast of Corning, and in the western third of the Subbasin in the limited areas where land is used for	Localized Spatial Data Gaps for Groundwater Level Monitoring Wells			GSP Section 8.5.1
21.c		Monitoring well data gaps were identified that would help characterize groundwater and surface water interaction adjacent to Thomes Creek and the northern boundary of the Subbasin. The data gap locations are co-located with those identified in the shallow RMP network for monitoring water	Localized Spatial Data Gaps for Shallow Groundwater Level Monitoring Near Streams			GSP Section 8.5.1
21.d		The primary data gap for the groundwater quality monitoring networks is that the DWR is currently evaluating potential plans to continue monitoring the groundwater quality well network in the Subbasin. The GSAs recommend that the DWR continue to monitor groundwater quality in the network of observation well clusters in the Subbasin in the future. Groundwater quality is also not measured in many wells in the western portion of the Subbasin as there are no wells in active groundwater quality monitoring programs. In addition, most water supply wells at the cities are only monitored sporadically for TDS, and the GSAs will work with the cities to implement annual	Localized Spatial Data Gaps for Groundwater Quality Monitoring			GSP Section 8.5.1
21.e		Many of the formerly active stream gages in the Subbasin are no longer available for monitoring. Replacing or modifying the 2 stream gages on Thomes Creek would provide more complete spatial coverage for streamflow monitoring. There is 1 existing gauge at the upstream portion of Thomes Creek that is not capable of measuring low flows below 3 feet, and there is 1 gauge on the lower	Localized Spatial Data Gaps for Surface Water Monitoring			GSP Section 8.5.1
21.f		The GSAs will seek to videolog wells with unknown screen intervals used for groundwater level monitoring. There are currently 14 wells with unknown screen intervals in the GSP monitoring network. Videologging will be conducted, focusing first on the RMP wells, followed by other less critical GSP monitoring network wells as funding allows. If a downhole pump is installed in the well in question, the pump will be removed prior to lowering a video camera. While the survey is being completed, the GSAs will note the screen intervals and conduct a well condition assessment to determine whether the well construction information and current condition support collection of	May include Videologging of Wells with Unknown Screen Intervals (Implementation Plan for addressing data gaps)			GSP Section 8.5.2

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21.g		During the first few years of GSP implementation, the GSAs will seek to identify existing wells that are suitable and accessible for monitoring groundwater levels in the data gap areas for chronic lowering of groundwater levels and depletion of interconnected surface water sustainability indicators. There are 5 general areas with spatial data gaps shown in the shallow and deep groundwater level RMP networks shown in Figures 5-4 and 5-5, respectively. If an existing well cannot be identified, or permission to use data from an existing well cannot be secured, then a new monitoring well will be drilled and added to the monitoring network, provided permission will be granted by the landowner. The GSAs will work with DWR to obtain TSS agreements to install new observation wells, as needed. In addition, groundwater level analysis near the Corning Subbasin boundaries will be supplemented in GSP annual updates with data from neighboring subbasin wells, as necessary, while	May include Identify or Install additional Groundwater Level Monitoring Wells (Implementation Plan for addressing data gaps)			GSP Section 8.5.2
21.h		The GSAs will coordinate with DWR to explore the continuation of regular groundwater quality monitoring in observation well clusters in the Subbasin, as this information would be extremely helpful for the Subbasin. Additionally, domestic wells in the western area of the Subbasin may be added to the current supply well monitoring network to collect TDS samples in those areas. The GSAs will also coordinate with the City of Corning and Hamilton City on annual TDS monitoring at	May include Groundwater Quality Data Gap Implementation Plan (Implementation Plan for addressing data gaps)			GSP Section 8.5.2
21.i		The GSAs will assess the feasibility of modifying or reviving the 2 surface water gages on Thomes Creek to address data gaps on this stream reach. This activity will be coordinated with applicable state and federal agencies. Thomes Creek is the only major surface water body in the Subbasin that is classified by the TNC Gage Gap webmap as a poorly gaged stream. The active DWR stream gauge on Thomes Creek near Paskenta only records creek stage and discharge when there is greater than 3 feet of water in the creek. There is also an inactive, former USGS stream gauge location on Thomes Creek to the west of I-5 that could be revived or replaced to improve monitoring on this reach.	May include Surface Water Monitoring Data Gap Implementation Plan (Implementation Plan for addressing data gaps)			GSP Section 8.5.2
22	Update Data Management System	The DMS that will be used to store, review, and upload data collected during GSP development and implementation. As new information is collected during monitoring and provided by local stakeholders, the DMS will be updated. The regular updates will also coincide with the review of new data and development of GSP annual reports. After the initial data upload and GSP submission, new data will be compiled in the input Excel tables, which are based on GSP and Annual Report upload templates provided by DWR. The monitoring data will be imported at least annually to the DMS Access database as part of the annual report process. GIS data in the web mapping application will also be updated annually, as needed. These annual updates will be completed by the GSAs. During GSP implementation, a more robust well data tracking and a well registration program may be developed to better assess wells in use and amount of pumping in the Subbasin. Should this				GSP Section 8.6
22.a		This program would be aimed at improving overall county well data management. The GSA could assist each county in developing improved well tracking databases. This would involve reviewing well completion reports and GIS data currently available through DWR's Well Completion Report Application and SGMA Data Viewer and the County Environmental Health Departments. Since much of this data is incomplete or places wells at the center of public land survey system (PLSS) sections, additional research could be conducted to refine the data. For example, the counties could check with well owners about data accuracy and compile information on new wells, including location, purpose, construction information, and hydrogeology. The counties could also identify abandoned wells or wells no longer in use. A similar effort has already been undertaken in Glenn County and enhanced with DMS improvements using Proposition 1 grant funding as described in Section 7.3.2.1. This effort could therefore focus on refining well data within the Tehama County portion of the Corning Subbasin and continuing to refine the Glenn County portion of the data included in its countywide well DMS. This effort will be coordinated with the GSPs being developed within Tehama and Glenn Counties to produce 2 county-wide well completion report databases, containing robust	Well Database Update			GSP Section 8.6.1
22.b		To further develop a robust understanding of groundwater use in the Corning Subbasin a well registration program could be implemented to track the volume and timing of groundwater pumping in the Subbasin. Registration could include sharing of available well construction information, metering information, and monthly or annual estimated extraction volumes. Well metering is intended to improve estimates of groundwater use. Well metering would focus on larger production wells and would likely exclude de minimis wells (pumping less than 2 AF/yr for domestic purposes). A pilot program could be started with the voluntary registration of new production wells and would need to be coordinated with the County Environmental Health	Well Registration Program			GSP Section 8.6.2
23	Update and Refine Hydrologic Model	Coordinate with technical teams responsible for groundwater modeling in neighboring subbasins to confirm that the regional groundwater models are consistent, particularly near the Subbasin boundaries where model areas overlap, through regular inter-basin coordination activities. DWR recommends regular update of the data sets and models used to support GSP development and implementation. This includes updating input data to extend the model simulation period and investigating structural changes that may improve model performance and reduce uncertainties. It will be necessary to maintain the NSac model with more refined local data collected by the GSAs to support GSP implementation and 5-year assessments. GSP implementation could benefit from the collection of additional data and the improvement of the NSac model. Data collected through the data gap implementation plan and the expanded monitoring networks will be used to refine the NSac model as well. Incorporation of future DWR C2VSimFG updates will keep the NSac model current with regional groundwater conditions and reduce the resources required to support the local model. Continued development of new hydrologic and hydrogeologic data throughout the Subbasin will improve knowledge and understanding of the groundwater flow system and provide valuable information for use in model improvement. Additional model refinements that can be				GSP Section 8.7
24	Refine and Implement Projects and Managem	Refine and assess feasibility and timeline of proejcts and management actions during the first 5 years of implementation. As needed, perform feasibility studies, clarify water rights or water availability for recharge, apply for new or change of diversion, place of use, or timing on new ater rights, refine benefit analysis, develop proposed costs, preliminary designs, initiate environmental permitting, apply for grant funding. Cost-sharing agreements between GSAs and local agencies will				GSP Section 8.8