

**CORNING SUB-BASIN (5-021.51)  
GROUNDWATER SUSTAINABILITY PLAN  
ANNUAL REPORT – 2025**

SUBMITTED BY



**TEHAMA COUNTY**  
FLOOD CONTROL AND WATER CONSERVATION DISTRICT



TEHAMA COUNTY FLOOD CONTROL AND WATER  
CONSERVATION DISTRICT GROUNDWATER  
SUSTAINABILITY AGENCY  
CORNING SUB-BASIN GROUNDWATER SUSTAINABILITY AGENCY

PREPARED BY



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## LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
AF	acre-feet
AFY	acre-feet per year
AMSL	above mean sea level
CSGSA	Corning Sub-Basin Groundwater Sustainability Agency
DMS	data management system
DWR	Department of Water Resources
GAMA	Groundwater Ambient Monitoring and Assessment
GPS	global positioning system
GSA	groundwater sustainability agency
GSP	groundwater sustainability plan
IM	Interim milestones
InSAR	Interferometric Synthetic Aperture Radar
ISW	interconnected surface water
MO	measurable objective
MOU	memorandum of understanding
MT	minimum threshold
PMA	projects and management actions
RMP	representative monitoring point
SGM	Sustainable Groundwater Management
SGMA	Sustainable Groundwater Management Act
SI	sustainability indicator
SMC	sustainable management criteria
Subbasin	Corning Subbasin
SWRCB	State Water Resources Control Board
SY	Sustainable Yield
TDS	total dissolved solids
Tehama County GSA	Tehama County Flood Control and Water Conservation District Groundwater Sustainability Agency
TIHM	Tehama Integrated Hydrogeologic Model
TNC	The Nature Conservancy
UR	undesirable result
USBR	United States Bureau of Reclamation
UWMP	Urban Water Management Plan
WY	water year

## EXECUTIVE SUMMARY

The Corning Subbasin (Subbasin) (5-021.51) Annual Report was prepared on behalf of the Corning Subbasin Groundwater Sustainability Agency (CSGSA) and the Tehama County Flood Control and Water Conservation District GSA (Tehama County GSA) to fulfill the statutory requirements set by the Sustainable Groundwater Management Act (SGMA) legislation (§10728) and the Groundwater Sustainability Plan (GSP) regulations (§354.40 and §356.2) developed by the California Department of Water Resources (DWR). The regulations mandate the submission of an annual report to DWR by April 1st after the reporting year, which spans the water year (WY) from October 1<sup>st</sup> to September 30<sup>th</sup>. This Annual Report includes information from the recent 2025 WY for the Corning Subbasin, located within part of Tehama and Glenn Counties, and shown in **Figure ES-1**.

Measured conditions in the Subbasin are in compliance with minimum thresholds (MTs) for all applicable sustainability indicators (SIs), with nine exceptions: wells 22N02W18C003M, 22N03W01R001M, 22N03W01R002M, 22N03W12Q003M, 23N02W28N002M, 23N03W07F001M, 23N03W13C004M, 23N03W25M002M, and 24N03W29Q002M, which had water levels fall below the MTs in fall 2025. An MT is a quantitative value that represents the groundwater conditions measured at a representative monitoring point (RMP) that, when exceeded individually or in combination with MTs at other monitoring sites, may cause an undesirable result(s) (UR) in the Subbasin per DWR's definition. Whether the MT represents a minimum or a maximum value is dependent on the SI. As an example of a minimum value, if groundwater levels are lower than the value of the measurable objectives (MO) for that site, they are moving in the direction of the MT. As an example of a maximum for the groundwater quality sustainable management criteria (SMC), as the value of the total dissolved solids (TDS) concentrations increase from the MO established for that site, it moves in the direction of the MT. The SIs and SMC, including MTs, are summarized in **Table ES-1**. Note that seawater intrusion is not an applicable SI in this Subbasin. Each SI is measured at an RMP.

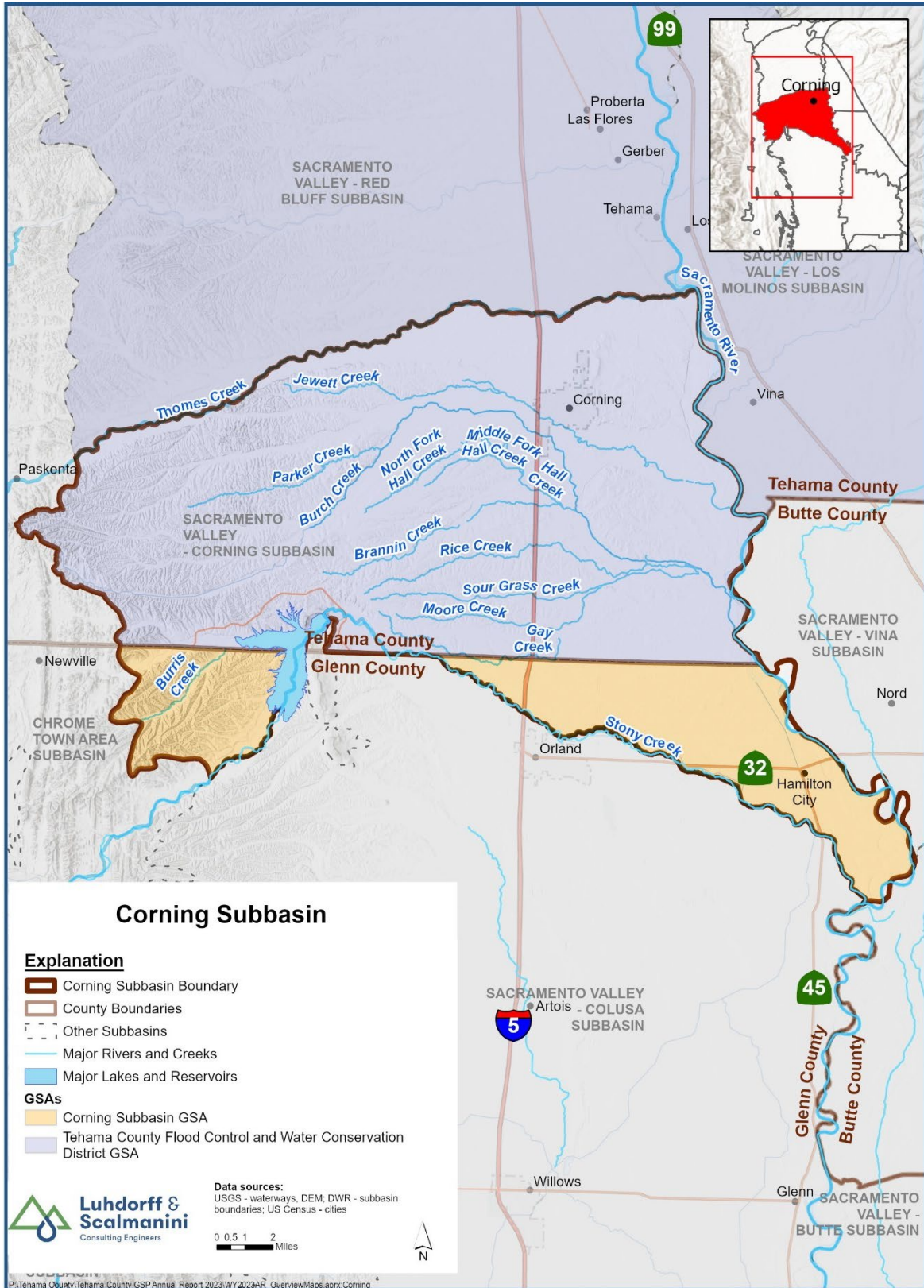


Figure ES-1. Corning Subbasin and Groundwater Sustainability Agency Boundaries

Table ES-1. Corning Subbasin Sustainability Indicator Summary			
2025 Status	Undesirable Result Identification	MO Definition	MT Definition
<b>Chronic Lowering of Groundwater Levels</b>			
<p><b>No indication of undesirable results.</b> There were nine RMP wells with fall 2025 groundwater level measurements below the MT; however, no reports of dry wells or greater than a 7.5 ft water level decline occurred.</p>	<p>10 supply wells are becoming dry (after the GSP revision) within a Thiessen Polygon established in the revised GSP, or when water levels at any RMP in the future decline 7.5 feet or more over a five (5) year period.</p>	<p><b>Stable wells:</b> Maximum fall groundwater elevation since 2012.</p> <p><b>Declining wells:</b> Maximum fall groundwater elevation in 2015.</p>	<p><b>Focus Areas:</b> Five (5) feet higher than MTs as published in the 2022 GSP.</p> <p><b>Outside Focus Areas:</b> MTs as published in the 2022 GSP.</p>
<b>Reduction of Groundwater Storage</b>			
<p><b>No indication of undesirable results.</b> There were 9 RMP wells with fall 2025 groundwater level measurements below the MT.</p>	<p>More than 20% of groundwater elevations measured at RMP wells drop below the associated minimum threshold during 2 consecutive years measured in the fall of each year.</p>	<p>Amount of groundwater in storage when groundwater elevations are at their measurable objective – since groundwater levels are used as a proxy, the same as chronic lowering of groundwater levels measurable objectives.</p>	<p>Amount of groundwater in storage when groundwater elevations are at their minimum threshold– since groundwater levels are used as a proxy, same as chronic lowering of groundwater levels’ minimum thresholds.</p>
<b>Degraded Water Quality</b>			
<p><b>No indication of undesirable results.</b> There were no RMP wells with TDS levels above their MTs.</p>	<p>At least 25% of representative monitoring sites exceed the minimum threshold for water quality for 2 consecutive years at each well, where it can be established that GSP implementation is the cause of the exceedance.</p>	<p>California lower limit SMCL concentration for TDS of 500 mg/L measured at public supply wells.</p>	<p>TDS concentration of 750 mg/L at public supply wells.</p>

Table ES-1. Corning Subbasin Sustainability Indicator Summary			
2025 Status	Undesirable Result Identification	MO Definition	MT Definition
<b>Land Subsidence</b>			
<b>No indication of undesirable results.</b> No InSAR pixel exceeded MT in WY 2025.	Any exceedance of a minimum threshold that is irreversible and caused by lowering groundwater elevations.	Zero inelastic subsidence, in addition to any measurement error. If InSAR data are used, the measurement error is 0.1 feet, and any measurement of 0.1 feet or less would not be considered inelastic subsidence.	No more than 0.5 feet of cumulative subsidence over a five-year period (beyond the measurement error), solely due to lowered groundwater elevations.
<b>Depletion of Interconnected Surface Water</b>			
<b>No indication of undesirable results.</b> There were two RMP wells with fall 2025 groundwater level measurements below the MT.	Same as chronic lowering of groundwater levels.	Same as chronic lowering of groundwater levels.	Same as chronic lowering of groundwater levels.

**Notes:**

*\*2022 GSP Undesirable Results for chronic lowering of GWL: **Stable Wells:** Minimum fall groundwater elevation since 2012 minus 20-foot buffer.*

***Declining Wells:** Minimum fall groundwater elevation since 2012, minus 20% of the minimum groundwater level depth.*

*TDS is the primary water quality constituent of concern.*

*MO = Measurable Objective; MT = Minimum Threshold; RMP = representative monitoring point; mg/L = milligrams per liter; SMCL = Secondary Maximum Contaminant Level*

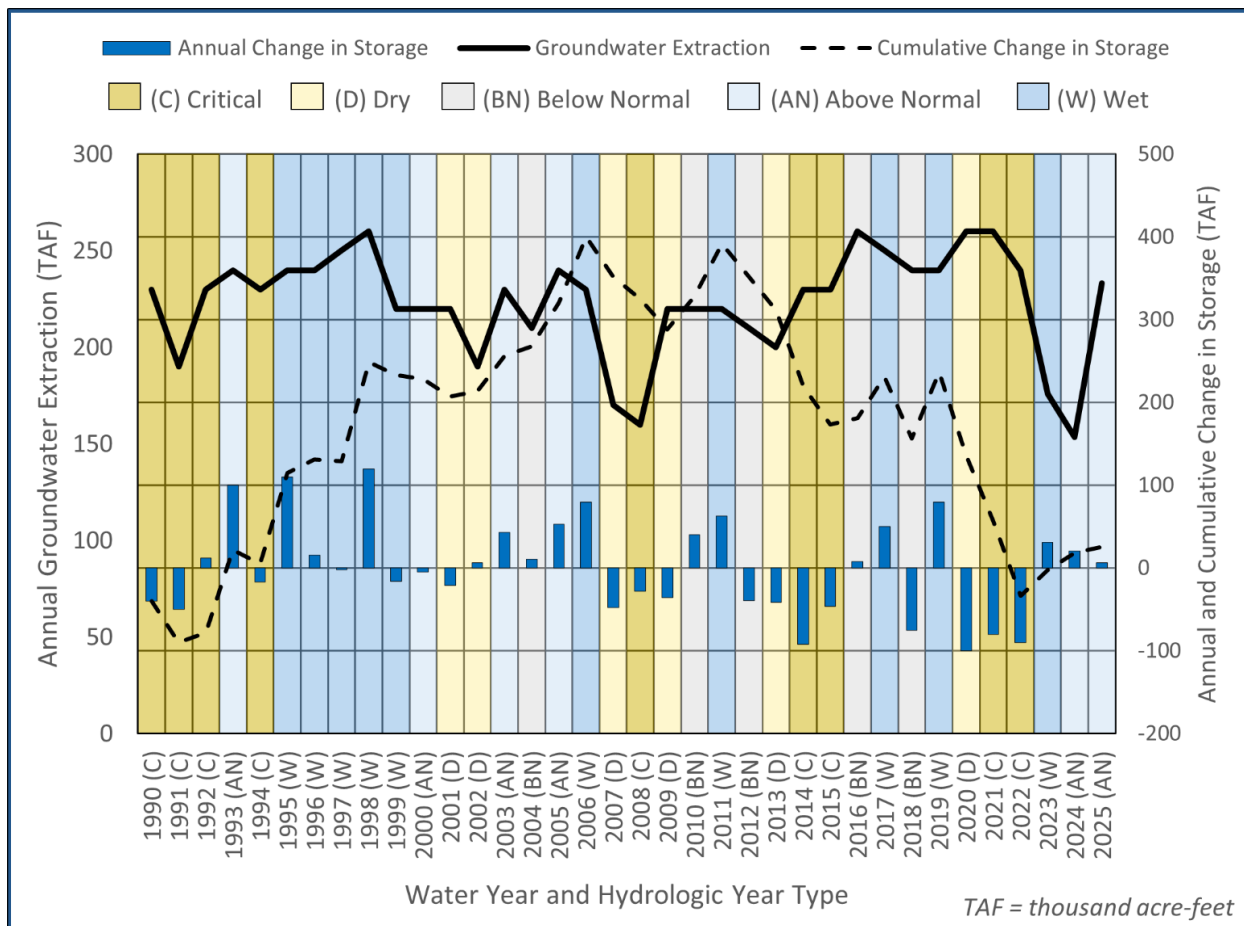
## Current Groundwater Level and Storage Conditions

The current groundwater conditions in the Subbasin are characterized by groundwater elevations that are near or below the MO. In WY 2025, nine wells experienced a decline below the MT in fall 2025, while all remaining RMP wells remained above the MT. Although one well remained below the MT for 24 consecutive months, a UR occurs when 10 supply wells become dry within a Thiessen Polygon (per the revised GSP) or when water levels at any RMP in the future decline 7.5 feet or more over a five (5) year period.

On average, groundwater elevations are about 15 feet above the MT throughout the Subbasin and 13 feet below the MOs in WY 2025. Despite groundwater elevations exhibiting an overall decreasing trend over the period of record, in recent years, groundwater elevations have remained stable or slightly increased. This positive trend is influenced by the above-normal hydrologic conditions experienced in WY 2025, which resulted in increased surface water supplies available for irrigation and decreased groundwater extractions and increased natural recharge, which contributed to the recovery of groundwater conditions relative to the dry period from WY 2020 to WY 2022.

Fluctuations in groundwater levels and storage within the Subbasin are influenced by the balance between aquifer recharge and extraction. Groundwater levels serve as a proxy for estimating changes in groundwater storage, with observed patterns closely mirroring those in the broader Sacramento Valley. In years characterized by drought and low precipitation, diminished surface water supplies lead to increased extraction and reduced recharge, causing a decline in groundwater storage.

WY 2025, classified as an above-normal WY, marked an increase in groundwater storage, totaling approximately 6,800 acre-feet (AF) in the aquifer. For context, over the past 36 years, the largest decrease in groundwater storage is estimated at -100,000 AF, and the highest increase was estimated to be 120,000 AF. **Figure ES-2** shows groundwater pumping, as well as annual and cumulative changes in groundwater storage from WY 1990 to WY 2025.



**Figure ES-2. Corning Subbasin Groundwater Pumping, Annual and Cumulative Change in Storage from WY 1990 to WY 2025**

## Water Use

Groundwater extraction was approximately 207,000 AF in WY 2025, higher than the 153,600 AF extracted in WY 2024. The annual volume of surface water delivered to the Subbasin from surface water features such as Thomes Creek and Stony Creek was about 26,100 AF in WY 2025, lower than the 29,700 AF delivered in WY 2024. The increase in groundwater extraction estimates in WY 2025 compared to WY 2024 were influenced by a variety of factors, including decreased surface water and potentially less effective precipitation in WY 2025 (relative to WY 2024), despite WY 2025 being classified the same as WY 2024. Additionally, in the Corning Subbasin, the irrigated acreage increased from 61,000 acres in WY 2024 to 63,600 acres in WY 2025.

Groundwater provides the majority (89%) of the total water used in the Subbasin, and surface water is the source for the remainder (11%). Groundwater also met the demand for municipal and rural residential users. The volume of groundwater and surface water used on an annual basis within the Subbasin is summarized directly from measured and reported groundwater pumping and surface water diversions when available; however, a water budget approach has been used to estimate the remaining unmeasured

volume of groundwater extraction. **Table ES-2** provides a summary of water use by water sector. Numbers are rounded to the nearest 100.

Table ES-2. Corning Subbasin Total Water Use by Water Use Sector in WY 2025					
Sector	Groundwater (AF)	Surface Water (AF)	Total (AF)	Percent of Total Water Use	Total Irrigated Area (acres)
Agricultural	166,600	26,100	192,700	<b>83%</b>	63,600
Municipal	31,500	0	31,500	<b>13%</b>	0
Rural Residential	8,900	0	8,900	<b>4%</b>	n/a*
<b>Total</b>	<b>207,000</b>	<b>26,100</b>	<b>233,100</b>	<b>100%</b>	
<b>Percent of Total Water Use</b>	<b>89%</b>	<b>11%</b>	<b>100%</b>		

\*Rural residential water use is calculated based on population from census data, not area.

## GSP Implementation Progress

The main activities and updates since the previous annual report are as follows:

- The GSAs have engaged in public outreach in WY 2025.
- The GSAs received from DWR “incomplete” determination letters in October 2023; re-submitted GSP in April 2024, which included two major commitments to develop Groundwater Demand Management and Well Mitigation programs.
- The GSAs completed the WY 2024 Annual Report and other compliance tasks.
- All sustainability indicators (SIs) are in compliance with their MTs, except for the chronic lowering of groundwater levels SI (see summary **Table 5-1**).
- Progress has been made on 15 PMAs since the last annual report (**Appendix G**).

Several other actions continue in the Subbasin to fulfill the requirements of the GSP. These include:

- Monitoring and recording groundwater levels and groundwater quality.
- Maintaining and updating the data management system (DMS) with newly collected data.
- Annual reporting on Subbasin conditions and submission to DWR as required by SGMA.
- Ongoing intra- and inter-basin coordination.

Since 2023, the Tehama County GSA and the CSGSA have been preparing to implement future projects to address recommended corrective actions, which will largely be funded by the Sustainable Groundwater Management (SGM) Implementation Grant Program. The ongoing implementation of PMAs, outlined in **Section 5**, aims to address these corrective actions effectively through periodic evaluation of the GSP, which is due in January 2027.

Following DWR’s review of the Corning Subbasin Water Year 2024 Annual Report, they requested additional information on August 22, 2025, to evaluate progress toward groundwater sustainability, focusing on implementation of Projects and Management Actions, correction of unsustainable water supply conditions, and improved monitoring and reporting. The approach the GSAs in the Corning Subbasin are taking to address DWR’s review can be found in **Section 5.1**; DWR’s letter can be found in **Appendix H**.

## 1 GENERAL INFORMATION §356.2(A)

The Annual Report for the Corning Subbasin (Subbasin) (5-021.51) was prepared on behalf of the Tehama County Flood Control and Water Conservation District (Tehama County GSA) and the Corning Sub-Basin Groundwater Sustainability Agency (CSGSA) to fulfill the statutory requirements of the Sustainable Groundwater Management Act (SGMA) legislation (§10728) and regulatory requirements developed by the California Department of Water Resources (DWR) included in the Groundwater Sustainability Plan (GSP) regulations (§354.40 and §356.2). The regulations require the Groundwater Sustainability Agencies (GSAs) to submit an annual report to DWR by April 1<sup>st</sup> following the reporting year, which spans the water year (WY) from October 1<sup>st</sup> to September 30<sup>th</sup>. This Annual Report is the fifth annual report submitted on behalf of the Subbasin and includes data for the most recent WY 2025. Public seeking information on Corning Subbasin and GSP Implementation, meeting schedules, and other resources should visit the **Tehama County GSA** (<https://tehamacountywater.org/gsa/>) and the **Corning Sub-Basin GSA** (<https://www.countyofglenn.net/corning-sub-basin-gsa>) websites.

### 1.1 Report Contents

This report is the fifth annual report prepared for the Corning Subbasin GSP, submitted in January 2022 (revisions submitted in April 2024). GSP references throughout this report refer to the Revised April 2024 Corning Subbasin GSP unless otherwise noted. The first annual report included data elements for the first reporting year, WY 2021, as well as a “bridge year,” WY 2020. The subsequent annual reports contain data only for the current reporting WY period. Data elements presented in this report refer to WY 2025, the 12-month period spanning October 2024 through September 2025, unless otherwise noted. Pursuant to GSP regulations, this Annual Report includes:

- Groundwater Elevation Data
- Water Supply and Use
- Change in Groundwater Storage
- GSP Implementation Progress

### 1.2 Subbasin Setting

The Subbasin is a 324 square mile (207,342 acres) area on the southern side of Tehama County and the northern side of Glenn County. The Subbasin is managed by the Tehama County GSA and the CSGSA.

The Subbasin is shown in **Figure 1-1** and **Figure 1-2**. The Subbasin lies in the northeastern portion of the Sacramento Groundwater Basin (**Figure 1-1**). The Subbasin’s northern boundary is the Red Bluff Subbasin, the western boundary is the Coastal Mountain Range, the southern boundary is the Colusa and Butte Subbasins, and the eastern boundary is the Los Molinos and Vina Subbasins (DWR, 2018), **Figure 1-2**. Several surface water features are located in the Subbasin, including the Sacramento River, Thomes Creek, and Stony Creek. Smaller local streams entering and traversing the Subbasin include Jewett Creek and Hall Creek. Groundwater generally flows from west/northwest to east/southeast.

The Corning Subbasin GSP recognizes that the updated annual groundwater storage is negative and constitutes overdraft. The value of -31,200 acre-feet per year (AFY) will affect the sustainable yield (SY) calculation downward. The recalculation of the SY will also be conducted as part of the 5-year Periodic Evaluation. Until that time, the 2070 simulated SY is 141,000 acre-feet (AF). Water use in the Subbasin is dominated (83%) by agricultural uses, and municipal (13%) and household (4%) water use account for the remainder of water used. Groundwater constitutes the majority (89%) of the Subbasin's water supplies, with surface water comprising the remaining portion (11%).

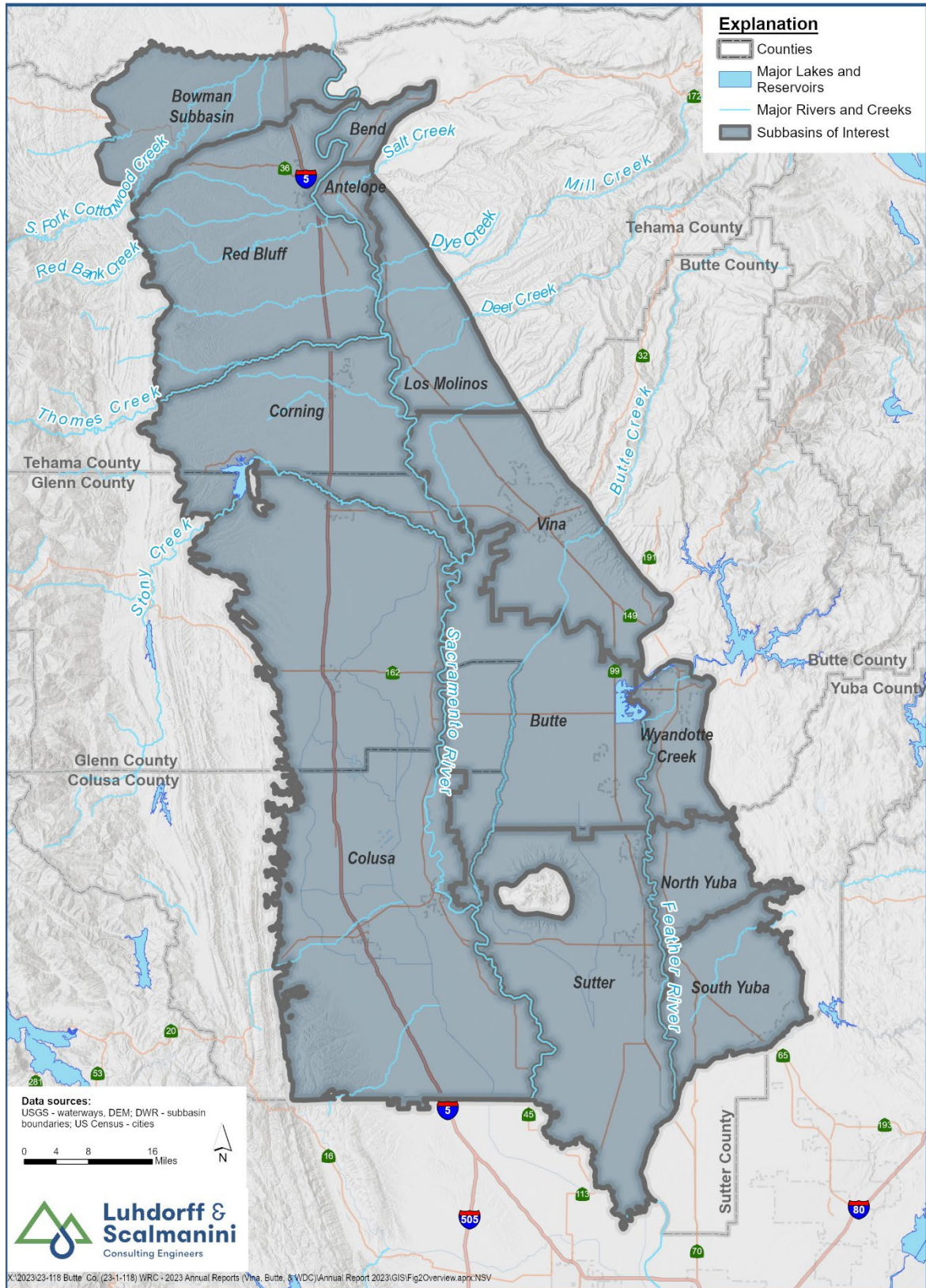


Figure 1-1. Subbasins in the Northern Sacramento Valley



## 2 GROUNDWATER ELEVATIONS §356.2(B)(1)

Groundwater elevations in the Subbasin typically fluctuate seasonally between and within water years, particularly in groundwater-dependent areas or during drought years when groundwater is used to compensate for diminished surface water supplies. Seasonal fluctuations of groundwater levels occur in response to groundwater pumping and recovery, land and water use activities, recharge, and natural discharge. Sources of recharge into the groundwater system include precipitation, applied irrigation water, and seepage from local creeks and rivers.

Groundwater pumping for irrigation typically occurs from April to September, although depending on the timing of rainfall, it may shift earlier and/or later into the season. Consequently, groundwater levels are usually highest in the spring and lowest during the irrigation season in the summer months. Fall groundwater measurements (typically measured in October) provide an indication of groundwater conditions after the primary irrigation season.

Groundwater levels in the Subbasin are monitored at representative monitoring point (RMP) wells that were selected in the GSP to represent localized groundwater conditions for specified areas of the Subbasin. RMP wells include a mixture of domestic wells, irrigation wells, and dedicated observation wells. In total, 54 RMP wells are used to monitor conditions in the aquifer. **Appendix A** includes hydrographs showing groundwater elevations and the approximate locations of the RMP wells. Sustainable management criteria (SMC), described in **Appendix B**, are assigned to groundwater levels at the RMP wells.

Certain RMP wells measured by DWR and Tehama County are equipped with data loggers and pressure transducers, which continuously monitor and record hourly changes in groundwater levels. These and the remaining wells in the network are measured by hand at least two times each year generally in March and October. Data from groundwater level monitoring wells is available from DWR's online SGMA Data Viewer tool (<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer>).

Spring and fall 2025 groundwater elevation measurements for RMP wells in the Subbasin are summarized in **Table 5-2**. The groundwater level monitoring methods are consistent with the protocols described in the Corning Subbasin GSP. Depending on the well, groundwater elevations are measured using steel tape, an electric sounder, or a pressure transducer. The accuracy of groundwater level measurements is typically either 0.01 ft or 0.1 ft, depending on the equipment used.

The following sub-sections provide a summary of groundwater elevations and conditions during WY 2025 through the presentation and description of groundwater elevation contours (Section 2.1) and hydrographs of groundwater elevations (Section 2.2; **Appendix A**).

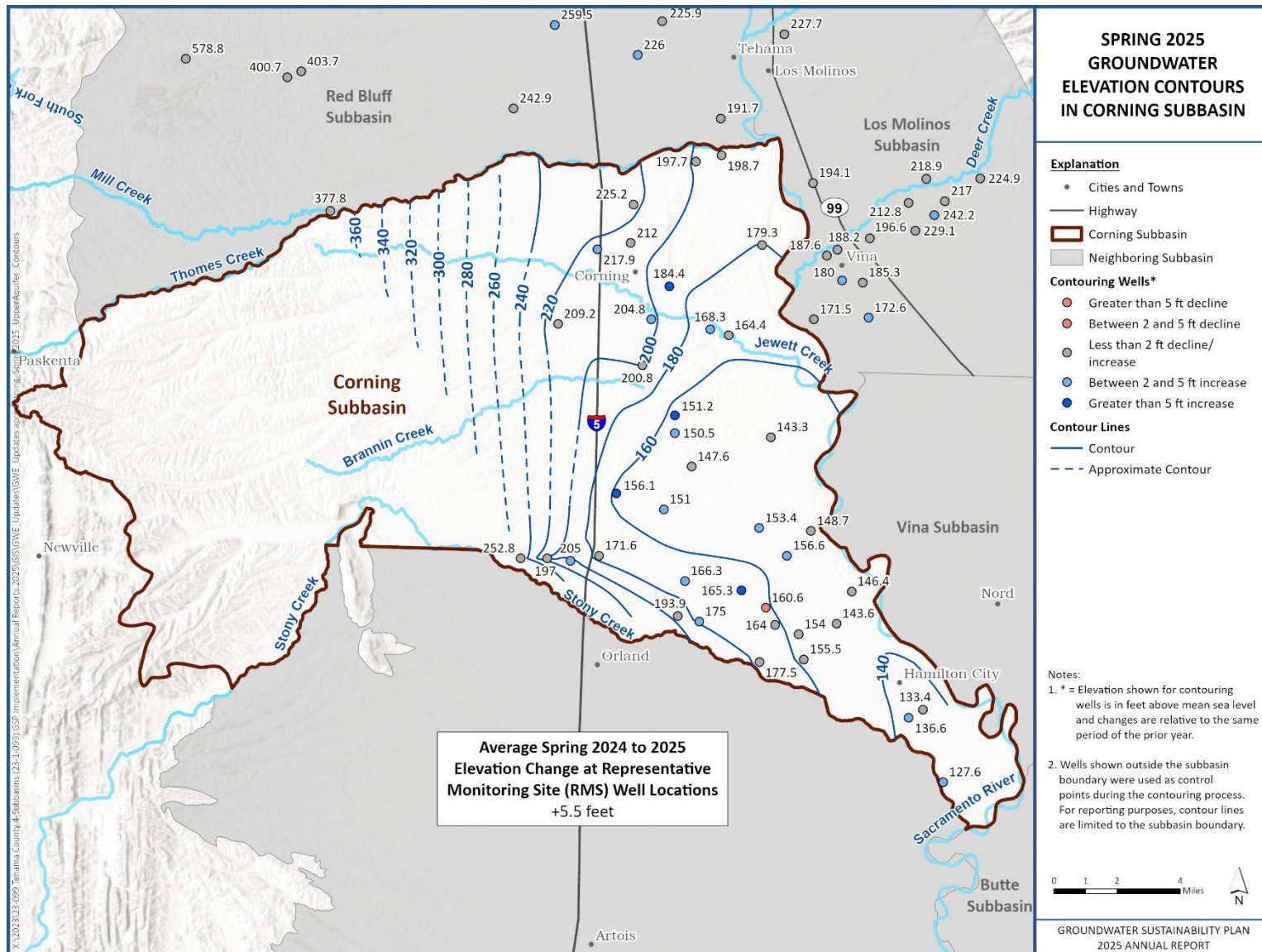
### 2.1 Groundwater Elevation Contour Maps – §356.2(b)(1)(A)

Groundwater elevation contour maps for spring and fall 2025 were prepared for the aquifer, as shown in **Figures 2-1** and **2-2**. Spring contours are intended to generally represent seasonal high groundwater elevations (shallower depth to water), while fall contours are intended to generally represent seasonal low groundwater elevations (deeper depth to water). Groundwater elevation contours were developed

by creating a continuous groundwater elevation surface based on available monitoring well data using the kriging interpolation method. Questionable groundwater elevation measurements were excluded, and minor adjustments to the contours were made based on professional judgment.

The contour maps of the aquifer (**Figures 2-1 and 2-2**) each show that groundwater elevations are generally higher in the northern areas of the Subbasin versus the southern and eastern areas, indicating a general gradient – and thus groundwater flow – from the west/northwest to the east/southeast. The contour maps illustrate several general features of the groundwater flow system in the Corning Subbasin, including:

- Overall, west/northwest to east/southeast groundwater flow is consistent with recharge from the Northern Coastal Mountain Ranges.
- Movement of water towards the Sacramento River in both the fall and the spring.
- The higher concentration of contours in the central portion of the Subbasin indicates a steeper gradient and could suggest higher groundwater flow. Nonetheless, the contours are consistent with the current understanding of recharge coming from the Northern Coastal Mountain Ranges foothills. New sources of information and data may improve understanding of this area.



**Figure 2-1. Corning Subbasin Contours of Equal Groundwater Elevation, Spring 2025 (Seasonal High)**

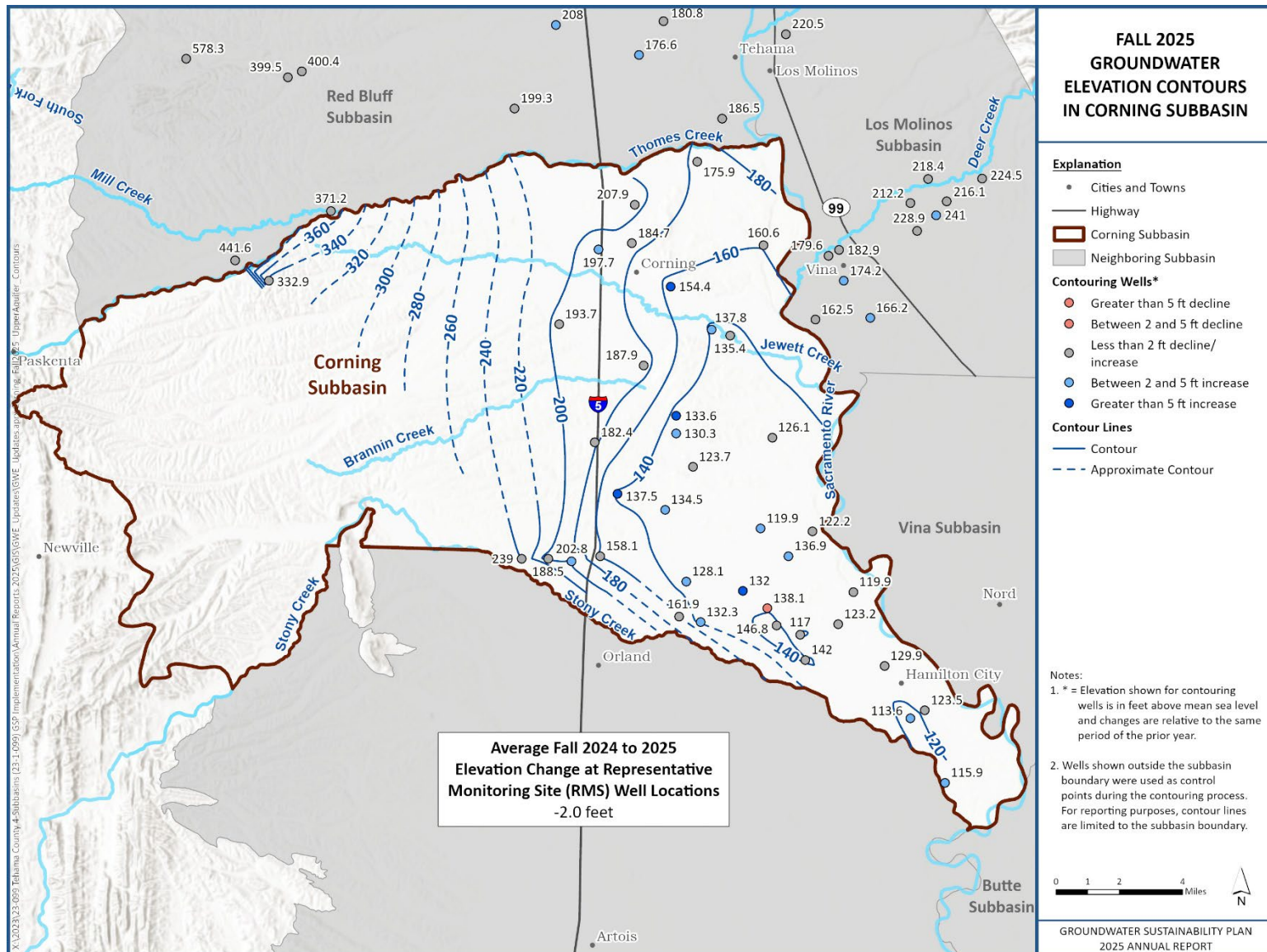


Figure 2-2. Corning Subbasin Contours of Equal Groundwater Elevation, Fall 2025 (Seasonal Low)

## 2.2 Hydrographs of Groundwater Elevations – §356.2(b)(1)(B)

Groundwater elevation hydrographs for each RMP well are presented in **Appendix A**. The pink trendline on each hydrograph illustrates general groundwater level changes during the spring months, a period typically free from groundwater pumping, thereby reflecting the least-influenced groundwater levels. Groundwater level records from recent spring seasons were used to calculate changes in groundwater levels, the average water level, and the average annual rate of change. The trendline was developed based on the available data and historical records for each specific monitoring site. While most sites have data spanning the past 22 years (Spring 2003 to Spring 2025), some long-established monitoring wells contain extended historical records (over 22 years), whereas newly installed wells have more limited datasets. **Appendix B** provides an explanation of the SMC terminology defined in Section 6 of the Corning Subbasin GSP (e.g., minimum threshold [MT], measurable objective [MO], and interim milestone [IM]). **Table 5-1** summarizes the MOs, MTs, and identification of undesirable results (URs) for WY 2025, and **Table 5-2** contains a summary of the spring 2025 (seasonal high) and fall 2025 (seasonal low) groundwater elevations measured at each well. **Table 5-2** also summarizes the established MO and MT for groundwater elevations, the changes in groundwater elevations from WY 2024 to WY 2025, and the differences between WY 2025 groundwater elevations and the MO.

Historically, groundwater levels have typically remained at or above their respective MOs in the Subbasin. The GSP also established IMs to provide numerical metrics for GSAs to track the Subbasin's conditions relative to the overall sustainability goal, ensuring that the groundwater management of the Subbasin remains sustainable.

Spring 2025 groundwater elevations were generally near or slightly higher than those in spring 2024; however, fall 2025 measurements were generally lower than those in fall 2024. In WY 2025, the average seasonal high was 169 feet above mean sea level (AMSL), and the average seasonal low was 153 feet AMSL. In WY 2024, the average seasonal high was 167 feet AMSL, and the average seasonal low was 153 feet AMSL. Increases in groundwater levels are generally expected to result from increased recharge due to above-normal climate conditions.

Groundwater elevations were measured in 39 of the 54 RMP wells in spring 2025. Groundwater elevations in 6 of those wells fell below their respective MO, however no groundwater elevations were below their respective MT. In fall 2025, groundwater elevations were measured in 45 of the 54 RMP wells. Groundwater elevations in 43 wells fell below their respective MO and 9 were below their respective MT. However, this does not trigger URs as outlined in the GSP (summarized in **Table 5-1**) since water levels at any RMP did not decline 7.5 feet or more over a five (5) year period and there were no reported dry wells. On average, groundwater levels measured in RMP wells were approximately 36 feet higher than MT elevations in spring 2025 and 10 feet higher than MT elevations in fall 2025.

## 3 WATER SUPPLY AND USE

As required by §356.2, this section summarizes water supply and use in the Subbasin, categorized by groundwater extraction volumes, surface water supply, and total supply. The total water available for use in the Subbasin was tabulated from groundwater extraction volumes reported in **Table 3-1** and the surface water supply reported in **Table 3-2**. The total water available is summarized in **Table 3-3** for WY 2025.

Groundwater extraction volumes are either based on measured data or estimates from a water use analysis based on 2025 land use data and climate conditions. Water use data is available in **Appendix D**. The water use analysis methodology is discussed in **Appendix E**. Surface water use was estimated from historic deliveries when records were not available.

Table 3-1. Corning Subbasin Groundwater Use by Water Use Sector for WY 2025		
Sector	Applied Groundwater (AF)	Percent of Total Groundwater Use
Agricultural	166,600	81%
Municipal	31,500	15%
Rural Residential	8,900	4%
<b>Total</b>	<b>207,000</b>	<b>100%</b>

### 3.1 Groundwater Extraction – §356.2(b)(2)

Groundwater extraction in the Subbasin is summarized in **Table 3-1**. Groundwater extraction is reported from pumping records where available, while the remaining groundwater extraction is estimated through the water use analysis approach described in the previous section and in **Appendix E**. The majority of the Subbasin relies on groundwater supplies for agricultural irrigation, although portions of the Subbasin rely on a combination of groundwater and surface water supplies.

Municipal water users extracted approximately 31,500 AF in the Subbasin in WY 2025. Municipal water supplies are measured and provided by the City of Corning and Hamilton City (CalWater). The record of municipal supplies does not distinguish between urban and industrial water uses.

Rural residential water users rely on private domestic wells to meet their household water needs. Rural residential groundwater extraction was quantified based on average per capita water use and estimated population. The average per capita water use reported in the California Water Service Chico-Hamilton City District 2020 Urban Water Management Plan (Cal Water Chico, 2020) is considered to be representative of the area. Water use in 2020 was 181 gallons per capita per day. Population estimates were based on average household sizes from the US census and aggregated to those living outside city water district boundaries. Population estimates from the 2020 Census were used to estimate residential groundwater pumping.

The total estimated groundwater extraction was approximately 207,000 AF in WY 2025, the majority of which was used to meet agricultural water demands (approximately 166,600 AF). The total groundwater extraction is about 16,100 AF less than the historical groundwater pumping average (223,100 AF; **Table 4-1**) and 9,700 AF less than the average annual extraction of the last five above normal WYs on record, 216,700 AF (1993, 2000, 2003, 2005, and 2024). The lower groundwater extraction in WY 2025 compared to the historical average is influenced by increased precipitation in above normal years and compared to other above normal water years by differing precipitation patterns and availability of water throughout the year. **Figure 3-1** shows the water use sector and source. **Figure 3-2** shows the general

areas where groundwater is applied in the Subbasin. In the Corning Subbasin, the irrigated acreage increased from 61,000 acres in WY 2024 to 63,600 acres in WY 2025. In the western, northeastern, and southeastern portions of the Subbasin, there are areas that are currently identified as solely utilizing groundwater for agricultural use that potentially also have access to surface water for agricultural use according to prior County land use surveys. If confirmed, these areas would be updated to reflect a mix of groundwater and surface water for agricultural use in future years. About 81% of the total groundwater extraction was used by the agricultural sector, while the remaining 19% was used for municipal and rural residential water needs.

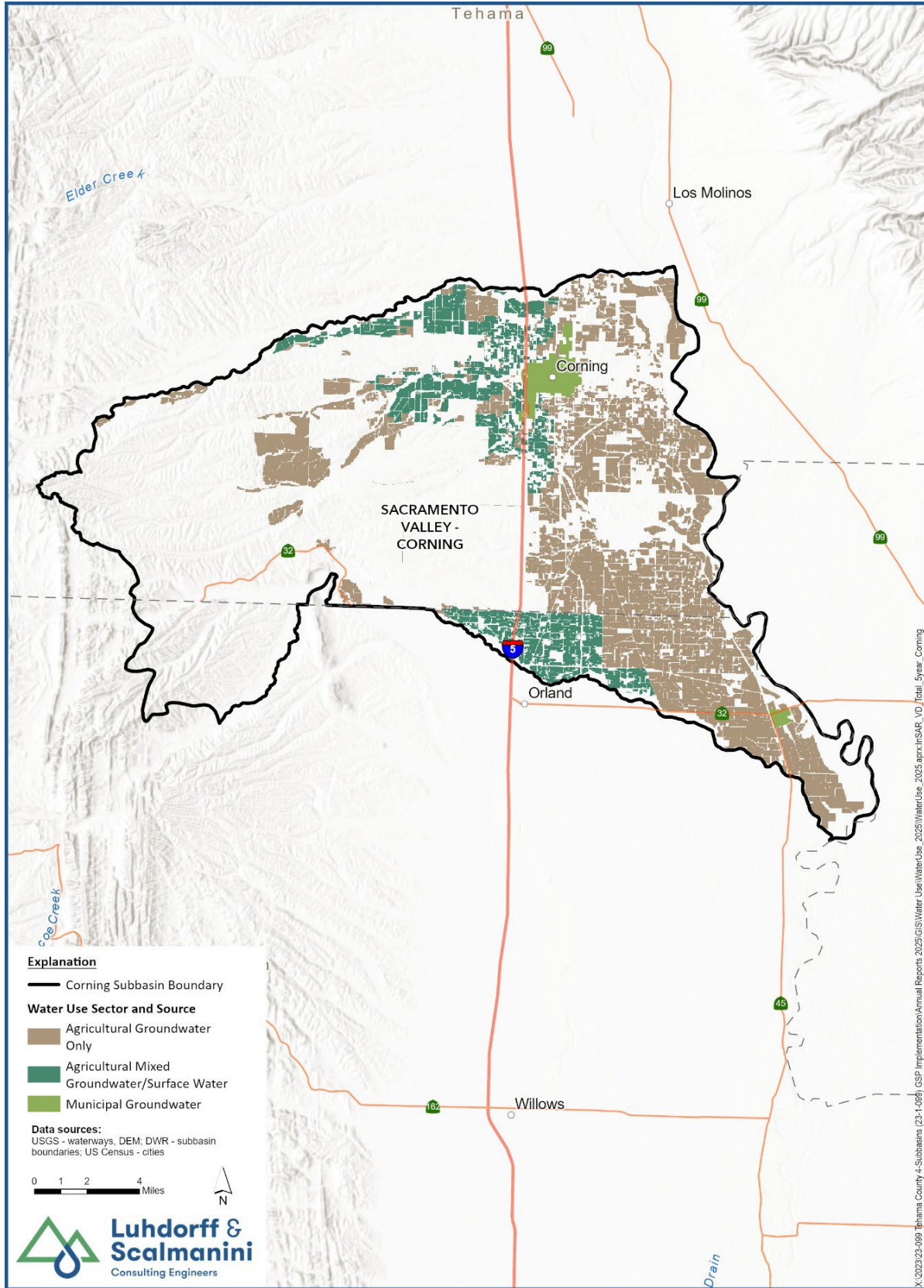


Figure 3-1. Corning Subbasin Water Use Sector and Source– WY 2025

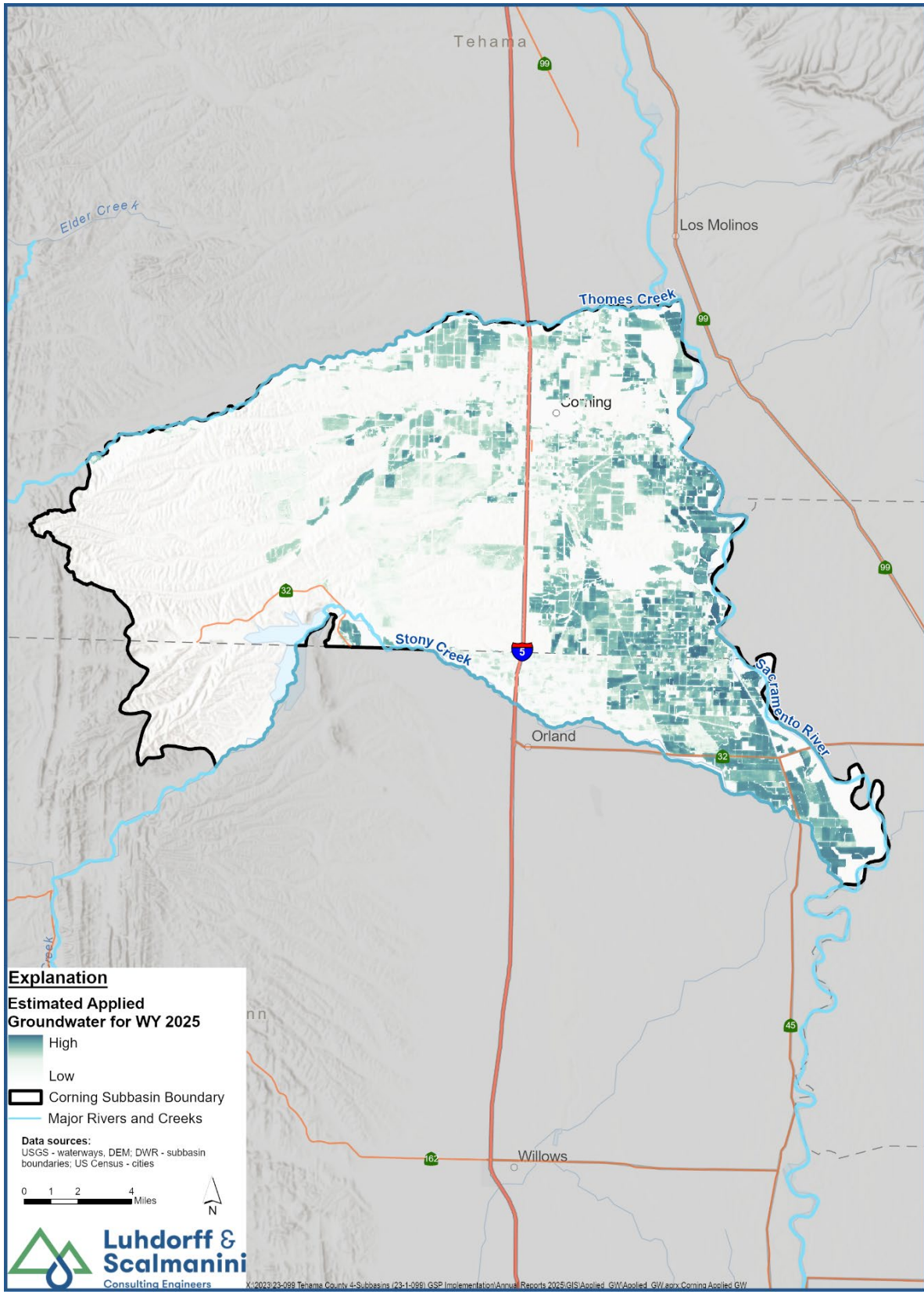


Figure 3-2. Corning Subbasin Estimated Applied Groundwater – WY 2025

### 3.2 Surface Water Supply – §356.2(b)(3)

Surface water supplies used or available for use in the Subbasin are summarized in **Table 3-2**. Surface water supplies are reported directly from water supplier records or collected from publicly available sources (water rights diversion records, etc.) where available. Missing surface water supply data were estimated based on available historical diversions data in similar water years.

Surface water provided about 11% of the total water use in the Subbasin for WY 2025. Diversions from surface water features such as Thomes Creek and Stony Creek were estimated based on the historic State Water Resources Control Board’s (SWRCB) California Water Accounting, Tracking, and Reporting System (CalWATRS) (SWRCB, 2025) data for total diversions or direct requests from diverters. There are currently no surface water supplies for municipal use in the Corning Subbasin. Total surface water diversions and applied surface water totals for the Corning Subbasin are estimated to be about 29,500 AF and 26,100 AF, respectively.

WY 2025 was an above-normal WY, similar to the hydrologic conditions in WY 2024. Despite receiving similar precipitation in WY 2025, surface water use decreased in WY 2025 (26,100 AF) compared to WY 2024 (29,700 AF).

<b>Table 3-2. Corning Subbasin Surface Water Use by Water Use Sector for WY 2025</b>			
<b>Sector</b>	<b>Diverted (AF)</b>	<b>Applied (AF)</b>	<b>Percent of Total Surface Water Use</b>
Agricultural	29,500	26,100	100%
Municipal	0	0	0%
<b>Total</b>	<b>29,500</b>	<b>26,100</b>	<b>100%</b>

### 3.3 Total Water Use by Sector – §356.2(b)(4)

Total water demand in the Subbasin for WY 2025 was divided between surface water (11%) and groundwater (89%). The total water available for use in the Subbasin was tabulated from groundwater extraction volumes reported in **Table 3-1** and the surface water supply reported in **Table 3-2**. The total water available is summarized in **Table 3-3** for WY 2025. The results are either based on measured data or estimates, as described in the previous two sections.

Sector	Groundwater (AF)	Surface Water (AF)	Total (AF)	Percent of Total Water Use	Total Sector Area (acres)
Agricultural	166,600	26,100	192,700	<b>83%</b>	63,600
Municipal	31,500	0	31,500	<b>13%</b>	0
Rural Residential	8,900	0	8,900	<b>4%</b>	n/a*
<b>Total</b>	<b>207,000</b>	<b>26,100</b>	<b>233,100</b>	<b>100%</b>	

\*Rural residential water use is calculated based on population from census data, not area.

### 3.4 Uncertainties in Water Use Estimates

Estimated uncertainties in the water budget components are presented in **Table 3-4**. The uncertainty of these water budget components is based on typical accuracies given in technical literature and the cumulative estimated accuracy of all inputs used to calculate the components.

Water Budget Component	Data Source	Estimated Uncertainty (%)	Source
<b>Groundwater Water</b>			
Agricultural	Measurement	20%	Typical uncertainty from water balance calculation.
Municipal/Industrial	Measurement /Estimate	5%	Typical accuracy of municipal water system reporting.
Rural Residential	Calculation	15%	Estimated from per capita water use and census information.
<b>Surface Water</b>			
Agricultural	Calculation	10% <sup>1</sup>	Estimated from the Senate Bill 88 measurement accuracy standards.

<sup>1</sup> Higher uncertainty of 10-20% is typical for estimated surface water inflows, including ungauged inflows from small watersheds into creeks that enter the Basin.

## 4 GROUNDWATER STORAGE

Long-term fluctuations in groundwater levels and groundwater in storage occur when there is an imbalance between the volume of water recharged into the aquifer and the volume of water removed from the aquifer, either by extraction or natural discharge to surface water bodies. If, over a period of years, the amount of water recharged to the aquifer exceeds the amount of water removed from the aquifer, then groundwater levels will increase and groundwater storage increases (i.e., positive change in storage). Conversely, if, over time, the amount of water removed from the aquifer exceeds the amount of water recharged, then groundwater levels decline, and groundwater storage decreases. These long-

term changes can be linked to various factors, including increased or decreased groundwater extraction or variations in recharge associated with wet or dry hydrologic cycles.

A review of the RMP well hydrographs (**Appendix A**) indicates that groundwater elevations are either relatively stable or show a declining trend over the period of record. Declines may be influenced by the significant percentage of water years since 2006 that have been dry (i.e., characterized as below normal, dry, or critical). Since groundwater storage is closely related to groundwater levels, measured changes in groundwater levels can serve as a proxy for and be utilized to estimate changes in groundwater storage. Changes in groundwater storage in the Subbasin follow a pattern typical of most of the Sacramento Valley. During normal-to-wet years, groundwater is withdrawn during the summer for irrigation and replenished during the winter through recharge of precipitation and surface water inflows, allowing groundwater storage to potentially rebound by the following spring. During dry years and drought conditions, this pattern is disrupted when more groundwater may be pumped to meet irrigation demand and less recharge may occur due to reduced precipitation, diminished or curtailed surface water supplies, and lower stream levels.

In WY 2025 (an above-normal WY), groundwater storage increased by approximately 6,800 AF. Above-normal conditions contributed to increased recharge. Related factors, such as flood irrigation with surface water and increased stream flows, resulted in higher groundwater levels in spring 2025 compared to spring 2024.

The following sections present a summary of groundwater use and change in storage over time, along with a description of the uncertainty in storage change estimates.

#### 4.1 Change in Groundwater Storage – §356.2(b)(5)(B)

Annual groundwater pumping, groundwater storage changes, and the cumulative change in storage are presented for WY 1990 through WY 2025 in **Table 4-1** and **Figure 4-1**. WY 2025 was an above-normal WY and saw an increase in groundwater storage, totaling approximately 6,800 AF. For context, over the past 36 years, the largest decrease in groundwater storage is estimated at -100,000 AF, and the highest increase was estimated to be 120,000 AF.

Changes in storage values for WY 1990 through WY 2020 and groundwater pumping for WY 1990 through WY 2021 come from the Corning Subbasin GSP (Tehama County GSA and CSGSA, 2022). It should be noted that the groundwater model was not used to estimate storage changes for WY 2021 through WY 2025. Therefore, future updates to the model may result in different estimates for WY 2021 through WY 2025 groundwater storage changes. The approach of using measured groundwater elevation changes to estimate storage changes is considered reasonable and cost-effective for the purposes of the annual report. **Table 4-1** includes estimates of annual groundwater pumping, annual storage change, and cumulative storage change for WYs 1990 through 2025. Estimates of annual groundwater pumping for WYs 2022 through 2025 are described in **Section 3** and **Appendix E**. The change in annual storage and cumulative change in storage for WYs 2021 through 2025 were estimated based on the method described in **Section 4.2**. Groundwater extractions for the entire period include pumping for agricultural, municipal, and rural residential purposes.

The annual and cumulative changes in groundwater storage for the period from WY 2021 through WY 2025 were based on the methodology described in **Section 4.2**. This methodology differs from the methodology reported in the GSP; however, it is anticipated that the methodology described in **Section 4.2** will be utilized for future annual reports.

<b>Table 4-1. Corning Subbasin Annual Groundwater Extraction and Change in Storage</b>			
<b>Water Year &amp; Type</b>	<b>Groundwater Extraction (Pumping &amp; Uptake) (afy)<sup>1</sup></b>	<b>Annual Groundwater Storage Change (afy)</b>	<b>Cumulative Groundwater Storage Change (afy)</b>
1990 (C)	230,000	-40,000	-40,000
1991 (C)	190,000	-50,000	-90,000
1992 (C)	230,000	12,000	-78,000
1993 (AN)	240,000	100,000	22,000
1994 (C)	230,000	-17,000	5,000
1995 (W)	240,000	110,000	115,000
1996 (W)	240,000	16,000	131,000
1997 (W)	250,000	-2,000	129,000
1998 (W)	260,000	120,000	249,000
1999 (W)	220,000	-16,000	233,000
2000 (AN)	220,000	-5,000	228,000
2001 (D)	220,000	-21,000	207,000
2002 (D)	190,000	6,500	213,500
2003 (AN)	230,000	43,000	256,500
2004 (BN)	210,000	11,000	267,500
2005 (AN)	240,000	53,000	320,500
2006 (W)	230,000	80,000	400,500
2007 (D)	170,000	-48,000	352,500
2008 (C)	160,000	-28,000	324,500
2009 (D)	220,000	-36,000	288,500
2010 (BN)	220,000	40,000	328,500
2011 (W)	220,000	63,000	391,500
2012 (BN)	210,000	-39,000	352,500
2013 (D)	200,000	-41,000	311,500
2014 (C)	230,000	-92,000	219,500
2015 (C) <sup>2</sup>	230,000	-46,000	173,500
2016 (BN)	260,000	8,000	181,500
2017 (W)	250,000	50,000	231,500
2018 (BN)	240,000	-75,000	156,500
2019 (W)	240,000	80,000	236,500
2020 (D)	260,000	-100,000	136,500

<b>Table 4-1. Corning Subbasin Annual Groundwater Extraction and Change in Storage</b>			
<b>Water Year &amp; Type</b>	<b>Groundwater Extraction (Pumping &amp; Uptake) (afy)<sup>1</sup></b>	<b>Annual Groundwater Storage Change (afy)</b>	<b>Cumulative Groundwater Storage Change (afy)</b>
2021 (C) <sup>2</sup>	260,000	-80,000	56,500
2022 (C) <sup>2</sup>	240,000	-90,000	-33,500
2023 (W)	176,000	31,000	-2,500
2024 (AN)	153,600	20,900	18,400
2025 (AN)	207,000	6,800	25,200
<b>Historic Averages (1990-2024)<sup>3</sup></b>			
1990-2024 (35 years)	223,100	500	
W (10 years)	232,600	53,200	
AN (5 years)	216,700	42,400	
BN (5 years)	228,000	-11,000	
D (6 years)	210,000	-39,900	
C (9 years)	222,200	-47,900	

**Notes:**

Positive values indicate inflows to the groundwater system, and negative values indicate outflows from the groundwater system.

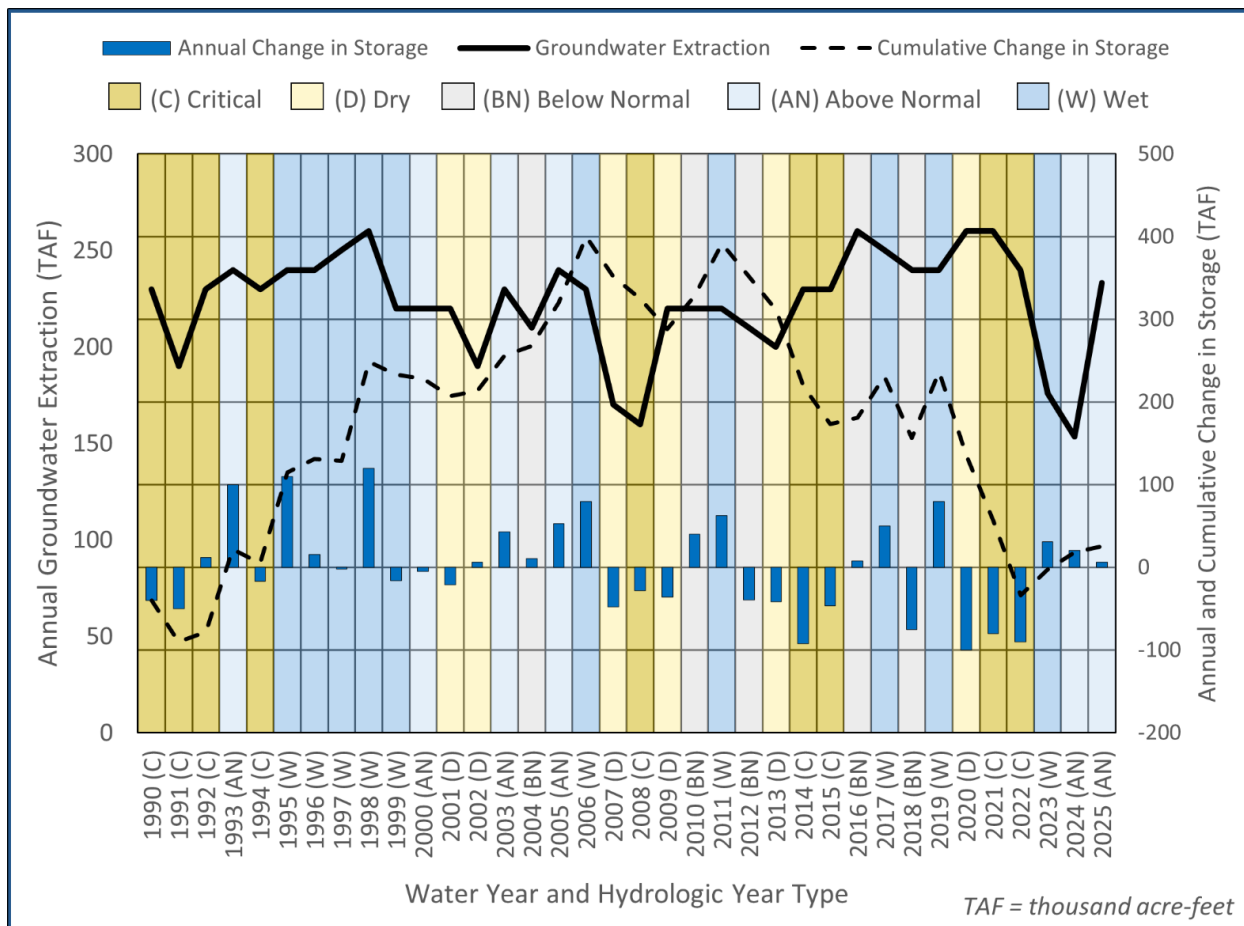
AF = Acre-feet

Water Year Types Classified According to the Sacramento Valley Water Year Index: AN = Above Normal, BN = Below Normal, C = Critical; D = Dry, W = Wet

<sup>1</sup> Groundwater extraction for WY 1990 through WY 2021 is from the Corning GSP Appendix 4D (Historical water budget tables; estimated using a numerical model); values for WY 2022 through WY 2024 were estimated using a water use analysis (presented in **Section 3; Appendix E**). Annual Change in Storage for WY 1990 through WY 2015 are from the Corning Subbasin GSP Appendix 4D (Historical water budget tables; estimated using a numerical model); values for WY 2016 through WY 2020 are from the Corning Subbasin Annual Report – 2021; values for WY 2021 through WY 2025 were estimated using measured groundwater elevation changes and average aquifer storage coefficient. Pumping and uptake data are reported in previous Annual Reports for WY 1990 through WY 2023, while only pumping data is reported for WY 2025.

<sup>2</sup> Indicated cutback year with reduced surface water supply availability.

<sup>3</sup> The historical average calculation covers the period from 1990 to 2024, excluding the current water year.



**Figure 4-1. Corning Subbasin Groundwater Extraction and Change in Groundwater Storage from WY 1990 to WY 2025**

## 4.2 Groundwater Storage Maps – §356.2(b)(5)(A)

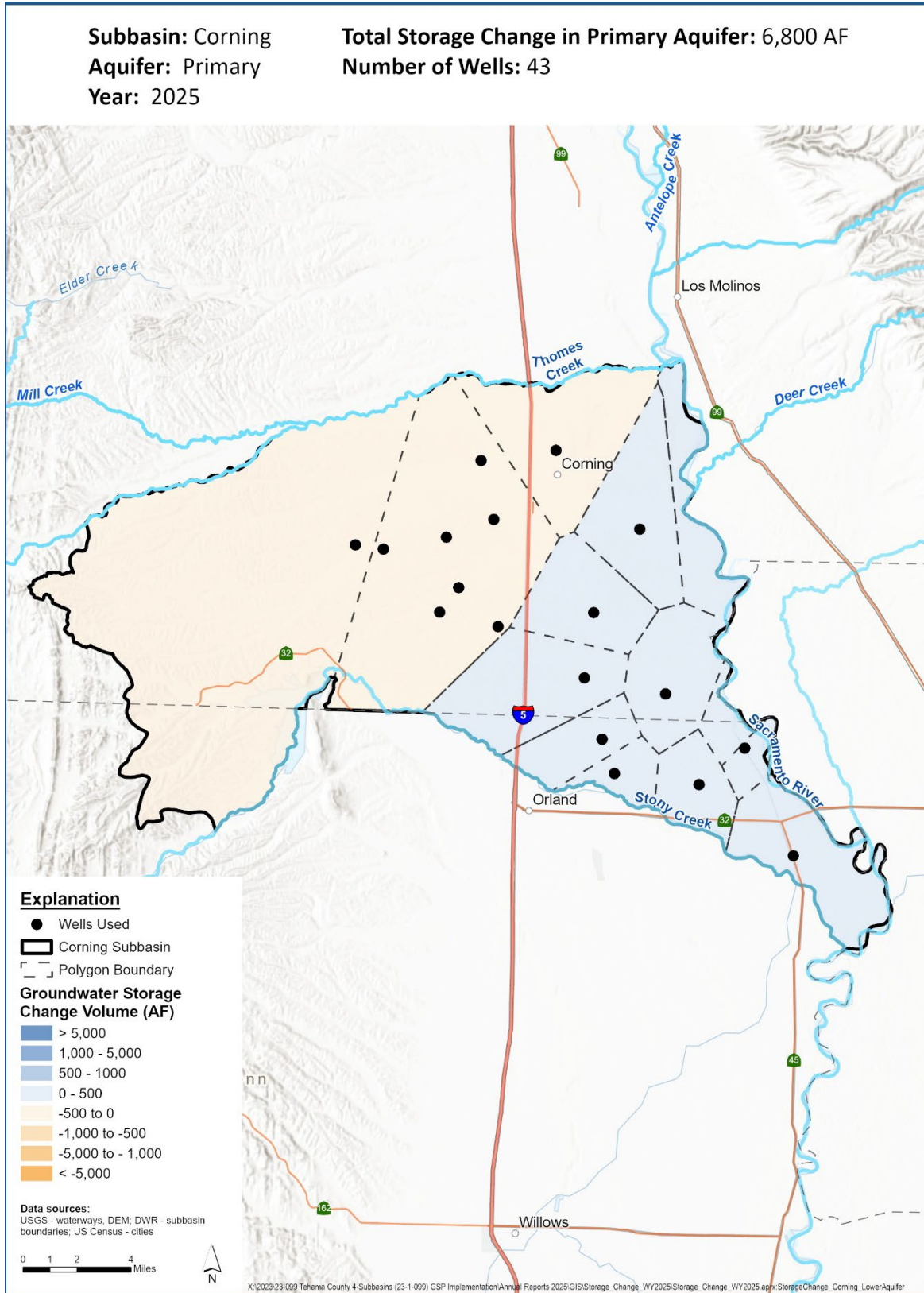
The spatial distribution of estimated changes in groundwater storage for the period from spring 2024 to spring 2025 is shown in **Figure 4-2**. Since groundwater storage is closely related to groundwater levels, measured changes in groundwater levels can serve as a proxy for and be utilized to estimate changes in groundwater storage. Groundwater level data obtained from the DWR Water Data Library (DWR, 2025) were generally recorded on a monthly to quarterly basis. For WY 2024 through WY 2025, a raster surface representing seasonal high groundwater level changes was generated by spatially interpolating (kriging) data from selected wells across the Subbasin. These seasonal high changes were calculated by subtracting groundwater levels recorded in spring 2024 from those recorded in spring 2025.

The selected wells represent sites with groundwater level records that are considered representative of Subbasin conditions. The subbasin was divided using the Thiessen polygon method. The Thiessen polygon method divides a plane into regions based on a set of points (in this case, the selected wells used for groundwater storage change calculations). In areas, mostly near the Subbasin boundaries, where polygon-specific groundwater data were unavailable, pixel values were estimated (interpolated) between the known values of the selected wells that were used for groundwater storage change calculations. In cases where

multiple groundwater level records existed within a single polygon, an average groundwater level was assigned to that polygon. Groundwater storage change was then calculated by multiplying the change in seasonal high groundwater level (WY 2025 minus WY 2024) by the specific yield value assigned to each polygon, and by the polygon area (in acres), resulting in groundwater storage changes from WY 2024 to WY 2025 expressed in acre-feet.

It should be noted that the groundwater model as described in the GSP was not used to estimate storage changes for WY 2021 through WY 2025. The approach of using measured groundwater elevation changes to estimate storage changes is considered reasonable and cost-effective for the purposes of the annual report.

Negative changes in storage values indicate lowering groundwater levels and depletion of groundwater storage, whereas positive changes in storage values represent rising groundwater levels and accretion of groundwater storage. As shown in **Figure 4-2**, the change in storage within each polygon ranged between negative (-500 AF) and positive (500 AF) values. When compiled, the total change in storage in the aquifer is approximately 6,800 AF between spring 2024 and spring 2025. The northwestern portion of the Subbasin had the largest negative change in storage, while the southeastern portion of the Subbasin experienced the largest positive change in storage.



**Figure 4-2. Corning Subbasin Change in Groundwater Storage from Spring 2024 to Spring 2025**

### 4.3 Uncertainty in Groundwater Storage Estimates

The uncertainty associated with changes in groundwater storage estimates depends in part on the underlying uncertainty of the groundwater level data, the representative area, and the calibrated storage coefficient parameter used to calculate the change in groundwater storage. As described in **Section 4.2**, the calibrated storage coefficient (0.0061-0.0557) from the Tehama Integrated Hydrogeologic Model (TIHM) was used to calculate the change in storage for this WY. Based on a comparison of storage change estimates from the C2VSim model for similar water-year types, the calculated storage change is reasonable. Further, the uncertainty for the estimated change in groundwater storage is typically 20-30% for integrated hydrologic models; therefore, the approach described in **Section 4.2** is considered to have similar uncertainty.

## 5 GSP IMPLEMENTATION PROGRESS – §356.2(B)(5)(C)

### 5.1 Main Activities of Water Year 2025

- The GSAs have engaged in public outreach in WY 2025.
- The GSAs received from DWR “incomplete” determination letters in October 2023; re-submitted GSP in April 2024, which included two major commitments to develop Groundwater Demand Management and Well Mitigation programs.
- The GSAs completed the WY 2024 Annual Report and other compliance tasks.
- In August 2023, the CSGSA approved a property-related service fee to fund GSA operations and implementation costs to comply with SGMA. Initial funding through the fee process was collected in WY 2024 and continued in WY 2025.
- All sustainability indicators (SIs) are in compliance with their MTs, except for the chronic lowering of groundwater levels SI (see summary **Table 5-1**).
- Progress has been made on 15 PMAs since the last annual report (**Table 5-4** and **Appendix G**).

Several other actions continue in the Subbasin to fulfill the requirements of the GSP. These include:

- Monitoring and recording groundwater levels and groundwater quality.
- Maintaining and updating the data management system (DMS) with newly collected data.
- Annual reporting on Subbasin conditions and submission to DWR as required by SGMA.
- Ongoing intra- and inter-basin coordination.

DWR issued a letter (**Appendix H**), received by the GSAs in August 2025, requesting additional information following its review of the Corning Subbasin Water Year 2024 Annual Report. The request focuses on documenting the implementation of Projects and Management Actions to address minimum threshold exceedances and areas of unsustainable water supply, as well as improving groundwater monitoring and reporting through regulation-compliant seasonal measurements, expanded monitoring coverage, and a detailed field monitoring plan. It should also be noted that although DWR’s review letter was dated

August 2025, which did not provide the GSAs with sufficient time to meaningfully incorporate the recommended revisions prior to the close of Water Year 2024 (September 30), the GSAs had already begun proactively addressing items independent of DWR’s comments. Much of this work was initiated in advance of the formal review timeline and has been funded and implemented primarily through GSP Implementation grant funding.

In response to the DWR requests for additional information, the GSAs’ responses are included as follows:

### **5.1.1 DWR Requests and Proposed Solutions**

**DWR Comment 1:** *“Detailed description of implementation actions taken by the GSAs to avoid and reverse the occurrence of minimum threshold exceedances and/or undesirable results. This information should clearly articulate how the GSAs are making adequate progress to reach the Subbasin’s sustainability goal.”*

GSA’s Approach 1: The GSAs are implementing multiple managed aquifer recharge projects. GSAs have updated the PMA table to provide additional details on these projects. The GSAs are also developing Demand Management Programs to supplement recharge efforts, reduce groundwater demand, and support compliance with local sustainability indicators.

**DWR Comment 2:** *“Description of specific projects and management actions to address the ‘substantial portions of the Subbasin that appear to have an unsustainable water supply’ as described by the GSAs.”*

GSA’s Approach 2: Under the SGM Implementation Grant, GSAs conducted various recharge focused feasibility studies and pilot projects. The GSAs are implementing additional managed aquifer recharge projects that were deemed feasible. GSAs have updated the PMA table to provide additional details on these projects. The GSAs will also develop and implement Demand Management Programs to reduce groundwater demand and address areas of the Subbasin with unsustainable water supply conditions.

**DWR Comment 3:** *“Staff recommend the GSA provide the seasonal low as required by the GSP regulations in future annual reports. Additionally, staff recommend the GSA include the date of monitoring in its reporting of seasonal highs and lows in its annual reports and when providing these measurements in other contexts.”*

GSA’s Approach 3: The GSAs have extended the seasonal groundwater level evaluation windows to better capture seasonal high and low conditions (spring: February 1–May 1; fall: August 1–November 1). The GSAs will also update **Table 5.2** to include measurement dates and to explicitly report seasonal groundwater levels relative to applicable minimum thresholds.

**DWR Comment 4:** *“The GSA should provide additional information describing how the GSA will perform the monitoring prescribed in its GSP and how any missed measurements over the water year still allow the GSA to monitor impacts to beneficial uses or users of groundwater, understand conditions relative to measurable objectives and minimum thresholds, quantify water budget components across the Subbasin, and represent and assess seasonal low and seasonal high groundwater conditions in the basin or plan area, in the next annual report.”*

GSA's Approach 4: The GSAs are enhancing groundwater monitoring by deploying telemetry systems to record water levels at 10-minute intervals and by expanding the monitoring well network. These efforts will be supported by implementation of Demand Management Programs, expansion of managed aquifer recharge projects, and continued coordination on water level monitoring, including monitoring activities conducted by the GSA's in collaboration with DWR. The GSA's intend to further evaluate during the Periodic Evaluation process.

## 5.2 Progress Toward Achieving Interim Milestones

All SIs are in compliance with their MTs, with the exception of the chronic lowering of groundwater levels SI (see summary **Table 5-1**). An MT is the quantitative value that represents the groundwater conditions at an RMP site that, when exceeded individually or in combination with MTs at other monitoring sites, may cause a UR in the Subbasin per DWR's definition. If groundwater levels are lower than the value of the MO for that site, they are moving in the direction of the MT. On the contrary, for the groundwater quality SMC, as the value of the total dissolved solids (TDS) concentration increases from the MO established for that site, they move in the direction of the MT. Seawater Intrusion is not an applicable SI in the Corning Subbasin.

Groundwater elevations in 6 wells fell below the MO in spring 2025, and 43 wells fell below the MOs in fall 2025 (**Tables 5-2 and 5-3**). Zero wells fell below their MT in spring 2025, while 9 wells fell below their MTs in fall 2025. However, no URs occurred since no dry wells were reported and water levels at any RMP in the Subbasin did not decline 7.5 feet or more over a five (5) year period. The wells that fell below the MT are expected to rebound in spring 2026. Water level elevation recoveries are attributed to the ongoing overall recovery in groundwater conditions throughout the Subbasin, facilitated by increased precipitation to meet evapotranspiration demands in WY 2024 and WY 2025.

Table 5-1. Corning Subbasin Sustainability Indicator Summary			
2025 Status	Undesirable Result Identification	MO Definition	MT Definition
<b>Chronic Lowering of Groundwater Levels</b>			
<b>No indication of undesirable results.</b> There were nine RMP wells with fall 2025 groundwater level measurements below the MT; however, no reports of dry wells or greater than a 7.5 ft water level decline occurred.	10 supply wells are becoming dry (after the GSP revision) within a Thiessen Polygon established in the revised GSP, or when water levels at any RMP in the future decline 7.5 feet or more over a five (5) year period.	<b>Stable wells:</b> Maximum fall groundwater elevation since 2012. <b>Declining wells:</b> Maximum fall groundwater elevation in 2015.	<b>Focus Areas:</b> Five (5) feet higher than MTs as published in the 2022 GSP. <b>Outside Focus Areas:</b> MTs as published in the 2022 GSP.
<b>Reduction of Groundwater Storage</b>			
<b>No indication of undesirable results.</b> There were nine RMP wells with fall 2025 groundwater level measurements below the MT.	More than 20% of groundwater elevations measured at RMP wells drop below the associated minimum threshold during 2 consecutive years measured in the fall of each year.	Amount of groundwater in storage when groundwater elevations are at their measurable objective – since groundwater levels are used as a proxy, the same as chronic lowering of groundwater levels measurable objectives.	Amount of groundwater in storage when groundwater elevations are at their minimum threshold– since groundwater levels are used as a proxy, same as chronic lowering of groundwater levels minimum thresholds.
<b>Degraded Water Quality</b>			
<b>No indication of undesirable results.</b> There were no RMP wells with TDS levels above their MTs.	At least 25% of RMP wells exceed the minimum threshold for water quality for 2 consecutive years at each well where it can be established that GSP implementation is the cause of the exceedance.	California lower limit SMCL concentration for TDS of 500 mg/L measured at public supply wells.	TDS concentration of 750 mg/L at public supply wells.

Table 5-1. Corning Subbasin Sustainability Indicator Summary			
2025 Status	Undesirable Result Identification	MO Definition	MT Definition
<b>Land Subsidence</b>			
<b>No indication of undesirable results.</b> No InSAR pixel exceeded MT in WY 2025.	Any exceedance of a minimum threshold that is irreversible and caused by lowering groundwater elevations.	Zero inelastic subsidence, in addition to any measurement error. If InSAR data are used, the measurement error is 0.1 feet, and any measurement of 0.1 feet or less would not be considered inelastic subsidence.	No more than 0.5 feet of cumulative subsidence over a five-year period (beyond the measurement error), solely due to lowered groundwater elevations
<b>Depletion of Interconnected Surface Water</b>			
<b>No indication of undesirable results.</b> There were two RMP wells with fall 2025 groundwater level measurements below the MT.	Same as chronic lowering of groundwater levels.	Same as chronic lowering of groundwater levels.	Same as chronic lowering of groundwater levels.

**Notes:**

*\*2022 GSP Undesirable Results for chronic lowering of GWL: **Stable Wells:** Minimum fall groundwater elevation since 2012 minus 20-foot buffer.*

***Declining Wells:** Minimum fall groundwater elevation since 2012, minus 20% of the minimum groundwater level depth.*

*TDS is the primary water quality constituent of concern.*

*MO = Measurable Objective; MT = Minimum Threshold; RMP = representative monitoring point; mg/L = milligrams per liter; SMCL = Secondary Maximum Contaminant Level*

### **5.2.1 Chronic Lowering of Groundwater Levels and Reduction in Groundwater Storage SMC**

The reduction in groundwater storage SMC utilizes the chronic lowering of groundwater levels SMC as a proxy (**Tables 5-1**). Thus, groundwater conditions related to storage and chronic lowering of groundwater levels are discussed together. Groundwater conditions in the Subbasin are on track to meet the first 5-year IMs for groundwater levels at each RMP well. In spring 2025, all groundwater elevations were above the established MTs. In fall 2025, groundwater elevations at nine wells were below the established MT (22N02W18C003M, 22N03W01R001M, 22N03W01R002M, 22N03W12Q003M, 23N02W28N002M, 23N03W07F001M, 23N03W13C004M, 23N03W25M002M, and 24N03W29Q002M, as indicated in **Table 5-2**). Groundwater elevations at 23N03W13C004M remained below the MT in fall 2024 and 2025, or 24 consecutive months. **Table 5-2** shows measurements from WY 2025 for spring seasonal highs (the highest measurement at each well between February and May of 2025) and fall seasonal lows (the lowest measurement at each well between August and November 2025), along with MOs and MTs. It also compares the WY 2025 measurements to those from WY 2024 and to the MOs. Lower water levels were observed in fall 2025 compared to fall 2024 despite above normal conditions, which has contributed to less recharge and increased groundwater extraction in WY 2025 compared to WY 2024. These conditions led to a total annual change in groundwater storage that was less in WY 2025, with an annual change in storage of 6,800 AF compared to WY 2024, in which the annual change in storage was 20,900.

**Table 5-2. Corning Subbasin Measurable Objectives, Minimum Thresholds, and Seasonal Groundwater Elevations of Representative Monitoring Site Points**

State Well Number / Representative Monitoring Point (RMP) ID	Groundwater Elevation (feet above mean sea level)						2025 vs. MO (ft)		2025 vs. MT (ft)		2025 vs. 2024 (ft)	
	2025 Measurements				MO	MT	Spring	Fall	Spring	Fall	Spring (seasonal high)	Fall (seasonal low)
	Date Measured	Spring (seasonal high)	Date Measured	Fall (seasonal low)								
21N01W04N001M	2/18/2025	127.63	8/7/2025	115.93	116.1	89.3	11.53	-0.17	38.33	26.63	4.15	--
22N01W19E003M	3/11/2025	129.38	10/13/2025	129.89	128.1	97.7	1.28	1.79	31.68	32.19	-9.41	4.30
22N01W29N002M	3/11/2025	129.38	8/6/2025	108.72	121.9	77.2	7.48	-13.18	52.18	31.52	1.85	-2.76
22N01W29N003M	2/11/2025	136.59	8/6/2025	113.57	123.4	91.7	13.19	-9.83	44.89	21.87	6.50	-9.98
22N02W01N002M	4/15/2025	141.93	8/6/2025	100.71	134.7	74.5	7.23	-33.99	67.43	26.21	1.89	-6.55
22N02W01N003M	2/11/2025	146.38	8/6/2025	119.85	136.5	99.3	9.88	-16.65	47.08	20.55	1.78	-6.00
22N02W15C002M	3/10/2025	128.78	8/4/2025	66.93	121.6	57.7	7.18	-54.67	71.08	9.23	1.89	-22.42
22N02W15C004M	3/10/2025	154.02	8/4/2025	116.99	144.1	84.0	9.92	-27.11	70.02	32.99	1.17	-14.21
22N02W18C001M	4/15/2025	112.39	8/6/2025	78.04	90.4	68.5	21.99	-12.36	43.89	9.54	5.75	-3.30
22N02W18C003M <sup>1</sup>	3/13/2025	175.02	8/6/2025	132.32	148.4	136.6	26.62	-16.08	38.42	-4.28	3.24	-10.52
22N03W01R001M <sup>1</sup>	3/19/2025	160.73	8/6/2025	107.47	135.2	121.6	25.53	-27.73	39.13	-14.13	3.61	-14.75
22N03W01R002M <sup>1</sup>	3/19/2025	166.35	8/6/2025	128.07	143.9	128.6	22.45	-15.83	37.75	-0.53	4.04	-5.16
22N03W05F002M	3/24/2025	196.99	10/22/2025	188.49	204.5	177.9	-7.51	-16.01	19.09	10.59	0.90	5.70
22N03W06B001M	3/17/2025	252.80	8/4/2025	239.00	264.1	238.0	-11.30	-25.10	14.80	1.00	1.90	-1.90
<b>22N03W12Q003M<sup>1</sup></b>	3/19/2025	193.94	8/4/2025	161.94	174.8	168.2	19.14	-12.86	25.74	-6.26	10.00	-1.00
23N02W16B001M	3/11/2025	143.33	8/8/2025	126.13	135.3	98.4	8.03	-9.17	44.93	27.73	127.27	0
<b>23N02W28N002M<sup>1</sup></b>	3/11/2025	138.12	8/6/2025	99.55	133.9	105.0	4.22	-34.35	33.12	-5.45	-3.80	0.18
23N02W28N004M	3/11/2025	153.41	8/6/2025	119.91	142.7	109.3	10.71	-22.79	44.11	10.61	3.03	-5.05
23N02W34A003M	3/11/2025	148.71	8/6/2025	122.21	135.5	109.2	13.21	-13.29	39.51	13.01	--	-6.20
23N02W34N001M	3/11/2025	156.62	8/6/2025	137.62	145.9	116.8	10.72	-8.28	39.82	20.82	2.70	3.70
<b>23N03W07F001M<sup>1</sup></b>	--	--	10/31/2025	193.10	209.9	193.4	--	-16.80	--	-0.30	--	3.70
<b>23N03W13C004M<sup>1</sup></b>	3/11/2025	139.51	8/6/2025	93.23	131.1	112.2	8.41	-37.87	27.31	-18.97	-1.22	-8.85
23N03W13C006M	4/16/2025	150.51	10/3/2025	130.31	145.6	128.1	4.91	-15.29	22.41	2.21	3.69	3.70
23N03W16H001M	--	--	10/31/2025	182.38	193.4	179.3	--	-11.02	--	3.08	--	3.80
23N03W17R001M	--	--	10/31/2025	193.60	207.7	192.3	--	-14.10	--	1.30	--	3.20
23N03W22Q001M	4/15/2025	156.11	8/6/2025	137.53	152.7	134.9	3.41	-15.17	21.21	2.63	5.36	4.38
23N03W24A003M	04/15/2025	147.64	8/7/2025	123.74	137.4	123.6	10.24	-13.66	24.04	0.14	1.20	2.00
23N03W25M002M <sup>1</sup>	3/11/2025	151.11	8/9/2025	112.64	151.5	116.6	-0.39	-38.86	34.51	-3.96	1.53	4.42
23N03W25M004M	4/15/2025	151.00	8/9/2025	134.47	150.3	127.7	0.70	-15.83	23.30	6.77	3.97	7.12

**Table 5-2. Corning Subbasin Measurable Objectives, Minimum Thresholds, and Seasonal Groundwater Elevations of Representative Monitoring Site Points**

State Well Number / Representative Monitoring Point (RMP) ID	Groundwater Elevation (feet above mean sea level)						2025 vs. MO (ft)		2025 vs. MT (ft)		2025 vs. 2024 (ft)	
	2025 Measurements				MO	MT	Spring	Fall	Spring	Fall	Spring (seasonal high)	Fall (seasonal low)
	Date Measured	Spring (seasonal high)	Date Measured	Fall (seasonal low)								
23N04W13G001M	--	--	10/31/2025	186.30	198.6	159.7	--	-12.30	--	26.6	--	2.40
24N02W17A001M	--	--	8/4/2025	160.60	170.9	150.9	--	-10.30	--	9.70	--	-8.85
24N02W29N003M	4/16/2025	164.37	8/7/2025	135.35	158.1	123.2	6.27	-22.75	41.17	12.15	2.41	0.69
24N02W29N004M	4/16/2025	165.41	8/7/2025	126.71	155.5	124.9	9.91	-28.79	40.51	1.81	0.90	1.91
24N03W02R001M	--	--	--	--	188.6	177.6	--	--	--	--	--	--
24N03W03R002M	4/16/2025	225.16	10/3/2025	207.86	207.3	197.8	17.86	0.56	27.36	10.06	-0.09	1.38
24N03W16A001M	4/16/2025	217.87	9/12/2025	197.67	200.7	187.6	17.17	-3.03	30.27	10.07	3.50	2.20
24N03W17M001M	--	--	--	--	216.3	195.5	--	--	--	--	--	--
24N03W17M002M	3/27/2025	219.70	--	--	196.8	177.8	22.90	--	41.90	--	--	--
24N03W24E001M	4/15/2025	184.35	8/7/2025	154.35	169.2	141.7	15.15	-14.85	42.65	12.65	6.20	-4.90
24N03W26K001M	3/27/2025	204.76	--	--	191.1	177.6	13.66	--	27.16	--	3.80	--
24N03W29Q001M	4/16/2025	209.20	8/7/2025	193.70	211.6	184.3	-2.40	-17.90	24.90	9.40	1.74	0.47
24N03W29Q002M <sup>1</sup>	4/16/2025	208.91	8/7/2025	176.70	212.6	179.9	-3.69	-35.90	29.01	-3.20	-0.30	-7.73
24N03W35P005M	3/21/2025	200.77	8/7/2025	191.00	192	185.1	8.77	-1.00	15.67	5.90	0.52	5.69
24N04W14N002M	--	--	10/14/2025	236.37	247.4	226.8	--	-11.03	--	9.57	--	--
24N04W33P001M	4/2/2025	220.26	10/14/2025	195.06	240	188.5	-19.74	-44.94	31.76	6.56	0.50	--
24N04W34K001M	--	--	--	--	223.9	184.4	--	--	--	--	--	--
24N04W34P001M	--	--	10/14/2025	197.80	214.3	183.5	--	-16.50	--	14.30	--	--
24N04W36G001M	--	--	10/31/2025	198.00	214.4	183.2	--	-16.40	--	14.80	--	6.40
24N05W23L001M	--	--	10/14/2025	332.90	345.8	312	--	-12.90	--	20.90	--	-4.80
25N02W31G002M	3/10/2025	198.70	--	--	191.4	169.3	7.30	--	29.40	--	-1.20	--
25N03W36H001M	3/10/2025	197.69	8/7/2025	175.85	183.3	160.9	14.39	-7.45	36.79	14.95	0.79	-6.25

MO = Measurable Objective, MT = Minimum Threshold, -- = Indicates missing or questionable measurements

**Bold red** text indicates water levels in the wells fell below their respective MTs for at least two consecutive fall measurements.

<sup>1</sup> Water level elevation fell below MT in WY 2025

### **5.2.2 Degraded Water Quality SMC**

The degraded water quality MT and MO are summarized in **Table 5-1**. TDS is the main constituent of concern in the Subbasin. TDS is measured at public supply wells throughout the Subbasin, and data were collected and reported by public agencies in WY 2025 and retrieved through the Groundwater Ambient Monitoring and Assessment (GAMA) (available at: <https://www.waterboards.ca.gov/gama/>). A summary of groundwater quality monitoring data is available in **Appendix F**. Groundwater conditions are on track to avoid URs related to water quality.

### **5.2.3 Land Subsidence SMC**

The land subsidence MT and MO are summarized in **Table 5-1**. Only inelastic subsidence, solely due to lowered groundwater elevations, will be considered relevant to the SMC. Data from monuments in the Sacramento Valley Global Positioning System (GPS) Subsidence Monitoring Network were utilized to track cumulative subsidence in the area in 2008 and 2017 (DWR, 2024a) and were used for identifying undesirable results in the GSP; however, these sites have not been measured since then. Observations from the Sacramento Valley GPS Subsidence Monitoring Network are supplemented by Interferometric Synthetic Aperture Radar (InSAR) data provided by DWR (DWR, 2024b) to assess this SMC. InSAR data were analyzed from October 2024 to October 2025 to track annual changes (**Figure 5-1**), from October 2020 to October 2025 to track net 5-year changes (**Figure 5-2**), and from June 2015 to October 2025 to track net 10-year changes (**Figure 5-3**).

Conditions indicate that there has been minimal land subsidence over the period of record. Subsidence and uplift measured by InSAR ranged from -0.07 feet of subsidence to 0.01 feet within the Subbasin from October 2024 to October 2025. Subsidence and uplift measured by InSAR over the 5-year period from October 2020 to October 2025 ranged from -0.16 feet to 0.10 feet. Subsidence and uplift measured by InSAR over the 10-year period from June 2015 to October 2025 ranged from -0.24 feet to 0.08 feet. Groundwater conditions in the Subbasin are on track to meet the first 5-year 2027 IMs and avoid undesirable results for land subsidence.

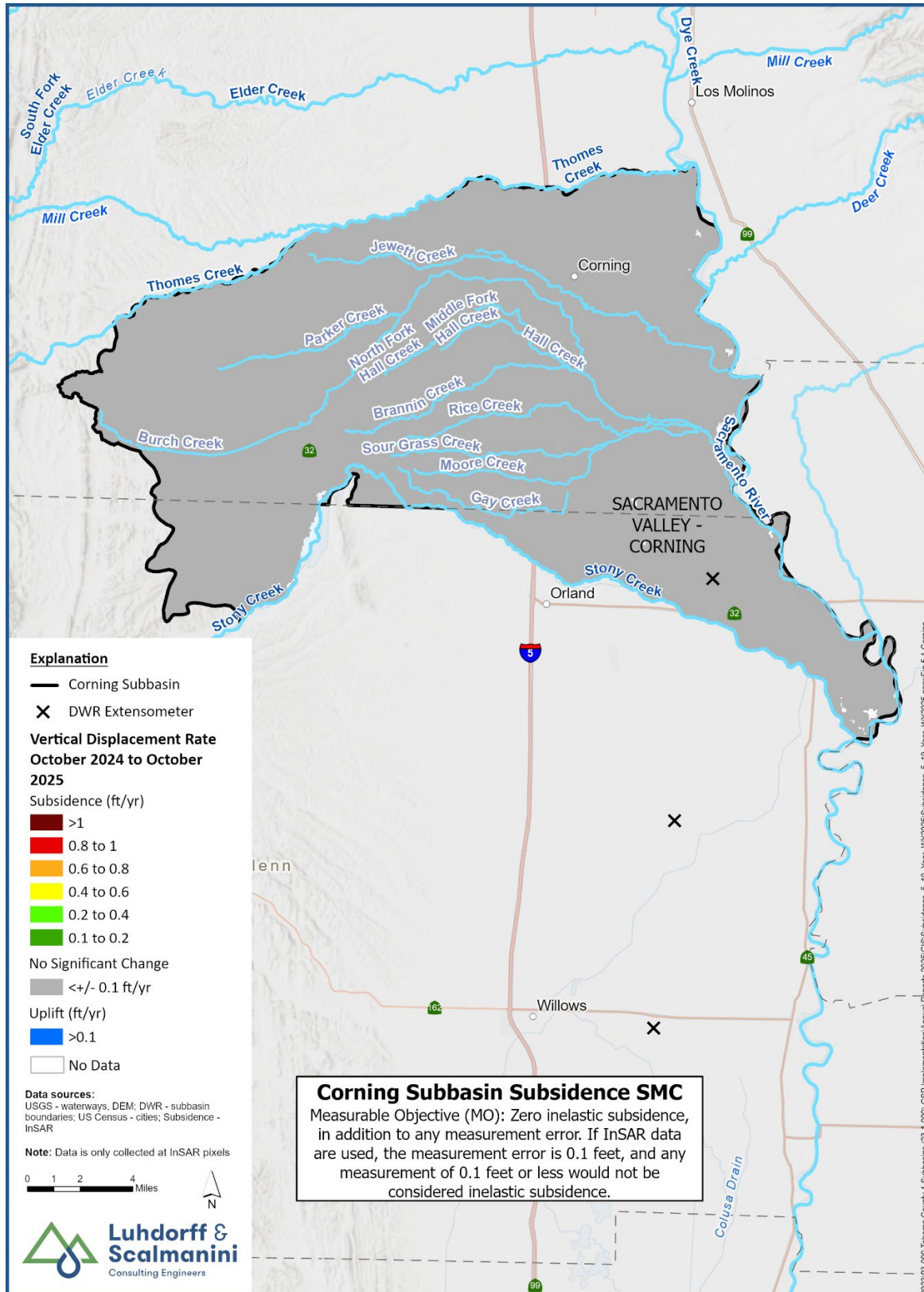


Figure 5-1. Corning Subbasin Change in Subsidence from 10/2024 to 10/2025

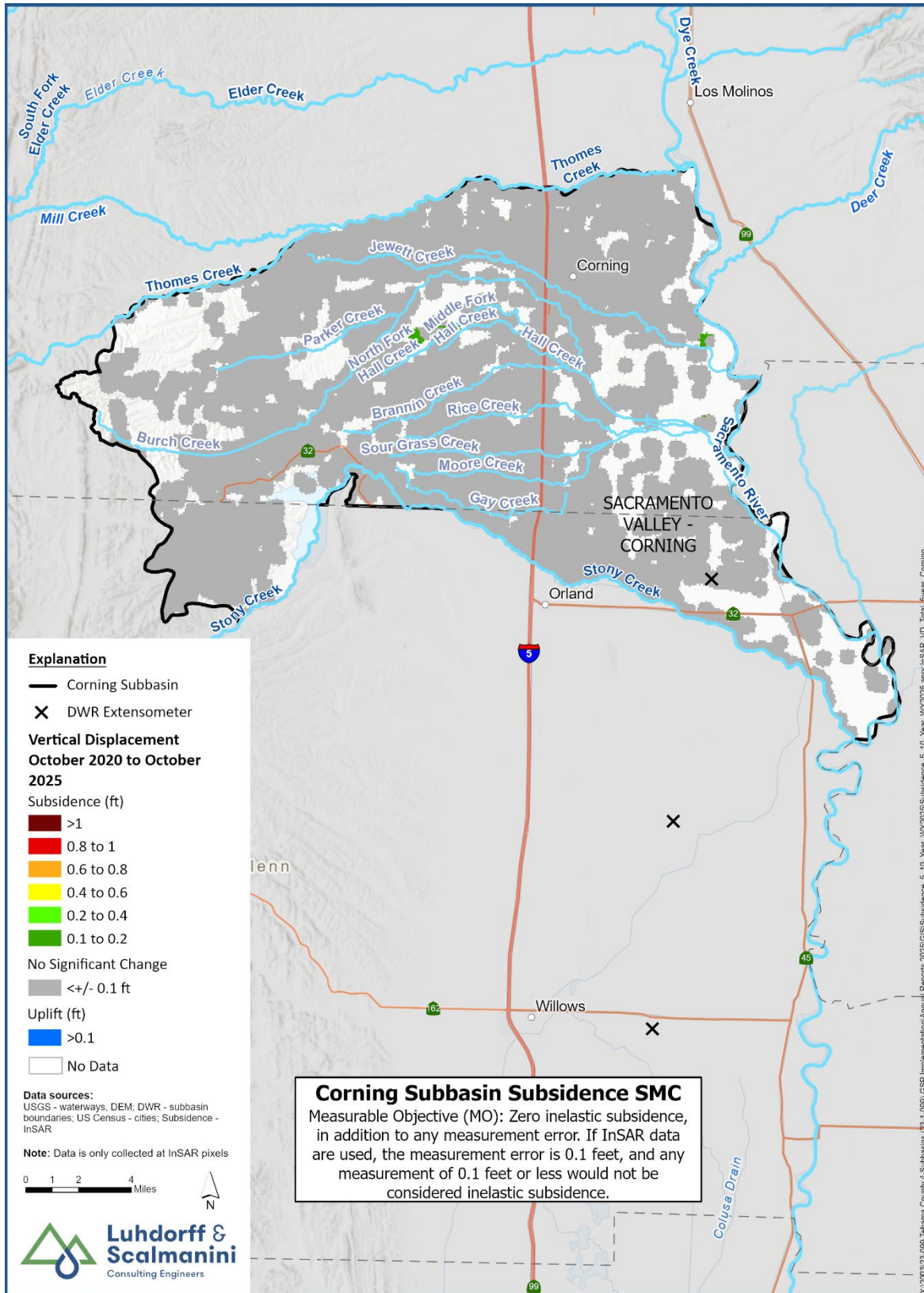


Figure 5-2. Corning Subbasin Change in Subsidence from 10/2020 to 10/2025

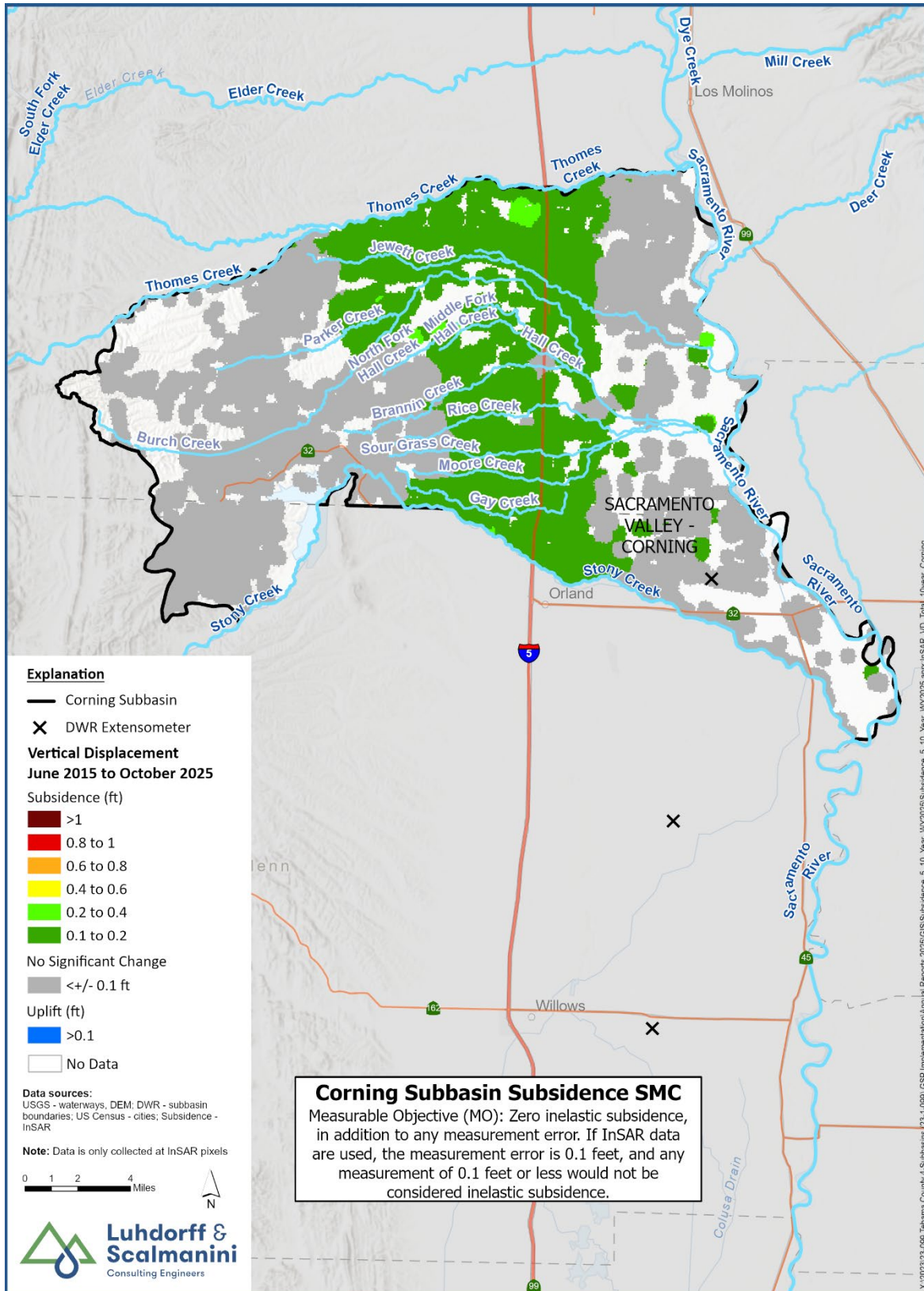


Figure 5-3. Corning Subbasin Change in Subsidence from 06/2015 to 10/2025

#### ***5.2.4 Depletion of Interconnected Surface Water SMC***

Five of the seven groundwater level measurements at the Interconnected Surface Water (ISW) RMP during WY 2025 were higher than their corresponding MTs, as summarized in **Table 5-3**. Two wells, 22N02W18C003M and 22N03W01R002M, fell below their respective MT in the fall of 2025, however, these wells were above their MT in the spring and did not experience drops below their MT in WY 2024, thus avoiding undesirable results. Therefore, groundwater conditions in the Subbasin are on track to meet the first 5-year 2027 IMs and avoid URs for groundwater levels at each RMP.

**Table 5-3. Corning Subbasin Measurable Objectives, Minimum Thresholds, and Undesirable Results for Depletion of Interconnected Surface Water**

State Well Number /Representative Monitoring Point (RMP) ID	Groundwater Elevation (feet above mean sea level)						2025 vs. MO (ft)		2025 vs. MT (ft)	
	2025 Measurements				MO	MT	Spring	Fall	Spring	Fall
	Date Measured	Spring (seasonal high)	Date Measured	Fall (seasonal low)						
22N01W29N003M	2/11/2025	136.59	8/6/2025	113.57	123.4	91.7	13.19	-9.83	44.89	21.87
22N02W01N003M	2/11/2025	146.38	9/10/2025	123.12	136.5	99.3	9.88	-13.38	47.08	23.82
22N02W15C004M	3/10/2025	154.02	10/14/2025	138.03	144.1	84.0	9.92	-6.07	70.02	54.03
22N02W18C003M	3/13/2025	175.02	8/6/2025	132.32	148.4	136.6	26.62	-16.08	38.42	-4.28
22N03W01R002M	3/19/2025	166.35	8/6/2025	128.07	143.9	128.6	22.45	-15.83	37.75	-0.53
23N02W28N004M	3/11/2025	153.41	8/6/2025	119.91	142.7	109.3	10.71	-22.79	44.11	10.61
24N02W29N003M	4/16/2025	164.37	8/7/2025	135.35	158.1	123.2	6.27	-22.75	41.17	12.15

MO = Measurable Objective, MT = Minimum Threshold, -- = Indicates missing or questionable measurements

### 5.3 Progress Toward PMA Implementation

The Corning Subbasin GSP includes a description of the projects and management actions the GSAs have determined will achieve the sustainability goal for the basin, including projects and management actions to respond to changing conditions in the basin. A description of progress towards implementing projects and management actions in the GSP is included in **Table 5-4** and the PMA Module (**Appendix G**). Groundwater users in the Subbasin benefit from generally stable groundwater levels in the Subbasin. Surface water supplies available to diverters in the Subbasin are used, when available, for irrigation and for the benefit of other recharge efforts and projects described in the GSP. Ongoing access to surface water supplies is crucial to preserving the sustainability of the Subbasin.

**Table 5-4. Corning Subbasin WY 2025 Project and Management Action Updates**

Project and Management Action Name	Status	Project or management action's progress towards implementation since WY2024 annual report
"Well Management Program" Part 1 - Well Inventory	Ongoing	Corning Subbasin GSA continues to collect well information
"Well Management Program" Part 2 - Education and Outreach	Ongoing	Part of Domestic Well Mitigation Program launched December 2025 in Corning Subbasin GSA
"Well Management Program" Part 3 - Well Incident Reporting System	Ongoing	Part of Domestic Well Mitigation Program launched December 2025 in Corning Subbasin GSA
"Well Management Program" Part 4 - Well Mitigation Program	Ongoing	Implemented 1/1/2026, launched December 2025 in Corning Subbasin GSA
"Policies and Ordinances" - Demand Management Immediate Implementation	Planning	Part of the Groundwater Demand Management development to be implemented 1/1/2027
"Policies and Ordinances" - Demand Management Phased Implementation	Planning	Part of the Groundwater Demand Management development to be implemented 1/1/2027

"Use of Full Surface Water Allocation"	Planning	This project was funded through SGM Implementation Grant. This project is currently in the construction phase. Landowners needing infrastructure improvements in order to utilize more surface water were identified through outreach and engagement efforts. These projects were assessed and ranked based on a GSA approved ranking matrix. Currently, landowner agreements are being distributed for signature after which the construction phase will begin.
"Regional Surface Water Transfers for In-Lieu Recharge"	Completed-Benefits fully realized	This project was funded through SGM Implementation Grant for a feasibility study to conduct an assessment on Corning Water District's infrastructure and water use. This study was completed and submitted to DWR.
"Invasive Plant Removal"	Planning	Discussions are occurring with County Agricultural Commissioners and other partners through the reinvigoration of the Weed Management Area.
"Groundwater Recharge Through Unlined Conveyance Features"	Completed-Benefits fully realized	This project is complete. Pilot studies were conducted at Brannin Creek to determine infiltration rates. This pilot test led to the development of a dry well recharge project. SGM Implementation Grant funding for this project did not provide construction funds so this project is being continued under the Multi-Benefit Recharge PMA.
"Groundwater Recharge Pond South of Corning"	Completed-Benefits fully realized	This project has been completed. A pilot test was conducted at the recharge pond south of Corning. This pilot test revealed extremely low infiltration rates at this site. Recharge at this site was determined to be infeasible without substantial modifications to the pond. Because the pond falls under federal jurisdiction and serves as relief site for stormwater flows, modifications to the pond were not possible. Thus, this project has concluded.

<p>"Multi-Benefit Recharge Projects"</p>	<p>Planning/Completed- Benefits Fully Realized</p>	<p>Multiple projects are being developed under this project. The project at Simpson Road has been fully completed. That project was conducted in collaboration with the Nature Conservancy (TNC). TNC provided funding for water for this project. This project was completed in November 2024 as a pilot.</p> <p>The second project at this site is a result of the work done at Brannin Creek under the recharge using unlined creeks project. This project is still in the planning phase and is being developed in conjunction with The Paskenta Band of Nomlaki Indians. Engineering designs for dry wells for this site have been completed, and a feasibility study has also been completed. This project will provide multiple benefits in the form of recharge and recreation on Brannin Creek.</p>
<p>"California Olive Ranch Groundwater Recharge Project"</p>	<p>Planning</p>	<p>This project is currently in the planning phase. A Memorandum of Understanding (MOU) has been signed between all interested parties. Both 30% and 60% design specifications have been completed and currently 100% design specifications are being developed. Once the permit is issued, this project will move into the construction phase. A permit application for a new turnout on the Tehama Colusa Canal has been submitted to United States Bureau of Reclamation (USBR). This permit has been approved and is expected to be issued in January 2026.</p>
<p>"Thomes Creek Flood Water Diversions for Recharge"</p>	<p>Planning</p>	<p>This project is currently in the planning phase. 5-Year recharge diversion applications have been submitted to the State Water Resources Control Board for 2 sites. Permit is expected to be issued by the beginning of February 2026. Specifications for equipment required for water diversions are currently being compiled and quotes for equipment are being obtained.</p>
<p>"Stony Creek Flood Water Diversions for Recharge"</p>	<p>Construction</p>	<p>This project is currently in the construction phase. 180-day temporary recharge diversion permits have been obtained from the State Water Resources Control Board for 2 sites in 2025. Diversions can occur under this permit from December 2024 through March 2025. Equipment for diversions was procured and distributed, and creek flows were monitored. No diversions were able to take place in 2025. A 5-year temporary permit for 3 sites was granted in December 2026. Results will be shared in the WY 2026 Annual Report.</p>

## 6 CONCLUSIONS

The Tehama County GSA and CSGSA adopted and submitted the GSP to DWR in January 2022, with a revised GSP submitted in April 2024, and continue to actively work on sustainable groundwater management in the Subbasin directly with their partners. SGM Implementation grant funding has allowed the GSAs to make significant progress in PMA development, filling data gaps, stakeholder outreach, and implementation of the GSP. As presented in **Section 5** of this report, recent progress made on activities applicable to the GSAs demonstrates the commitment of the GSAs to implement the GSP by allocating the necessary time and resources to achieve long-term sustainable management of the groundwater resources in the Corning Subbasin.

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Water Year 2025 Annual Report

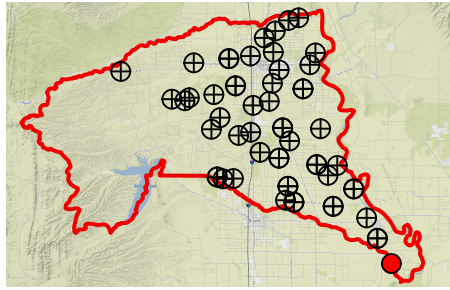
# Appendix A

Characteristics and Hydrographs of Representative  
Monitoring Site (RMS) Wells



# Corning Subbasin – State Well Number (SWN) 21N01W04N001M

(Shallow Zone) Well Depth: 100 ft. Perforation top & bottom: Unknown



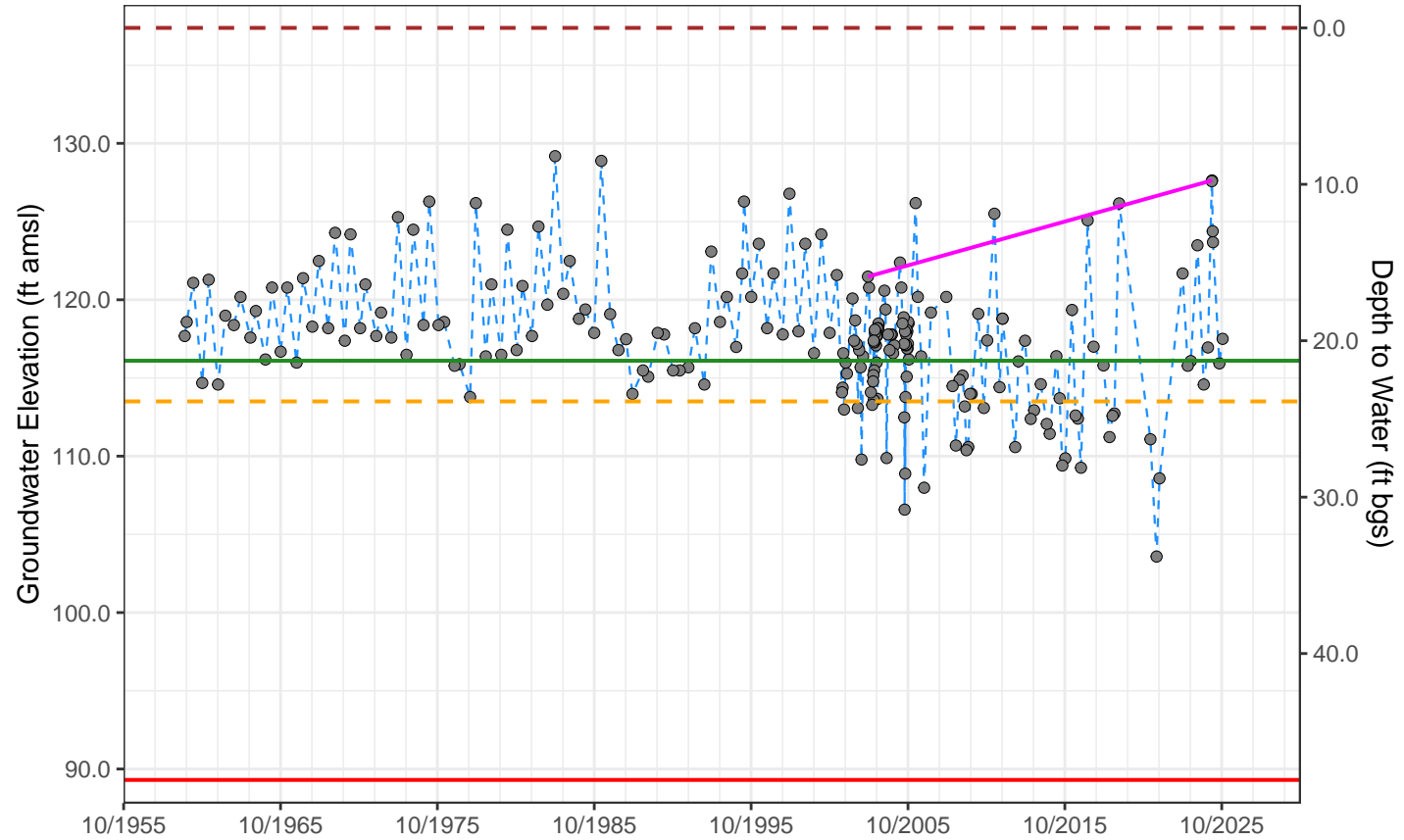
- Graphed Well
- ⊕ Other Well

MO GWE: 116.1 ft amsl  
MO DTW: 21.28 ft amsl

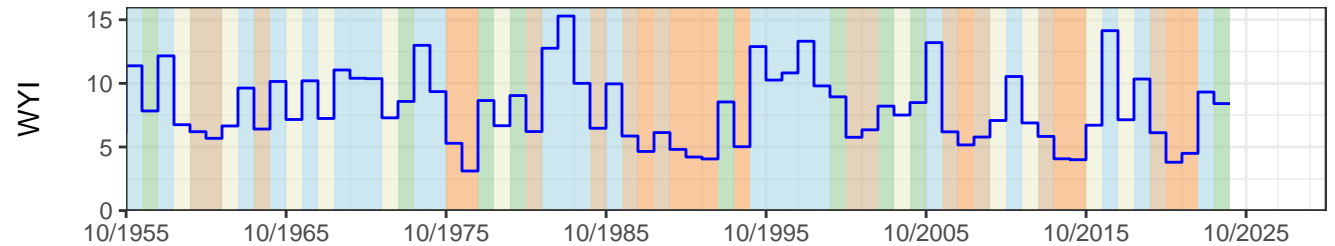
MT GWE: 89.3 ft amsl  
MT DTW: 48.08 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = 6.15 ft  
Avg. rate of change = 0.28 ft/yr  
Avg. water level = 120.42 ft amsl  
5-yr Avg. rate (2021–2025):  
= 4.14 ft/yr



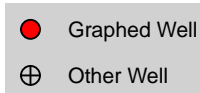
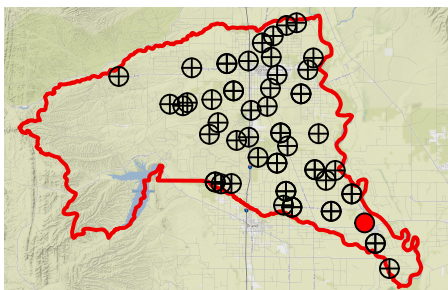
- GSE
- 5-year Interim milestone
- MO
- Spring WL trend (2003–2025, 22 yrs)
- MT



- Sacramento Valley Water Year Index
- WY Type:  Wet  Above Normal  Below Normal  Dry  Critical

# Corning Subbasin – State Well Number (SWN) 22N01W19E003M

(Shallow Zone) Well Depth: 500 ft. Perforation top & bottom: 80 – 400 ft bgs

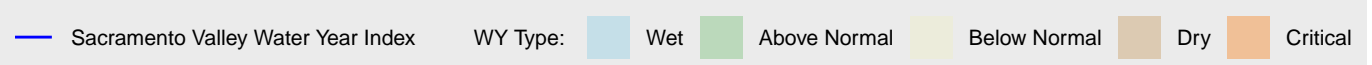
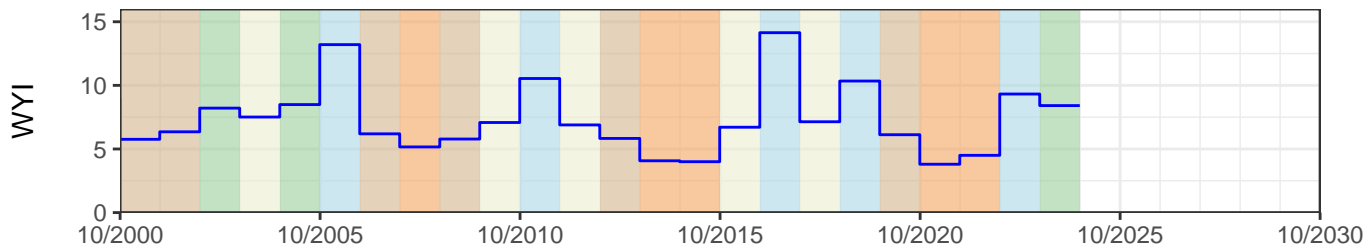
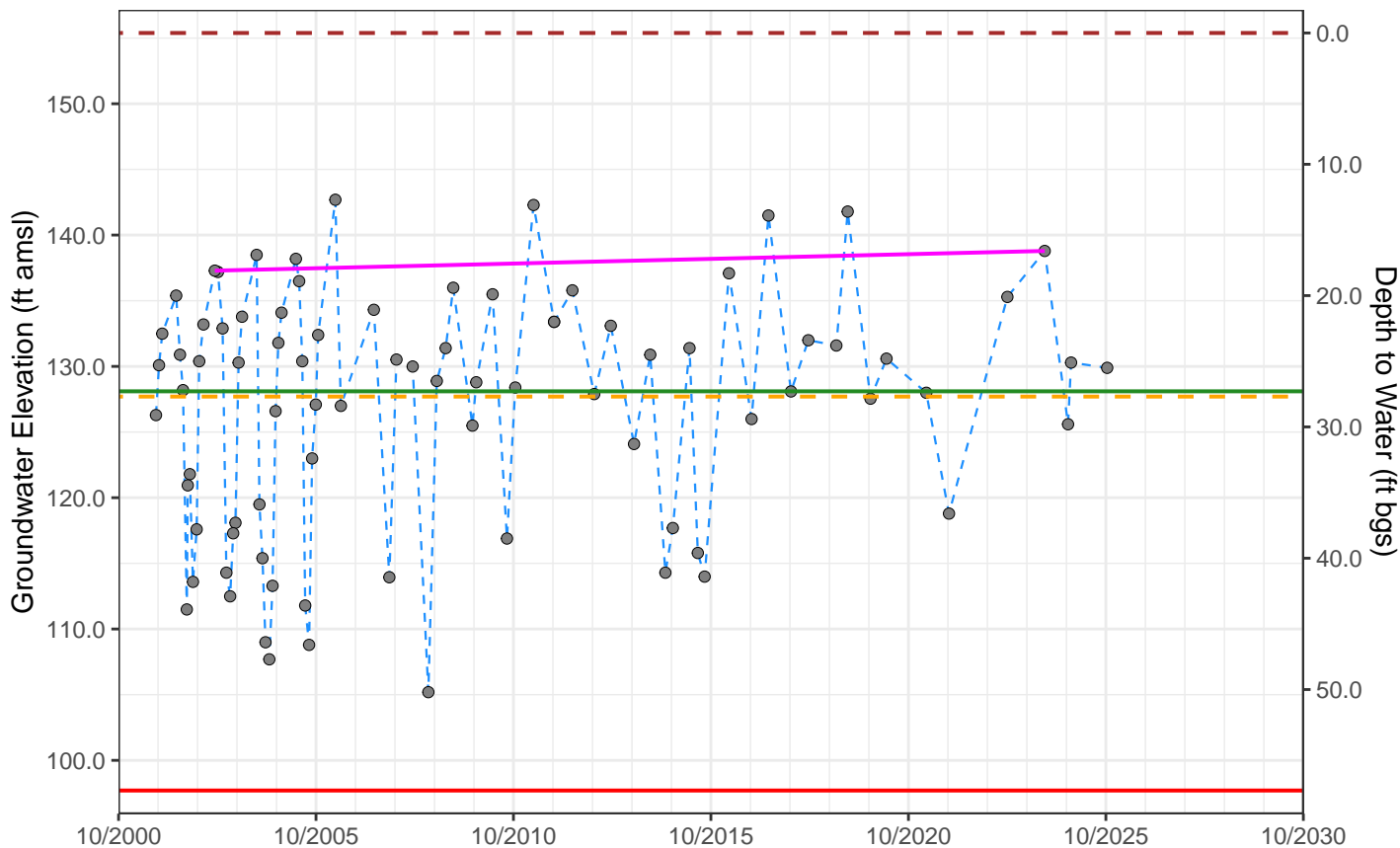


MO GWE: 128.1 ft amsl  
MO DTW: 27.29 ft amsl

MT GWE: 97.7 ft amsl  
MT DTW: 57.69 ft amsl

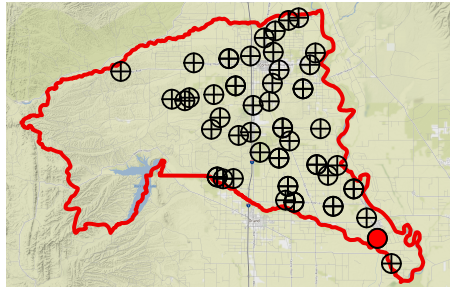
Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 21 years (2003 to 2024):  
Change = 1.5 ft  
Avg. rate of change = 0.07 ft/yr  
Avg. water level = 135.76 ft amsl  
5-yr Avg. rate (2020–2024):  
= 2.05 ft/yr



# Corning Subbasin – State Well Number (SWN) 22N01W29N002M

(Deep Zone) Well Depth: 670 ft. Perforation top & bottom: 549 – 641 ft bgs



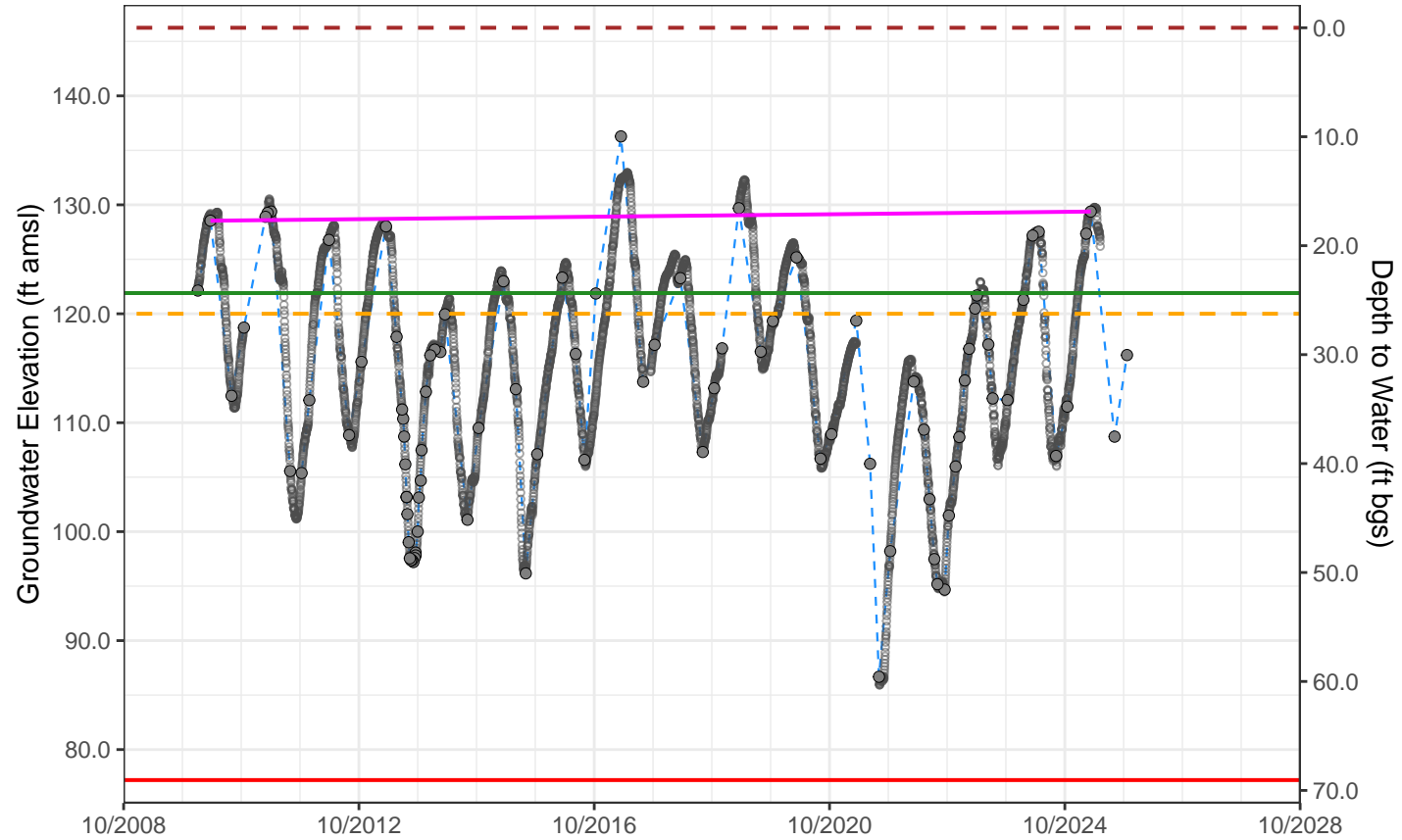
- Graphed Well
- ⊕ Other Well

MO GWE: 121.9 ft amsl  
MO DTW: 24.35 ft amsl

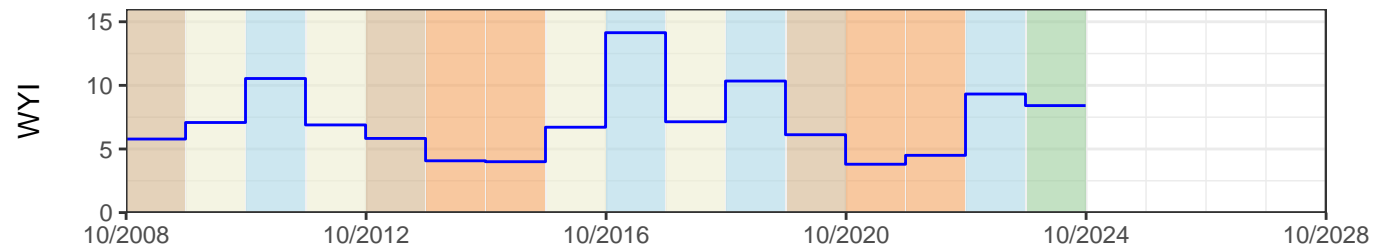
MT GWE: 77.2 ft amsl  
MT DTW: 69.05 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 15 years (2010 to 2025):  
Change = 0.84 ft  
Avg. rate of change = 0.06 ft/yr  
Avg. water level = 125.32 ft amsl  
5-yr Avg. rate (2021–2025):  
= 2.5 ft/yr



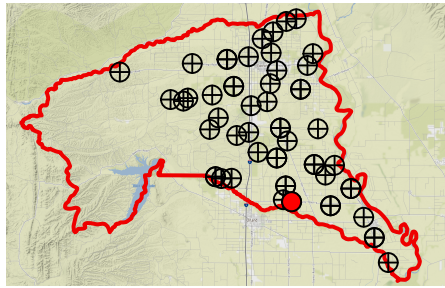
- - - GSE
- - - 5-year Interim milestone
- MO
- Spring WL trend (2010–2025, 15 yrs)
- MT
- Transducer data



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 22N02W18C003M

(Shallow Zone) Well Depth: 188 ft. Perforation top & bottom: 165 – 175 ft bgs



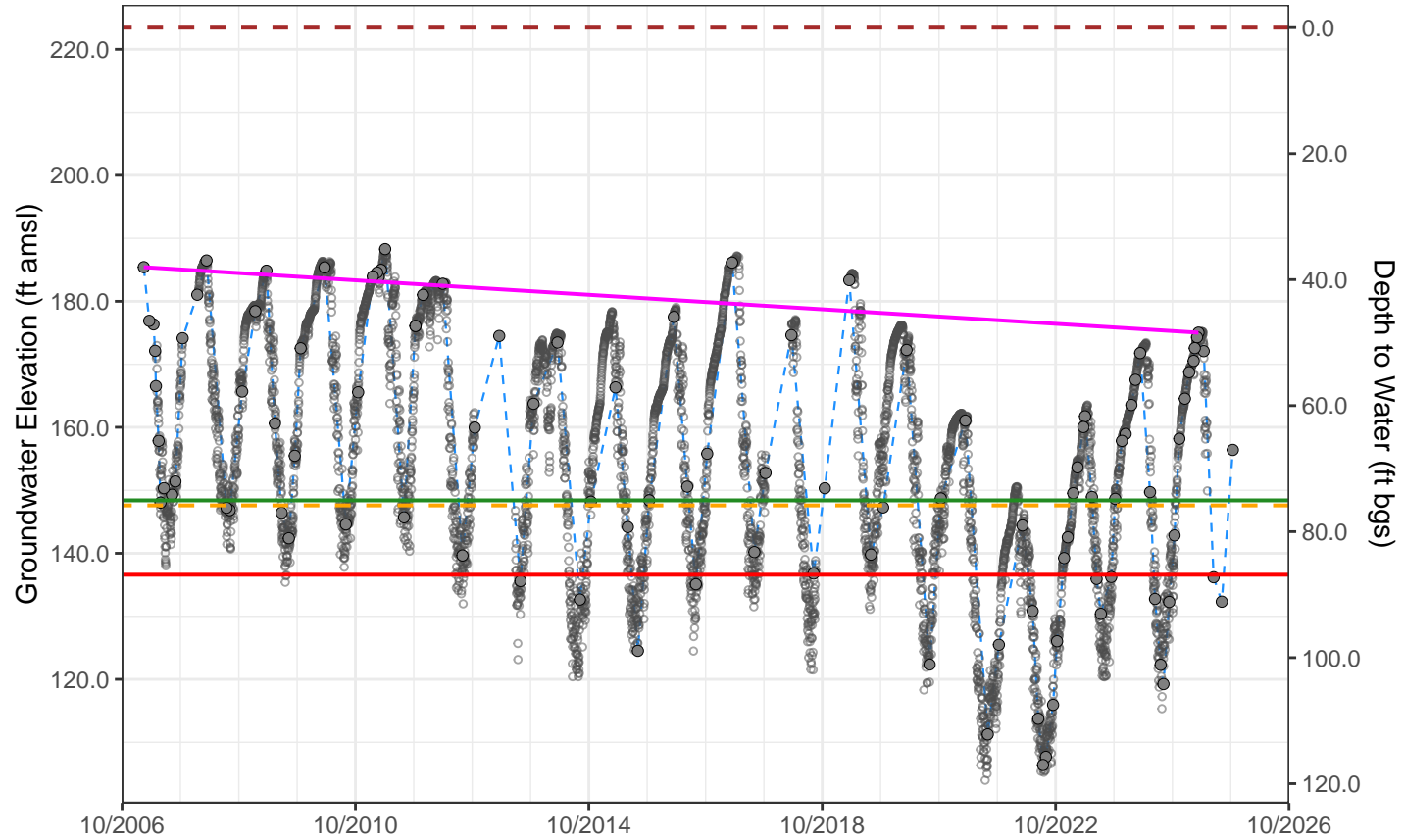
- Graphed Well
- ⊕ Other Well

MO GWE: 148.4 ft amsl  
MO DTW: 75.04 ft amsl

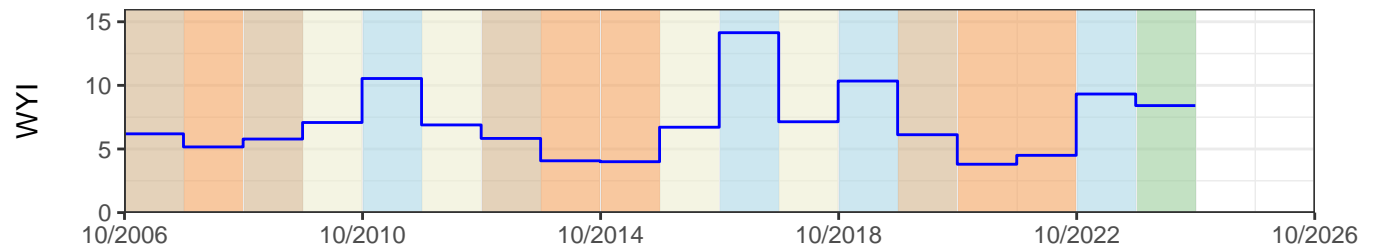
MT GWE: 136.6 ft amsl  
MT DTW: 86.84 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 18 years (2007 to 2025):  
Change = -10.4 ft  
Avg. rate of change = -0.58 ft/yr  
Avg. water level = 175.55 ft amsl  
5-yr Avg. rate (2021–2025):  
= 3.49 ft/yr



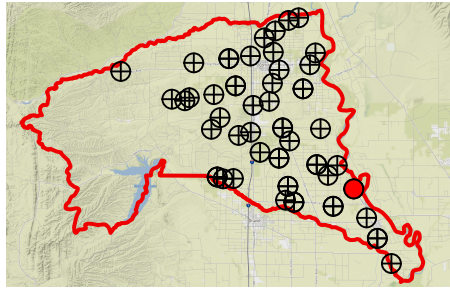
- GSE
- 5-year Interim milestone
- MO
- Spring WL trend (2007–2025, 18 yrs)
- MT
- Transducer data



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 22N02W01N002M

(Deep Zone) Well Depth: 730 ft. Perforation top & bottom: 700 – 710 ft bgs



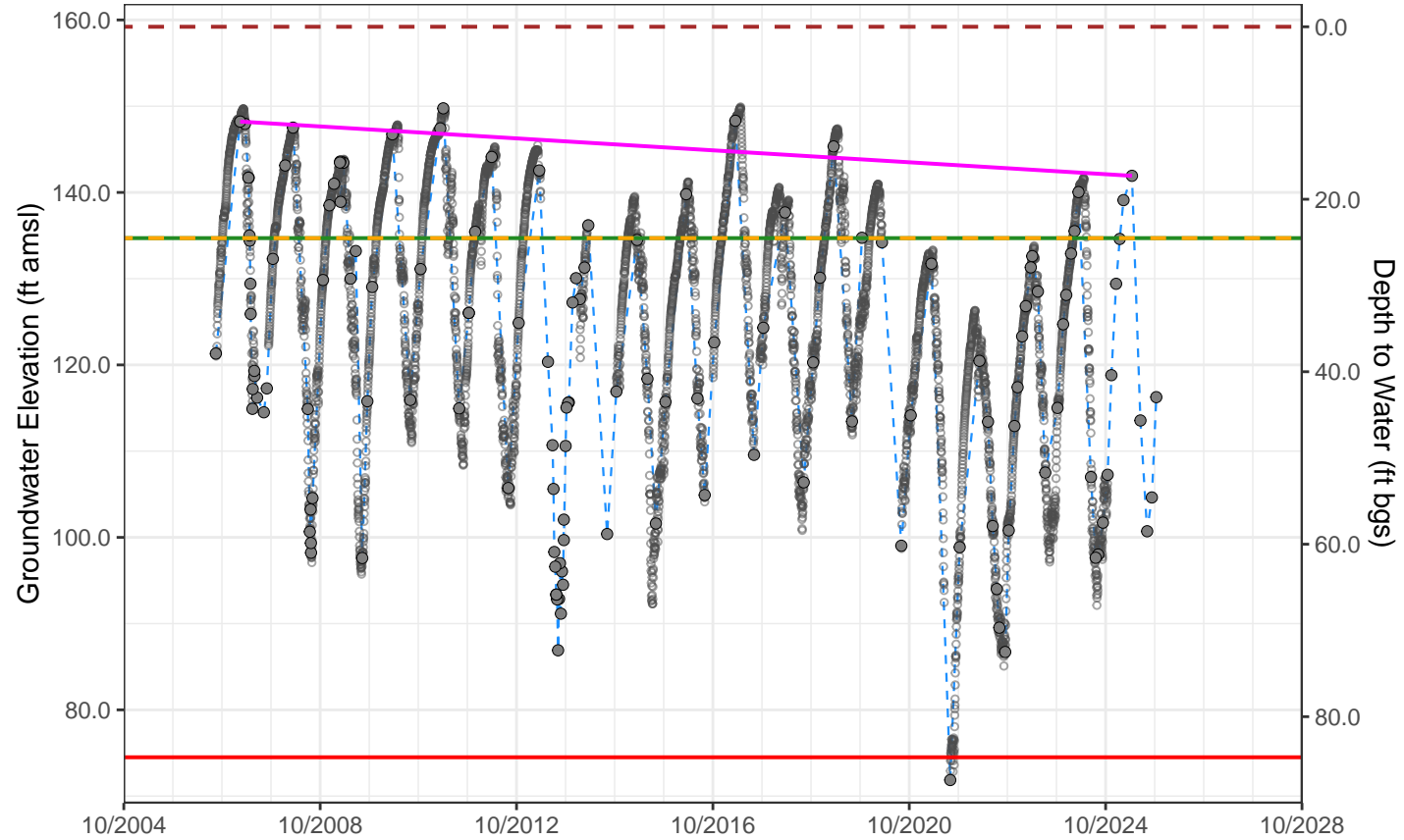
- Graphed Well
- ⊕ Other Well

MO GWE: 134.7 ft amsl  
MO DTW: 24.51 ft amsl

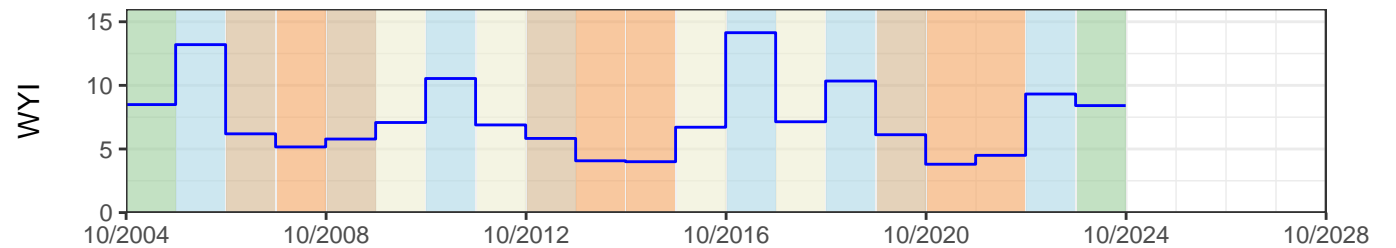
MT GWE: 74.5 ft amsl  
MT DTW: 84.71 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 18 years (2007 to 2025):  
Change = -6.29 ft  
Avg. rate of change = -0.35 ft/yr  
Avg. water level = 140.28 ft amsl  
5-yr Avg. rate (2021–2025):  
= 2.55 ft/yr



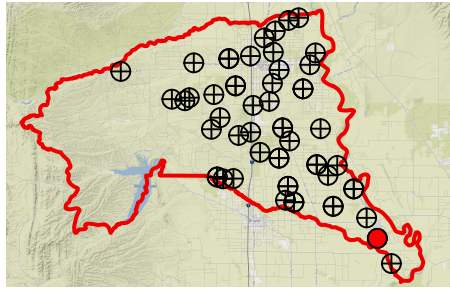
- - - GSE
- MO
- MT
- Transducer data
- Spring WL trend (2007–2025, 18 yrs)
- 5-year Interim milestone



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 22N01W29N003M

(Shallow Zone) Well Depth: 400 ft. Perforation top & bottom: 189 – 380 ft bgs



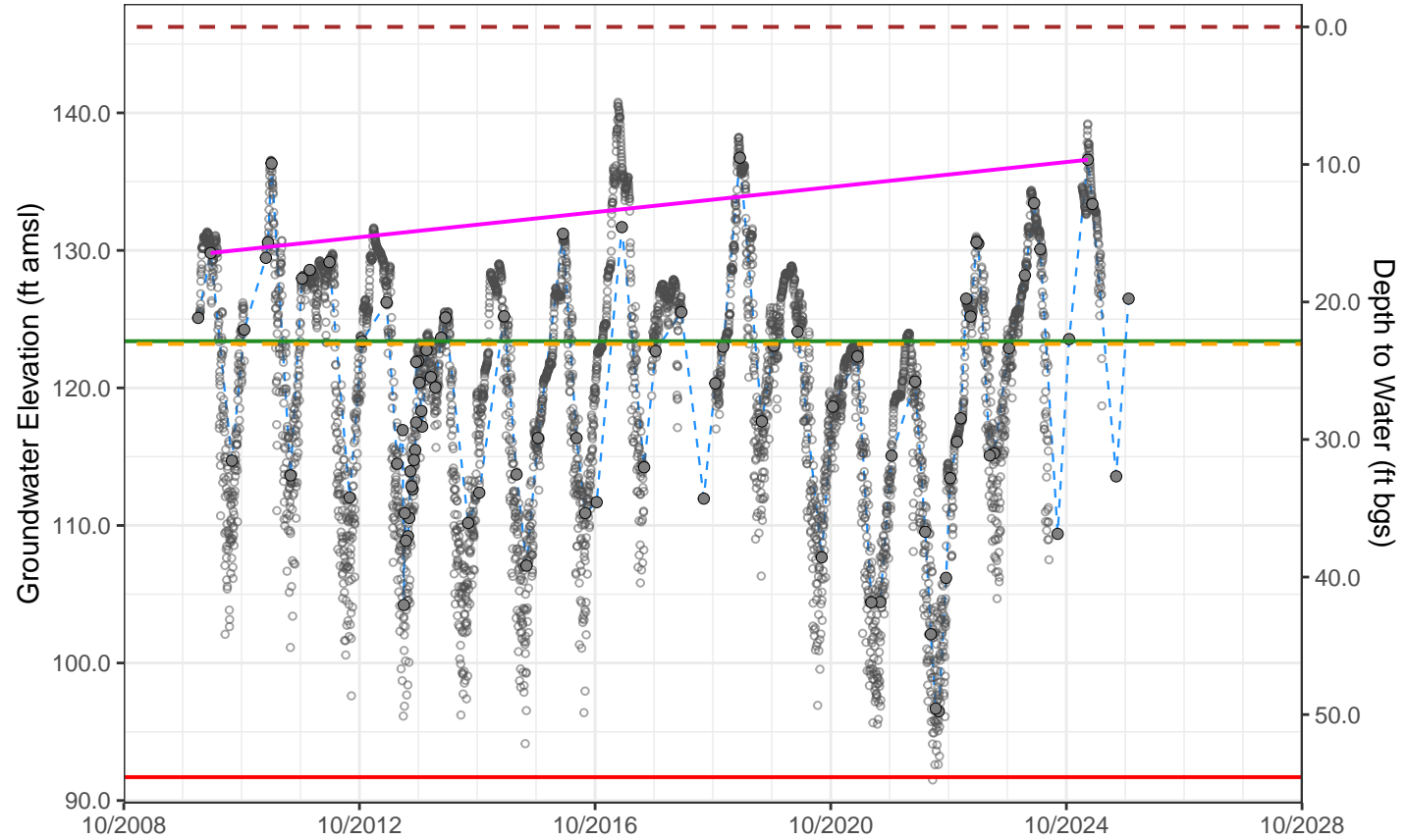
- Graphed Well
- ⊕ Other Well

MO GWE: 123.4 ft amsl  
MO DTW: 22.85 ft amsl

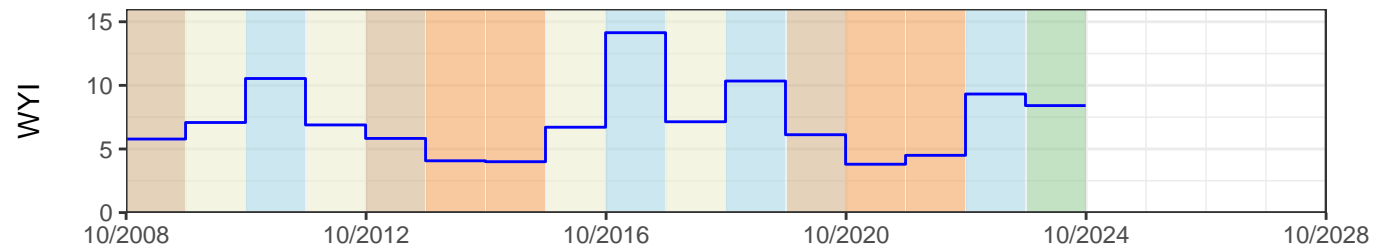
MT GWE: 91.7 ft amsl  
MT DTW: 54.55 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 15 years (2010 to 2025):  
Change = 6.78 ft  
Avg. rate of change = 0.45 ft/yr  
Avg. water level = 129.03 ft amsl  
5-yr Avg. rate (2021–2025):  
= 3.57 ft/yr



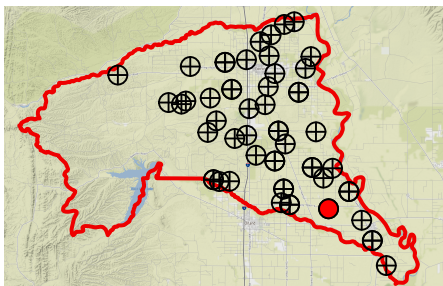
- GSE
- 5-year Interim milestone
- Transducer data
- MO
- Spring WL trend (2010–2025, 15 yrs)
- MT



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 22N02W15C002M

(Deep Zone) Well Depth: 825 ft. Perforation top & bottom: 760 – 781 ft bgs



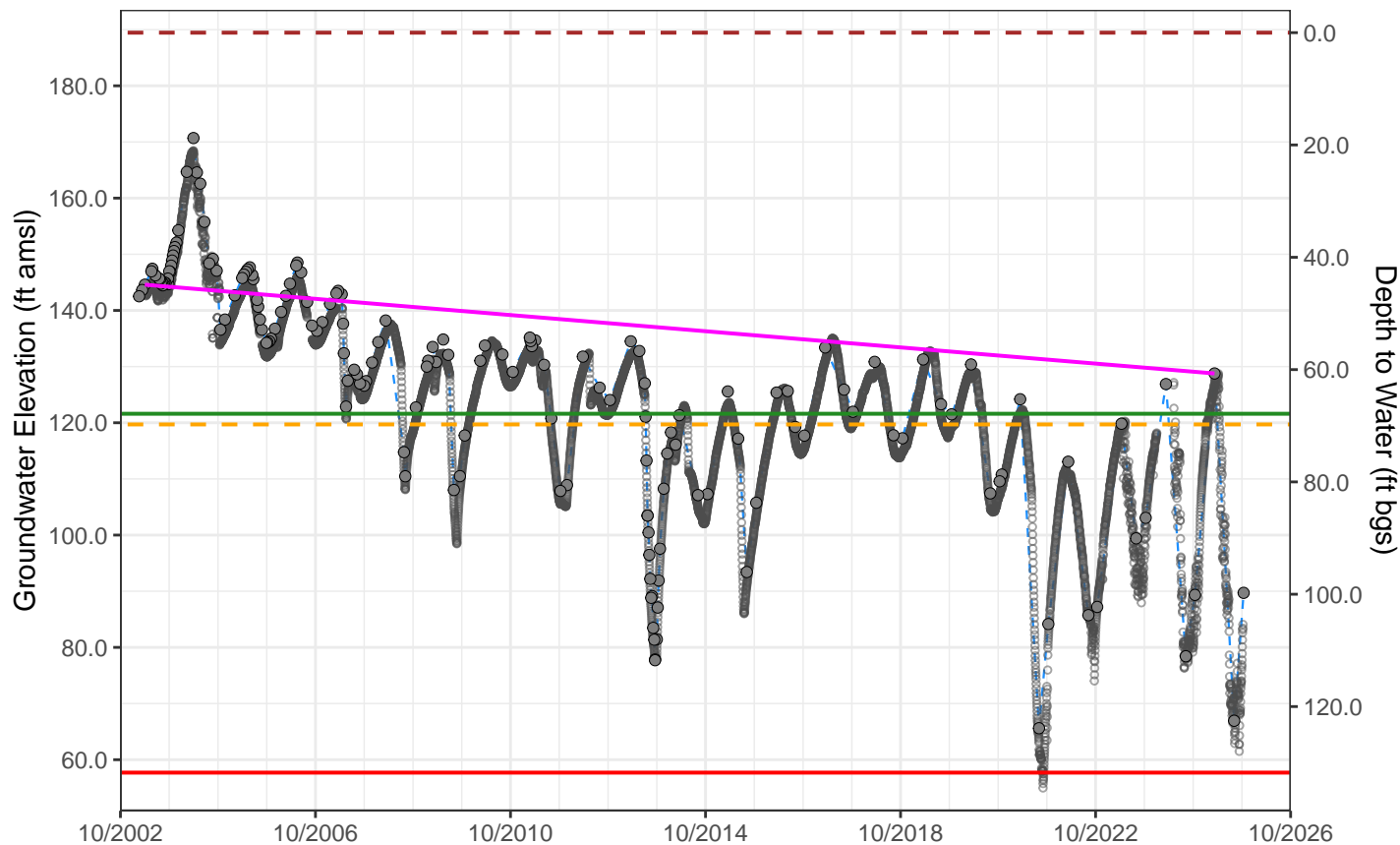
- Graphed Well
- ⊕ Other Well

MO GWE: 121.6 ft amsl  
MO DTW: 67.865 ft amsl

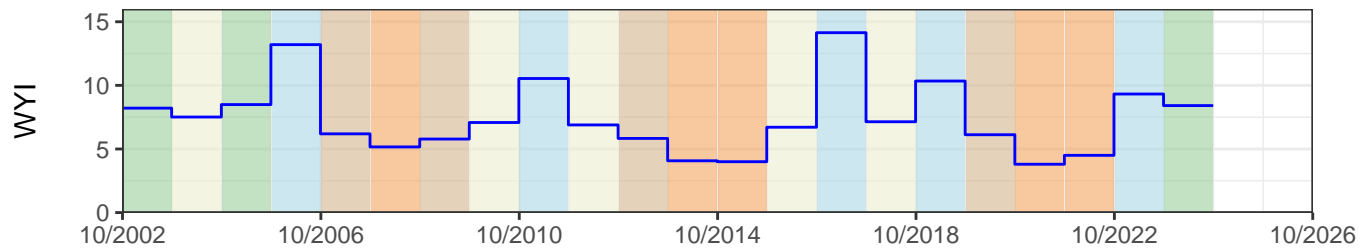
MT GWE: 57.7 ft amsl  
MT DTW: 131.765 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -15.81 ft  
Avg. rate of change = -0.72 ft/yr  
Avg. water level = 133.4 ft amsl  
5-yr Avg. rate (2021–2025):  
= 1.15 ft/yr



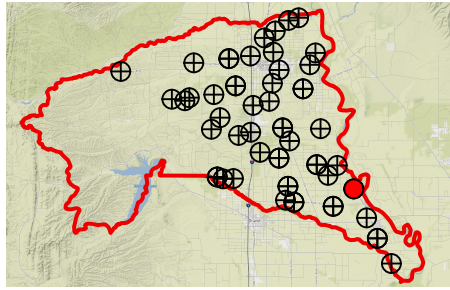
- GSE
- 5-year Interim milestone
- Transducer data
- MO
- Spring WL trend (2003–2025, 22 yrs)
- MT



- Sacramento Valley Water Year Index
- WY Type:  Wet
- Above Normal
- Below Normal
- Dry
- Critical

# Corning Subbasin – State Well Number (SWN) 22N02W01N003M

(Shallow Zone) Well Depth: 440 ft. Perforation top & bottom: 210 – 370 ft bgs



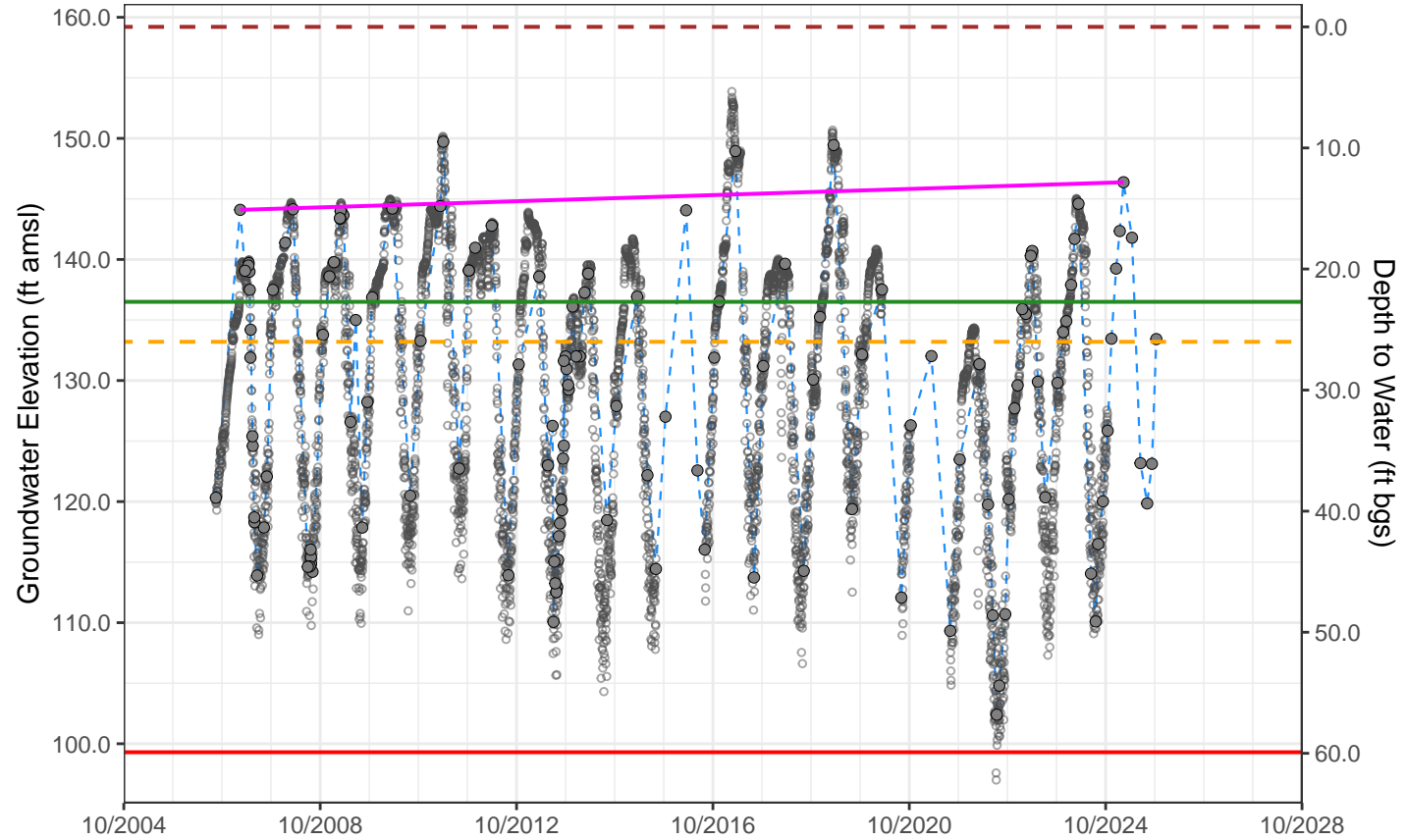
- Graphed Well
- ⊕ Other Well

MO GWE: 136.5 ft amsl  
MO DTW: 22.71 ft amsl

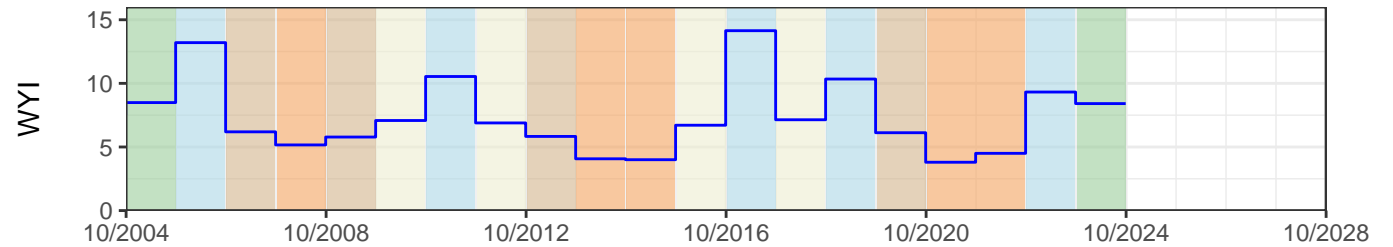
MT GWE: 99.3 ft amsl  
MT DTW: 59.91 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 18 years (2007 to 2025):  
Change = 2.28 ft  
Avg. rate of change = 0.13 ft/yr  
Avg. water level = 142 ft amsl  
5-yr Avg. rate (2021–2025):  
= 3.59 ft/yr



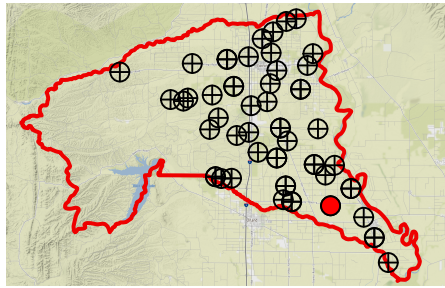
- - - GSE
- - - 5-year Interim milestone
- MO
- Spring WL trend (2007–2025, 18 yrs)
- MT
- Transducer data



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 22N02W15C004M

(Shallow Zone) Well Depth: 258 ft. Perforation top & bottom: 210 – 220 ft bgs



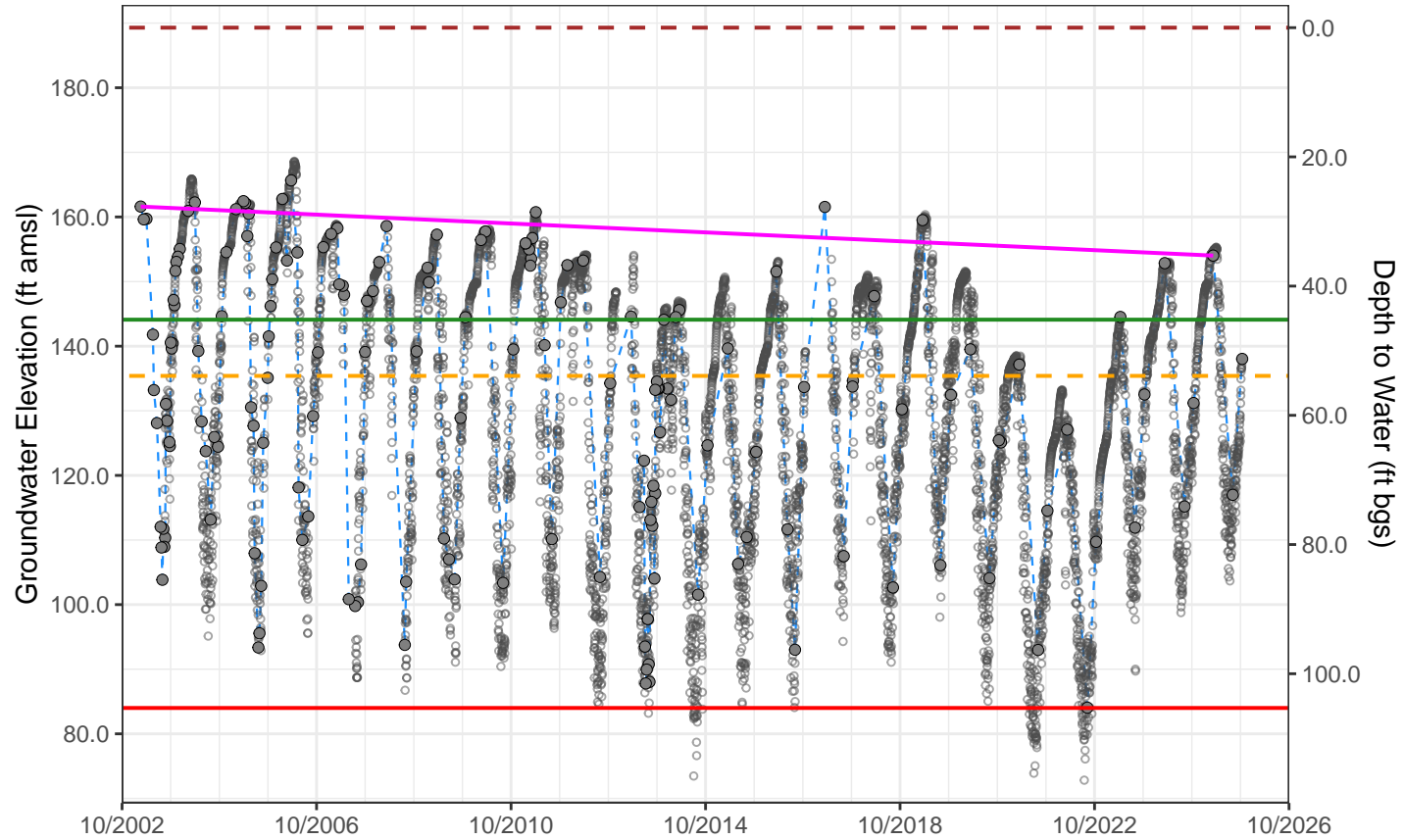
- Graphed Well
- ⊕ Other Well

MO GWE: 144.1 ft amsl  
MO DTW: 45.2 ft amsl

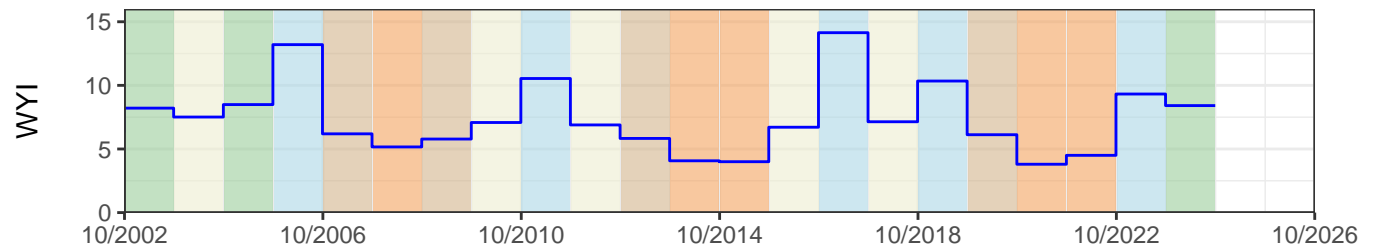
MT GWE: 84 ft amsl  
MT DTW: 105.3 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -7.58 ft  
Avg. rate of change = -0.34 ft/yr  
Avg. water level = 152.31 ft amsl  
5-yr Avg. rate (2021–2025):  
= 4.22 ft/yr



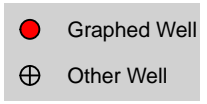
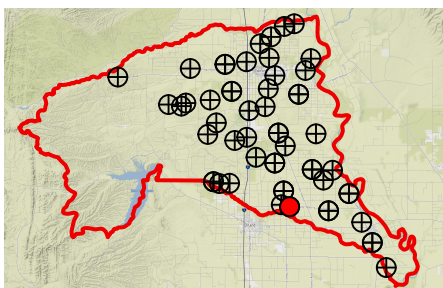
- GSE
- 5-year Interim milestone
- MO
- Spring WL trend (2003–2025, 22 yrs)
- MT
- Transducer data



- Sacramento Valley Water Year Index
- WY Type:  Wet
- Above Normal
- Below Normal
- Dry
- Critical

# Corning Subbasin – State Well Number (SWN) 22N02W18C001M

(Deep Zone) Well Depth: 1062 ft. Perforation top & bottom: 841 – 1029 ft bgs

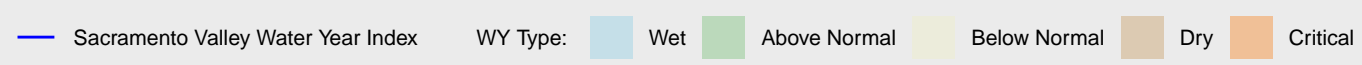
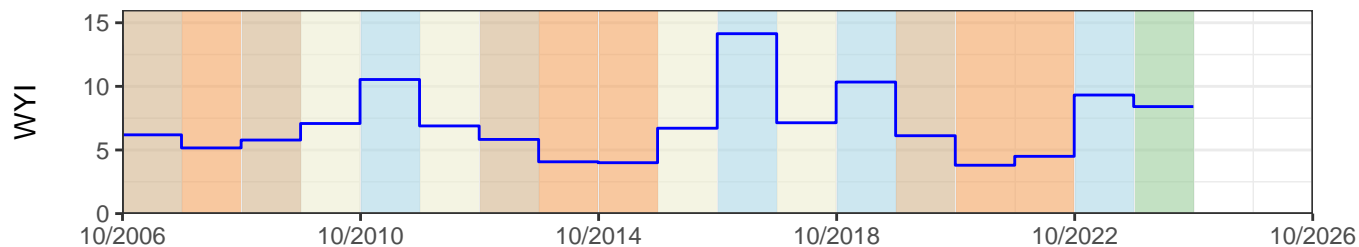
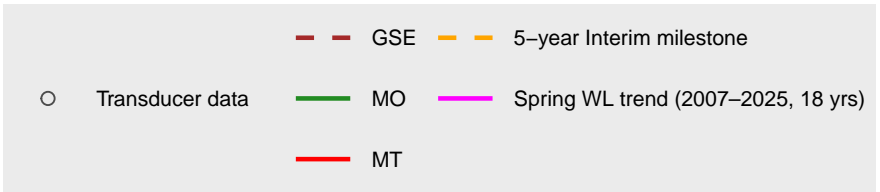
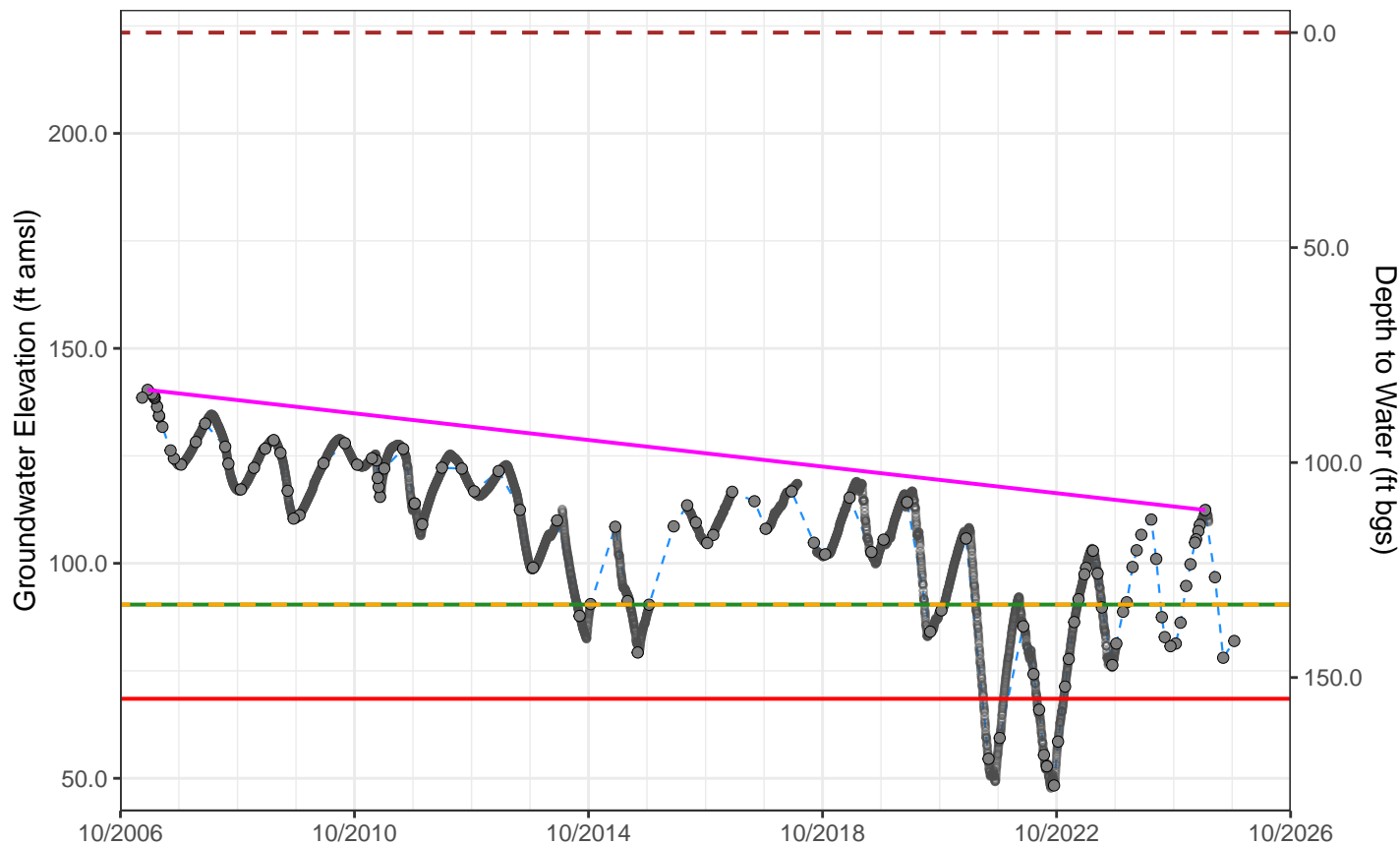


MO GWE: 90.4 ft amsl  
MO DTW: 133.04 ft amsl

MT GWE: 68.5 ft amsl  
MT DTW: 154.94 ft amsl

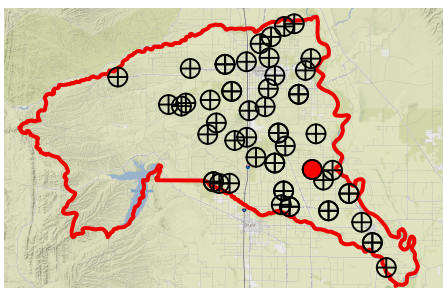
Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 18 years (2007 to 2025):  
Change = -27.95 ft  
Avg. rate of change = -1.55 ft/yr  
Avg. water level = 115.26 ft amsl  
5-yr Avg. rate (2021–2025):  
= 1.65 ft/yr



# Corning Subbasin – State Well Number (SWN) 23N02W28N002M

(Deep Zone) Well Depth: 580 ft. Perforation top & bottom: 550 – 570 ft bgs



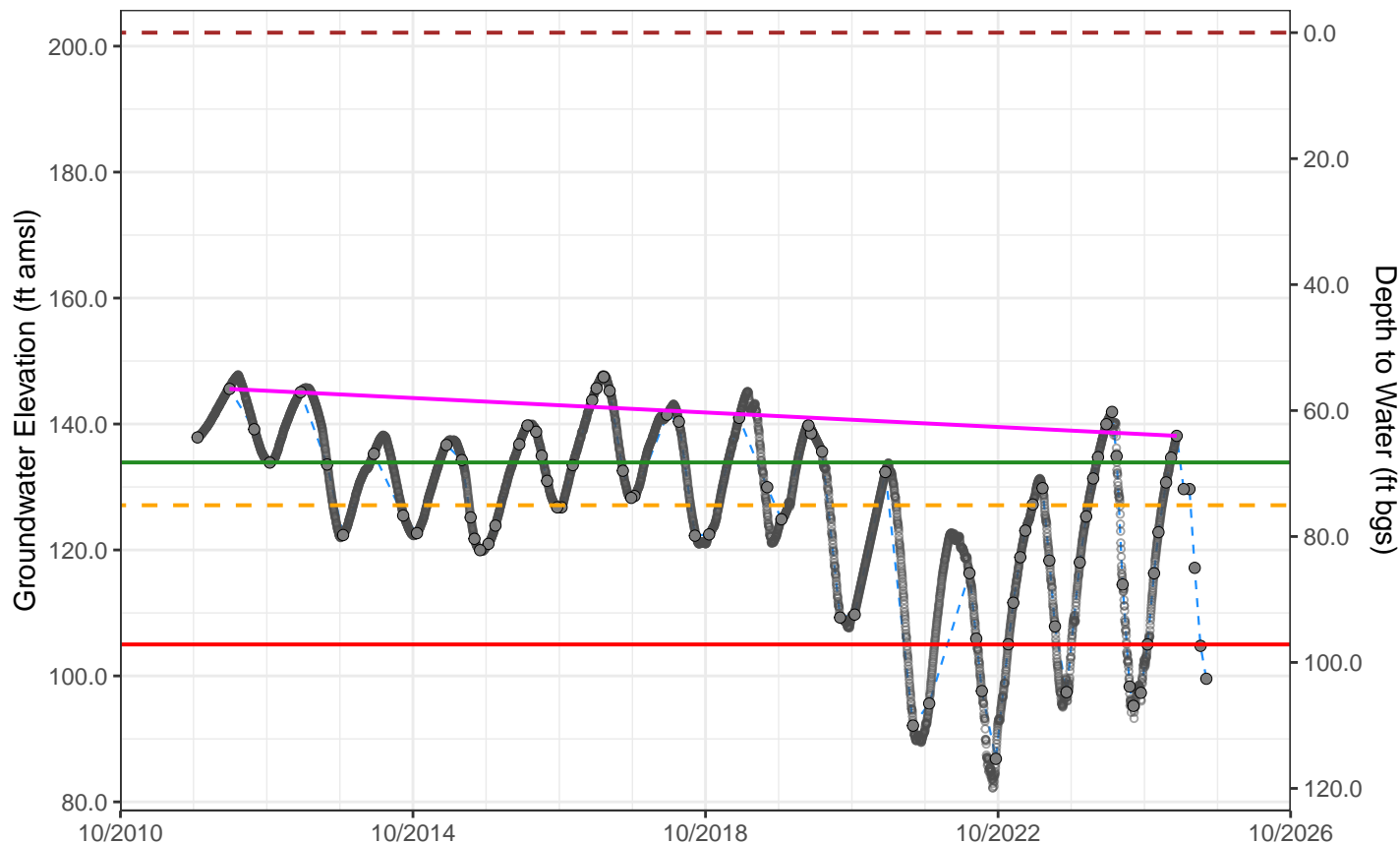
- Graphed Well
- ⊕ Other Well

MO GWE: 133.9 ft amsl  
MO DTW: 68.24 ft amsl

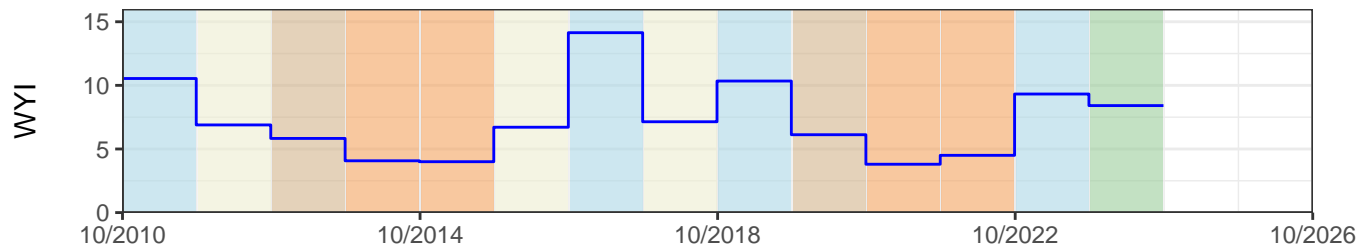
MT GWE: 105 ft amsl  
MT DTW: 97.14 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 13 years (2012 to 2025):  
Change = -7.45 ft  
Avg. rate of change = -0.57 ft/yr  
Avg. water level = 139.22 ft amsl  
5-yr Avg. rate (2021–2025):  
= 1.44 ft/yr



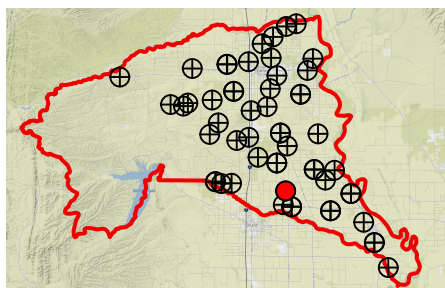
- - - GSE
- - - 5-year Interim milestone
- MO
- Spring WL trend (2012–2025, 13 yrs)
- MT
- Transducer data



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 22N03W01R001M

(Deep Zone) Well Depth: 515 ft. Perforation top & bottom: 470 – 480 ft bgs



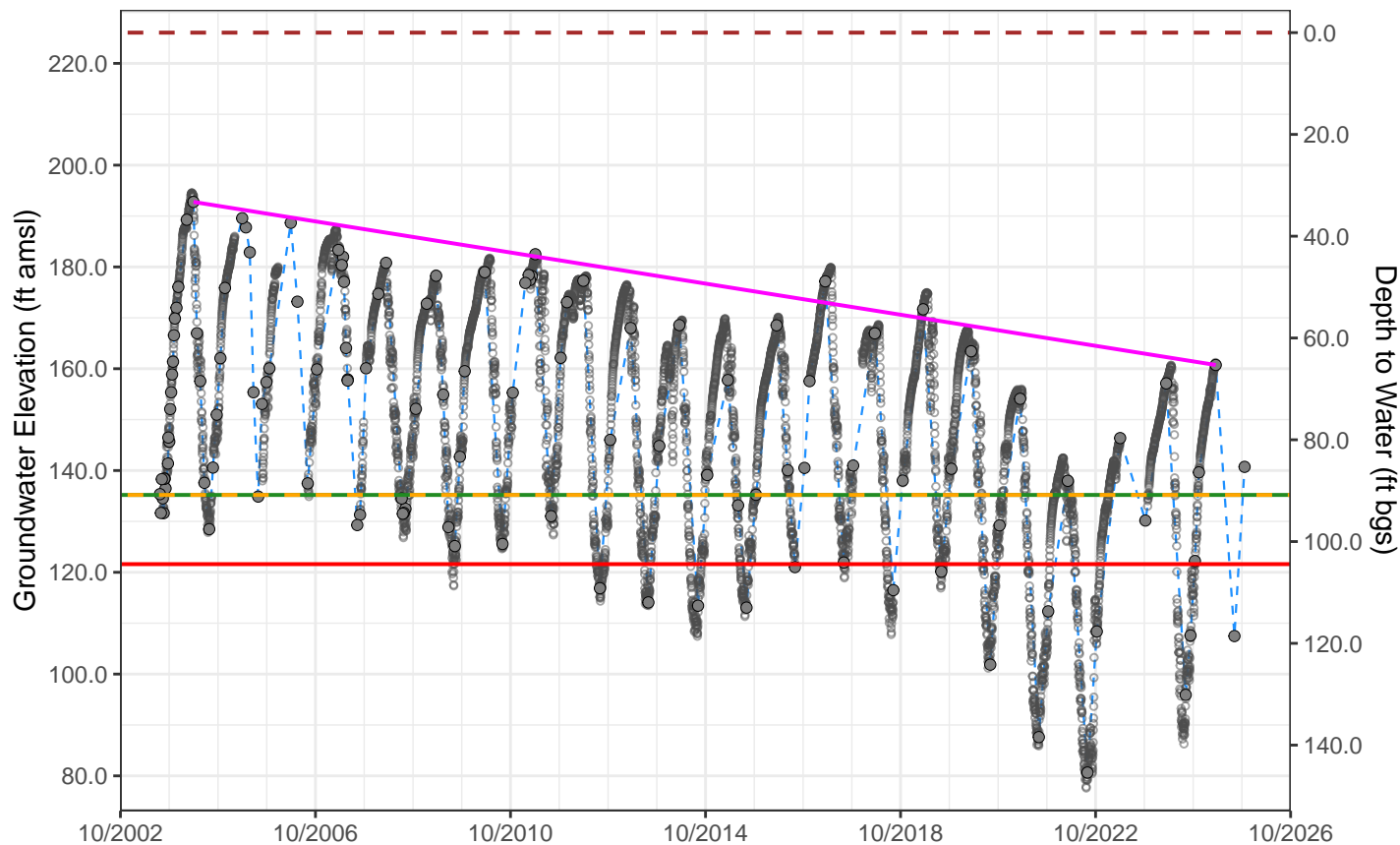
- Graphed Well
- ⊕ Other Well

MO GWE: 135.2 ft amsl  
MO DTW: 90.84 ft amsl

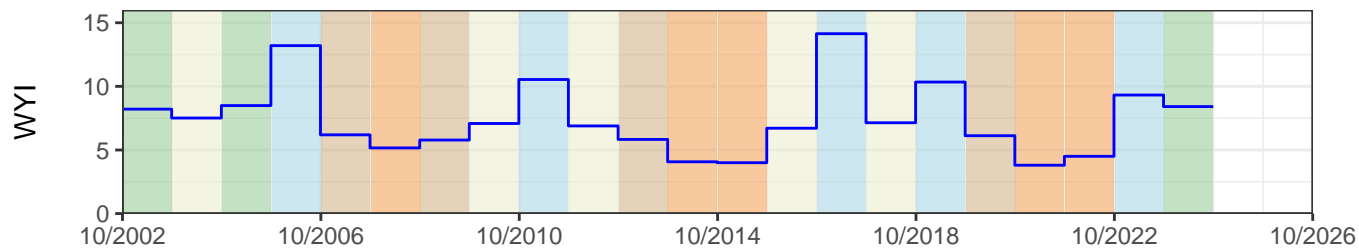
MT GWE: 121.6 ft amsl  
MT DTW: 104.44 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 21 years (2004 to 2025):  
Change = -32.04 ft  
Avg. rate of change = -1.53 ft/yr  
Avg. water level = 170.48 ft amsl  
5-yr Avg. rate (2021–2025):  
= 1.66 ft/yr



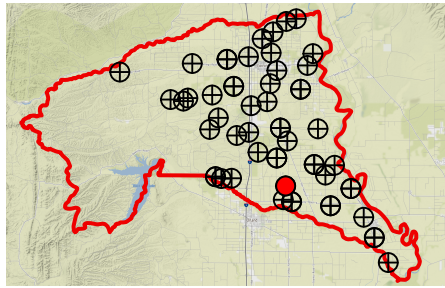
- GSE
- 5-year Interim milestone
- MO
- MT
- Transducer data
- Spring WL trend (2004–2025, 21 yrs)



- Sacramento Valley Water Year Index
- WY Type:  Wet
- Above Normal
- Below Normal
- Dry
- Critical

# Corning Subbasin – State Well Number (SWN) 22N03W01R002M

(Shallow Zone) Well Depth: 314 ft. Perforation top & bottom: 270 – 280 ft bgs



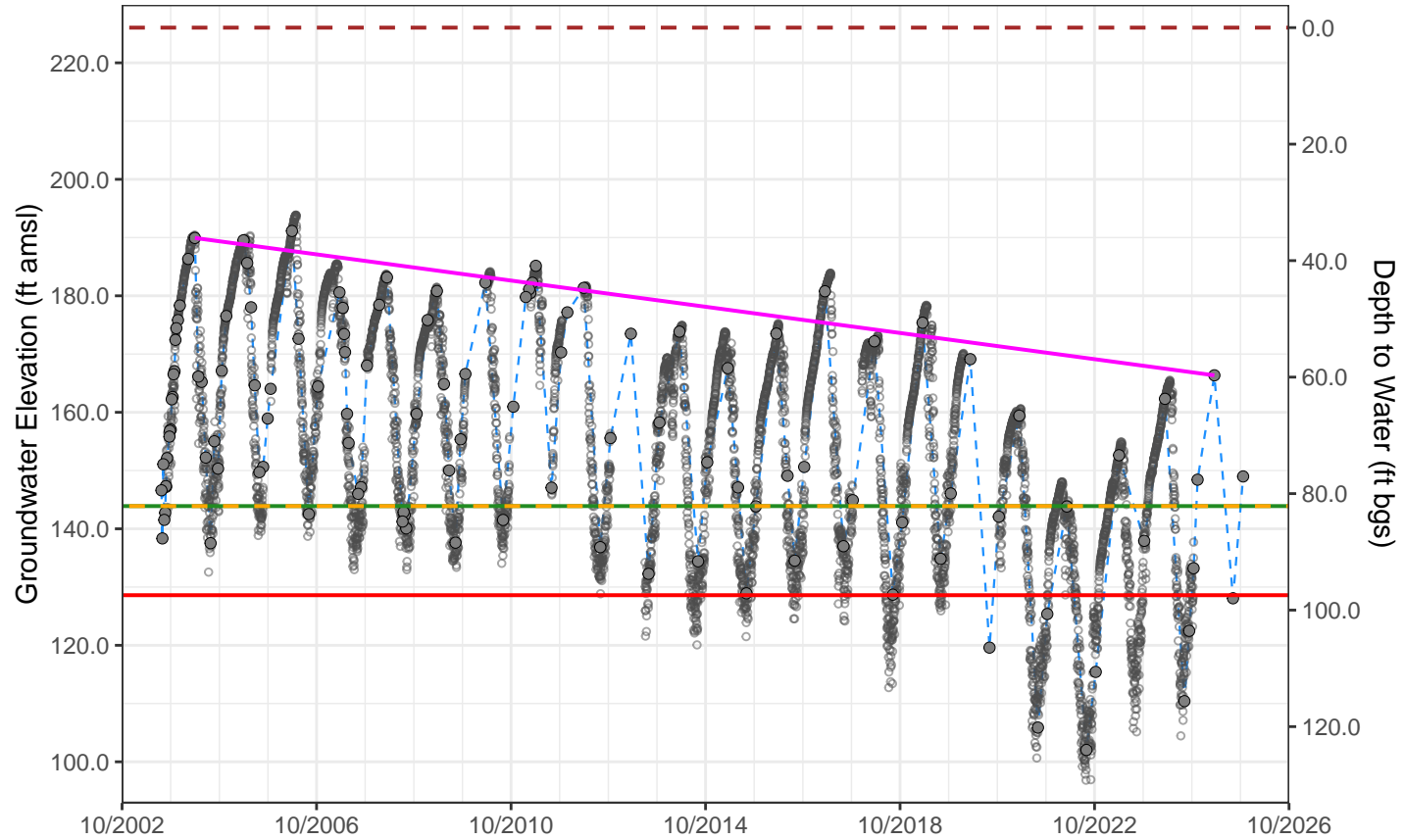
- Graphed Well
- ⊕ Other Well

MO GWE: 143.9 ft amsl  
MO DTW: 82.14 ft amsl

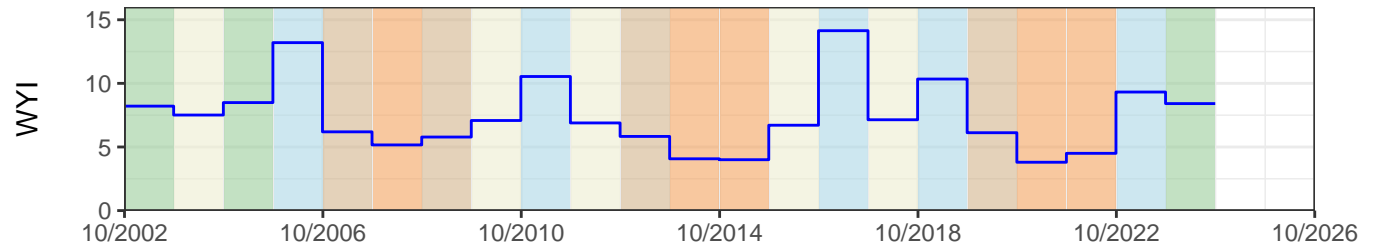
MT GWE: 128.6 ft amsl  
MT DTW: 97.44 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 21 years (2004 to 2025):  
Change = -23.58 ft  
Avg. rate of change = -1.12 ft/yr  
Avg. water level = 174.29 ft amsl  
5-yr Avg. rate (2021–2025):  
= 1.73 ft/yr



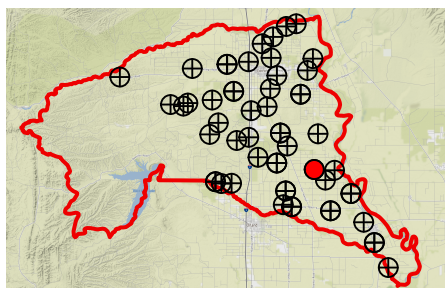
- GSE
- 5-year Interim milestone
- Transducer data
- MO
- Spring WL trend (2004–2025, 21 yrs)
- MT



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 23N02W28N004M

(Shallow Zone) Well Depth: 205 ft. Perforation top & bottom: 100 – 170 ft bgs



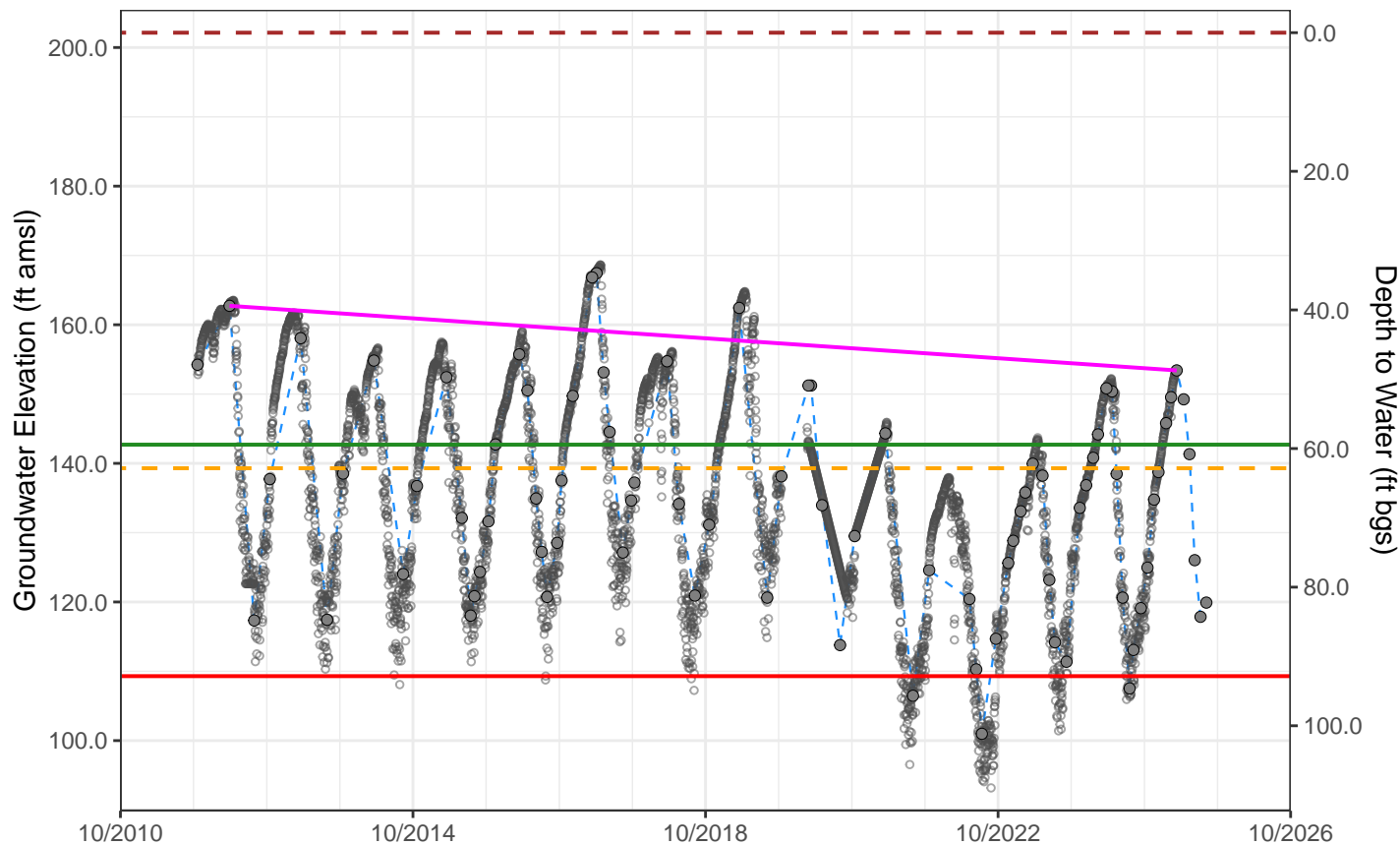
- Graphed Well
- ⊕ Other Well

MO GWE: 142.7 ft amsl  
MO DTW: 59.44 ft amsl

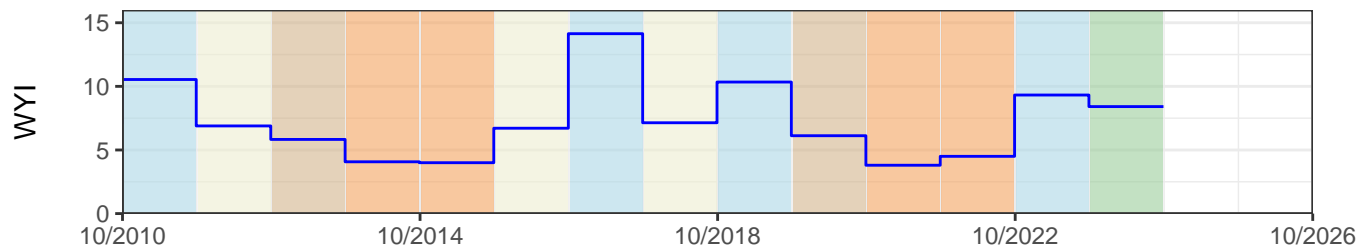
MT GWE: 109.3 ft amsl  
MT DTW: 92.84 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 13 years (2012 to 2025):  
Change = -9.32 ft  
Avg. rate of change = -0.72 ft/yr  
Avg. water level = 154.47 ft amsl  
5-yr Avg. rate (2021–2025):  
= 2.27 ft/yr



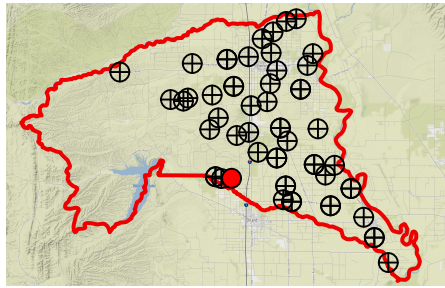
- GSE
- 5-year Interim milestone
- MO
- MT
- Transducer data
- Spring WL trend (2012–2025, 13 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 22N03W05F002M

(Shallow Zone) Well Depth: 218 ft. Perforation top & bottom: 188 – 218 ft bgs



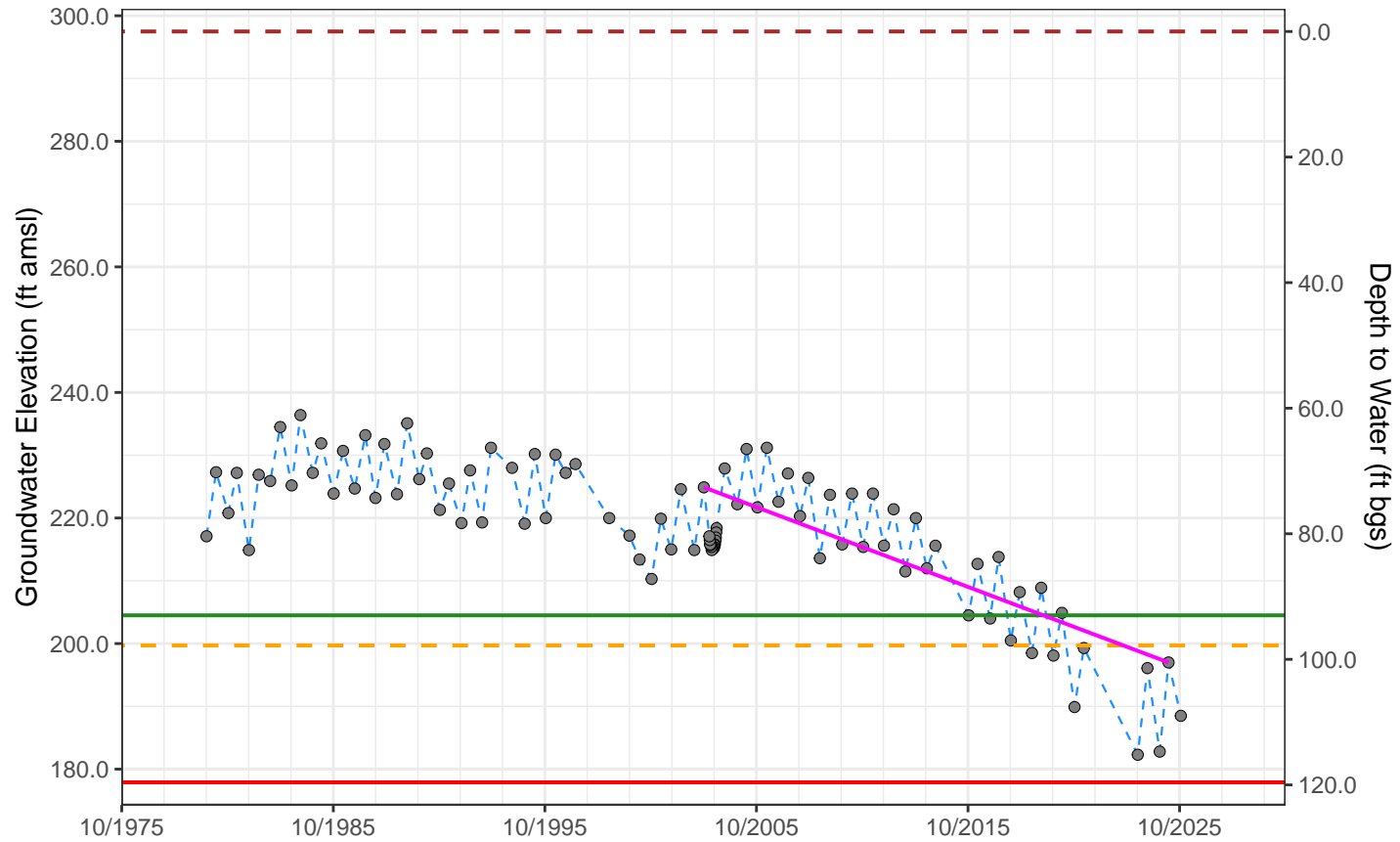
- Graphed Well
- ⊕ Other Well

MO GWE: 204.5 ft amsl  
MO DTW: 92.99 ft amsl

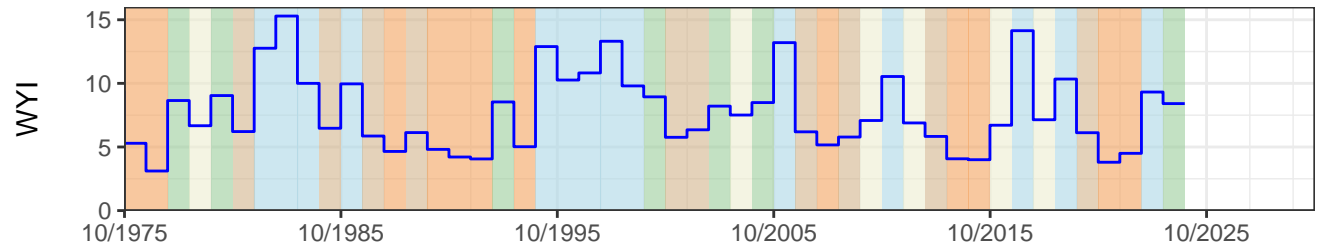
MT GWE: 177.9 ft amsl  
MT DTW: 119.59 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -27.9 ft  
Avg. rate of change = -1.27 ft/yr  
Avg. water level = 216.88 ft amsl  
5-yr Avg. rate (2021–2025):  
= -0.57 ft/yr



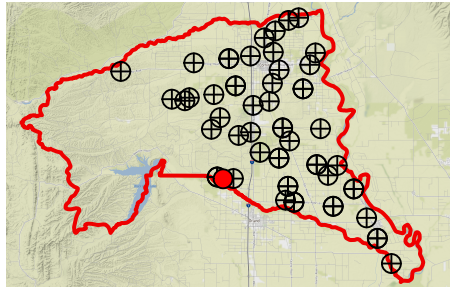
- - - GSE
- MO
- MT
- - - 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 22N03W06B001M

(Shallow Zone) Well Depth: 210 ft. Perforation top & bottom: 195 – 210 ft bgs



- Graphed Well
- ⊕ Other Well

MO GWE: 264.1 ft amsl  
MO DTW: 44.4 ft amsl

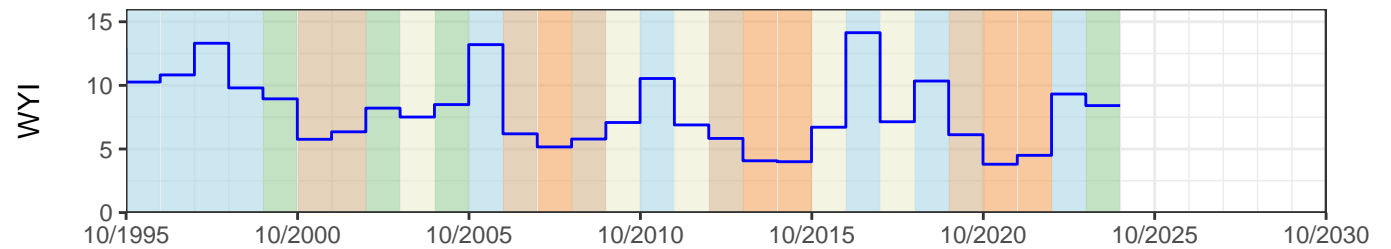
MT GWE: 238 ft amsl  
MT DTW: 70.5 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -23.1 ft  
Avg. rate of change = -1.05 ft/yr  
Avg. water level = 264.73 ft amsl  
5-yr Avg. rate (2021–2025):  
= 2.48 ft/yr



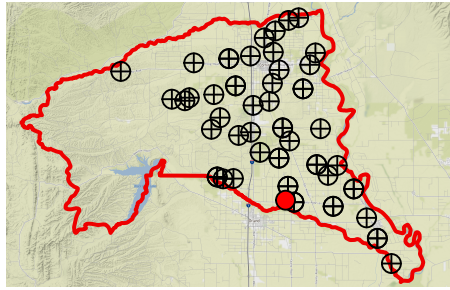
- GSE
- MO
- MT
- - - 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 22N03W12Q003M

(Shallow Zone) Well Depth: 124 ft. Perforation top & bottom: 112 – 123 ft bgs



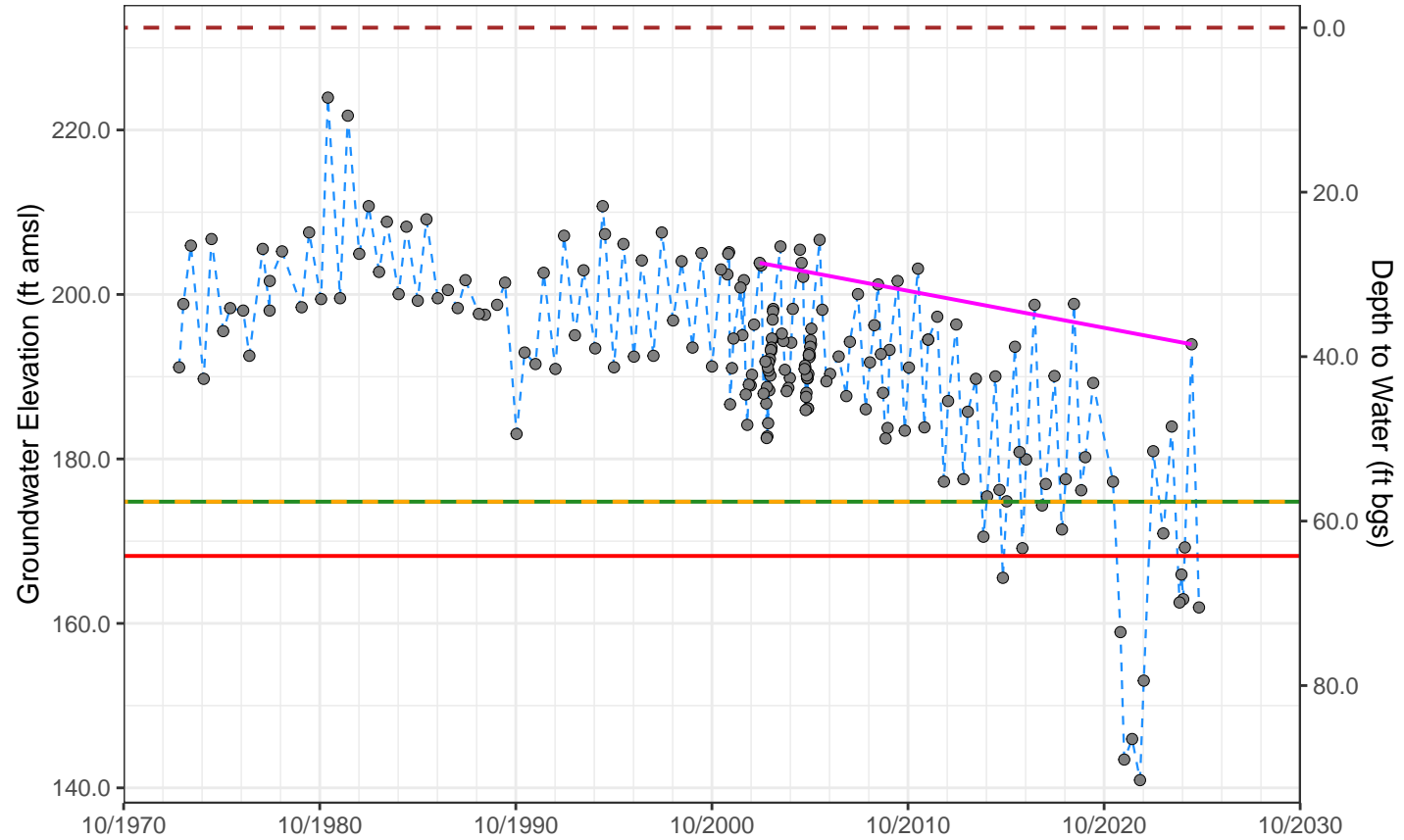
- Graphed Well
- ⊕ Other Well

MO GWE: 174.8 ft amsl  
MO DTW: 57.64 ft amsl

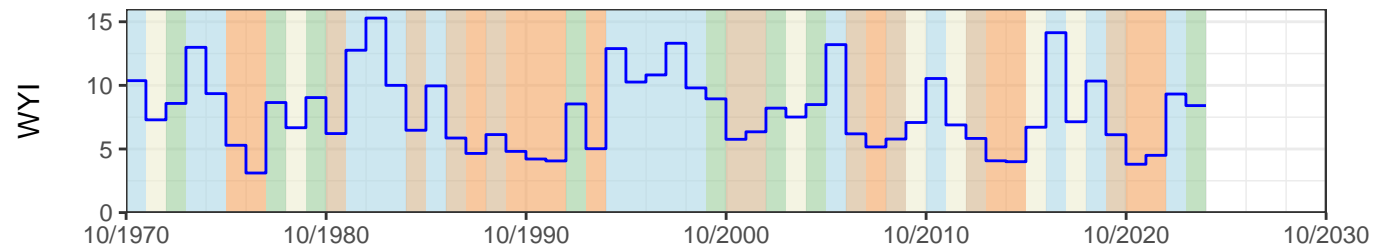
MT GWE: 168.2 ft amsl  
MT DTW: 64.24 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -9.9 ft  
Avg. rate of change = -0.45 ft/yr  
Avg. water level = 193.31 ft amsl  
5-yr Avg. rate (2021–2025):  
= 4.17 ft/yr



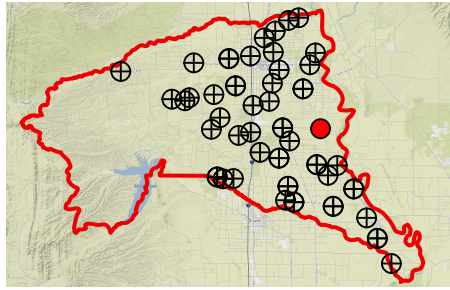
- GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 23N02W16B001M

(Shallow Zone) Well Depth: 120 ft. Perforation top & bottom: 100 – 120 ft bgs



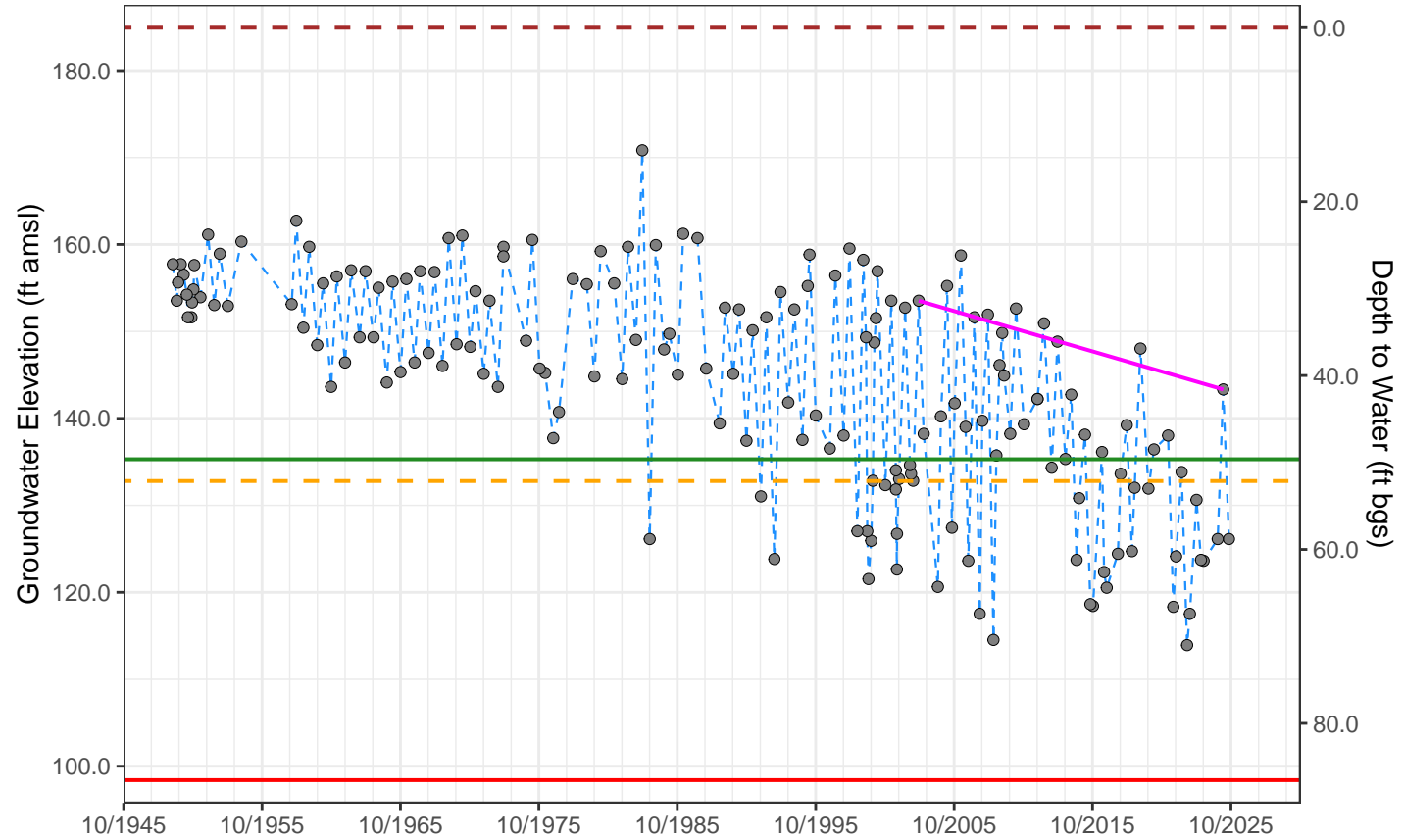
- Graphed Well
- ⊕ Other Well

MO GWE: 135.3 ft amsl  
MO DTW: 49.63 ft amsl

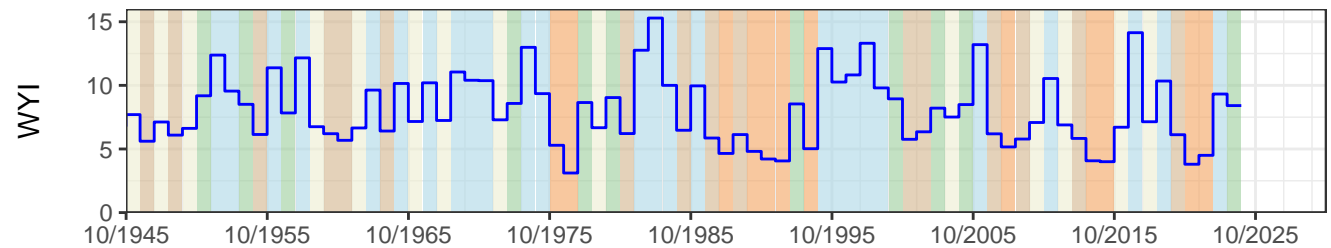
MT GWE: 98.4 ft amsl  
MT DTW: 86.53 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -10.2 ft  
Avg. rate of change = -0.46 ft/yr  
Avg. water level = 145.76 ft amsl  
5-yr Avg. rate (2021–2025):  
= 1.33 ft/yr



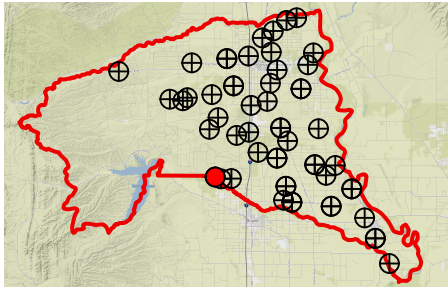
- GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 22N04W01A004M

(Shallow Zone) Well Depth: 70 ft. Perforation top & bottom: 40 – 50 ft bgs



- Graphed Well
- ⊕ Other Well

MO GWE: 262.8 ft amsl

MO DTW: 52.2 ft amsl

MT GWE: 237.5 ft amsl

MT DTW: 77.5 ft amsl

**Acronyms:**

GSE: Ground Surface Elevation

GWE: Groundwater Elevation

MO: Minimum Objective

MT: Minimum Threshold

DTW: Depth to Water

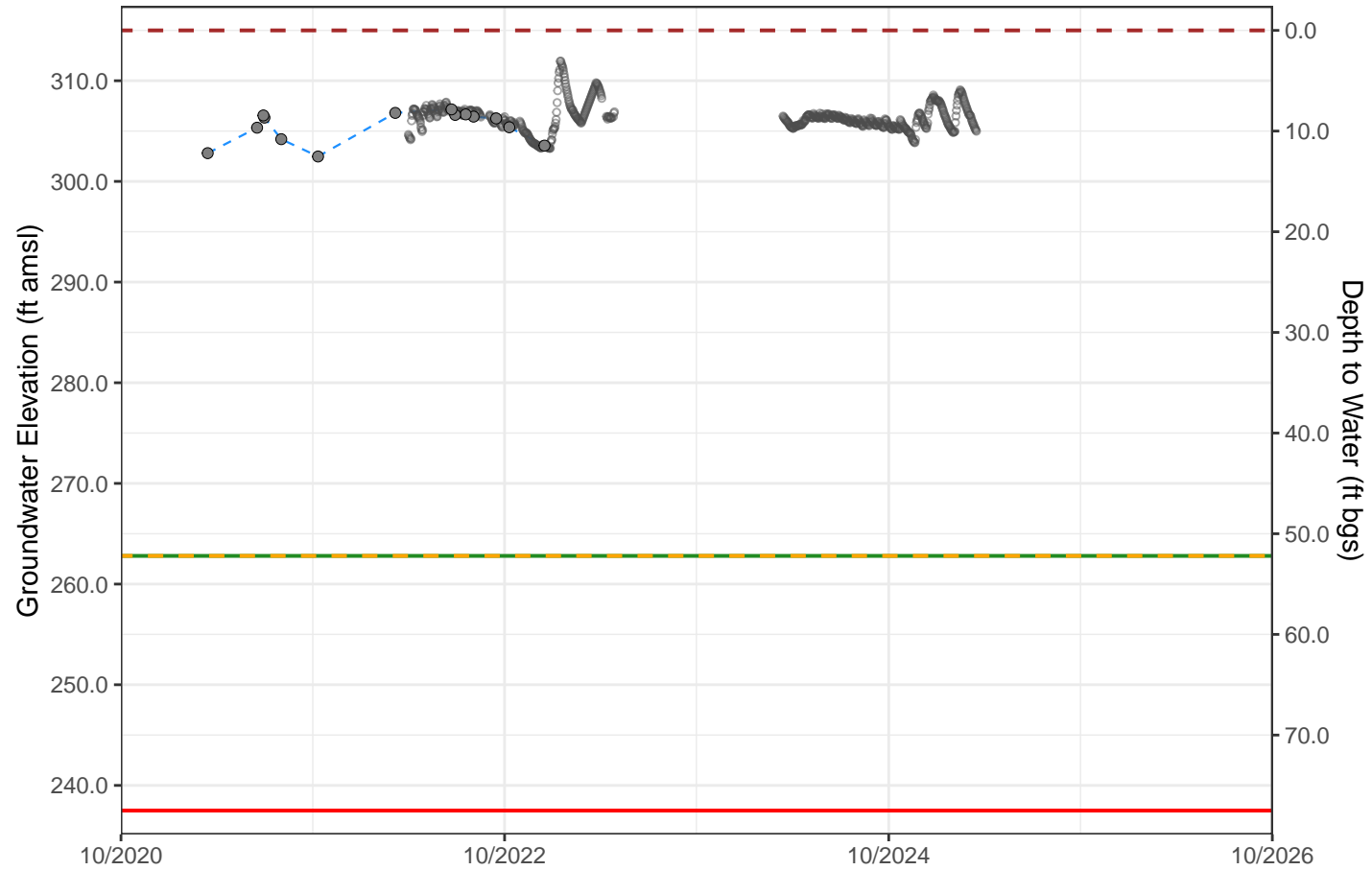
bgs: Below Ground Surface

amsl: Above Mean Sea Level

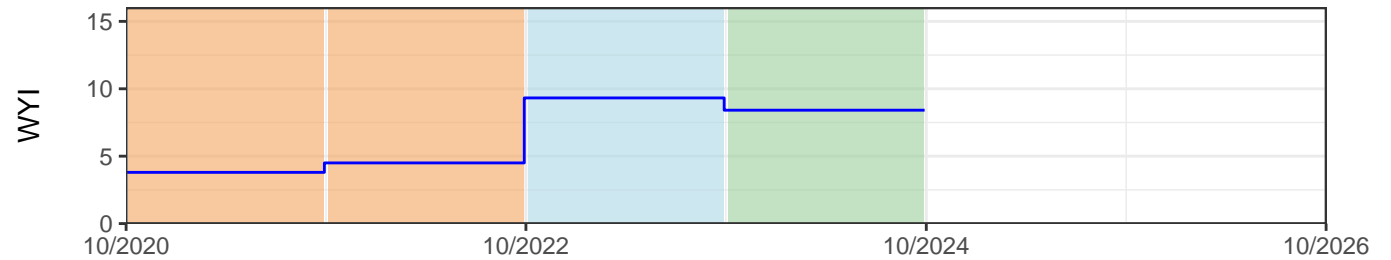
NA: Not Available

WY: Water Year

Insufficient spring GW level data to calculate statistics for 3 years



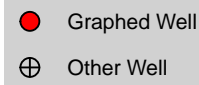
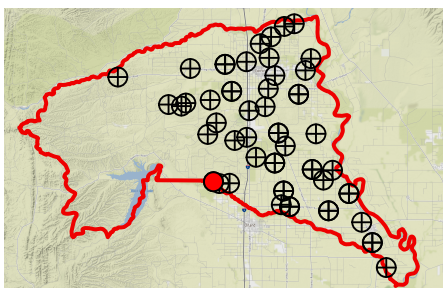
- Transducer data
- GSE
- MO
- MT
- 5-year Interim milestone



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 22N04W01A002M

(Deep Zone) Well Depth: 550 ft. Perforation top & bottom: 520 – 530 ft bgs

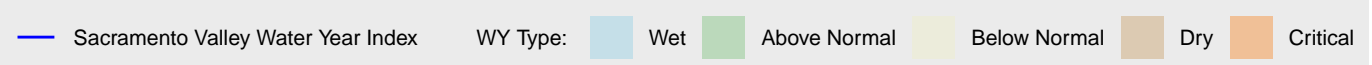
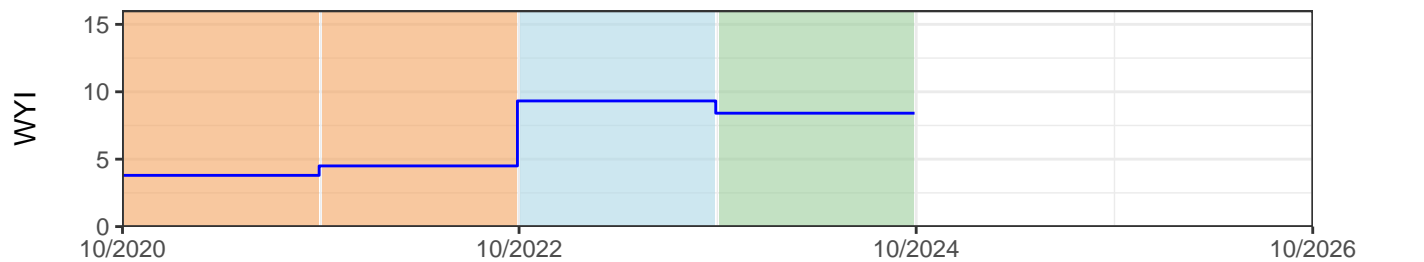
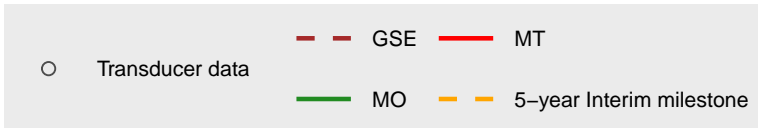
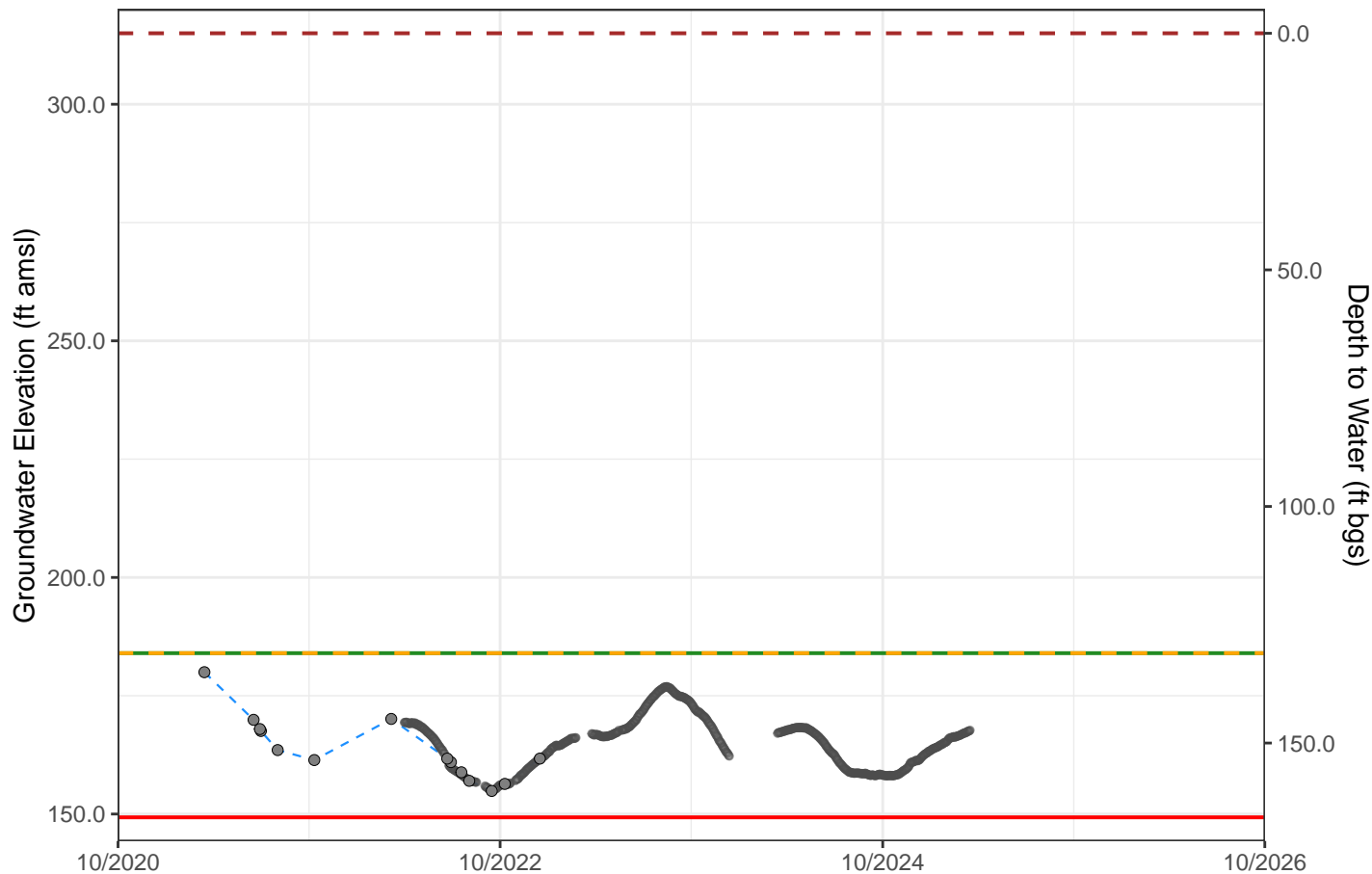


MO GWE: 184 ft amsl  
MO DTW: 131 ft amsl

MT GWE: 149.3 ft amsl  
MT DTW: 165.7 ft amsl

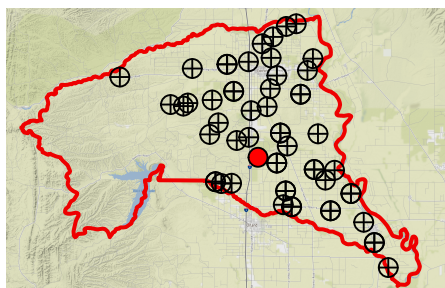
Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Insufficient spring GW level data to calculate statistics for 3 years



# Corning Subbasin – State Well Number (SWN) 23N03W22Q001M

(Shallow Zone) Well Depth: 380 ft. Perforation top & bottom: Unknown



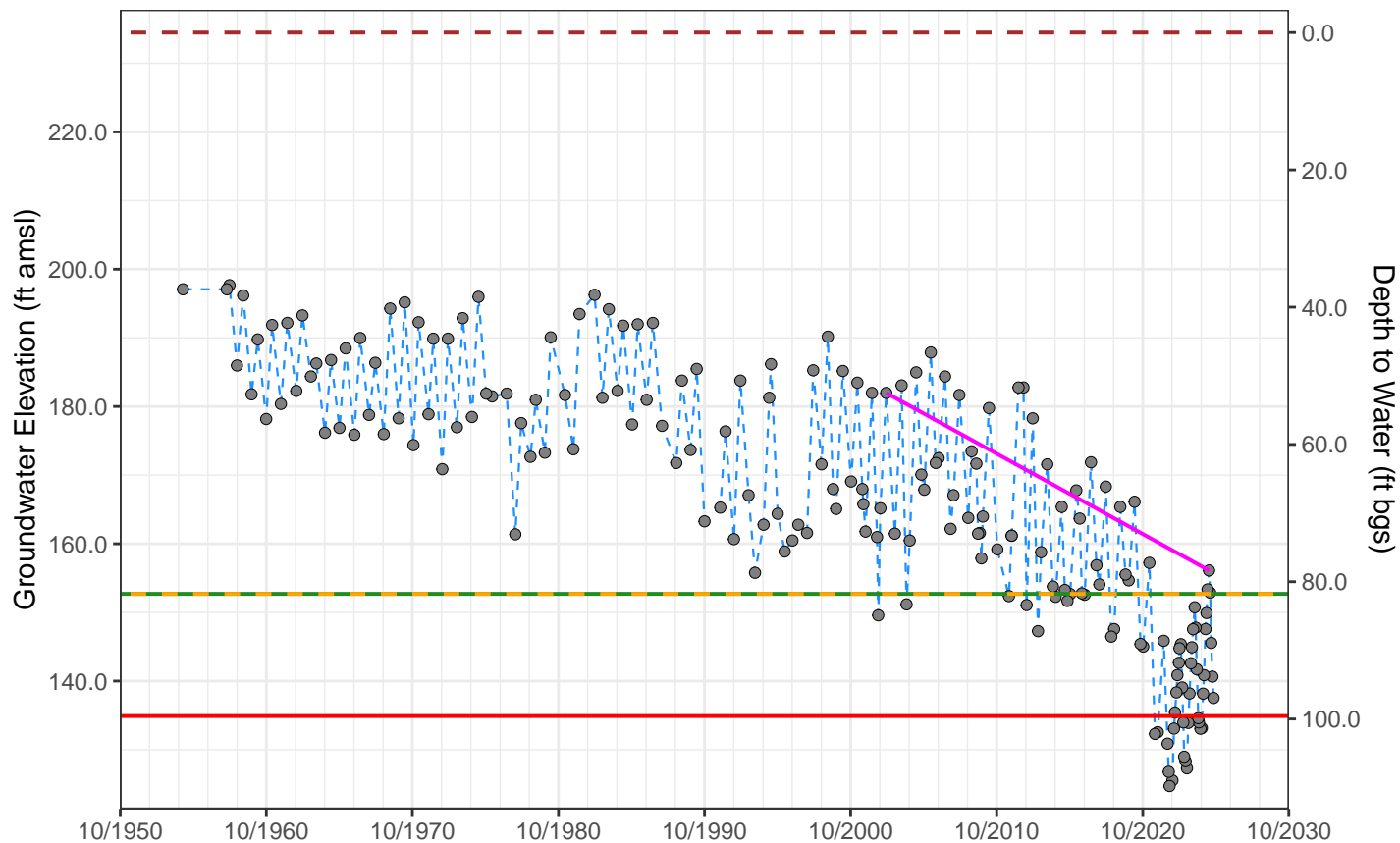
- Graphed Well
- ⊕ Other Well

MO GWE: 152.7 ft amsl  
MO DTW: 81.77 ft amsl

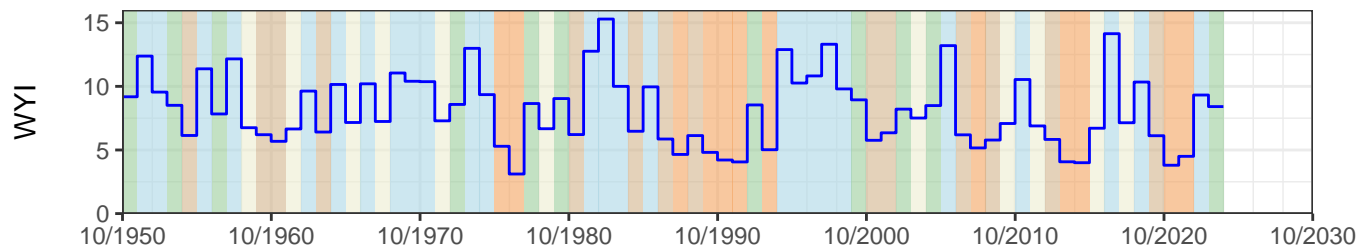
MT GWE: 134.9 ft amsl  
MT DTW: 99.57 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -25.86 ft  
Avg. rate of change = -1.18 ft/yr  
Avg. water level = 170.42 ft amsl  
5-yr Avg. rate (2021–2025):  
= -0.28 ft/yr



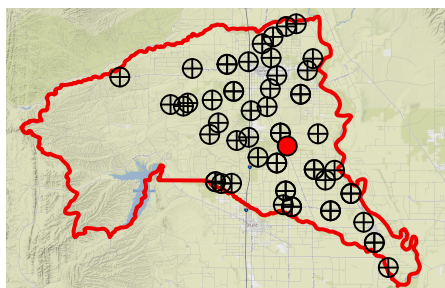
- GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 23N03W24A003M

(Shallow Zone) Well Depth: 199 ft. Perforation top & bottom: 180 – 199 ft bgs



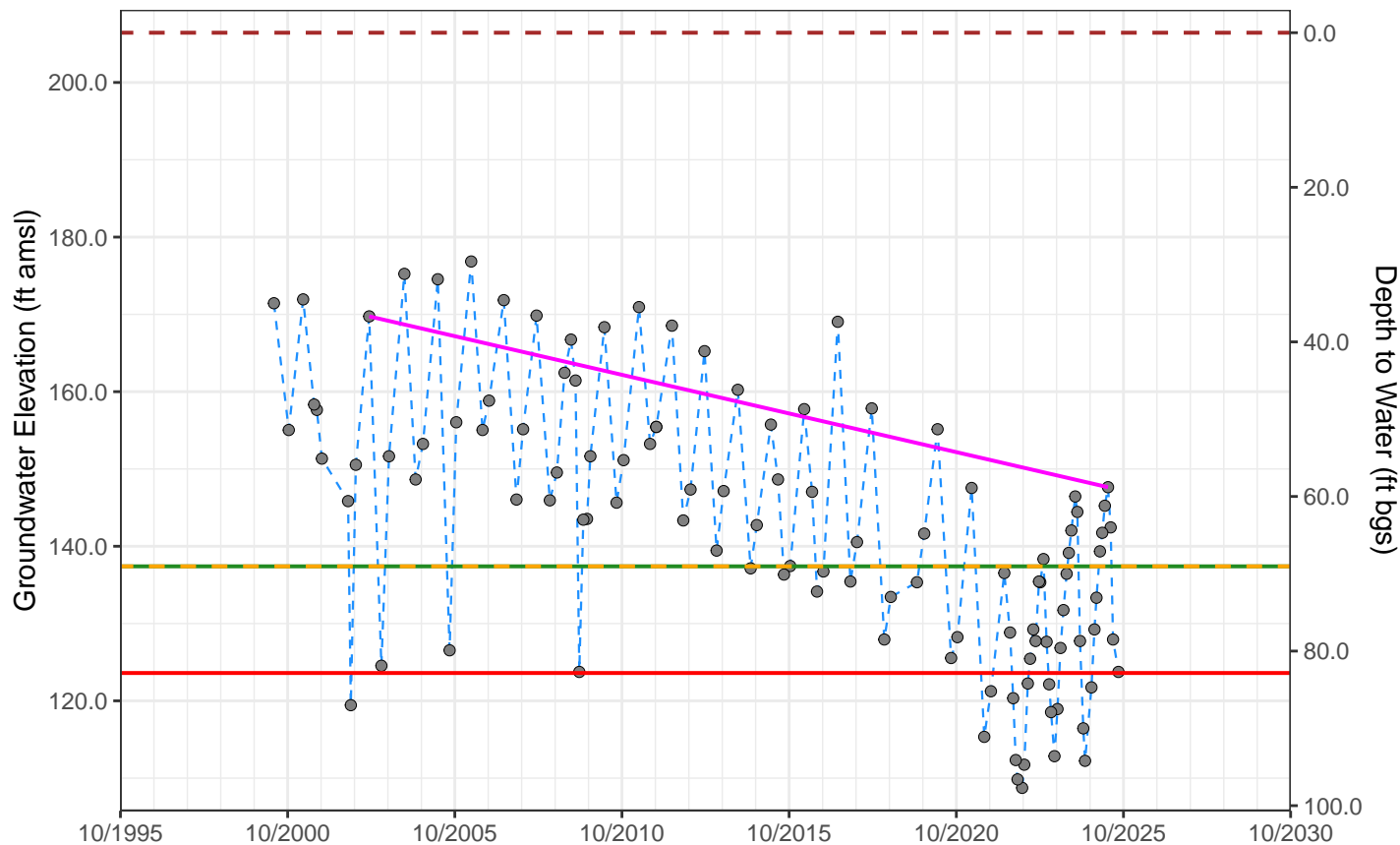
- Graphed Well
- ⊕ Other Well

MO GWE: 137.4 ft amsl  
MO DTW: 69.04 ft amsl

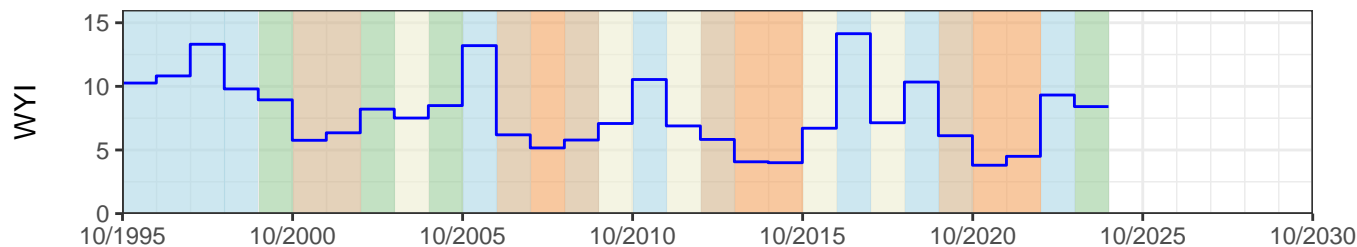
MT GWE: 123.6 ft amsl  
MT DTW: 82.84 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -22.1 ft  
Avg. rate of change = -1 ft/yr  
Avg. water level = 161.24 ft amsl  
5-yr Avg. rate (2021–2025):  
= 0.02 ft/yr



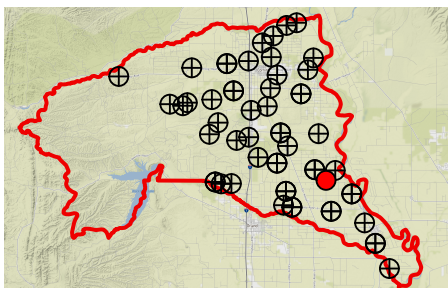
- - - GSE
- - - MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 23N02W34N001M

(Shallow Zone) Well Depth: 100 ft. Perforation top & bottom: 70 – 100 ft bgs



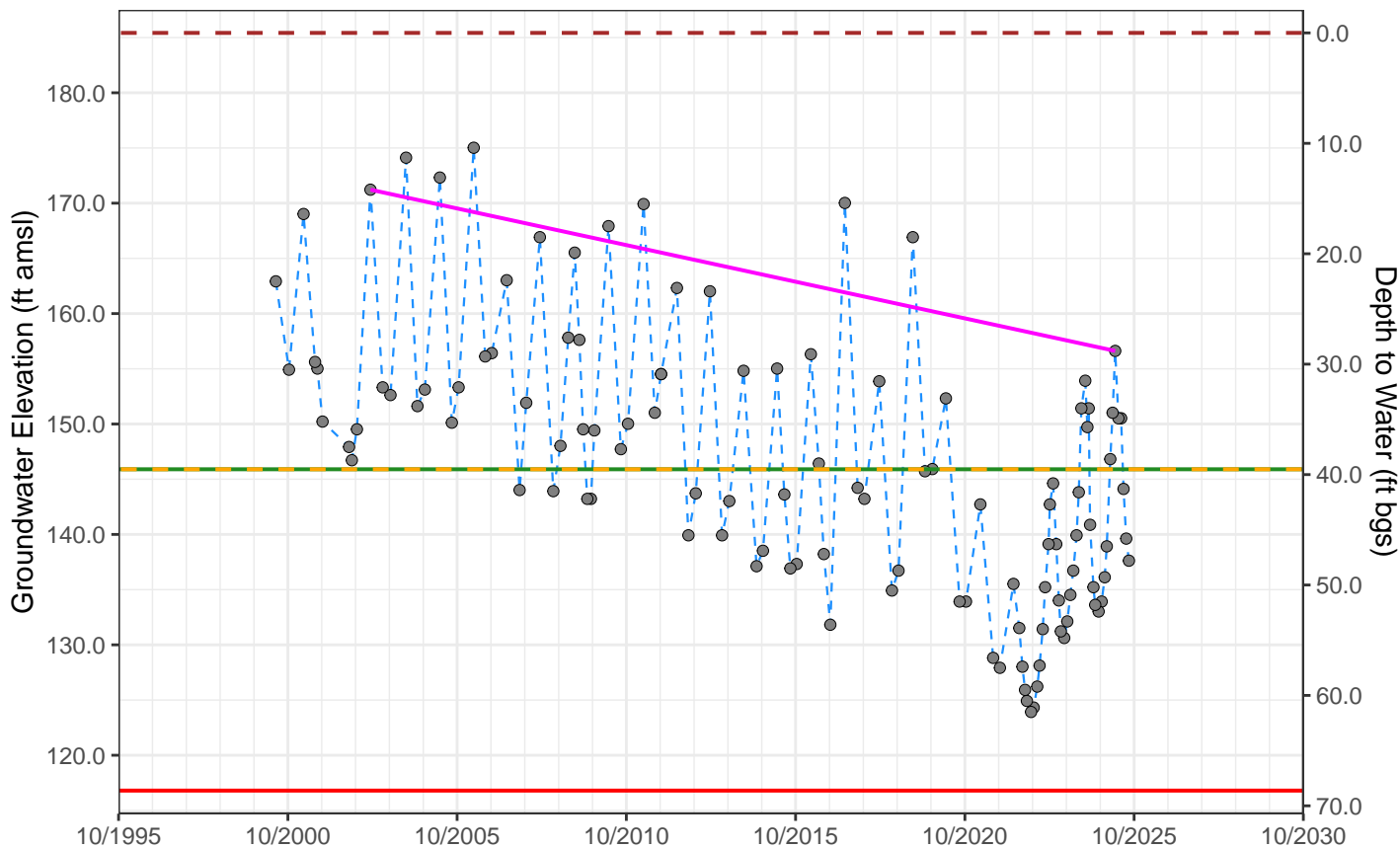
- Graphed Well
- ⊕ Other Well

MO GWE: 145.9 ft amsl  
MO DTW: 39.52 ft amsl

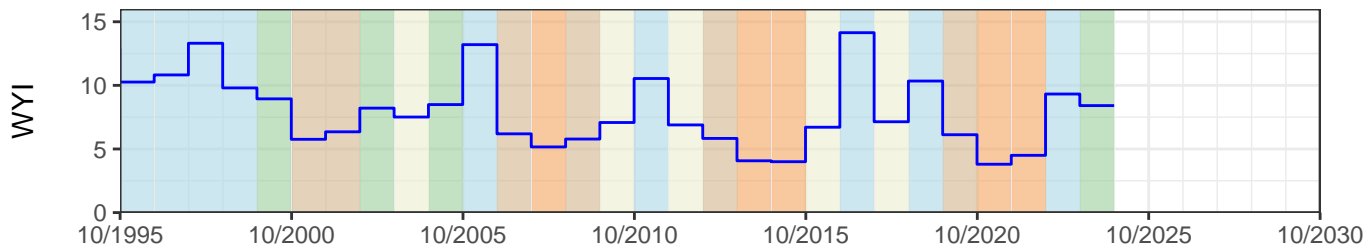
MT GWE: 116.8 ft amsl  
MT DTW: 68.62 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -14.6 ft  
Avg. rate of change = -0.66 ft/yr  
Avg. water level = 160.48 ft amsl  
5-yr Avg. rate (2021–2025):  
= 3.48 ft/yr



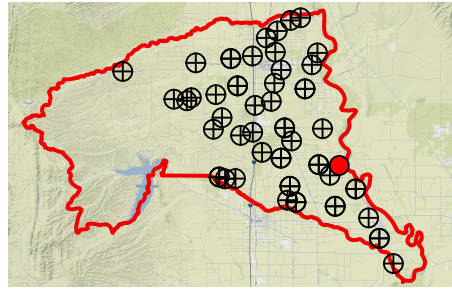
- GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type:  Wet
- Above Normal
- Below Normal
- Dry
- Critical

# Corning Subbasin – State Well Number (SWN) 23N02W34A003M

(Shallow Zone) Well Depth: 125 ft. Perforation top & bottom: 104 – 124 ft bgs



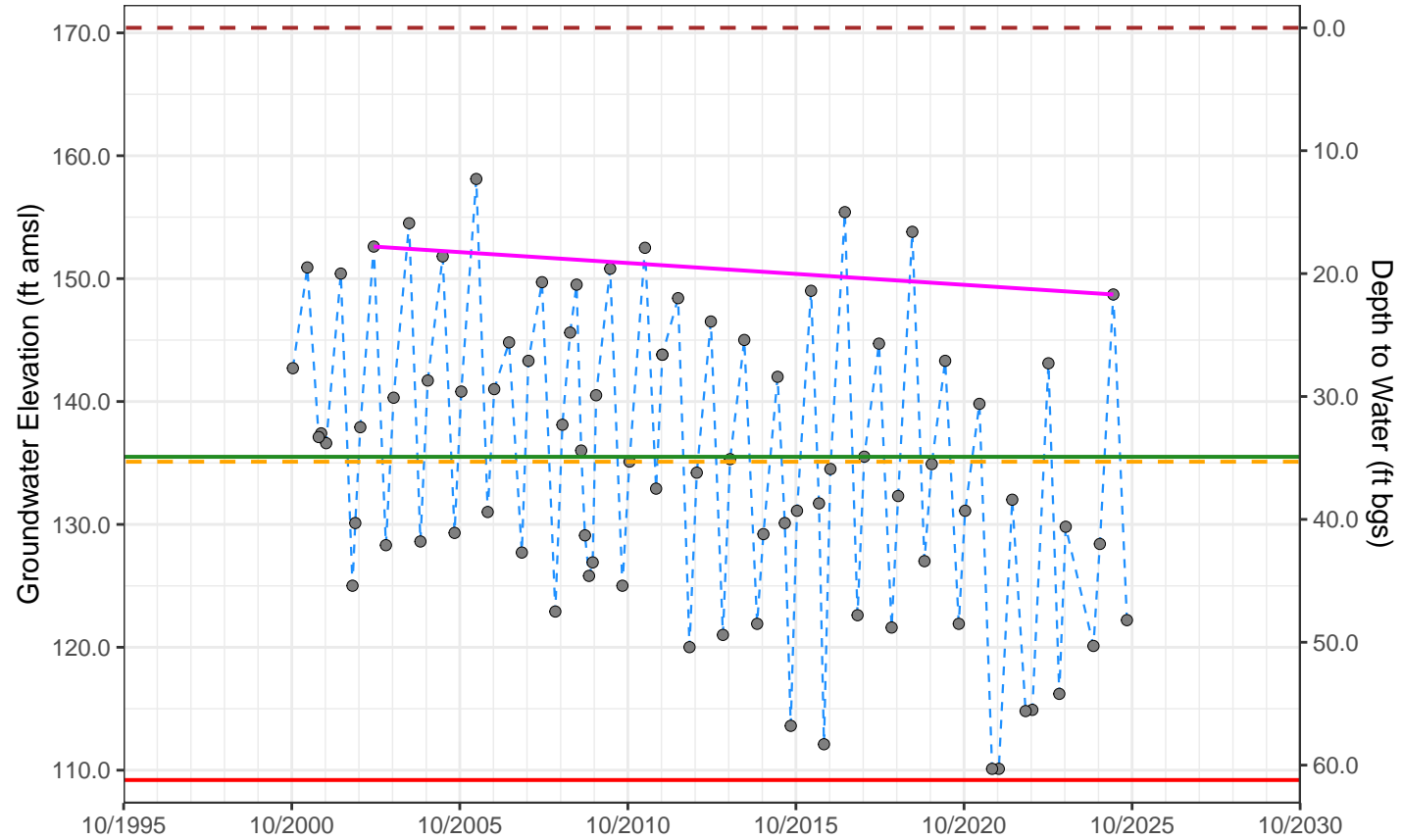
- Graphed Well
- ⊕ Other Well

MO GWE: 135.5 ft amsl  
MO DTW: 34.91 ft amsl

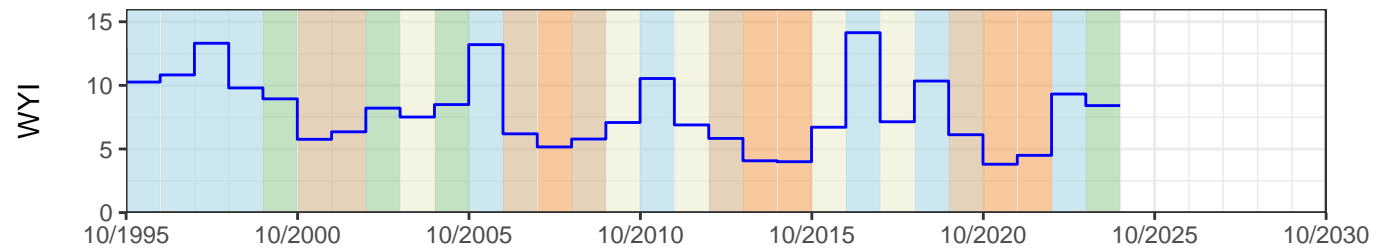
MT GWE: 109.2 ft amsl  
MT DTW: 61.21 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -3.9 ft  
Avg. rate of change = -0.18 ft/yr  
Avg. water level = 148.01 ft amsl  
5-yr Avg. rate (2021–2025):  
= 2.23 ft/yr



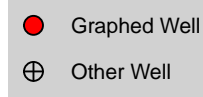
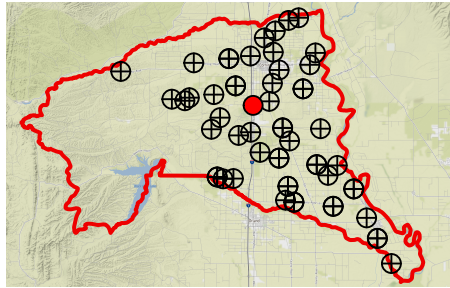
- - - GSE
- MO
- MT
- - - 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 23N03W04H001M

(Shallow Zone) Well Depth: 270 ft. Perforation top & bottom: 200 – 260 ft bgs

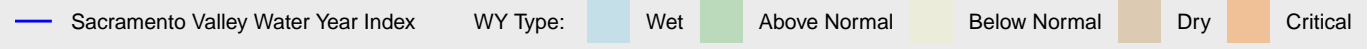
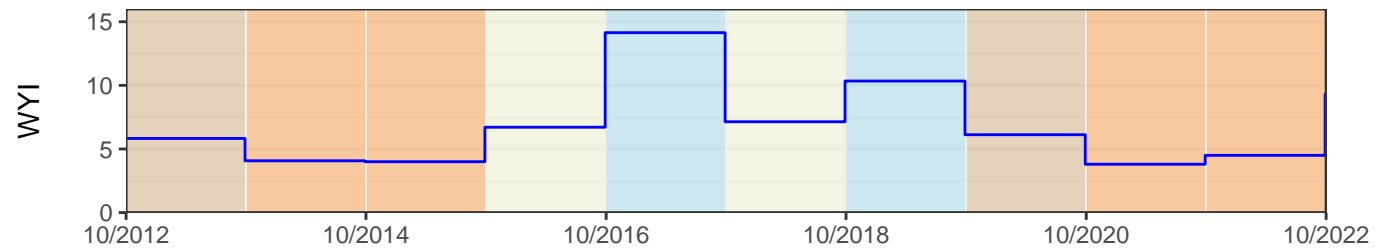
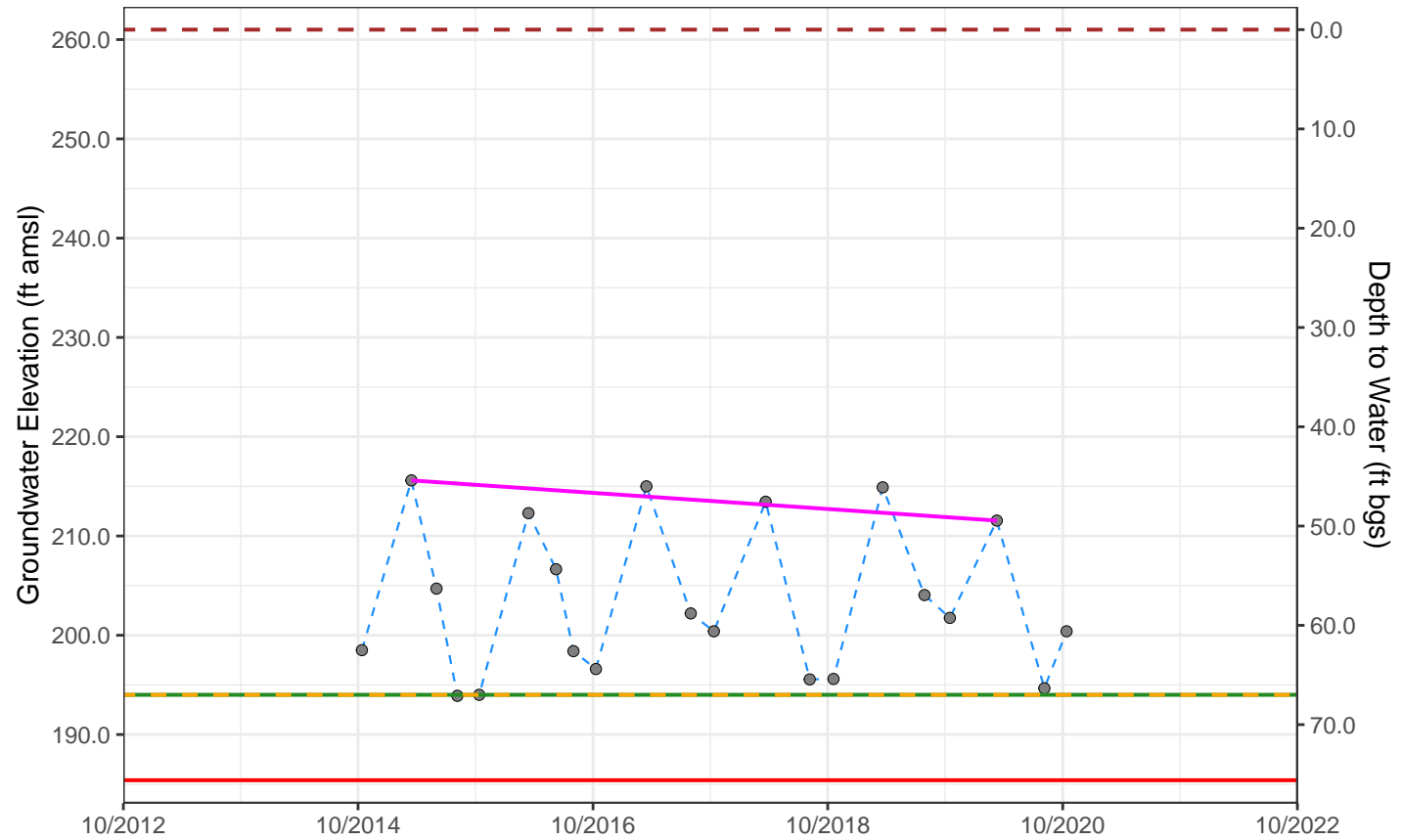


MO GWE: 194 ft amsl  
MO DTW: 67 ft amsl

MT GWE: 185.4 ft amsl  
MT DTW: 75.6 ft amsl

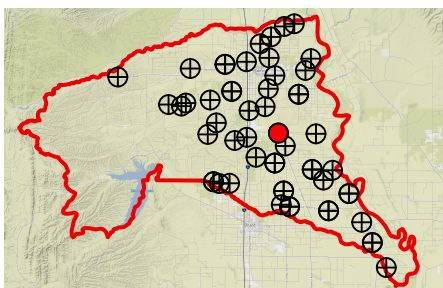
Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 5 years (2015 to 2020):  
Change = -4.05 ft  
Avg. rate of change = -0.81 ft/yr  
Avg. water level = 213.8 ft amsl  
5-yr Avg. rate (2016–2020):  
= -0.19 ft/yr



# Corning Subbasin – State Well Number (SWN) 23N03W13C004M

(Deep Zone) Well Depth: 835 ft. Perforation top & bottom: 815 – 825 ft bgs



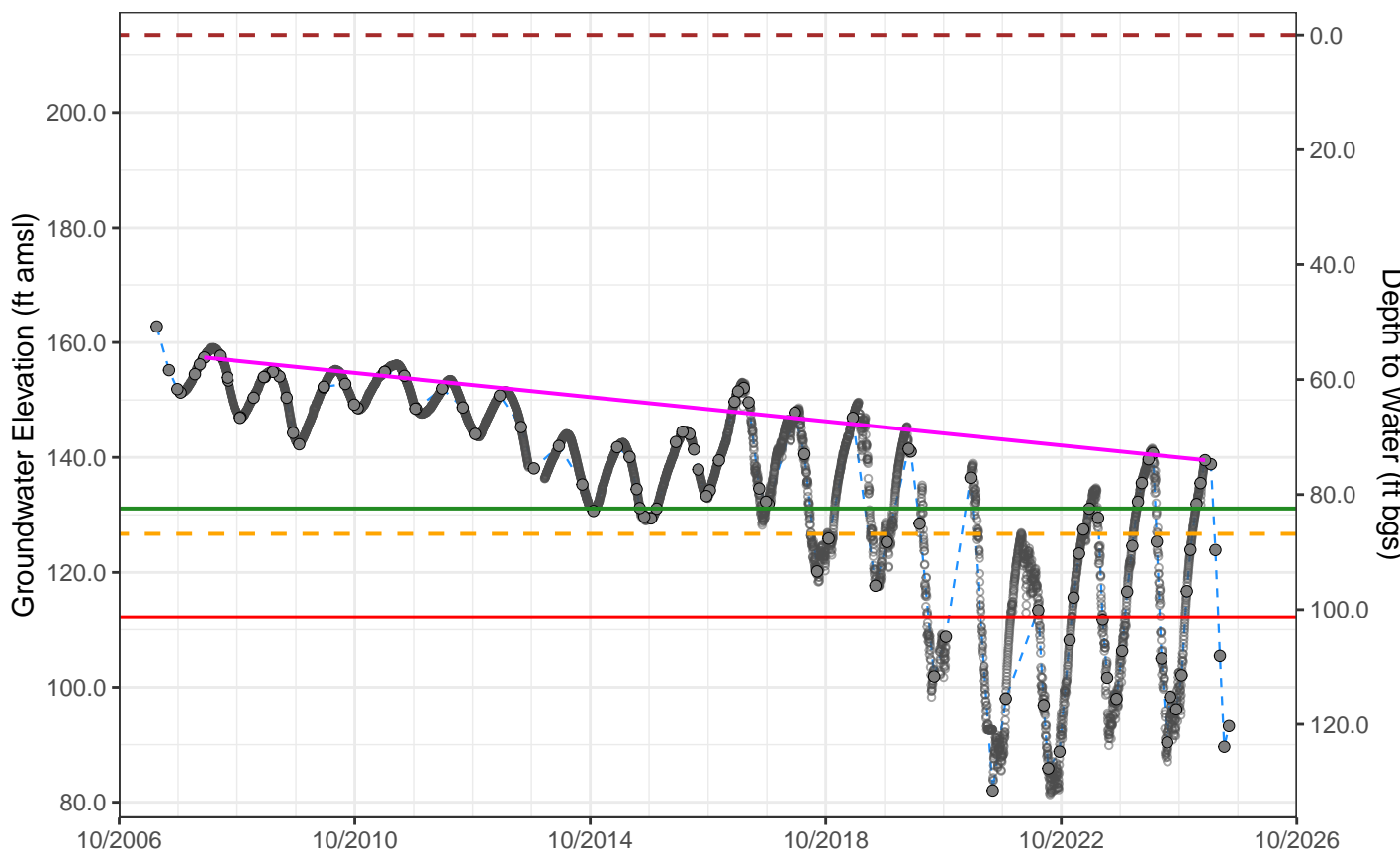
- Graphed Well
- ⊕ Other Well

MO GWE: 131.1 ft amsl  
MO DTW: 82.44 ft amsl

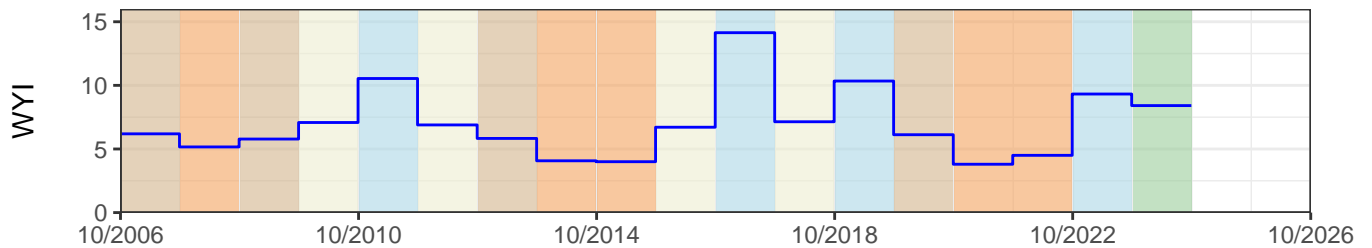
MT GWE: 112.2 ft amsl  
MT DTW: 101.34 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 17 years (2008 to 2025):  
Change = -17.87 ft  
Avg. rate of change = -1.05 ft/yr  
Avg. water level = 146.17 ft amsl  
5-yr Avg. rate (2021–2025):  
= 0.76 ft/yr



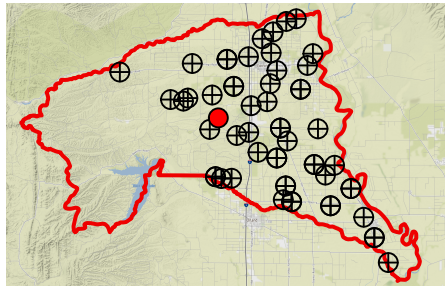
- GSE
- - - 5-year Interim milestone
- MO
- Spring WL trend (2008–2025, 17 yrs)
- MT
- Transducer data



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 23N03W07F001M

(Deep Zone) Well Depth: 790 ft. Perforation top & bottom: 240 – 790 ft bgs



- Graphed Well
- ⊕ Other Well

MO GWE: 209.9 ft amsl  
MO DTW: 102.1 ft amsl

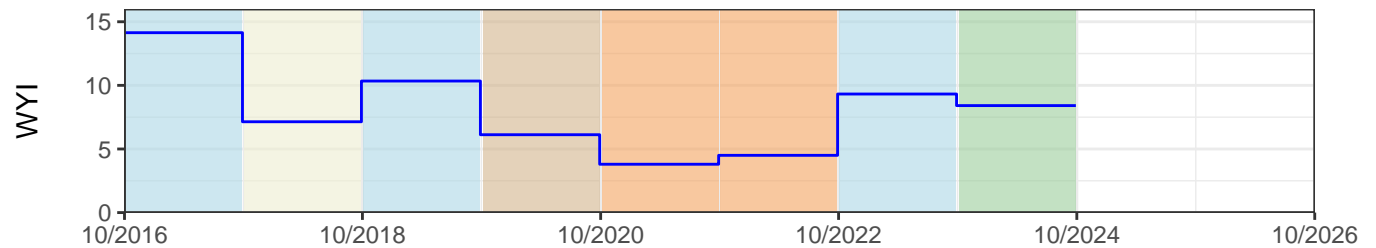
MT GWE: 193.4 ft amsl  
MT DTW: 118.6 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 4 years (2019 to 2023):  
Change = -20.5 ft  
Avg. rate of change = -5.12 ft/yr  
Avg. water level = 210.52 ft amsl  
5-yr Avg. rate (2019–2023):  
= -5.12 ft/yr



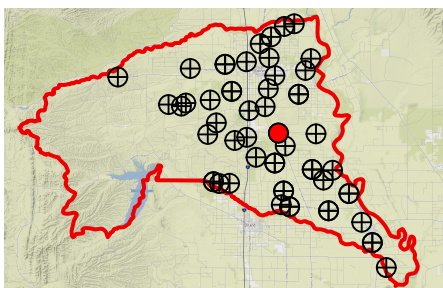
- - - GSE
- - - MO
- MT
- - - 5-year Interim milestone
- Spring WL trend (2019–2023, 4 yrs)



- Sacramento Valley Water Year Index
- WY Type:  Wet
- Above Normal
- Below Normal
- Dry
- Critical

# Corning Subbasin – State Well Number (SWN) 23N03W13C006M

(Shallow Zone) Well Depth: 182 ft. Perforation top & bottom: 95 – 135 ft bgs



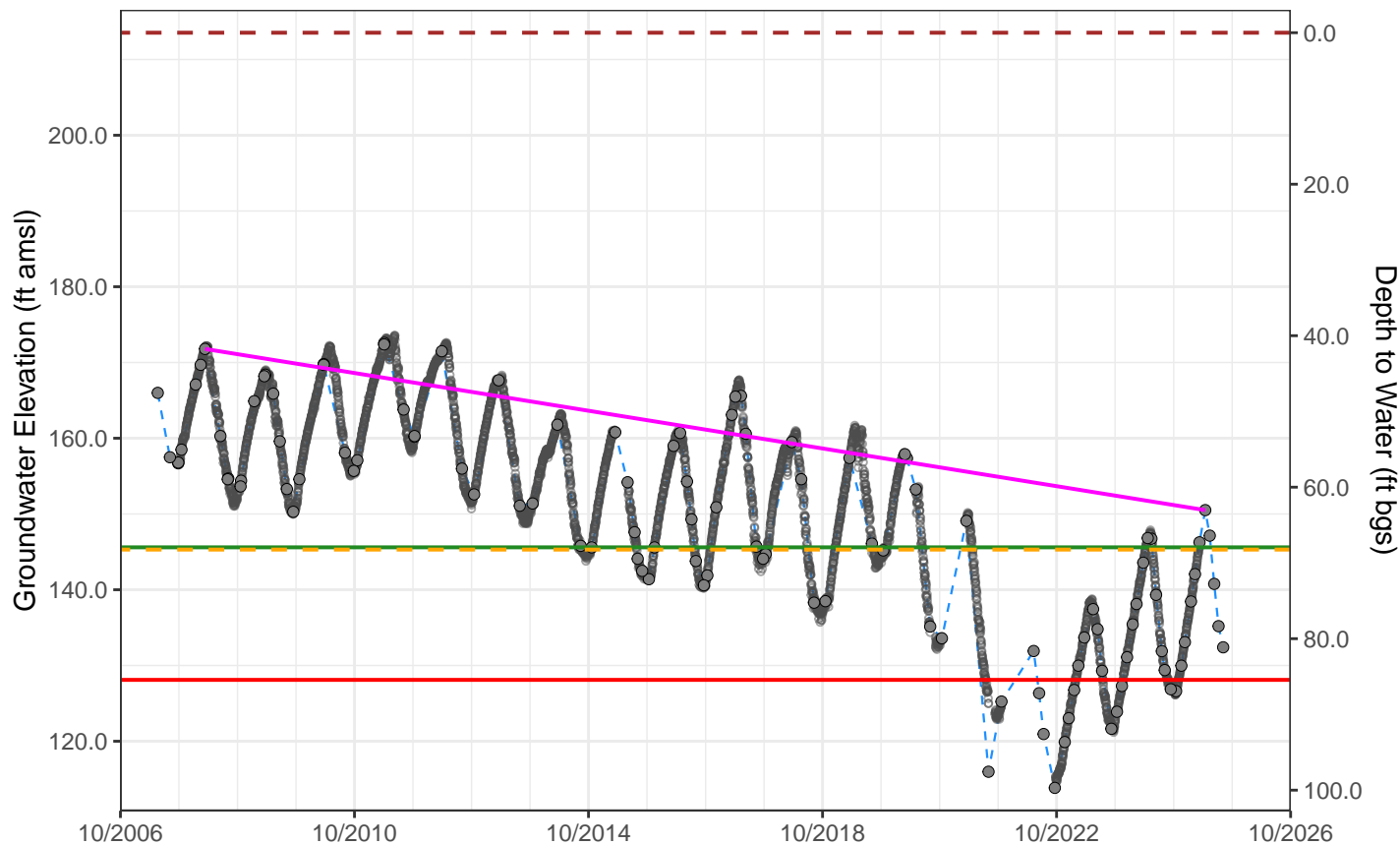
- Graphed Well
- ⊕ Other Well

MO GWE: 145.6 ft amsl  
MO DTW: 67.94 ft amsl

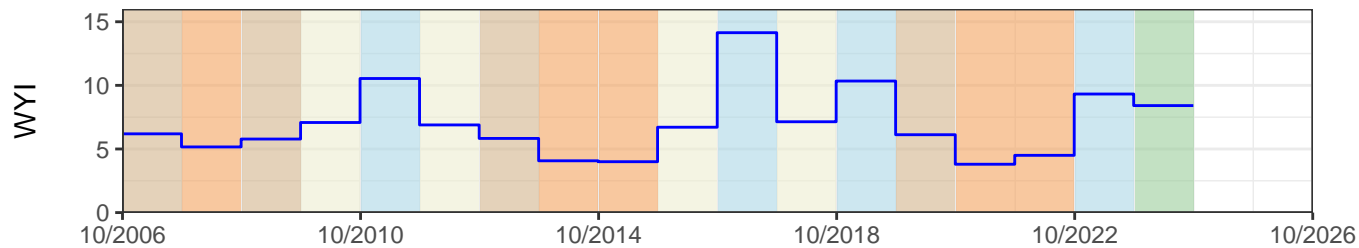
MT GWE: 128.1 ft amsl  
MT DTW: 85.44 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 17 years (2008 to 2025):  
Change = -21.28 ft  
Avg. rate of change = -1.25 ft/yr  
Avg. water level = 160.31 ft amsl  
5-yr Avg. rate (2021–2025):  
= 0.35 ft/yr



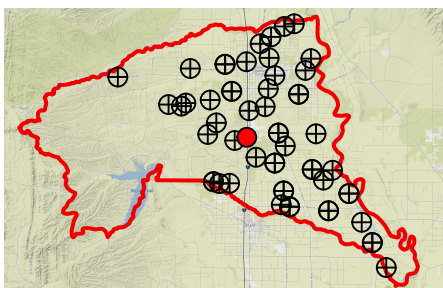
- GSE
- 5-year Interim milestone
- MO
- MT
- Transducer data
- Spring WL trend (2008–2025, 17 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 23N03W16H001M

(Shallow Zone) Well Depth: 150 ft. Perforation top & bottom: 144 – 150 ft bgs



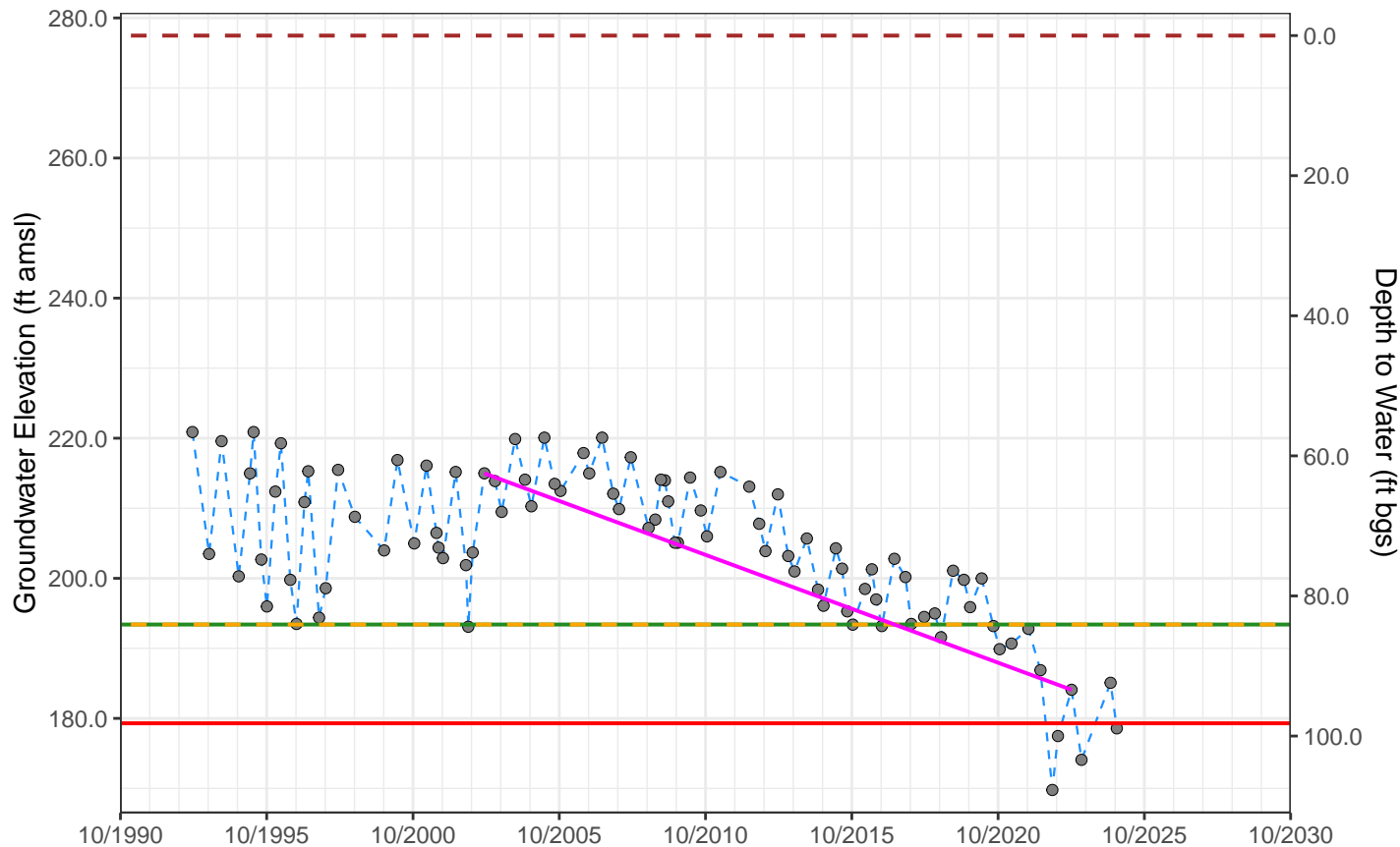
- Graphed Well
- ⊕ Other Well

MO GWE: 193.4 ft amsl  
MO DTW: 84.08 ft amsl

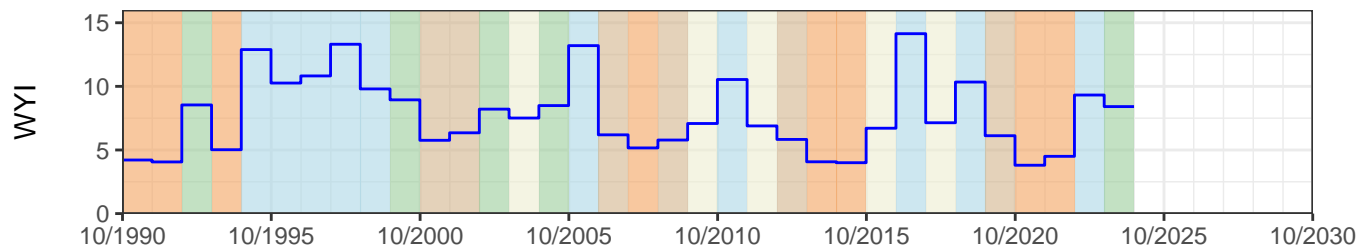
MT GWE: 179.3 ft amsl  
MT DTW: 98.18 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 20 years (2003 to 2023):  
Change = -30.9 ft  
Avg. rate of change = -1.54 ft/yr  
Avg. water level = 206.47 ft amsl  
5-yr Avg. rate (2019–2023):  
= -4.25 ft/yr



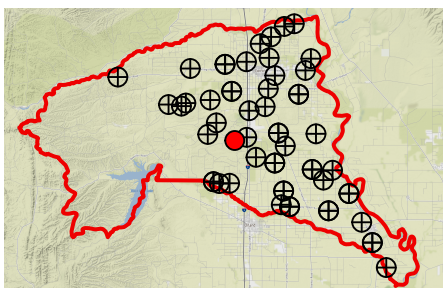
- - - GSE
- - - MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2023, 20 yrs)



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 23N03W17R001M

(Deep Zone) Well Depth: 720 ft. Perforation top & bottom: 360 – 720 ft bgs



- Graphed Well
- ⊕ Other Well

MO GWE: 207.7 ft amsl  
MO DTW: 92.3 ft amsl

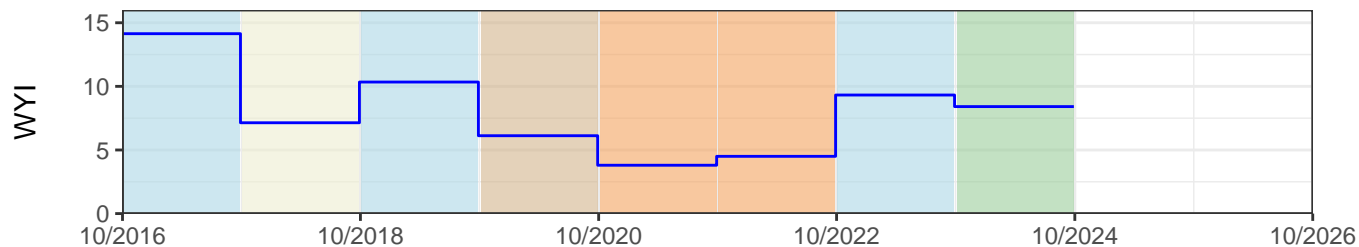
MT GWE: 192.3 ft amsl  
MT DTW: 107.7 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 4 years (2019 to 2023):  
Change = -18.2 ft  
Avg. rate of change = -4.55 ft/yr  
Avg. water level = 208.34 ft amsl  
5-yr Avg. rate (2019–2023):  
= -4.55 ft/yr



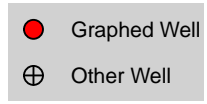
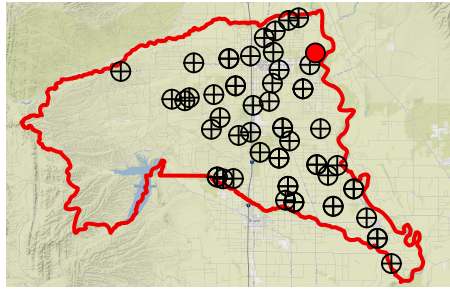
- - - GSE
- MO
- MT
- - - 5-year Interim milestone
- Spring WL trend (2019–2023, 4 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 24N02W17A001M

(Shallow Zone) Well Depth: 140 ft. Perforation top & bottom: 120 – 140 ft bgs



MO GWE: 170.9 ft amsl

MO DTW: 40.1 ft amsl

MT GWE: 150.9 ft amsl

MT DTW: 60.1 ft amsl

**Acronyms:**

GSE: Ground Surface Elevation

GWE: Groundwater Elevation

MO: Minimum Objective

MT: Minimum Threshold

DTW: Depth to Water

bgs: Below Ground Surface

amsl: Above Mean Sea Level

NA: Not Available

WY: Water Year

**Statistics of spring water levels for past 6 years (2019 to 2025):**

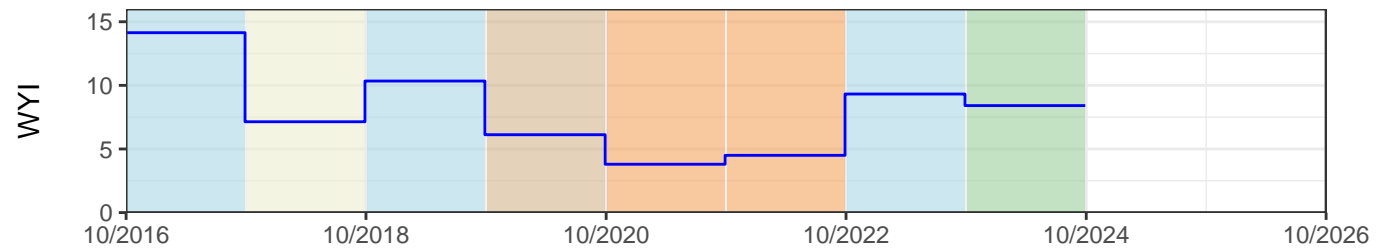
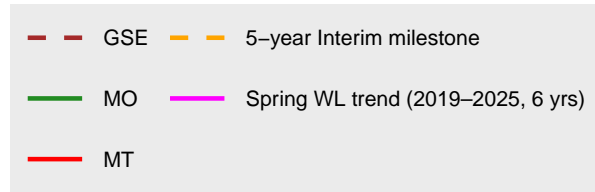
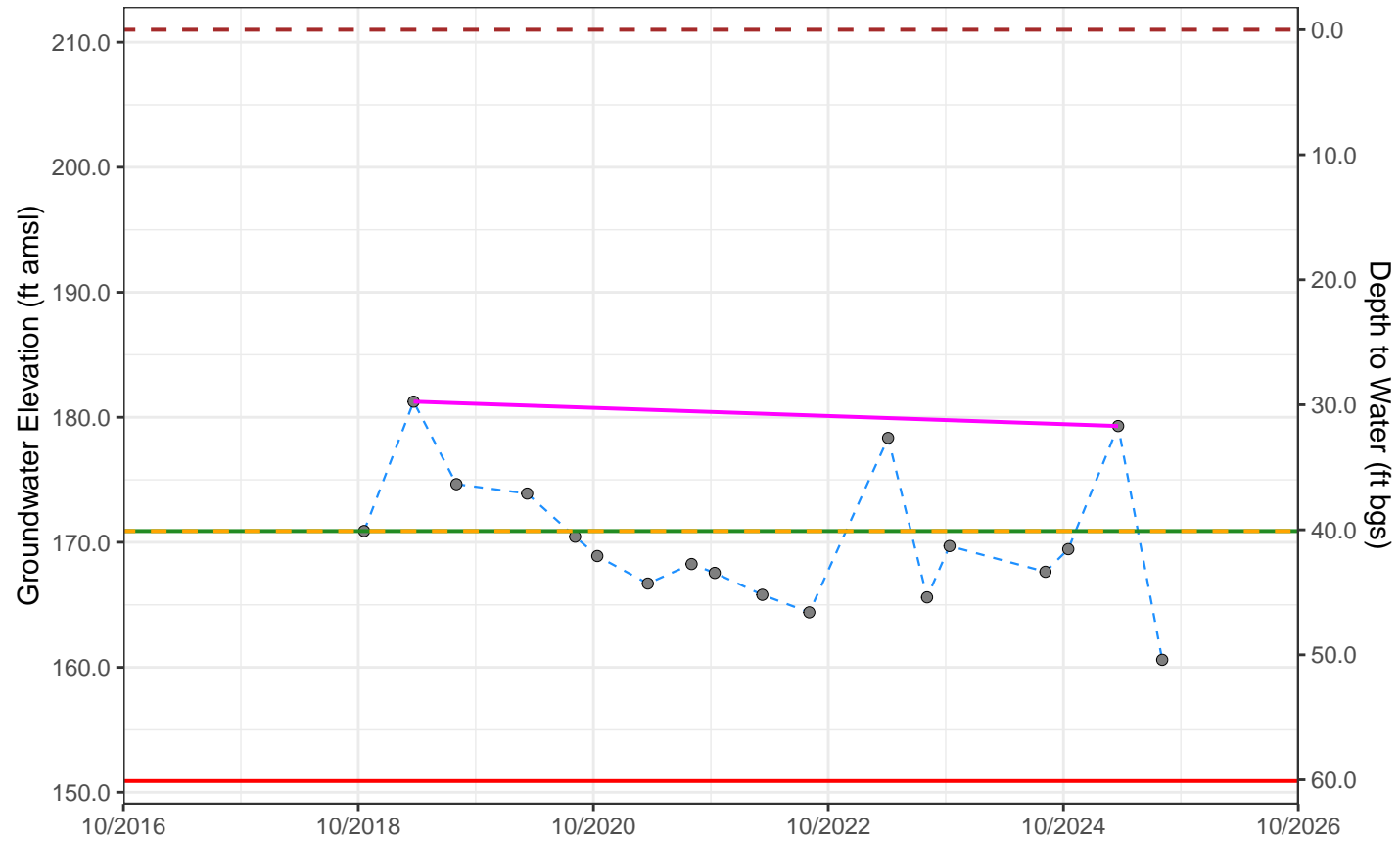
Change = -1.95 ft

Avg. rate of change = -0.32 ft/yr

Avg. water level = 174.22 ft amsl

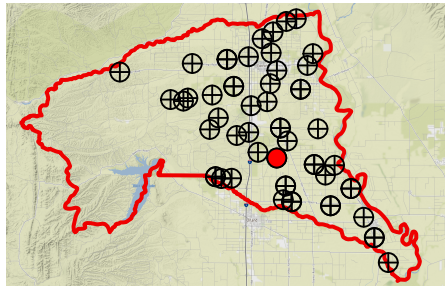
5-yr Avg. rate (2021-2025):

= 3.15 ft/yr



# Corning Subbasin – State Well Number (SWN) 23N03W25M004M

(Shallow Zone) Well Depth: 155 ft. Perforation top & bottom: 120 – 130 ft bgs



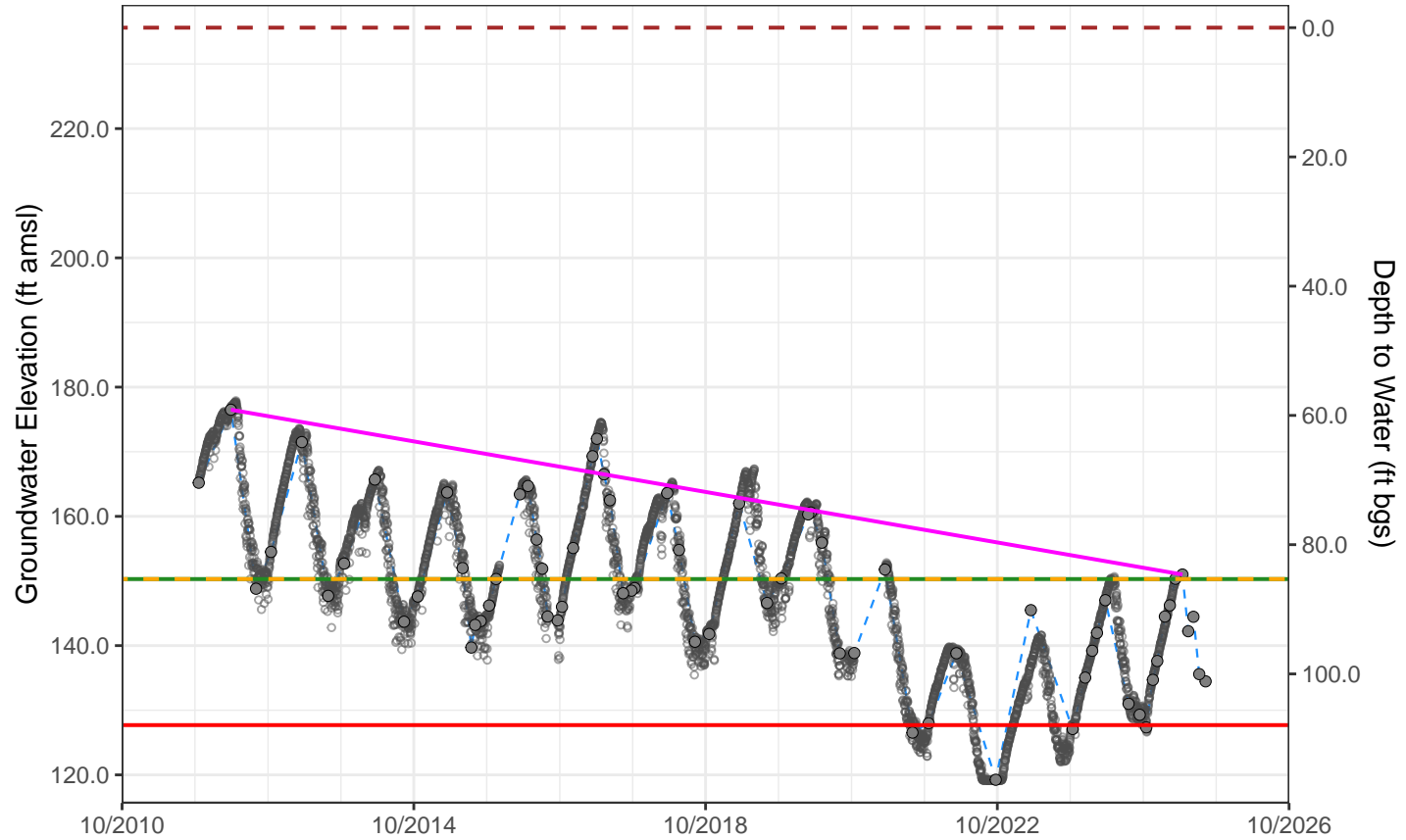
- Graphed Well
- ⊕ Other Well

MO GWE: 150.3 ft amsl  
MO DTW: 85.32 ft amsl

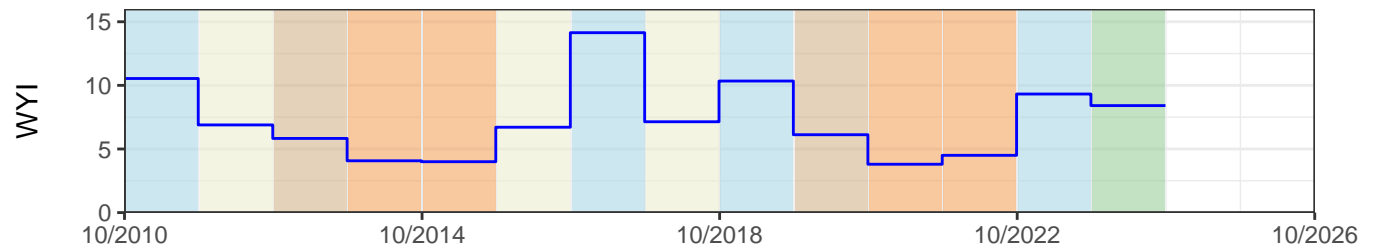
MT GWE: 127.7 ft amsl  
MT DTW: 107.92 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 13 years (2012 to 2025):  
Change = -25.5 ft  
Avg. rate of change = -1.96 ft/yr  
Avg. water level = 159.6 ft amsl  
5-yr Avg. rate (2021–2025):  
= -0.2 ft/yr



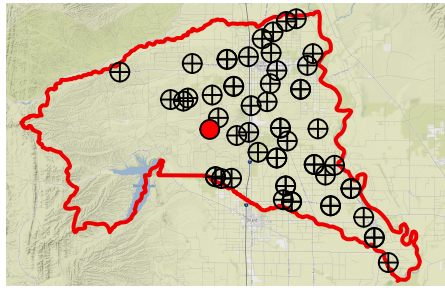
- GSE
- 5-year Interim milestone
- Transducer data
- MO
- Spring WL trend (2012–2025, 13 yrs)
- MT



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 23N04W13G001M

(Deep Zone) Well Depth: 560 ft. Perforation top & bottom: Unknown



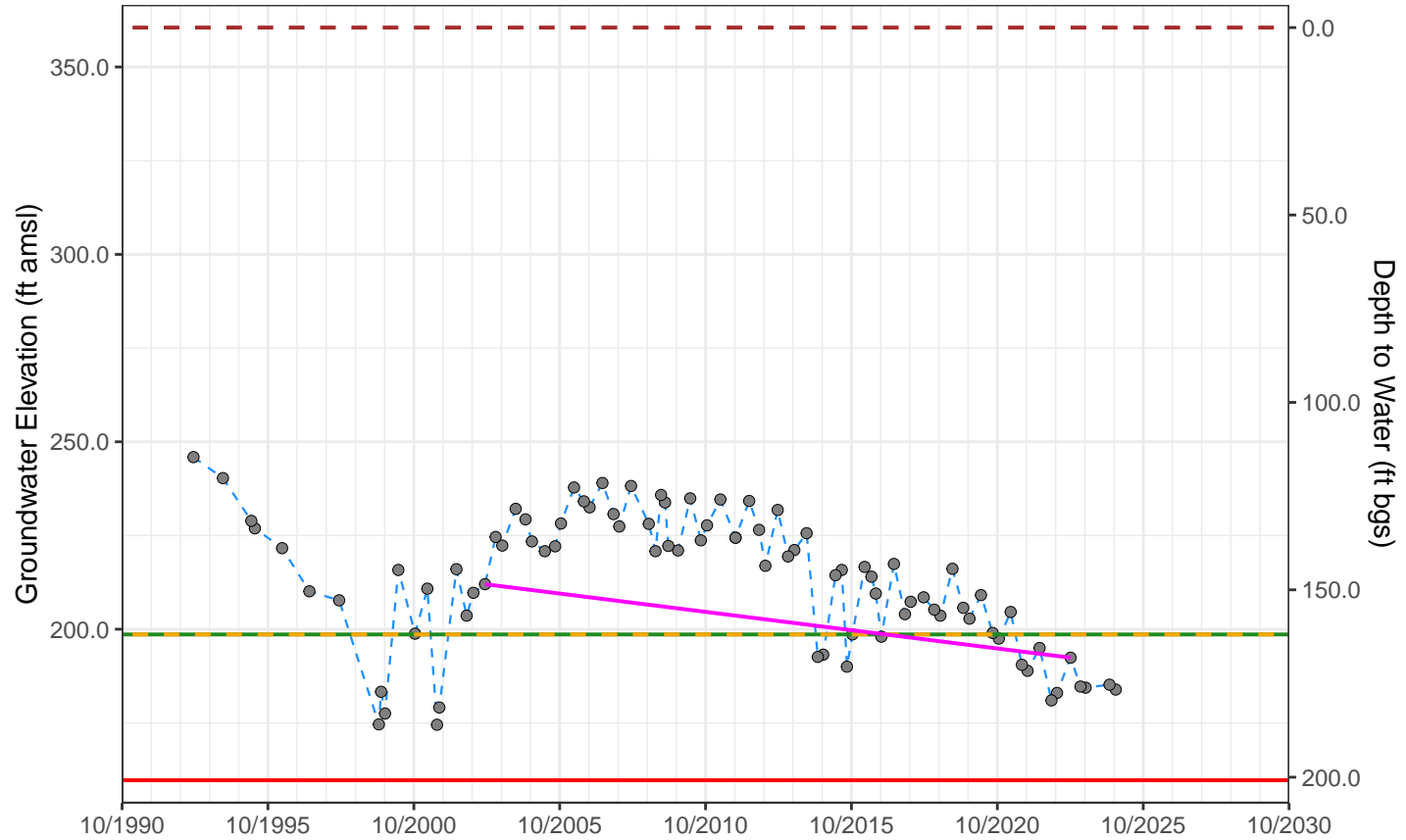
- Graphed Well
- ⊕ Other Well

MO GWE: 198.6 ft amsl  
MO DTW: 161.91 ft amsl

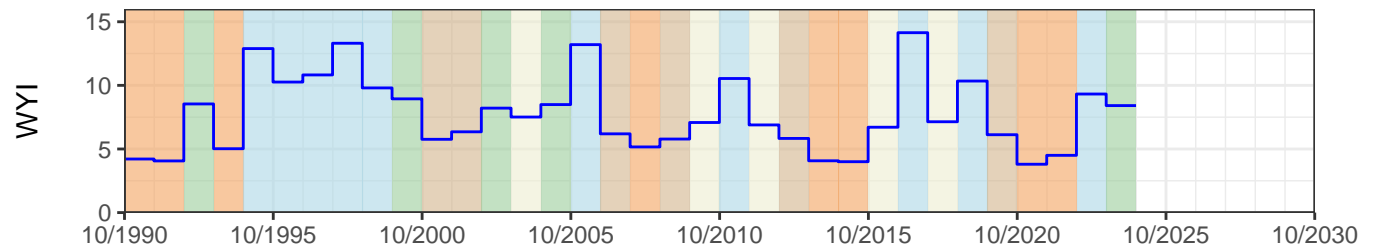
MT GWE: 159.7 ft amsl  
MT DTW: 200.81 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 20 years (2003 to 2023):  
Change = -19.61 ft  
Avg. rate of change = -0.98 ft/yr  
Avg. water level = 221.48 ft amsl  
5-yr Avg. rate (2019–2023):  
= -5.93 ft/yr



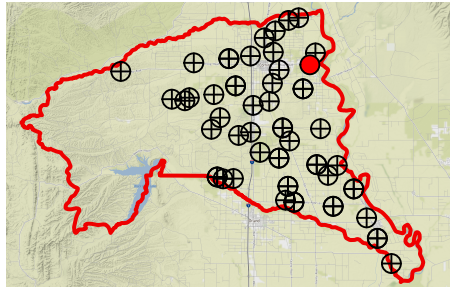
- - - GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2023, 20 yrs)



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 24N02W20B001M

(Shallow Zone) Well Depth: 120 ft. Perforation top & bottom: 100 – 120 ft bgs



- Graphed Well
- ⊕ Other Well

MO GWE: 173.4 ft amsl

MO DTW: 49.03 ft amsl

MT GWE: 150.3 ft amsl

MT DTW: 72.13 ft amsl

**Acronyms:**

GSE: Ground Surface Elevation

GWE: Groundwater Elevation

MO: Minimum Objective

MT: Minimum Threshold

DTW: Depth to Water

bgs: Below Ground Surface

amsl: Above Mean Sea Level

NA: Not Available

WY: Water Year

**Statistics of spring water levels for**

**past 14 years (2003 to 2017):**

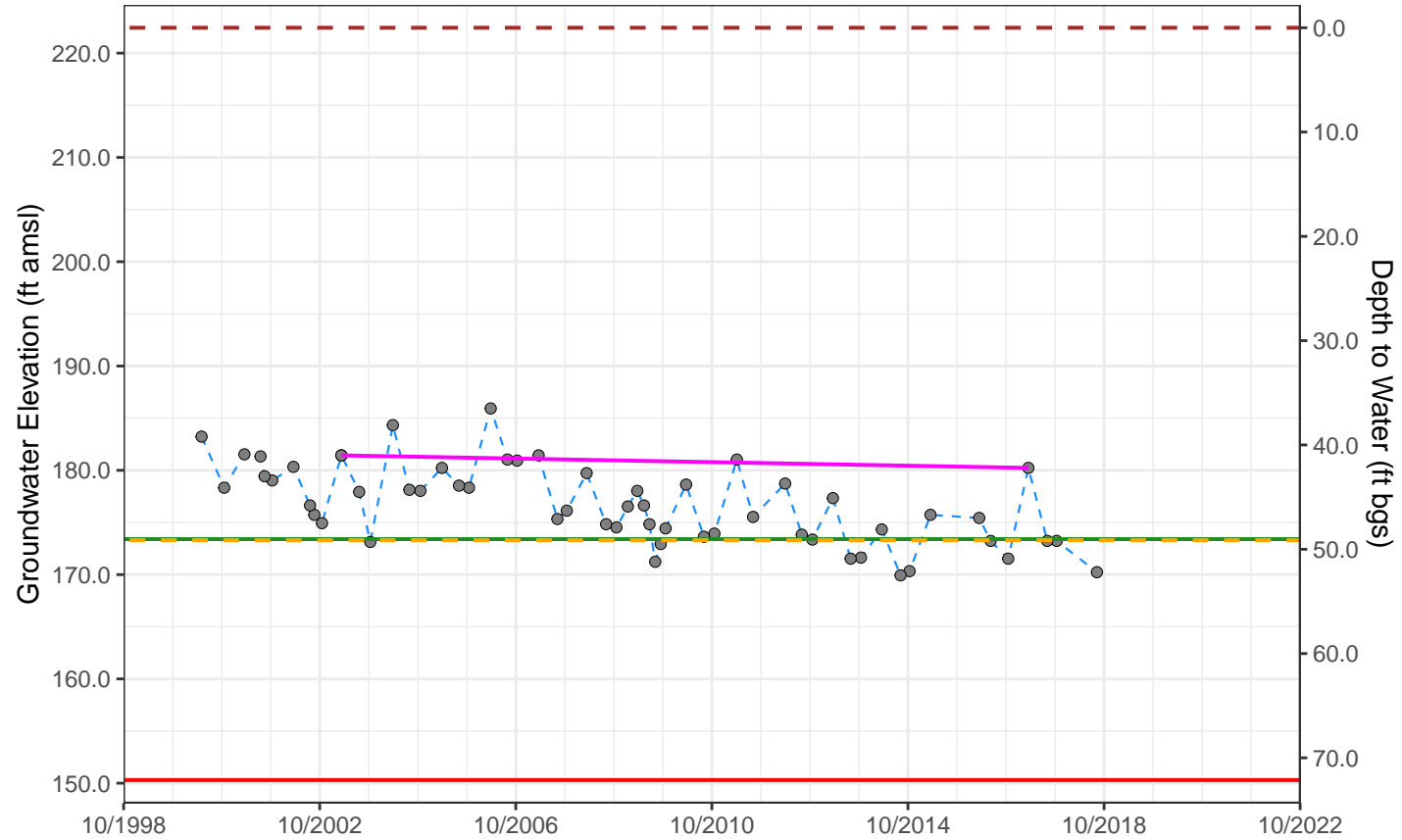
Change = -1.2 ft

Avg. rate of change = -0.09 ft/yr

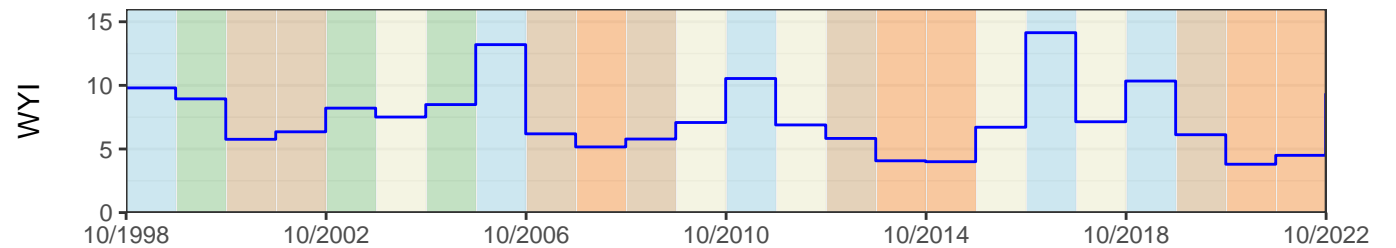
Avg. water level = 179.5 ft amsl

5-yr Avg. rate (2013–2017):

= 0.72 ft/yr



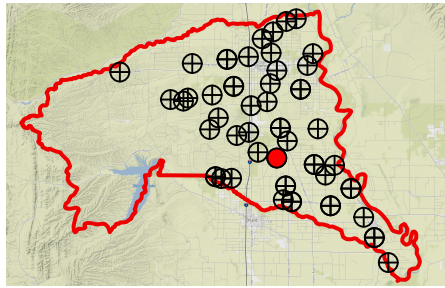
- - - GSE
- MO
- MT
- - - 5-year Interim milestone
- Spring WL trend (2003–2017, 14 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 23N03W25M002M

(Deep Zone) Well Depth: 513 ft. Perforation top & bottom: 470 – 500 ft bgs



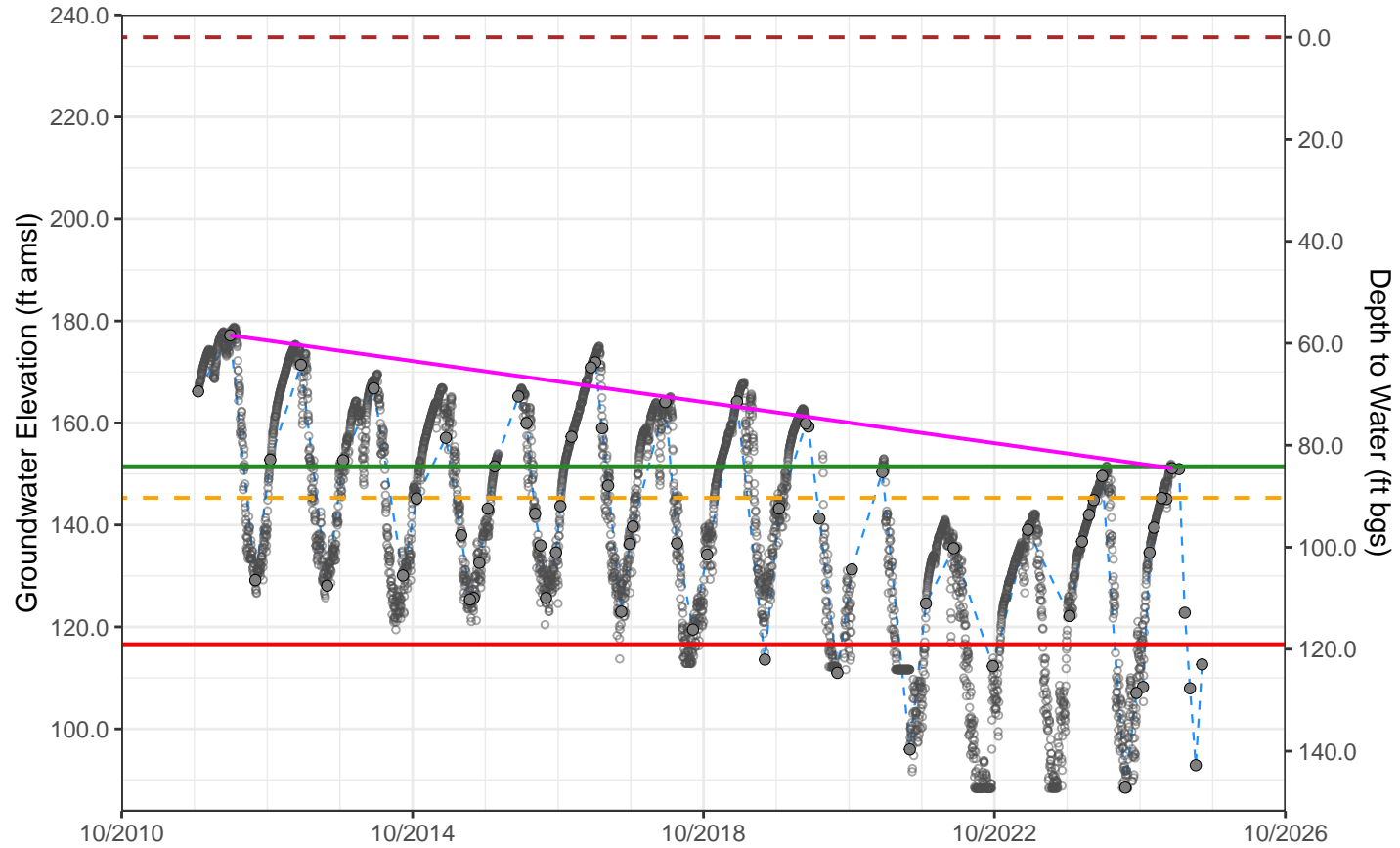
- Graphed Well
- ⊕ Other Well

MO GWE: 151.5 ft amsl  
MO DTW: 84.12 ft amsl

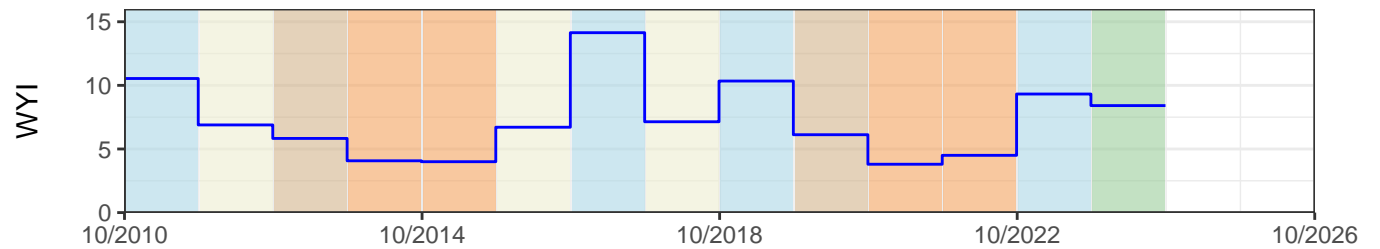
MT GWE: 116.6 ft amsl  
MT DTW: 119.02 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 13 years (2012 to 2025):  
Change = -26.07 ft  
Avg. rate of change = -2.01 ft/yr  
Avg. water level = 158.8 ft amsl  
5-yr Avg. rate (2021–2025):  
= 0.19 ft/yr



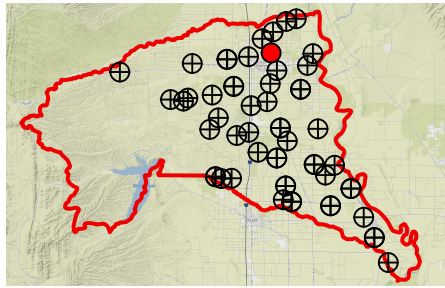
- - - GSE
- - - 5-year Interim milestone
- Transducer data
- MO
- Spring WL trend (2012–2025, 13 yrs)
- MT



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 24N03W14B001M

(Shallow Zone) Well Depth: 140 ft. Perforation top & bottom: 130 – 140 ft bgs



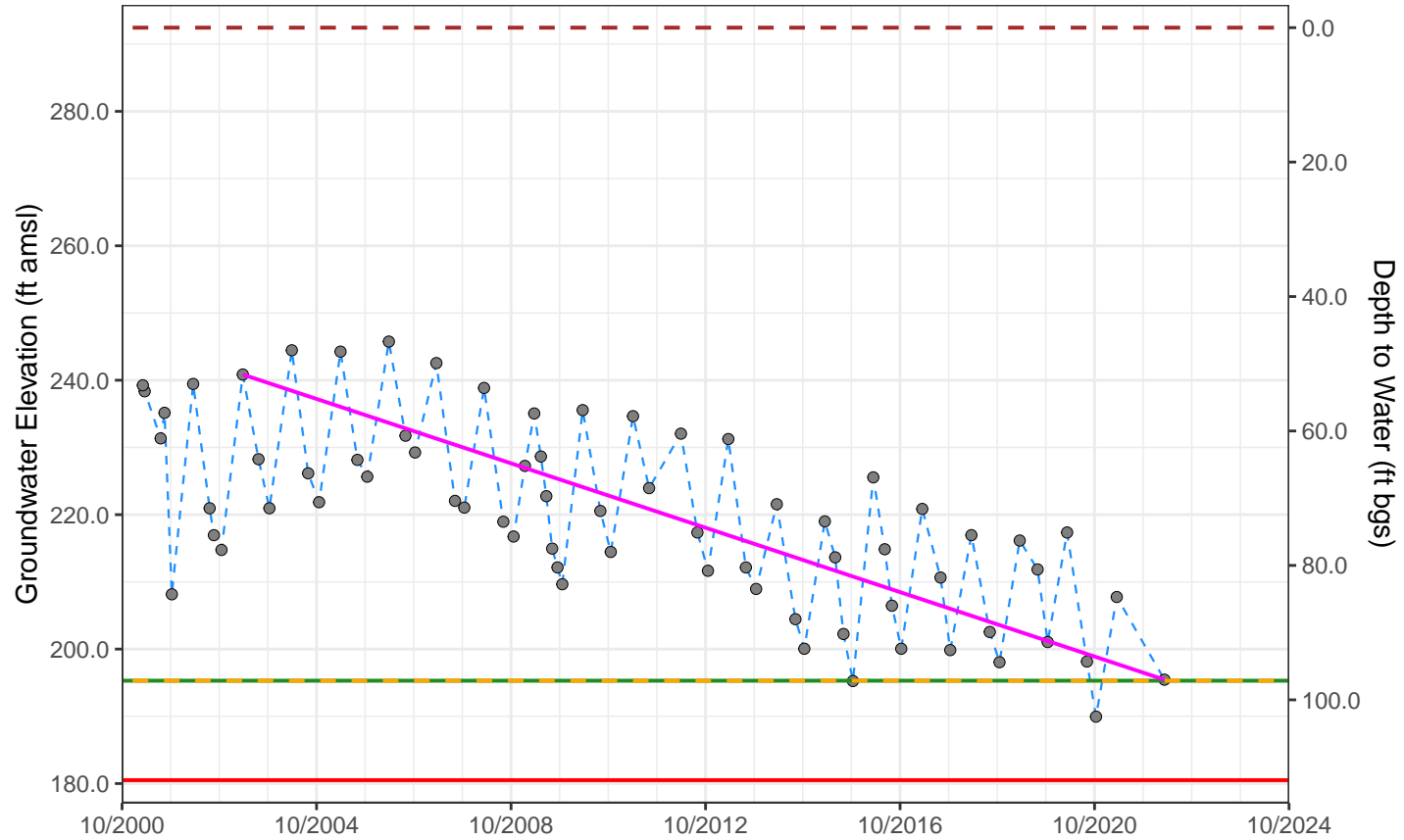
- Graphed Well
- ⊕ Other Well

MO GWE: 195.3 ft amsl  
MO DTW: 97.15 ft amsl

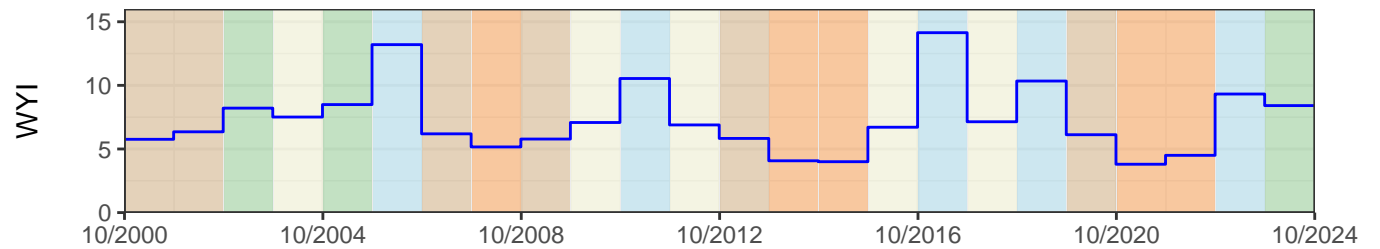
MT GWE: 180.5 ft amsl  
MT DTW: 111.95 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 19 years (2003 to 2022):  
Change = -45.4 ft  
Avg. rate of change = -2.39 ft/yr  
Avg. water level = 228.29 ft amsl  
5-yr Avg. rate (2018–2022):  
= -5.38 ft/yr



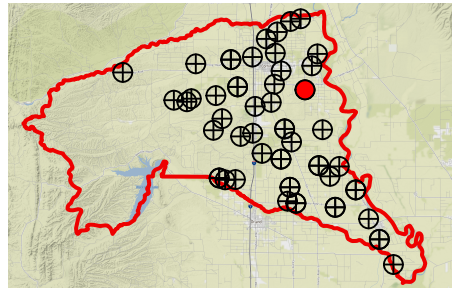
- - - GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2022, 19 yrs)



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 24N02W29N003M

(Shallow Zone) Well Depth: 388 ft. Perforation top & bottom: 200 – 290 ft bgs



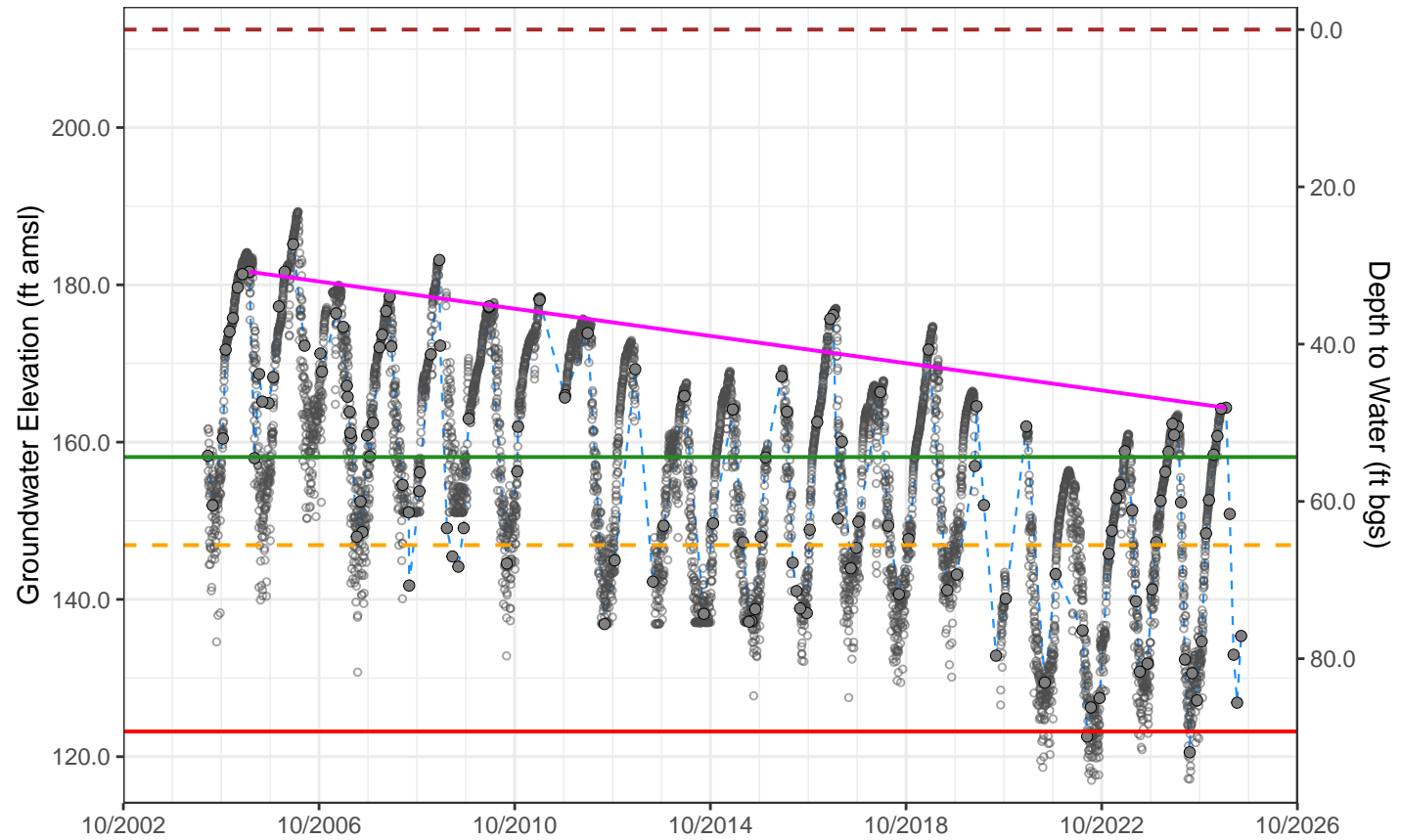
- Graphed Well
- ⊕ Other Well

MO GWE: 158.1 ft amsl  
MO DTW: 54.36 ft amsl

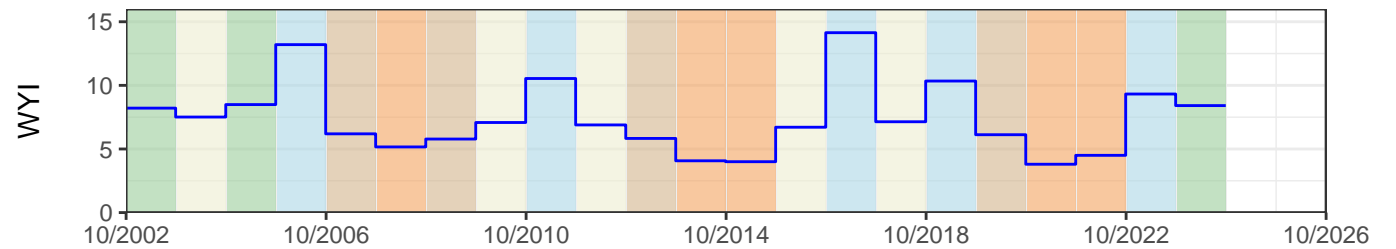
MT GWE: 123.2 ft amsl  
MT DTW: 89.26 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 20 years (2005 to 2025):  
Change = -17.29 ft  
Avg. rate of change = -0.86 ft/yr  
Avg. water level = 171.41 ft amsl  
5-yr Avg. rate (2021–2025):  
= 0.59 ft/yr



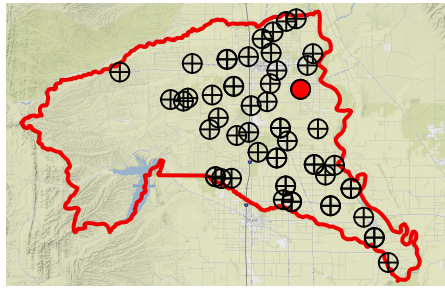
- GSE
- 5-year Interim milestone
- MO
- MT
- Transducer data
- Spring WL trend (2005–2025, 20 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 24N02W29N004M

(Deep Zone) Well Depth: 741 ft. Perforation top & bottom: 590 – 710 ft bgs



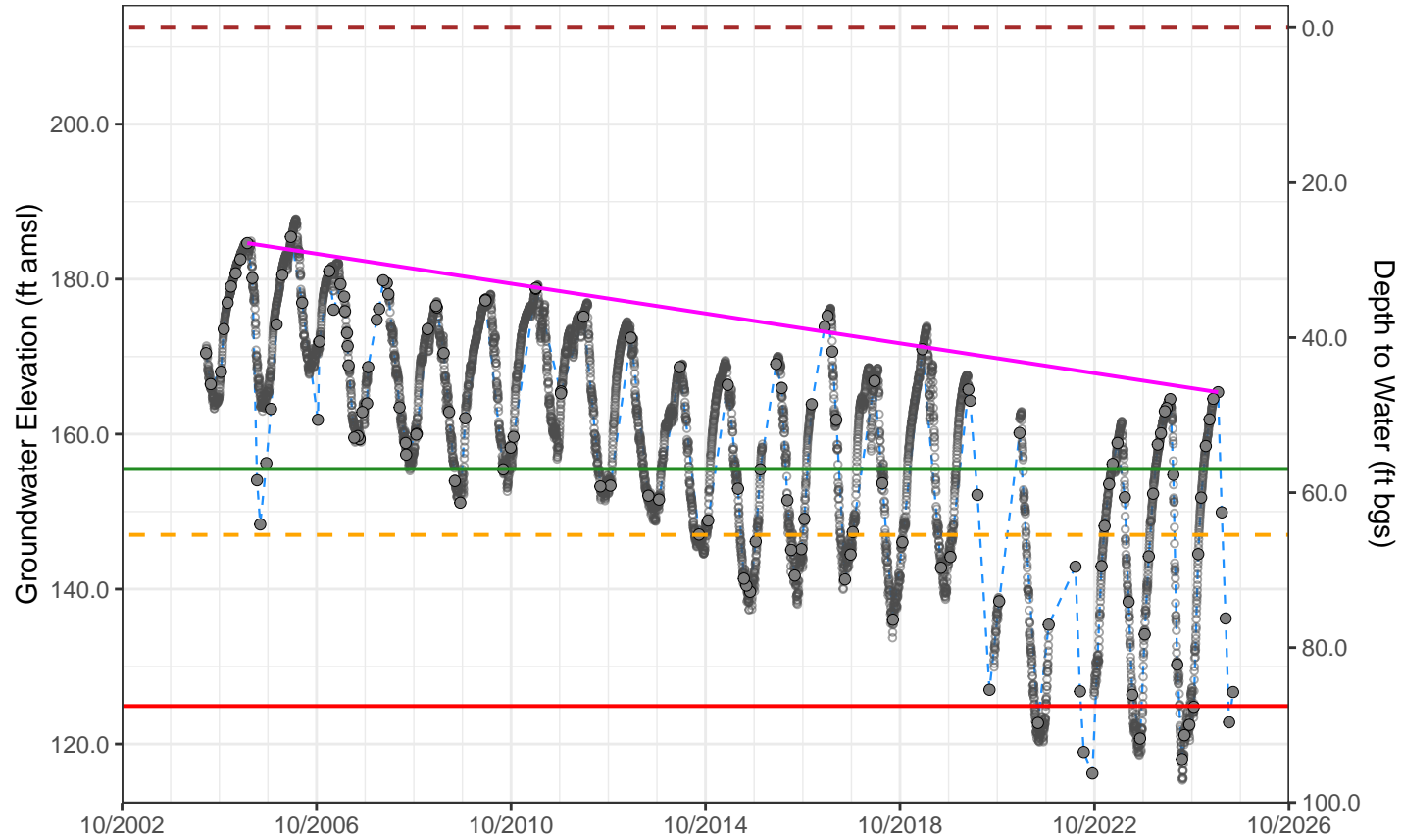
- Graphed Well
- ⊕ Other Well

MO GWE: 155.5 ft amsl  
MO DTW: 56.95 ft amsl

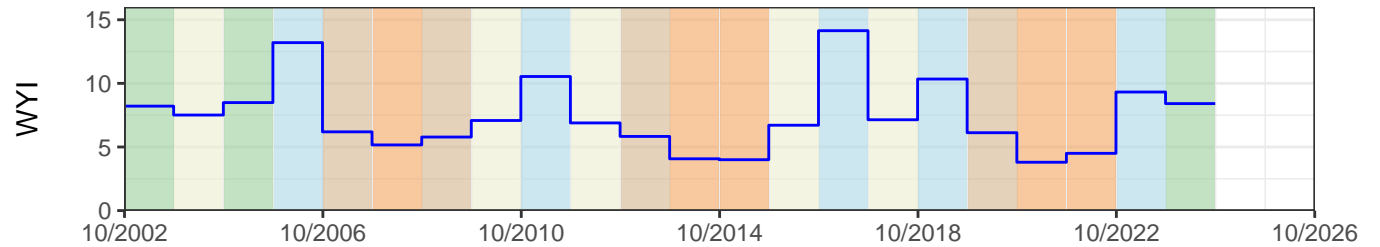
MT GWE: 124.9 ft amsl  
MT DTW: 87.55 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 20 years (2005 to 2025):  
Change = -19.24 ft  
Avg. rate of change = -0.96 ft/yr  
Avg. water level = 172.15 ft amsl  
5-yr Avg. rate (2021–2025):  
= 1.31 ft/yr



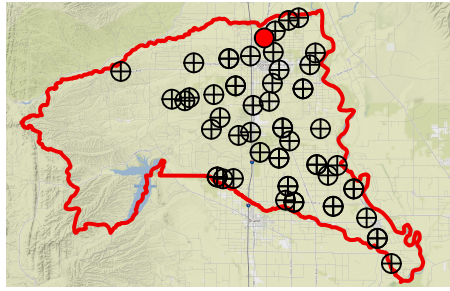
- GSE
- 5-year Interim milestone
- Transducer data
- MO
- Spring WL trend (2005–2025, 20 yrs)
- MT



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 24N03W03R002M

(Shallow Zone) Well Depth: 132 ft. Perforation top & bottom: 112 – 132 ft bgs



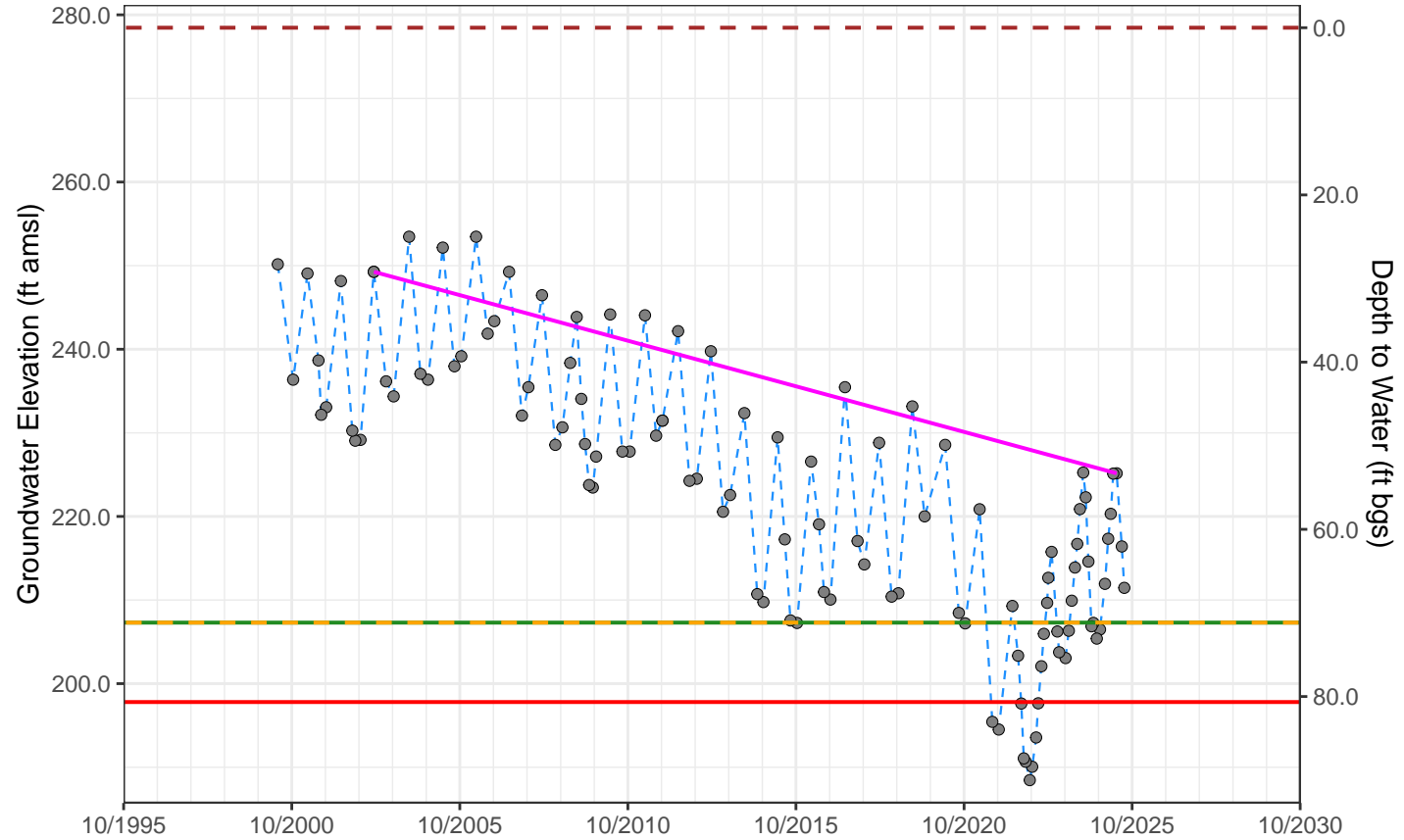
- Graphed Well
- ⊕ Other Well

MO GWE: 207.3 ft amsl  
MO DTW: 71.16 ft amsl

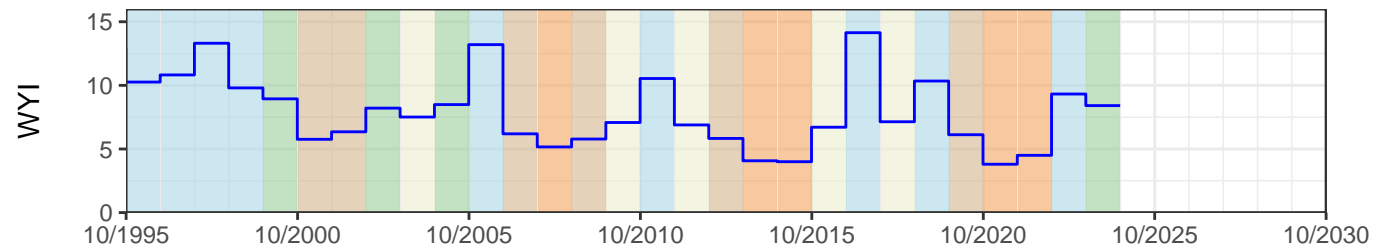
MT GWE: 197.8 ft amsl  
MT DTW: 80.66 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -24.1 ft  
Avg. rate of change = -1.1 ft/yr  
Avg. water level = 235.9 ft amsl  
5-yr Avg. rate (2021–2025):  
= 1.07 ft/yr



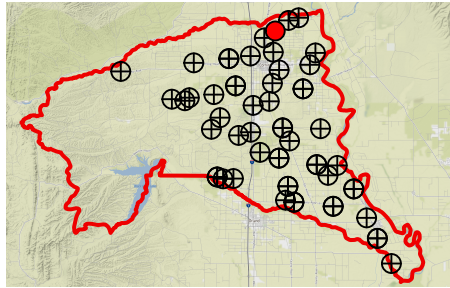
- - - GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 24N03W02R001M

(Shallow Zone) Well Depth: 270 ft. Perforation top & bottom: Unknown



- Graphed Well
- ⊕ Other Well

MO GWE: 188.6 ft amsl

MO DTW: 68.85 ft amsl

MT GWE: 177.6 ft amsl

MT DTW: 79.85 ft amsl

### Acronyms:

GSE: Ground Surface Elevation

GWE: Groundwater Elevation

MO: Minimum Objective

MT: Minimum Threshold

DTW: Depth to Water

bgs: Below Ground Surface

amsl: Above Mean Sea Level

NA: Not Available

WY: Water Year

### Statistics of spring water levels for past 20 years (2003 to 2023):

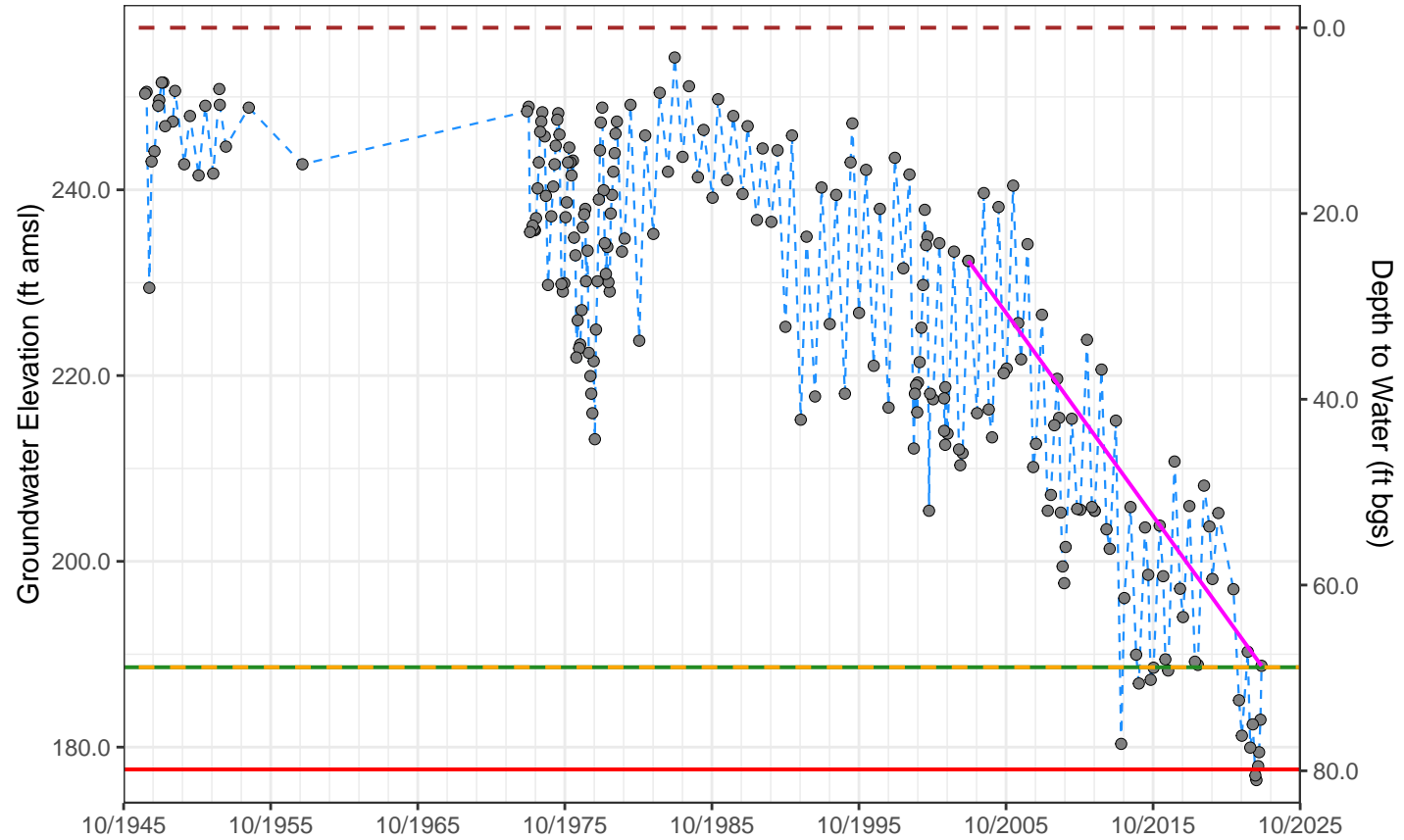
Change = -43.6 ft

Avg. rate of change = -2.18 ft/yr

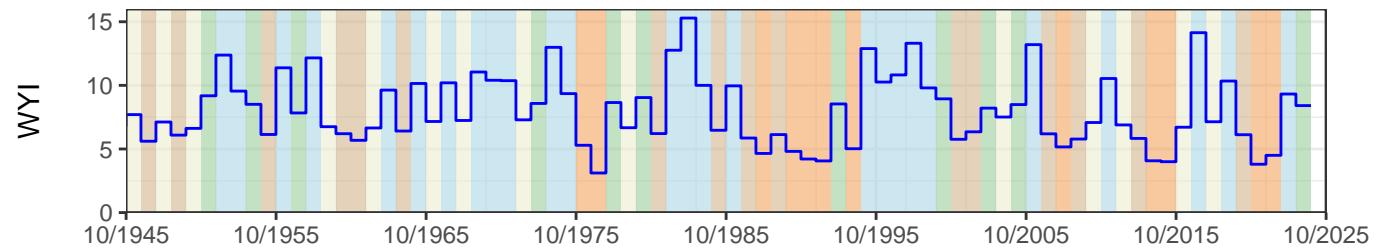
Avg. water level = 215.49 ft amsl

5-yr Avg. rate (2019–2023):

= -4.85 ft/yr



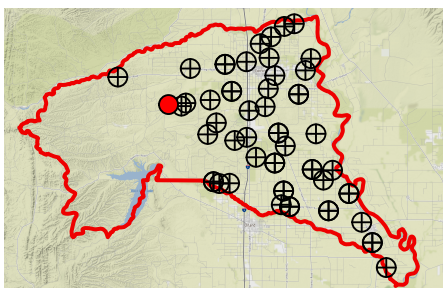
- GSE
- MO
- MT
- - - 5-year Interim milestone
- Spring WL trend (2003–2023, 20 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet
- Above Normal
- Below Normal
- Dry
- Critical

# Corning Subbasin – State Well Number (SWN) 24N04W33P001M

(Deep Zone) Well Depth: 780 ft. Perforation top & bottom: 250 – 780 ft bgs



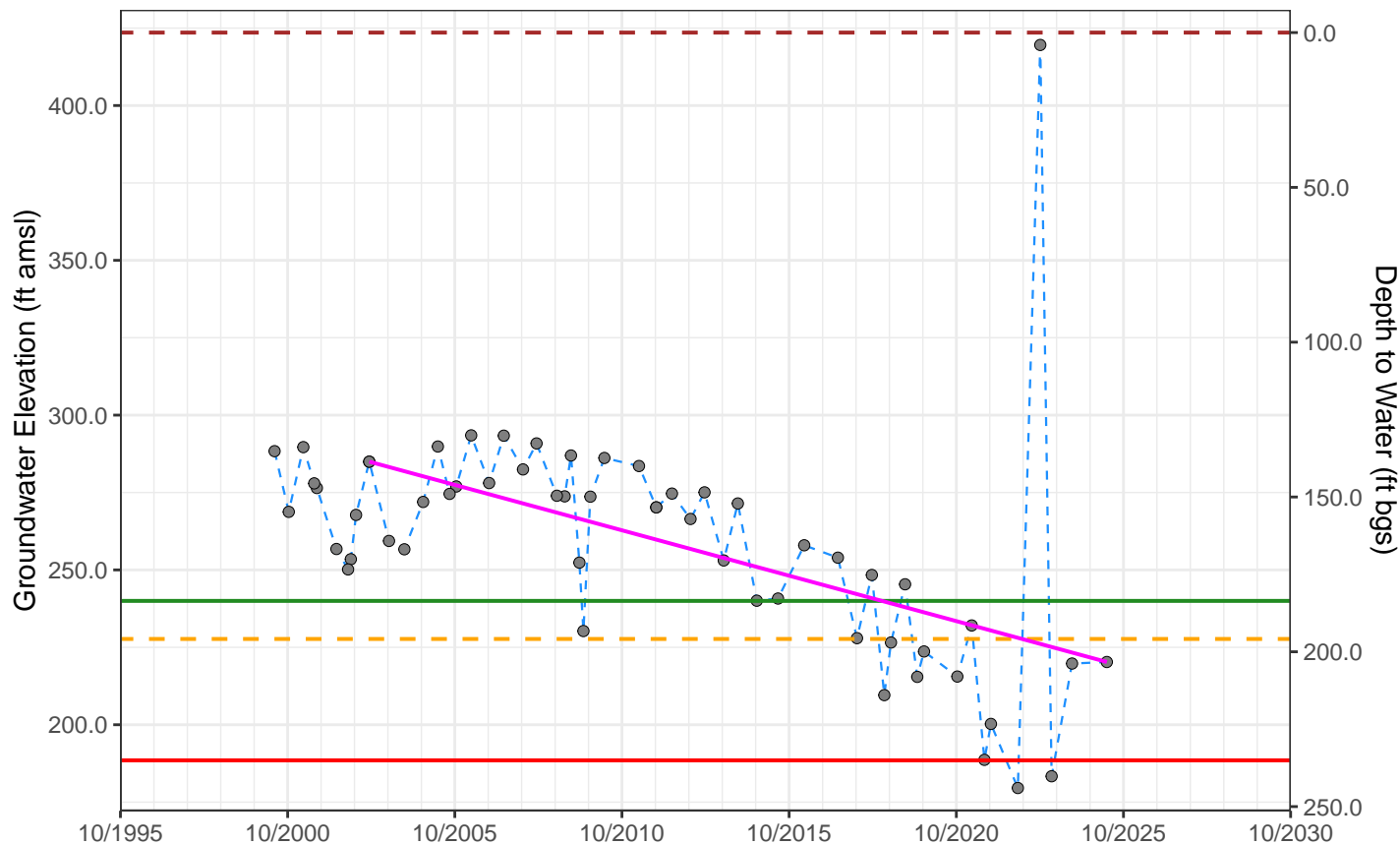
- Graphed Well
- ⊕ Other Well

MO GWE: 240 ft amsl  
 MO DTW: 183.56 ft amsl

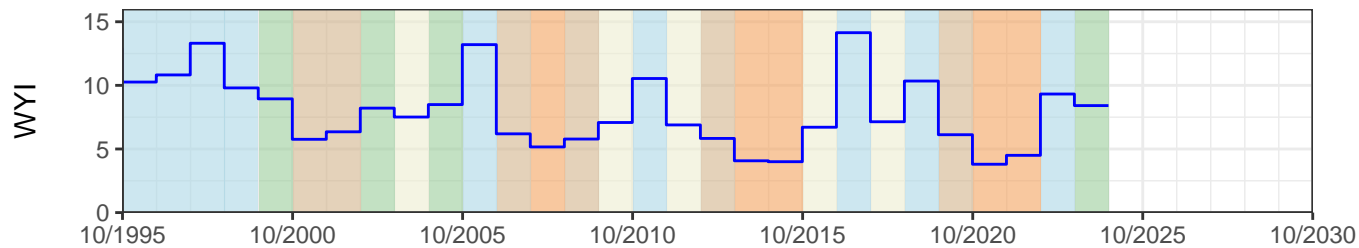
MT GWE: 188.5 ft amsl  
 MT DTW: 235.06 ft amsl

Acronyms:  
 GSE: Ground Surface Elevation  
 GWE: Groundwater Elevation  
 MO: Minimum Objective  
 MT: Minimum Threshold  
 DTW: Depth to Water  
 bgs: Below Ground Surface  
 amsl: Above Mean Sea Level  
 NA: Not Available  
 WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
 Change = -64.7 ft  
 Avg. rate of change = -2.94 ft/yr  
 Avg. water level = 274.21 ft amsl  
 5-yr Avg. rate (2021–2025):  
 = -2.95 ft/yr



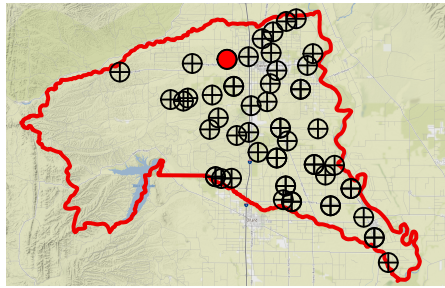
- - - GSE
- MO
- MT
- - - 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 24N03W17M001M

(Shallow Zone) Well Depth: 108 ft. Perforation top & bottom: 100 – 108 ft bgs



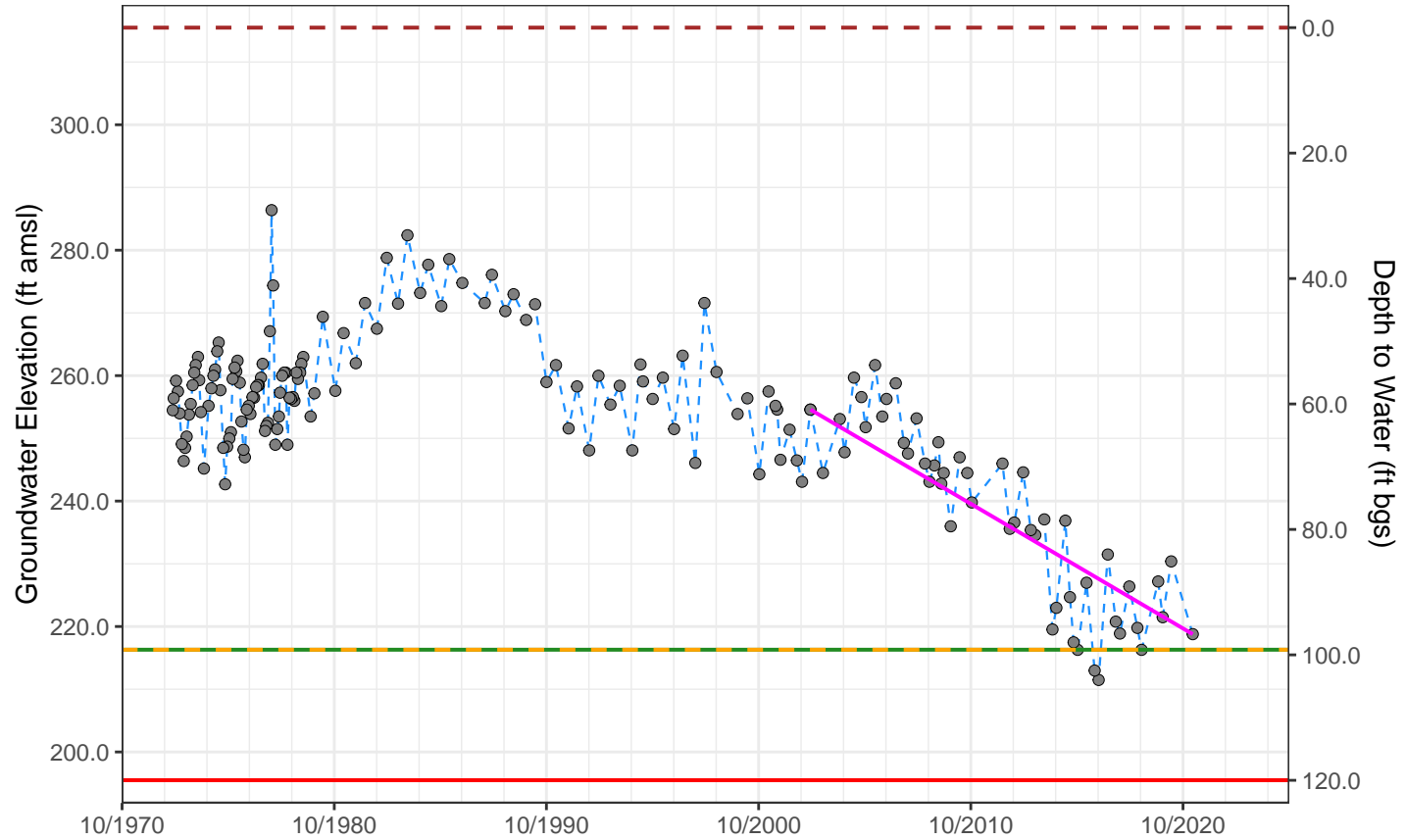
- Graphed Well
- ⊕ Other Well

MO GWE: 216.3 ft amsl  
MO DTW: 99.18 ft amsl

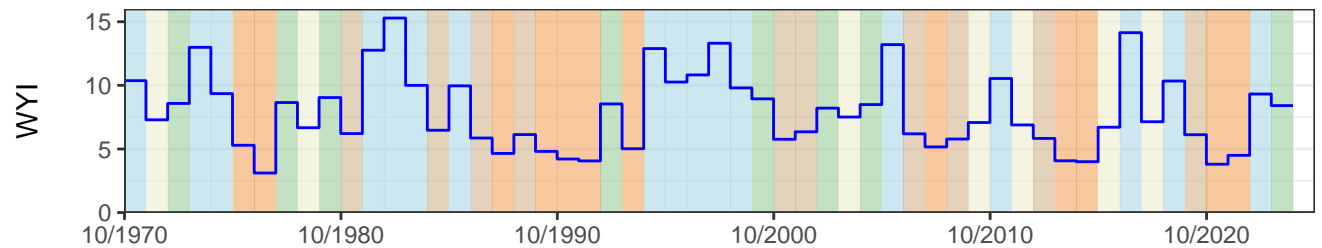
MT GWE: 195.5 ft amsl  
MT DTW: 119.98 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 18 years (2003 to 2021):  
Change = -35.8 ft  
Avg. rate of change = -1.99 ft/yr  
Avg. water level = 242.67 ft amsl  
5-yr Avg. rate (2017–2021):  
= -3.17 ft/yr



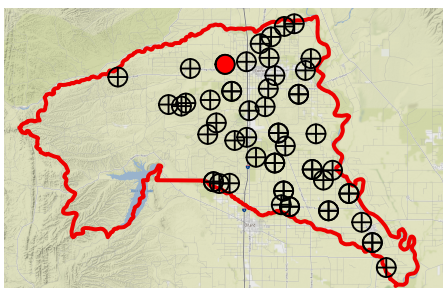
- - - GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2021, 18 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet
- Above Normal
- Below Normal
- Dry
- Critical

# Corning Subbasin – State Well Number (SWN) 24N03W17M002M

(Deep Zone) Well Depth: 505 ft. Perforation top & bottom: 315 – 495 ft bgs



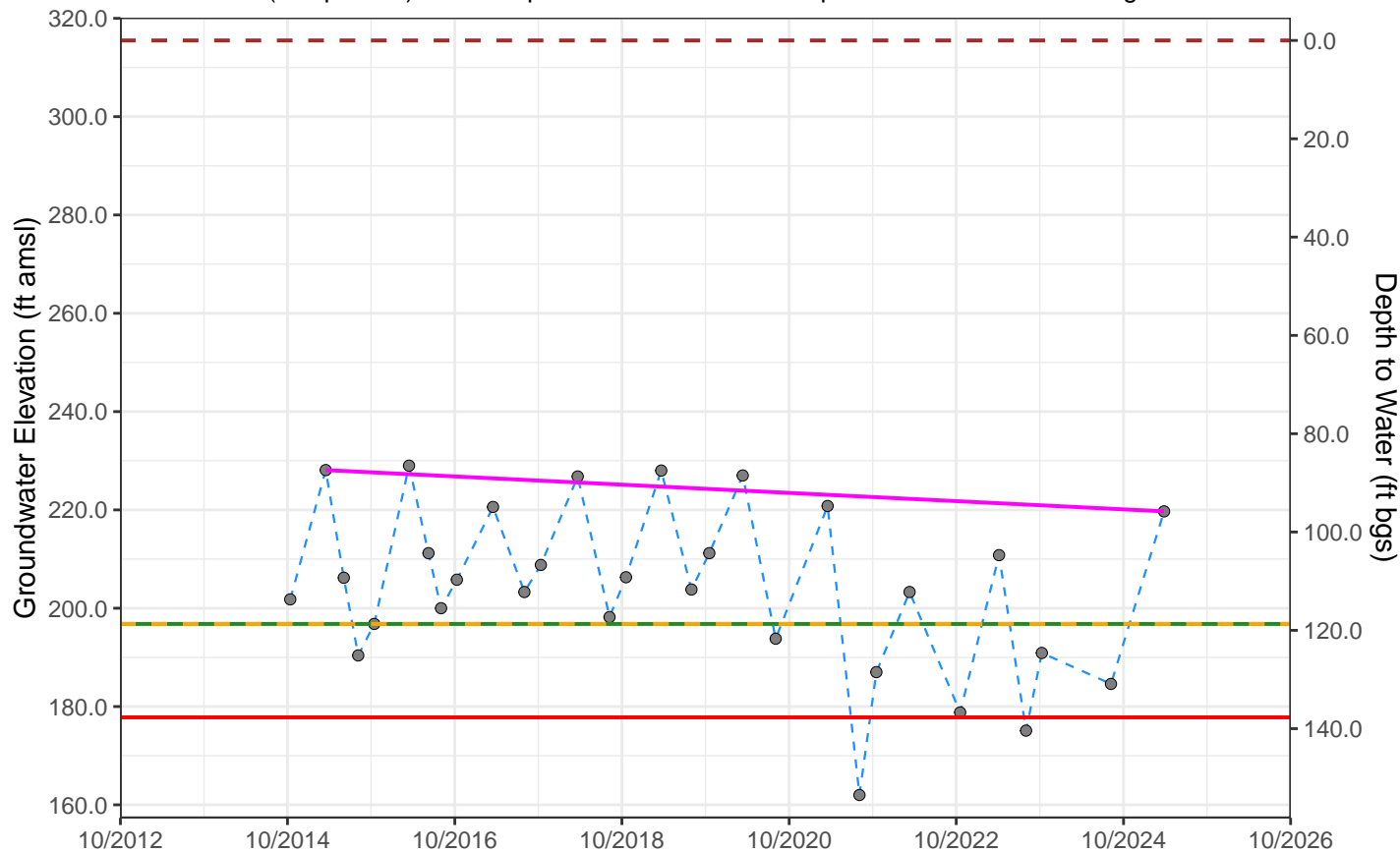
- Graphed Well
- ⊕ Other Well

MO GWE: 196.8 ft amsl  
MO DTW: 118.7 ft amsl

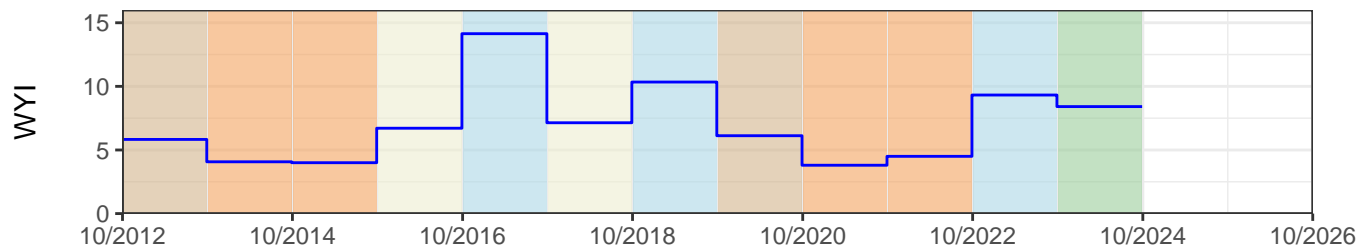
MT GWE: 177.8 ft amsl  
MT DTW: 137.7 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 10 years (2015 to 2025):  
Change = -8.4 ft  
Avg. rate of change = -0.84 ft/yr  
Avg. water level = 221.41 ft amsl  
5-yr Avg. rate (2021-2025):  
= -0.28 ft/yr



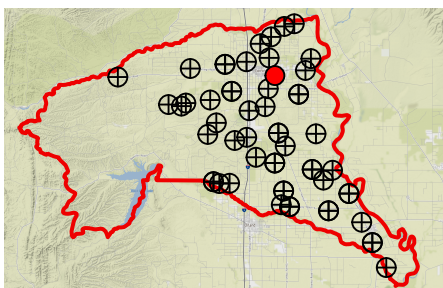
- - - GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2015-2025, 10 yrs)



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 24N03W24E001M

(Shallow Zone) Well Depth: 224 ft. Perforation top & bottom: 212 – 220 ft bgs



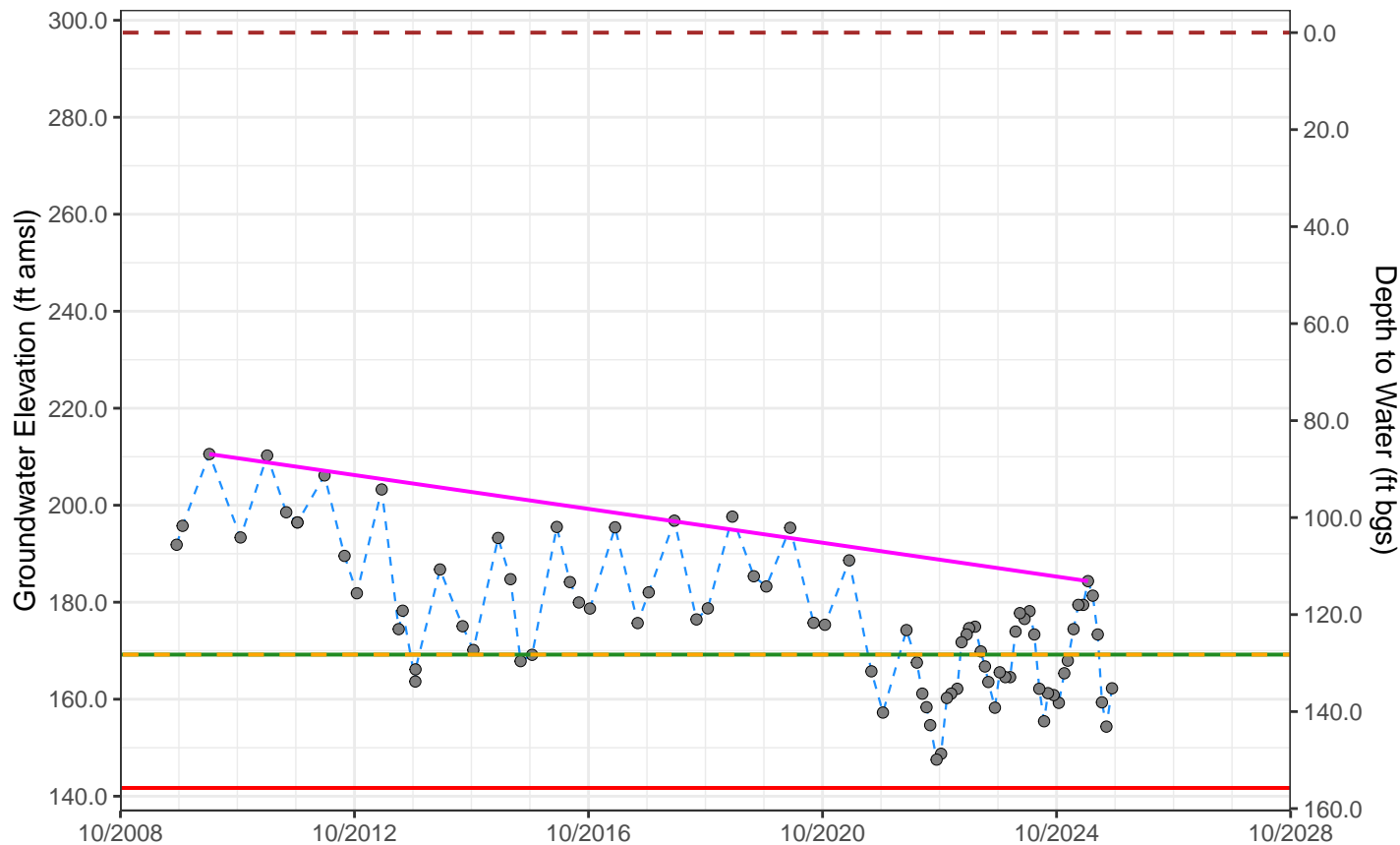
- Graphed Well
- ⊕ Other Well

MO GWE: 169.2 ft amsl  
MO DTW: 128.25 ft amsl

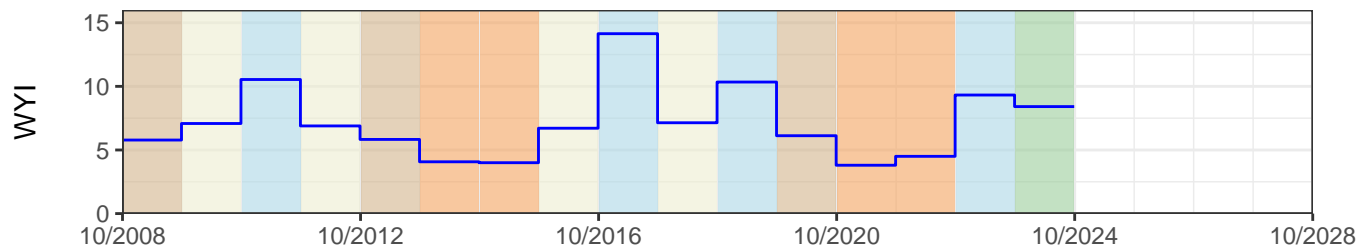
MT GWE: 141.7 ft amsl  
MT DTW: 155.75 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 15 years (2010 to 2025):  
Change = -26.2 ft  
Avg. rate of change = -1.75 ft/yr  
Avg. water level = 193.19 ft amsl  
5-yr Avg. rate (2021–2025):  
= -1.07 ft/yr



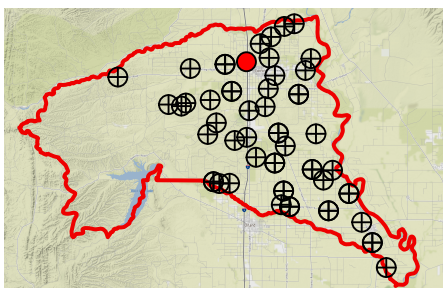
- GSE
- 5-year Interim milestone
- MO
- Spring WL trend (2010–2025, 15 yrs)
- MT



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 24N03W16A001M

(Shallow Zone) Well Depth: 195 ft. Perforation top & bottom: 85 – 195 ft bgs



- Graphed Well
- ⊕ Other Well

MO GWE: 200.7 ft amsl  
MO DTW: 90.27 ft amsl

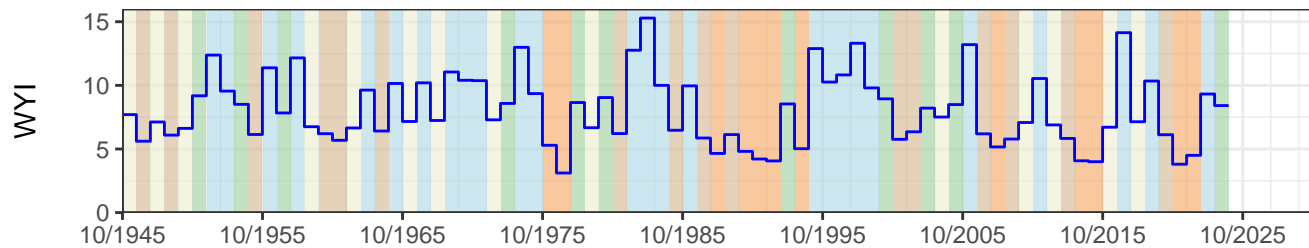
MT GWE: 187.6 ft amsl  
MT DTW: 103.37 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -33.3 ft  
Avg. rate of change = -1.51 ft/yr  
Avg. water level = 232.33 ft amsl  
5-yr Avg. rate (2021–2025):  
= 0.93 ft/yr



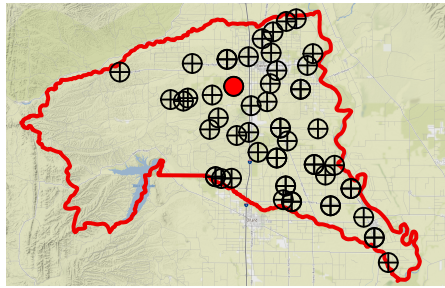
- GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 24N03W29Q001M

(Shallow Zone) Well Depth: 372 ft. Perforation top & bottom: 130 – 360 ft bgs



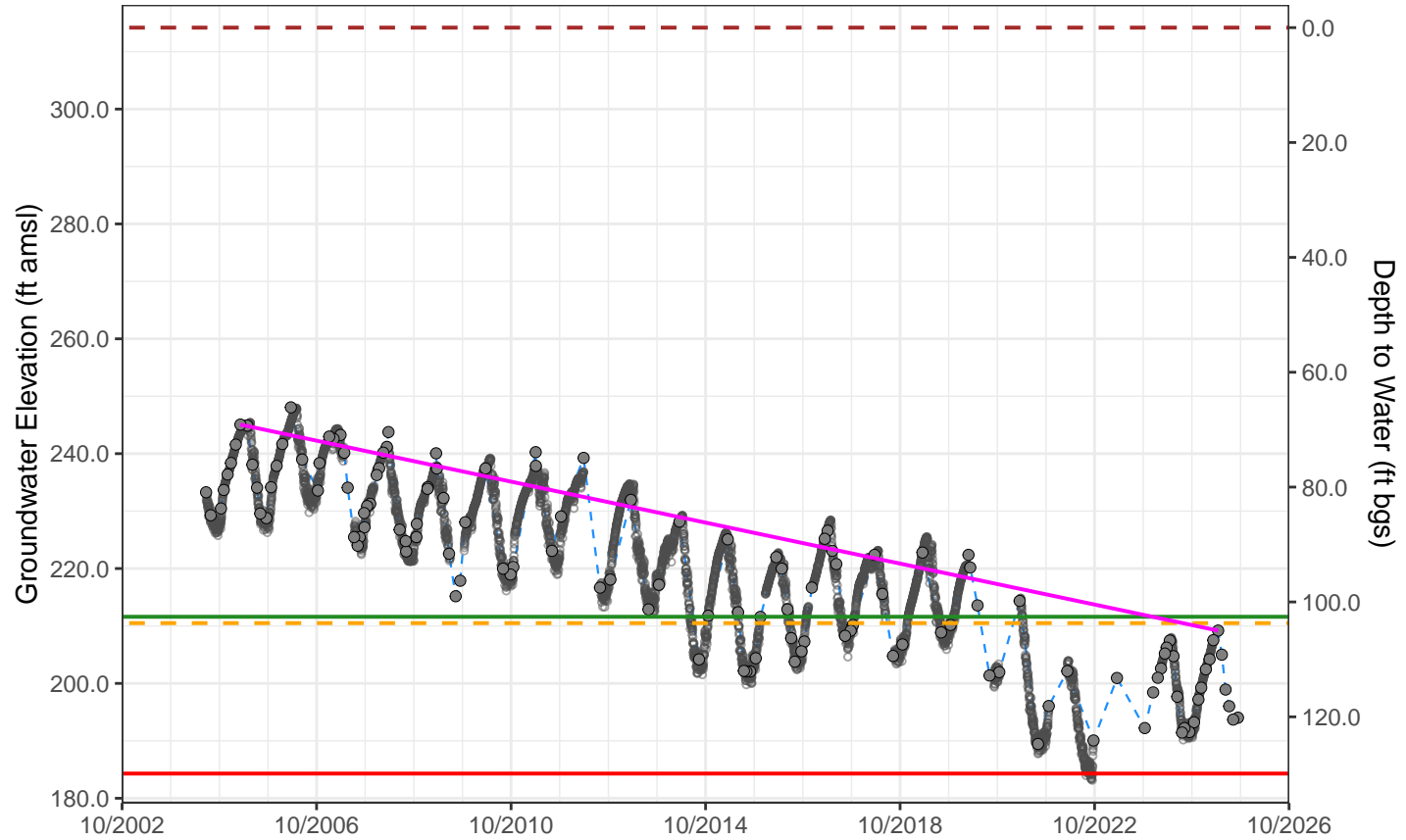
- Graphed Well
- ⊕ Other Well

MO GWE: 211.6 ft amsl  
MO DTW: 102.58 ft amsl

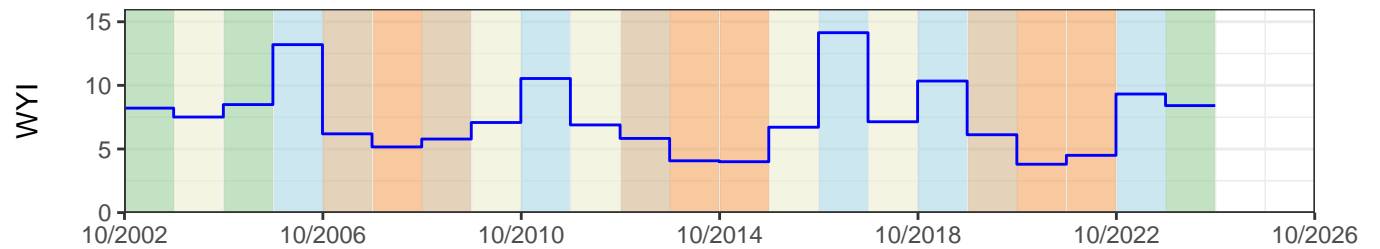
MT GWE: 184.3 ft amsl  
MT DTW: 129.88 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 20 years (2005 to 2025):  
Change = -35.86 ft  
Avg. rate of change = -1.79 ft/yr  
Avg. water level = 227.26 ft amsl  
5-yr Avg. rate (2021–2025):  
= -1.29 ft/yr



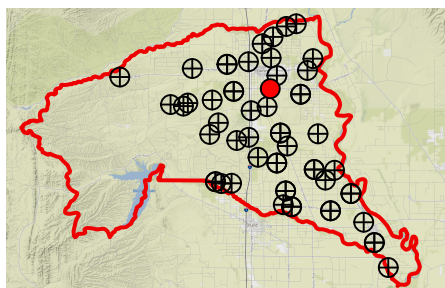
- GSE
- 5-year Interim milestone
- MO
- MT
- Transducer data
- Spring WL trend (2005–2025, 20 yrs)



- Sacramento Valley Water Year Index
- WY Type:  Wet
- Above Normal
- Below Normal
- Dry
- Critical

# Corning Subbasin – State Well Number (SWN) 24N03W26K001M

(Shallow Zone) Well Depth: 245 ft. Perforation top & bottom: 103 – 175 ft bgs



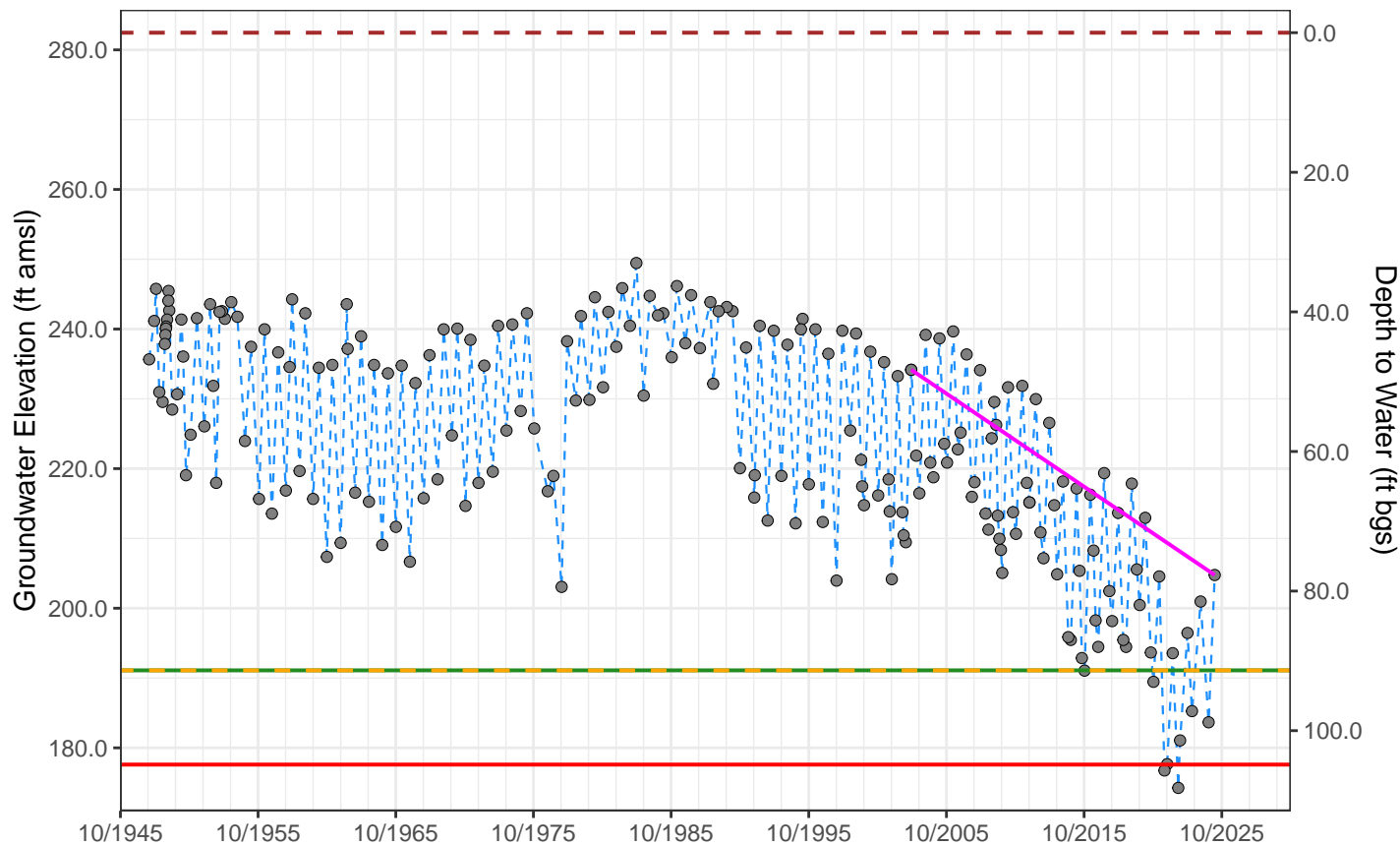
- Graphed Well
- ⊕ Other Well

MO GWE: 191.1 ft amsl  
MO DTW: 91.36 ft amsl

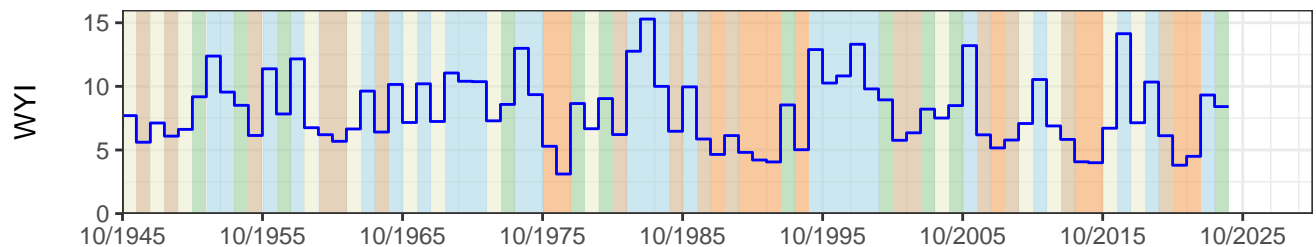
MT GWE: 177.6 ft amsl  
MT DTW: 104.86 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -29.4 ft  
Avg. rate of change = -1.34 ft/yr  
Avg. water level = 221.19 ft amsl  
5-yr Avg. rate (2021–2025):  
= 0.05 ft/yr



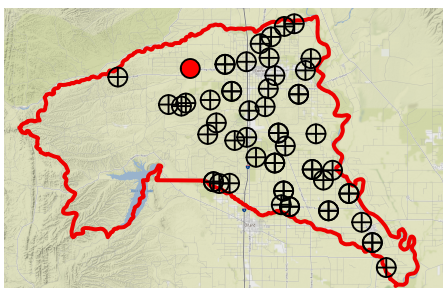
- GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2025, 22 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 24N04W14N002M

(Shallow Zone) Well Depth: 180 ft. Perforation top & bottom: Unknown



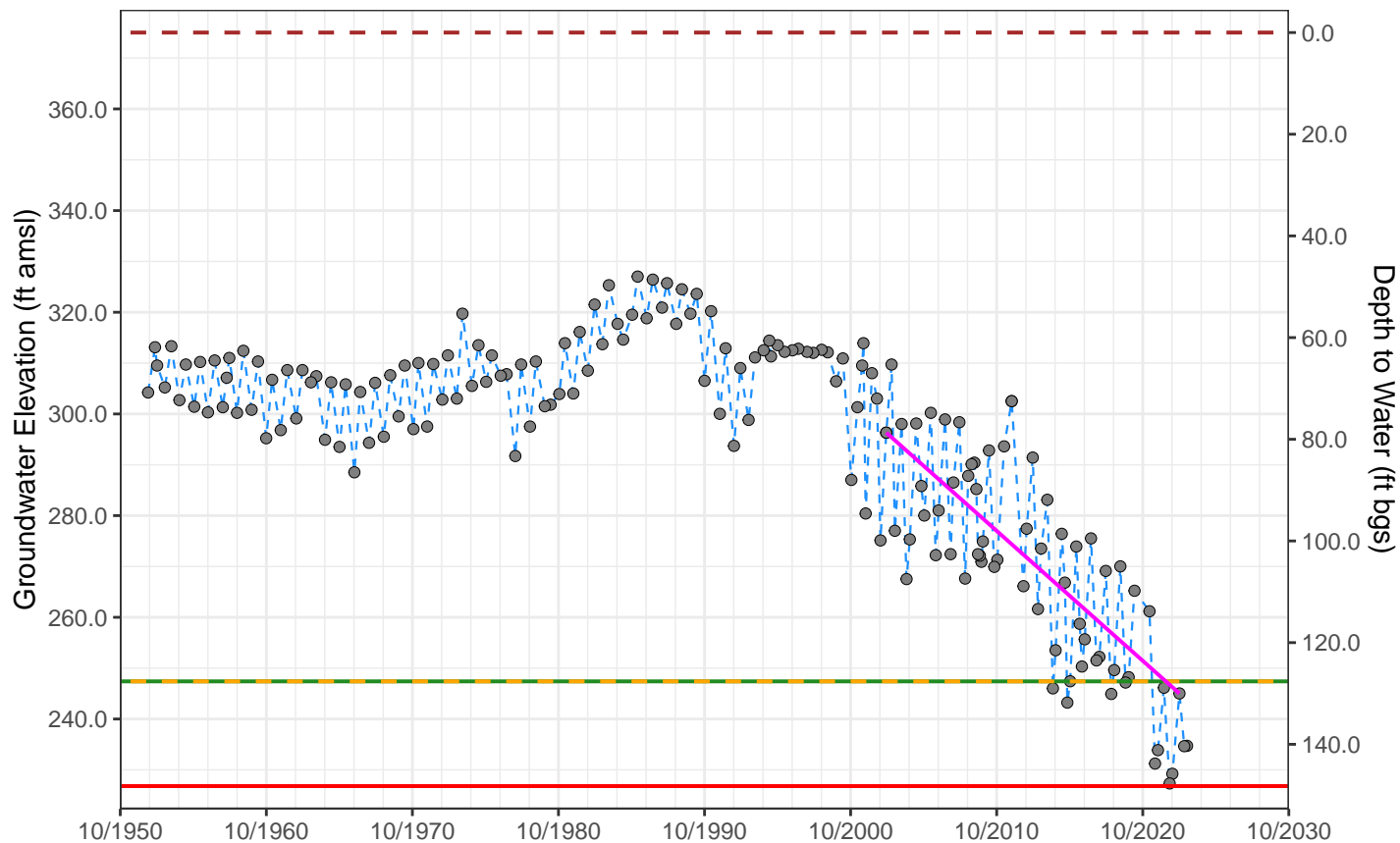
- Graphed Well
- ⊕ Other Well

MO GWE: 247.4 ft amsl  
MO DTW: 127.62 ft amsl

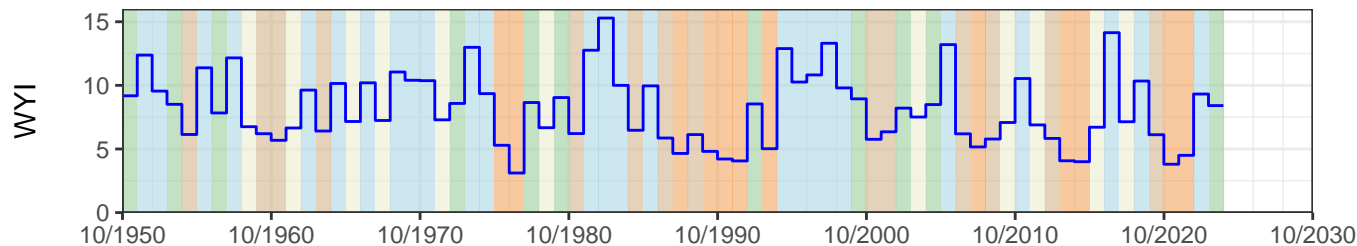
MT GWE: 226.8 ft amsl  
MT DTW: 148.22 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 20 years (2003 to 2023):  
Change = -51.3 ft  
Avg. rate of change = -2.56 ft/yr  
Avg. water level = 281.2 ft amsl  
5-yr Avg. rate (2019–2023):  
= -6.25 ft/yr



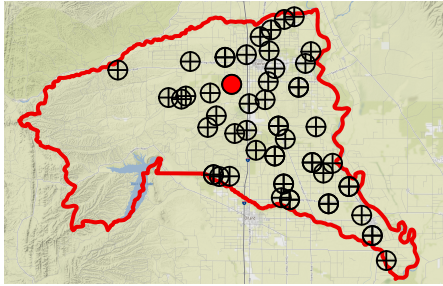
- - - GSE
- - - MO
- MT
- 5-year Interim milestone
- Spring WL trend (2003–2023, 20 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 24N03W29Q002M

(Deep Zone) Well Depth: 575 ft. Perforation top & bottom: 490 – 550 ft bgs



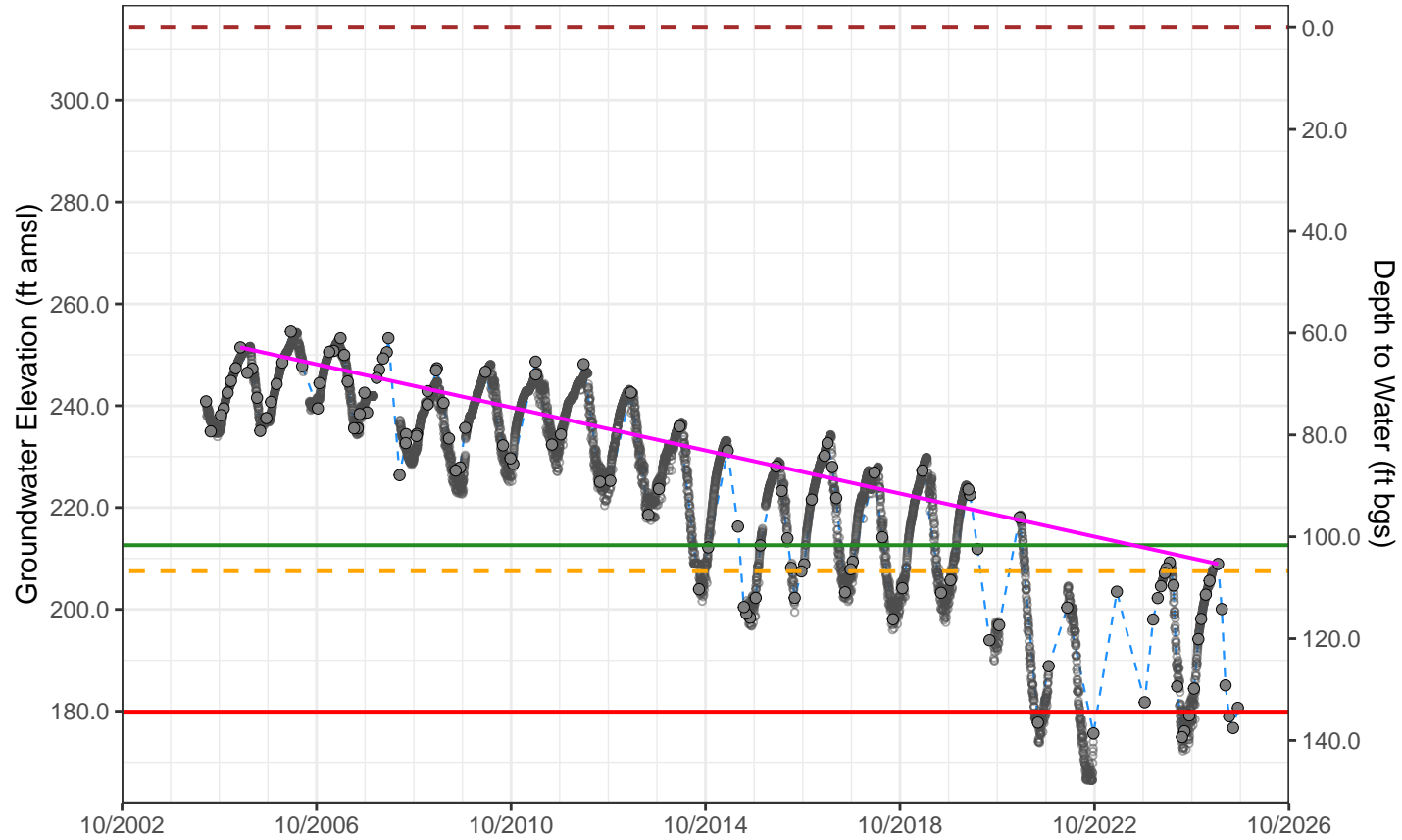
- Graphed Well
- ⊕ Other Well

MO GWE: 212.6 ft amsl  
MO DTW: 101.66 ft amsl

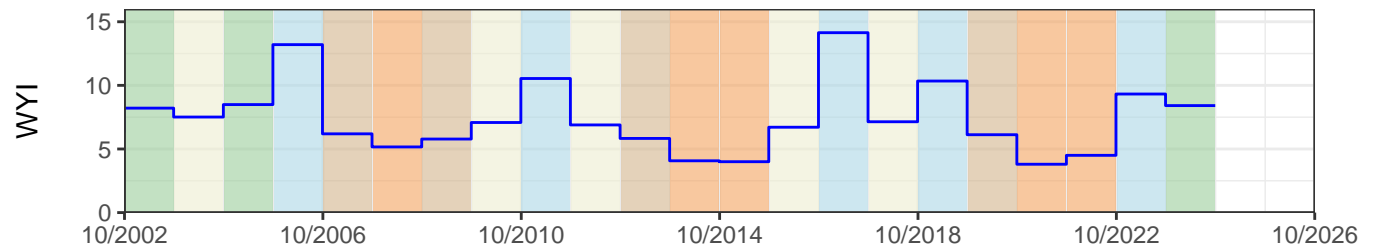
MT GWE: 179.9 ft amsl  
MT DTW: 134.36 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 20 years (2005 to 2025):  
Change = -42.54 ft  
Avg. rate of change = -2.13 ft/yr  
Avg. water level = 232.93 ft amsl  
5-yr Avg. rate (2021–2025):  
= -2.28 ft/yr



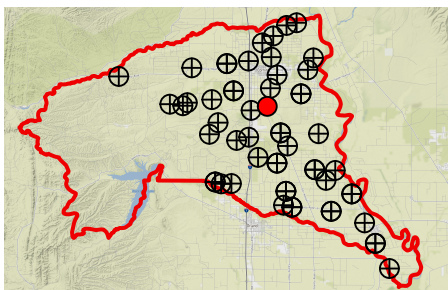
- - - GSE
- - - 5-year Interim milestone
- Transducer data
- MO
- Spring WL trend (2005–2025, 20 yrs)
- MT



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 24N03W35P005M

(Shallow Zone) Well Depth: 120 ft. Perforation top & bottom: 100 – 120 ft bgs



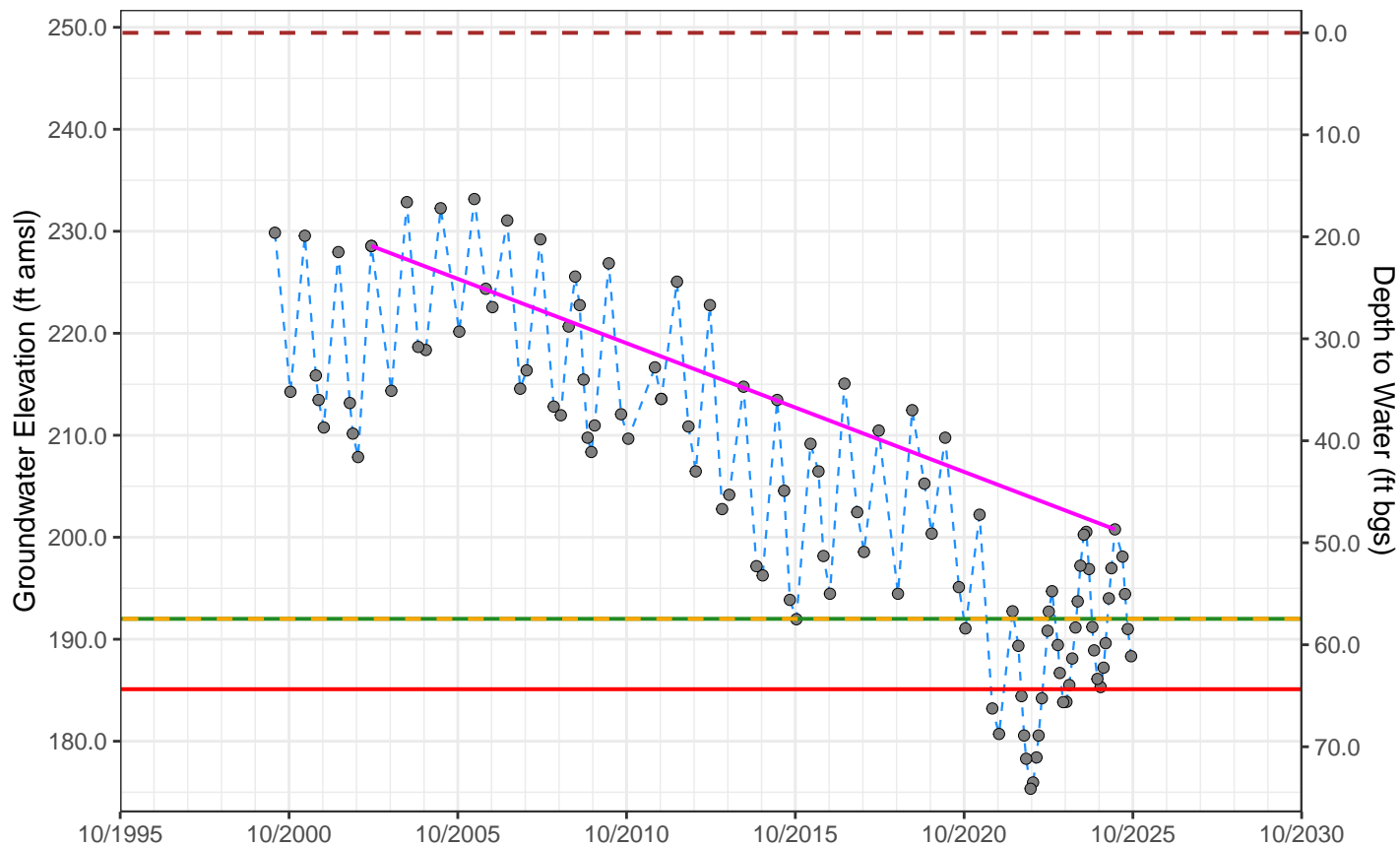
- Graphed Well
- ⊕ Other Well

MO GWE: 192 ft amsl  
MO DTW: 57.46 ft amsl

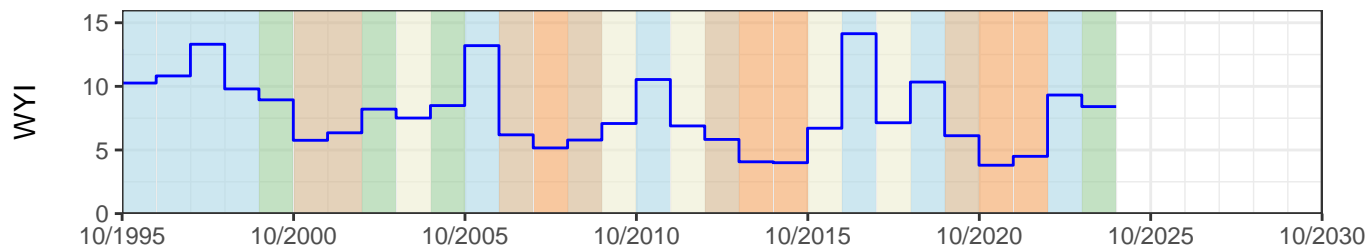
MT GWE: 185.1 ft amsl  
MT DTW: 64.36 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 22 years (2003 to 2025):  
Change = -27.79 ft  
Avg. rate of change = -1.26 ft/yr  
Avg. water level = 216.42 ft amsl  
5-yr Avg. rate (2021–2025):  
= -0.36 ft/yr



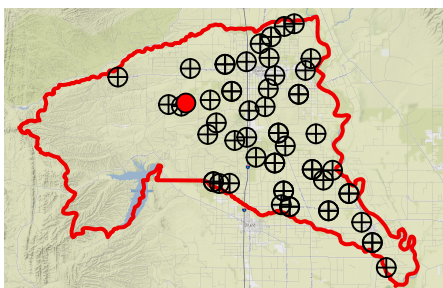
- - - GSE
- - - MO
- MT
- Spring WL trend (2003–2025, 22 yrs)
- 5-year Interim milestone



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

# Corning Subbasin – State Well Number (SWN) 24N04W34K001M

(Deep Zone) Well Depth: 750 ft. Perforation top & bottom: 310 – 750 ft bgs



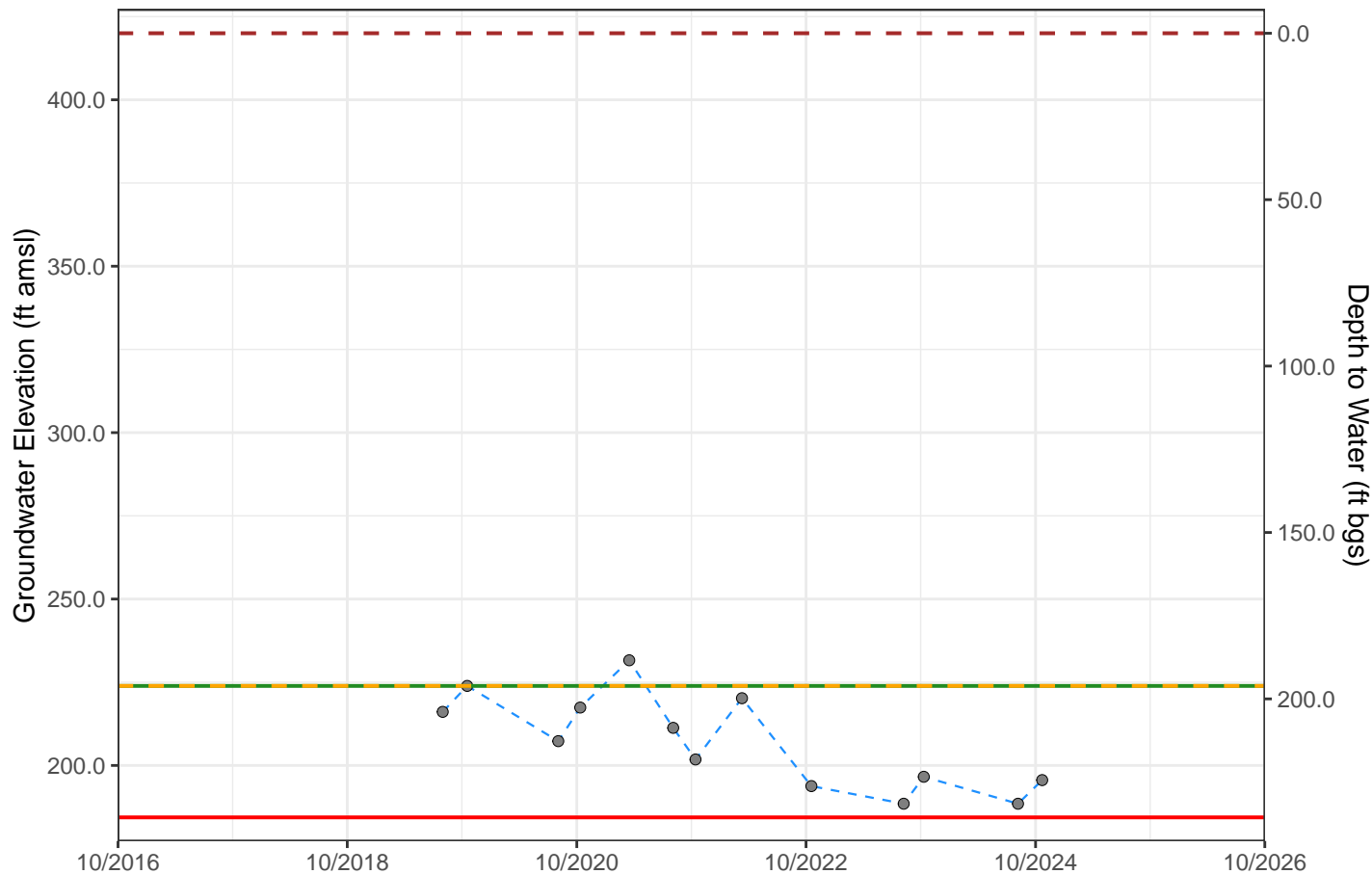
- Graphed Well
- ⊕ Other Well

MO GWE: 223.9 ft amsl  
 MO DTW: 196.1 ft amsl

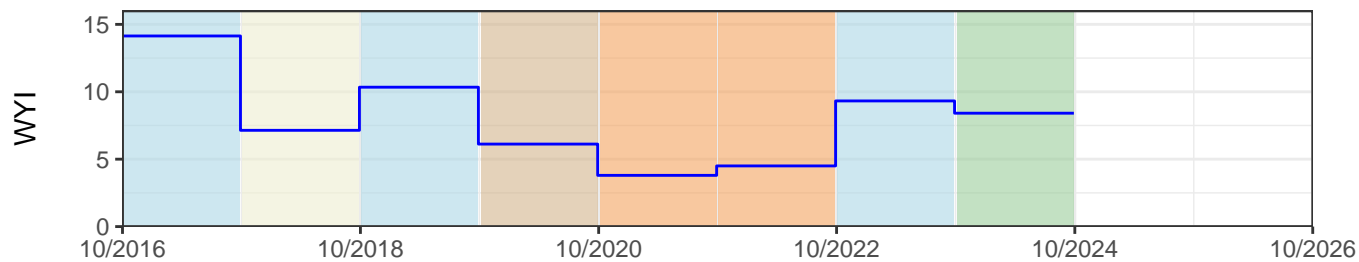
MT GWE: 184.4 ft amsl  
 MT DTW: 235.6 ft amsl

Acronyms:  
 GSE: Ground Surface Elevation  
 GWE: Groundwater Elevation  
 MO: Minimum Objective  
 MT: Minimum Threshold  
 DTW: Depth to Water  
 bgs: Below Ground Surface  
 amsl: Above Mean Sea Level  
 NA: Not Available  
 WY: Water Year

Insufficient spring GW level data to calculate statistics for 3 years



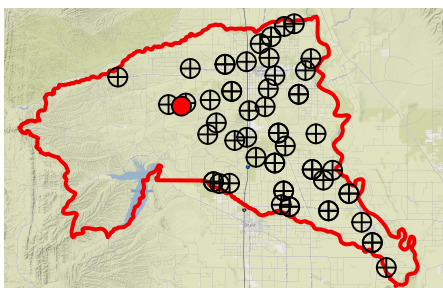
- - - GSE
- MT
- MO
- - - 5-year Interim milestone



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 24N04W34P001M

(Deep Zone) Well Depth: 535 ft. Perforation top & bottom: 290 – 475 ft bgs



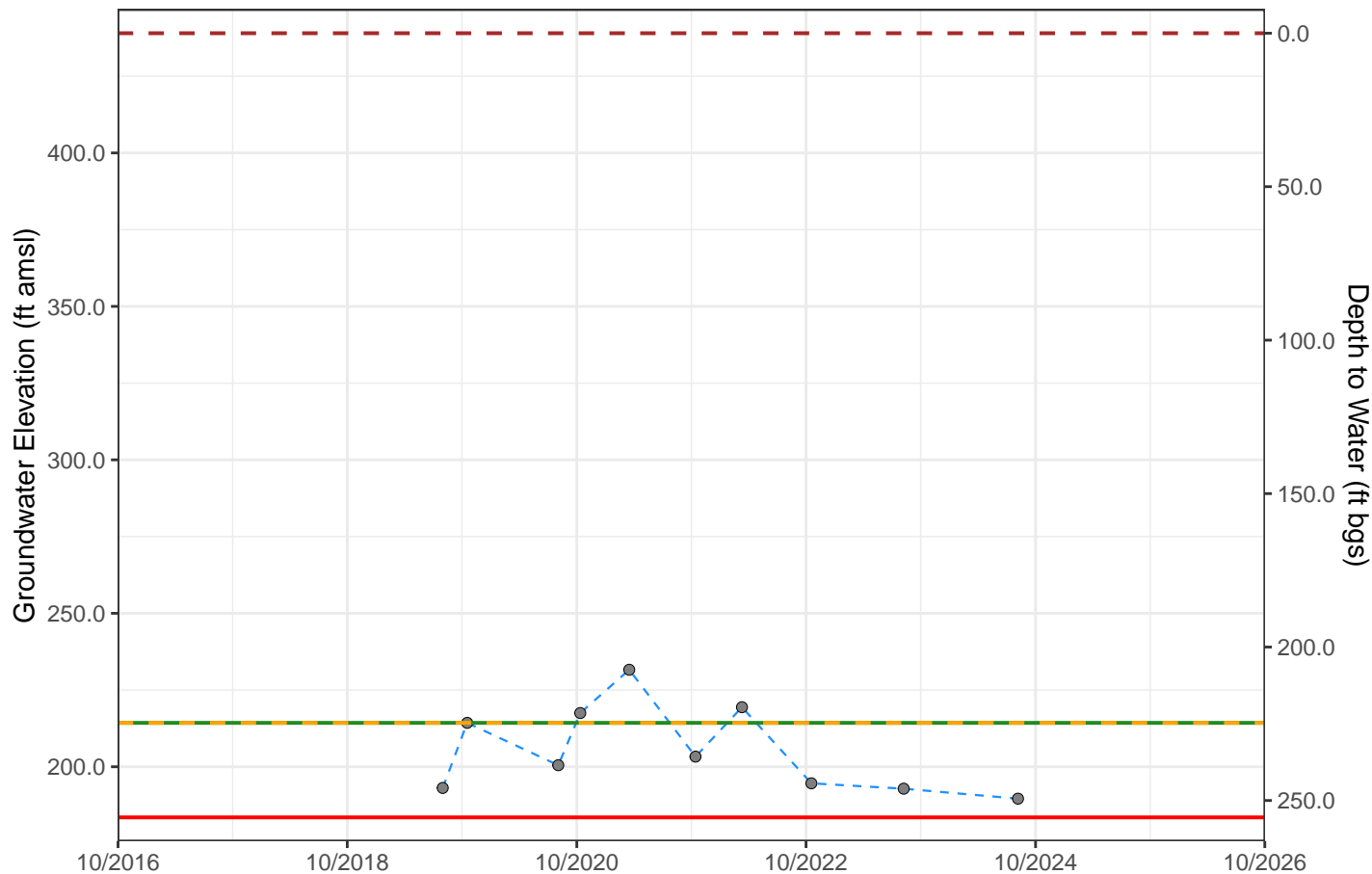
- Graphed Well
- ⊕ Other Well

MO GWE: 214.3 ft amsl  
MO DTW: 224.7 ft amsl

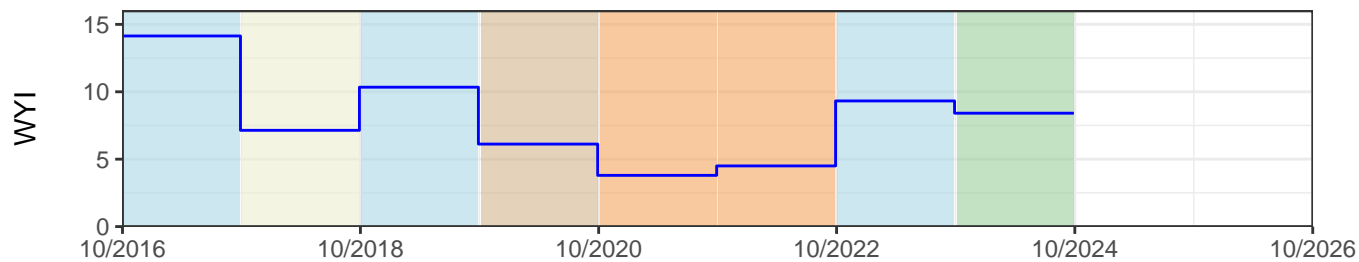
MT GWE: 183.5 ft amsl  
MT DTW: 255.5 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Insufficient spring GW level data to calculate statistics for 3 years



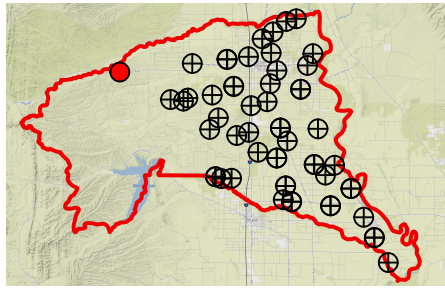
- - - GSE
- MT
- MO
- - - 5-year Interim milestone



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 24N05W23L001M

(Shallow Zone) Well Depth: 235 ft. Perforation top & bottom: Unknown



- Graphed Well
- ⊕ Other Well

MO GWE: 345.8 ft amsl  
MO DTW: 184.2 ft amsl

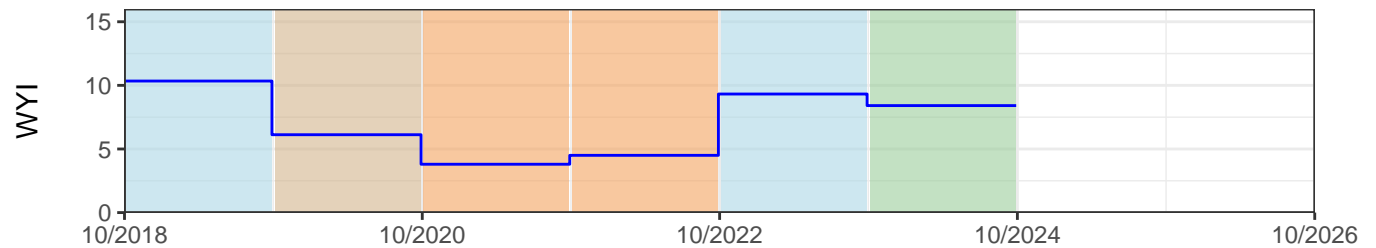
MT GWE: 312 ft amsl  
MT DTW: 218 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 3 years (2020 to 2023):  
Change = -3.4 ft  
Avg. rate of change = -1.13 ft/yr  
Avg. water level = 359.13 ft amsl  
5-yr Avg. rate (2020-2023):  
= -1.13 ft/yr



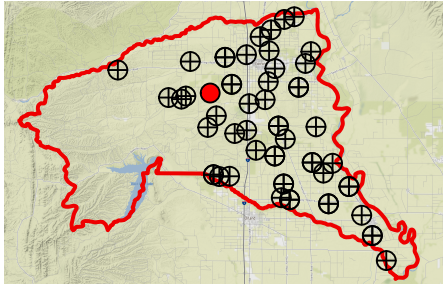
- - - GSE
- MO
- MT
- - - 5-year Interim milestone
- Spring WL trend (2020-2023, 3 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 24N04W36G001M

(Deep Zone) Well Depth: 750 ft. Perforation top & bottom: 320 – 750 ft bgs



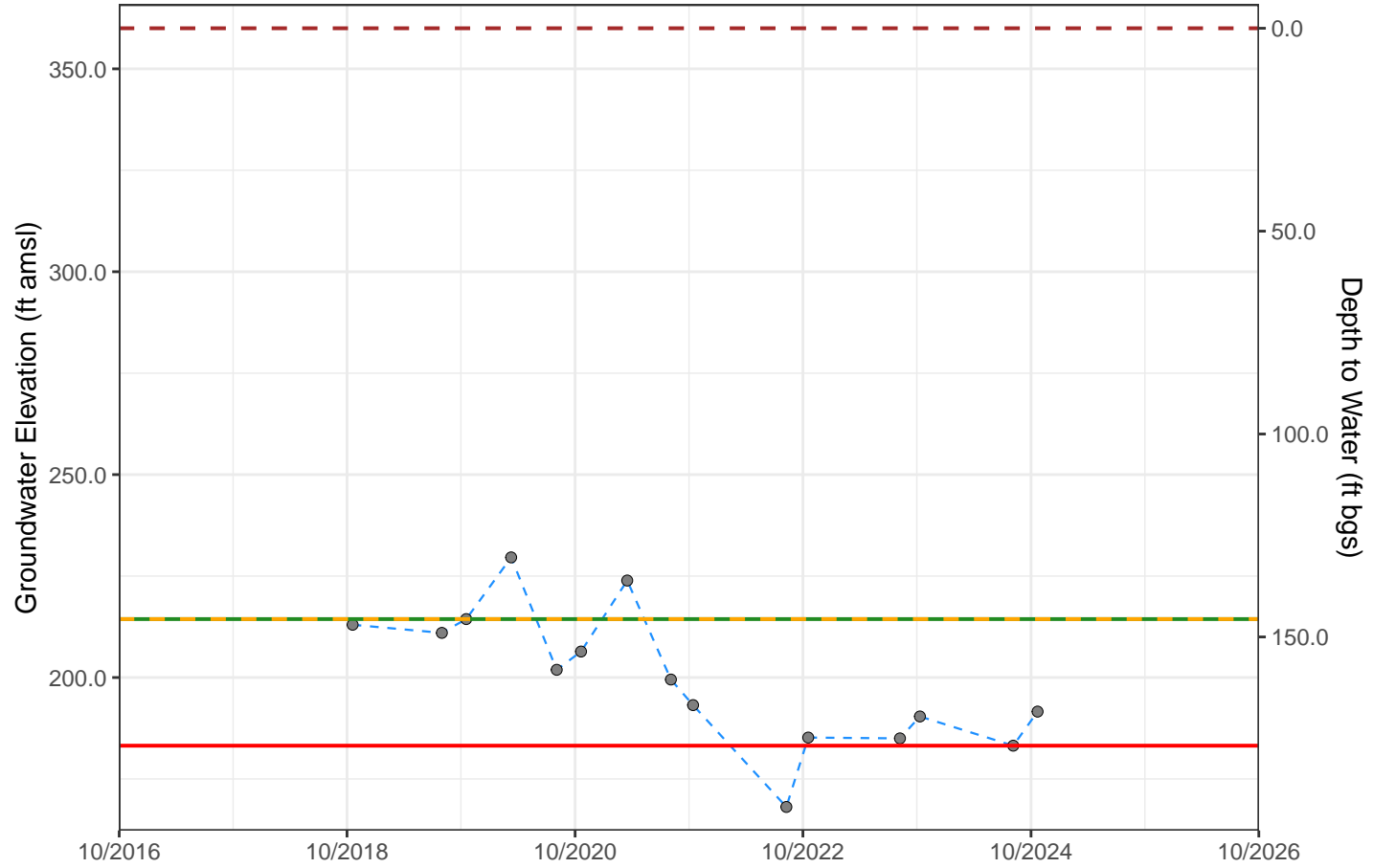
- Graphed Well
- ⊕ Other Well

MO GWE: 214.4 ft amsl  
MO DTW: 145.6 ft amsl

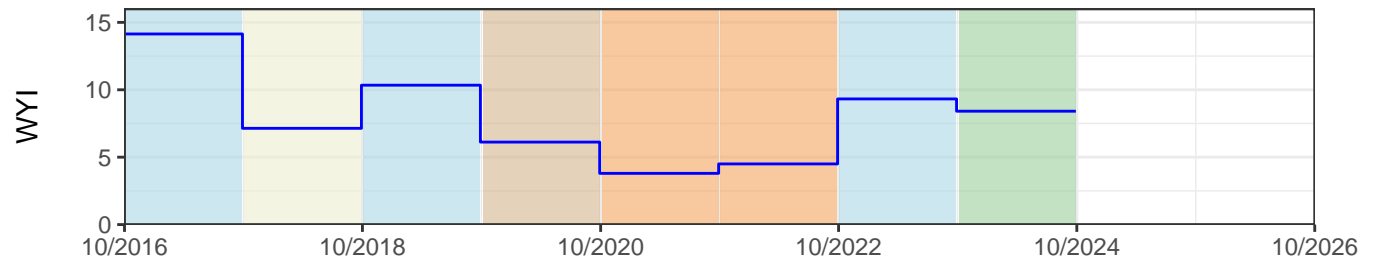
MT GWE: 183.2 ft amsl  
MT DTW: 176.8 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Insufficient spring GW level data to calculate statistics for 3 years



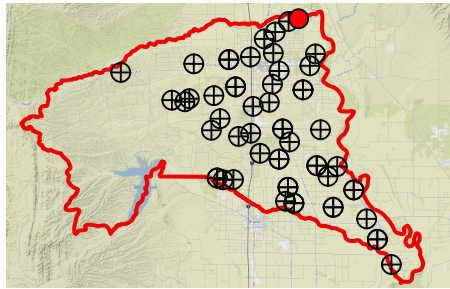
- - - GSE
- MT
- MO
- - - 5-year Interim milestone



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 25N02W31G002M

(Shallow Zone) Well Depth: 115 ft. Perforation top & bottom: 93 – 113 ft bgs



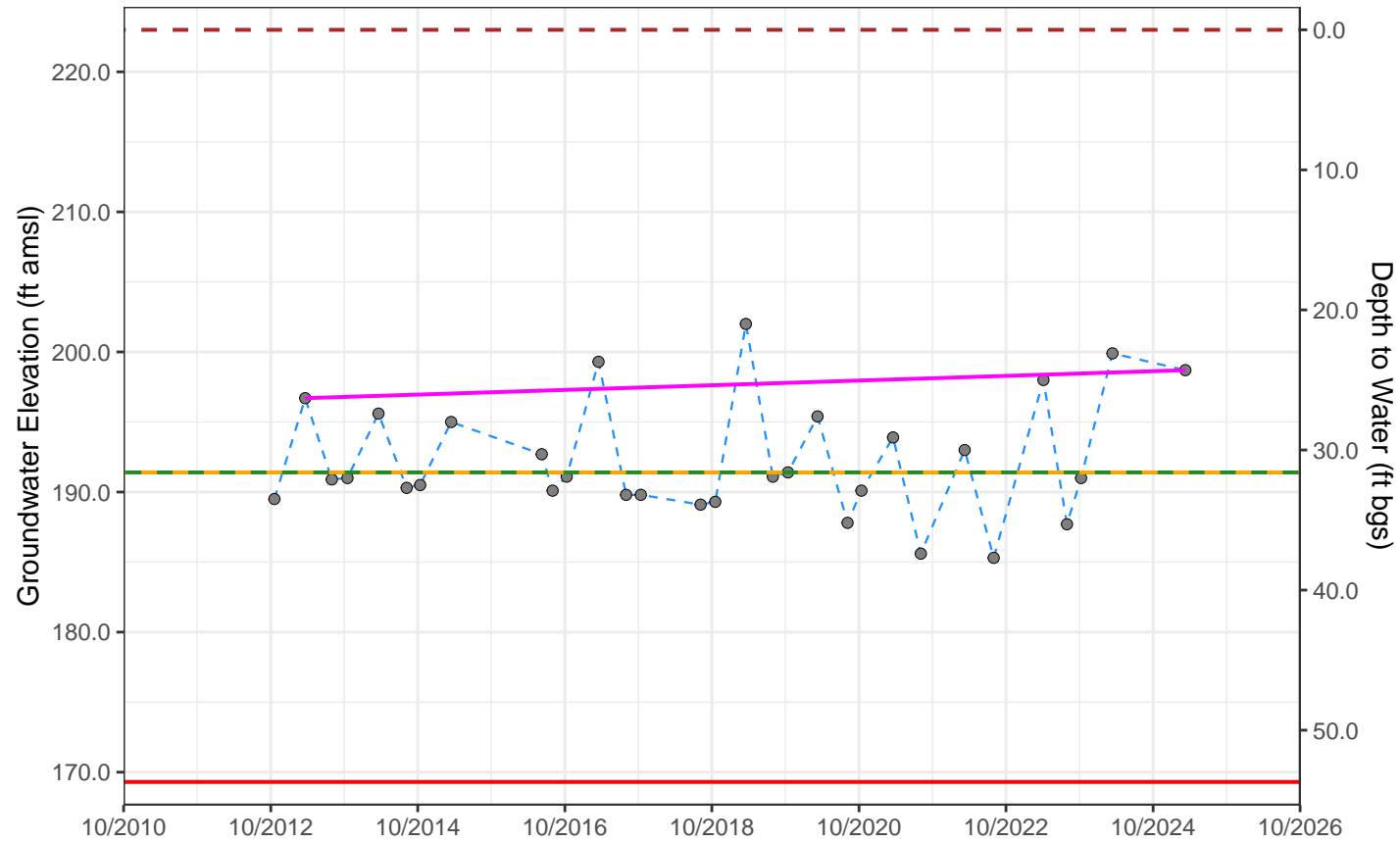
- Graphed Well
- ⊕ Other Well

MO GWE: 191.4 ft amsl  
MO DTW: 31.6 ft amsl

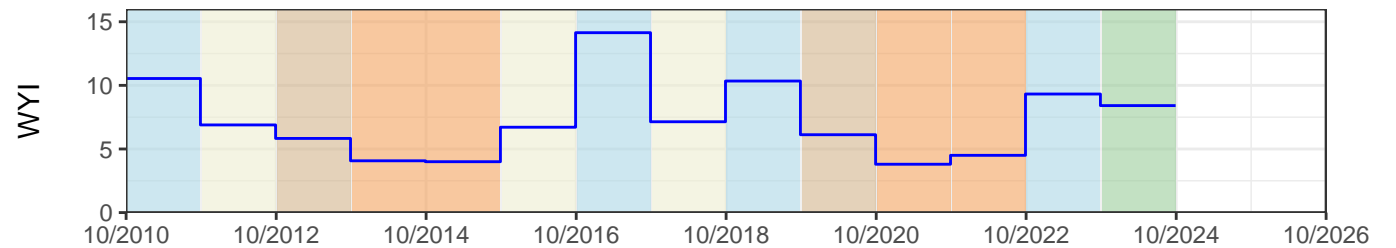
MT GWE: 169.3 ft amsl  
MT DTW: 53.7 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 12 years (2013 to 2025):  
Change = 2 ft  
Avg. rate of change = 0.17 ft/yr  
Avg. water level = 197.05 ft amsl  
5-yr Avg. rate (2021–2025):  
= 1.2 ft/yr



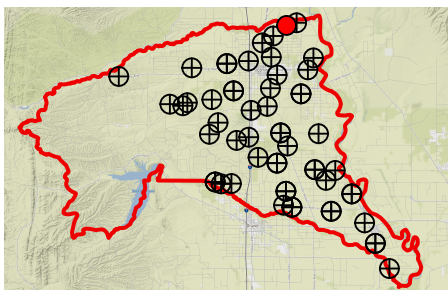
- - - GSE
- - - MO
- MT
- - - 5-year Interim milestone
- Spring WL trend (2013–2025, 12 yrs)



- Sacramento Valley Water Year Index
- WY Type:   Wet   Above Normal   Below Normal   Dry   Critical

# Corning Subbasin – State Well Number (SWN) 25N03W36H001M

(Deep Zone) Well Depth: 524 ft. Perforation top & bottom: Unknown



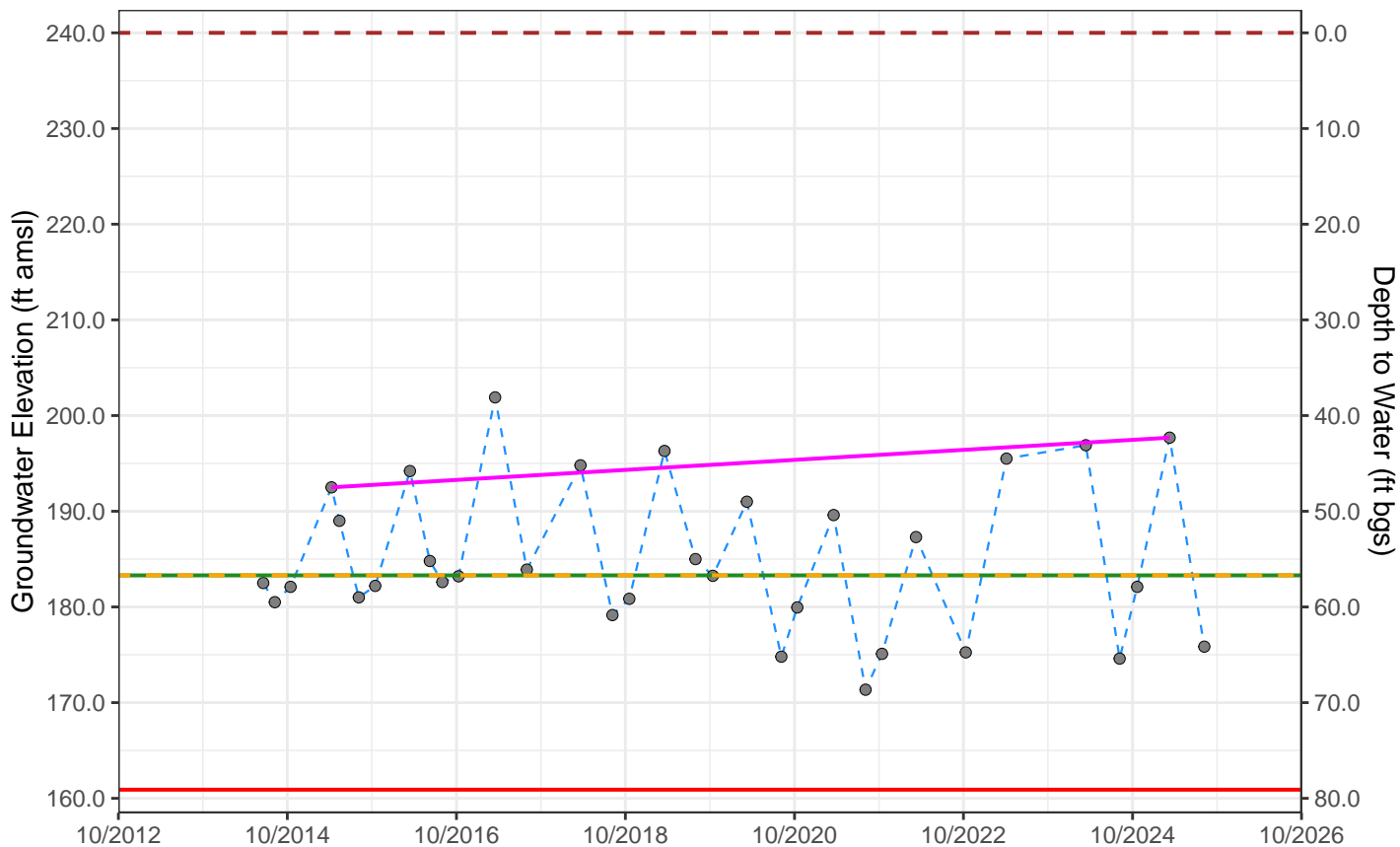
- Graphed Well
- ⊕ Other Well

MO GWE: 183.3 ft amsl  
MO DTW: 56.7 ft amsl

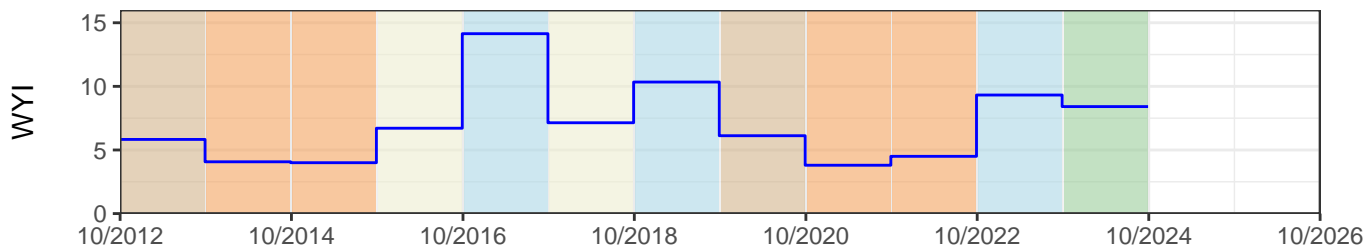
MT GWE: 160.9 ft amsl  
MT DTW: 79.1 ft amsl

Acronyms:  
GSE: Ground Surface Elevation  
GWE: Groundwater Elevation  
MO: Minimum Objective  
MT: Minimum Threshold  
DTW: Depth to Water  
bgs: Below Ground Surface  
amsl: Above Mean Sea Level  
NA: Not Available  
WY: Water Year

Statistics of spring water levels for past 10 years (2015 to 2025):  
Change = 5.19 ft  
Avg. rate of change = 0.52 ft/yr  
Avg. water level = 194.34 ft amsl  
5-yr Avg. rate (2021–2025):  
= 2.02 ft/yr



- GSE
- MO
- MT
- 5-year Interim milestone
- Spring WL trend (2015–2025, 10 yrs)



- Sacramento Valley Water Year Index
- WY Type: ■ Wet ■ Above Normal ■ Below Normal ■ Dry ■ Critical

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# Appendix B

Explanation of Sustainable Management Criteria



## Appendix B: Explanation of Sustainable Management Criteria

The Sustainable Groundwater Management Act (SGMA) requires a Groundwater Sustainability Plan (GSP) to define Sustainable Management Criteria (SMC) for the groundwater subbasin. The SMC offer guideposts and guardrails for groundwater managers seeking to achieve sustainable groundwater management. SGMA defines sustainable groundwater management as “the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results,” where the planning and implementation horizon is 50 years with the first 20 years spent working toward achieving sustainable groundwater management and the following 30 years (and beyond) spent maintaining it (California Water Code §10721).

“Undesirable Results” are associated with up to six Sustainability Indicators (SI), including groundwater levels, groundwater storage, water quality, seawater intrusion, land subsidence, and interconnected surface water. SGMA defines undesirable results as those having significant and unreasonable negative impacts. Failure to avoid undesirable results on the part of the GSAs may lead to intervention by the State. Once the sustainability goal and undesirable results have been locally identified, projects and management actions are formulated to achieve the sustainability goal and avoid undesirable results.



### *SI and associated undesirable results, if significant and unreasonable*

The associated undesirable results for each SI have been defined similarly across the Corning Subbasin. In turn, the rationale and approach for determining Minimum Thresholds and Measurable Objectives for each SI are the same across the Corning Subbasin.

The terminology for describing SMC is defined as follows:

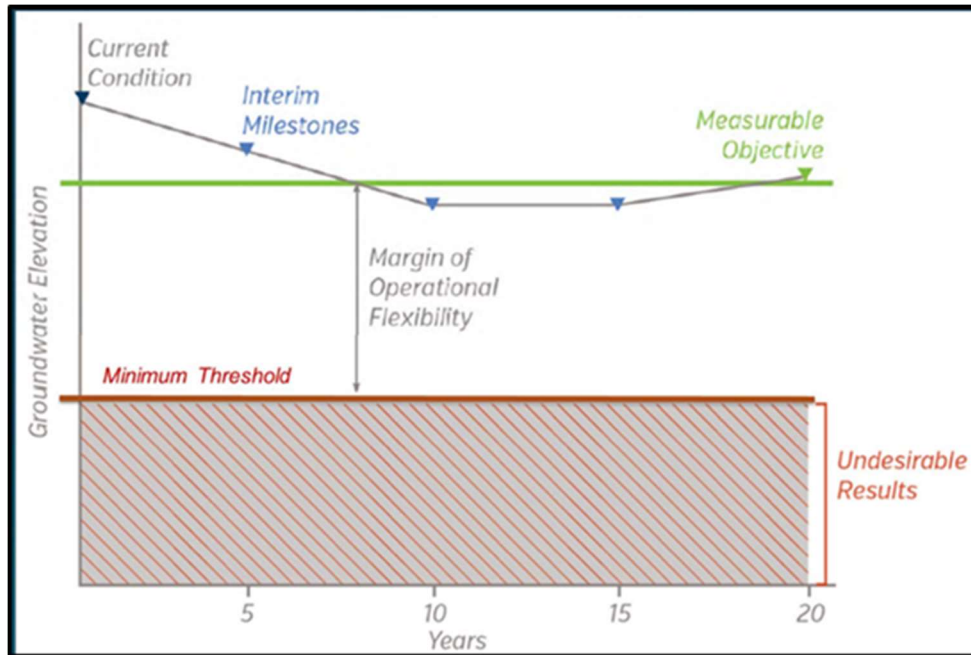
**Undesirable Results** – Significant and unreasonable negative impacts associated with each SI.

**Minimum Threshold (MT)** – Quantitative threshold for each SI used to define the point at which undesirable results may begin to occur.

**Measurable Objective (MO)** – Quantitative target that establishes a point above the MT that allows for a range of active management to prevent undesirable results.

**Margin of Operational Flexibility** – The range of active management between the MT and the MO.

**Interim Milestones (IMs)** – Targets set in increments of five years over the implementation period of the GSP offering a path to sustainability.



***Illustration of Terms Used for Describing Sustainable Management Criteria Using the Groundwater Level SI***

The Figure above illustrates these terms for the groundwater level SI.

SI are intended to be measured and compared against quantifiable SMC throughout a monitoring framework of Representative Monitoring Site (RMS) wells. Ongoing monitoring of SI can:

- Determine compliance with the adopted GSP
- Offer a means to evaluate the effectiveness of projects and management actions over time
- Allow for course correction and adaptation in five-year updates
- Facilitate understanding among diverse stakeholders
- Support decision-making on the part of the GSAs into the future

The SMC for the Corning Subbasin is fully explained and defined in Section 3 of the GSP available here: <https://sgma.water.ca.gov/portal/gsp/preview/94>

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# Appendix C

GSP Annual Reporting Elements Guide



## Groundwater Sustainability Plan Annual Report Elements Guide

Basin Name	Corning		
GSP Local ID	5-021.51		
<b>California Code of Regulations - GSP Regulation Sections</b>	<b>Groundwater Sustainability Plan Elements</b>	<b>Document page number(s) that address the applicable GSP element.</b>	<b>Notes: Briefly describe the GSP element does not apply.</b>
<b>Article 5</b>	<b>Plan Contents</b>		
<b>Subarticle 4</b>	<b>Monitoring Networks</b>		
<b>§ 354.40</b>	<b>Reporting Monitoring Data to the Department</b>		
	Monitoring data shall be stored in the data management system developed pursuant to Section 352.6. A copy of the monitoring data shall be included in the Annual Report and submitted electronically on forms provided by the Department.	40-50	
	Note: Authority cited: Section 10733.2, Water Code. Reference: Sections 10728, 10728.2, 10733.2 and 10733.8, Water Code.		
<b>Article 7</b>	<b>Annual Reports and Periodic Evaluations by the Agency</b>		
<b>§ 356.2</b>	<b>Annual Reports</b>		
	Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:		
	(a) General information, including an executive summary and a location map depicting the basin covered by the report.	5-12	
	(b) A detailed description and graphical representation of the following conditions of the basin managed in the Plan:		
	(1) Groundwater elevation data from monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:		
	(A) Groundwater elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.	17-20	
	(B) Hydrographs of groundwater elevations and water year type using historical data to the greatest extent available, including from January 1, 2015, to current reporting year.	21; 53-110	
	(2) Groundwater extraction for the preceding water year. Data shall be collected using the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector, and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.	21-26	
	(3) Surface water supply used or available for use, for groundwater recharge or in-lieu use shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.	25	
	(4) Total water use shall be collected using the best available measurement methods and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.	24-26	
	(5) Change in groundwater in storage shall include the following:		
	(A) Change in groundwater in storage maps for each principal aquifer in the basin.	26-33	
	(B) A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year.	31	
	(c) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.	34-50	



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# Appendix D

DWR Upload Tables



A. Groundwater Extractions								
Total Groundwater Extractions (AF)	Water Use Sector Urban (AF)	Water Use Sector Industrial (AF)	Water Use Sector Agricultural (AF)	Water Use Sector Managed Wetlands (AF)	Water Use Sector Managed Recharge (AF)	Water Use Sector Native Vegetation (AF)	Water Use Sector Other (AF)	Water Use Sector Other Description
207,000	31,500	0	166,600		0	-	8,900	Rural Residential

B. Groundwater Extraction Methods																								
Meters Volume (AF)	Meters Description	Meters Type	Meters Accuracy (%)	Meters Accuracy Description	Electrical Records Volume (AF)	Electrical Records Description	Electrical Records Type	Electrical Records Accuracy (%)	Electrical Records Accuracy Description	Land Use Volume (AF)	Land Use Description	Land Use Type	Land Use Accuracy (%)	Land Use Accuracy Description	Groundwater Model Volume (AF)	Groundwater Model Description	Groundwater Model Type	Groundwater Model Accuracy (%)	Groundwater Model Accuracy Description	Other Method(s) Volume (AF)	Other Method(s) Description	Other Method(s) Type	Other Method(s) Accuracy (%)	Other Method(s) Accuracy Description
2,300	Metered Municipal Wells	Direct	5%	Metered connection maintained by City of Corning and California Water Service Chico-Hamilton City	0					166,600	Land use estimates were derived from crop mapping and CropScape survey results	Estimate	20%	Typical uncertainty for water balance calculation	0					8,900	Rural residential groundwater extraction is estimated based on City of Red Bluff's 2020 Urban Water Management Plan 2020 usage of an average per capita water use of 181 gallons per capita per day. Population data from the 2020 census was coupled with water district boundary data to identify total population not serviced by municipal supplies	Estimate	15%	Uncertainties are from population estimates and gallon per capita per day estimates

C. Surface Water Supply										
Total Surface Water Supply (AF)	Methods Used To Determine	Water Source Type Central Valley Project (AF)	Water Source Type State Water Project (AF)	Water Source Type Colorado River Project (AF)	Water Source Type Local Supplies (AF)	Water Source Type Local Imported Supplies (AF)	Water Source Type Recycled Water (AF)	Water Source Type Desalination (AF)	Water Source Type Other (AF)	Water Source Type Other Description
26,100	Diversions for local supplies are estimated based on historic State Water Resource Control Board CalWATRS (California Water Accounting, Tracking, Reporting System) data for total diversions. Surface water delivery estimates are based on historic deliveries in the area that have occurred in dry and critical years. Note: values reflect applied water only.	0	0	0	26,100	0	0	0	0	

D. Total Water Use															
Total Water Use (AF)	Methods Used To Determine	Water Source Type Groundwater (AF)	Water Source Type Surface Water (AF)	Water Source Type Recycled Water (AF)	Water Source Type Reused Water (AF)	Water Source Type Other (AF)	Water Source Type Other Description	Water Use Sector Urban (AF)	Water Use Sector Industrial (AF)	Water Use Sector Agricultural (AF)	Water Use Sector Managed Wetlands (AF)	Water Use Sector Managed Recharge (AF)	Water Use Sector Native Vegetation (AF)	Water Use Sector Other (AF)	Water Use Sector Other Description
233,100	Methods used are a combination of estimates based on land use and population/ per capita water use, metered municipal water use, and estimates based on historic water rights data for dry and critical years	207,000	26,100	0	0	0		31,500	0	192,700	-	0	-	8,900	Rural Residential



Water Year 2025 Annual Report

# Appendix E

Water Use Analysis Methodology



# TECHNICAL MEMORANDUM

**To:** Luhdorff and Scalmanini Consulting Engineers  
**From:** Davids Engineering, Inc.  
**Date:** March 3, 2025  
**Subject:** **Water Use Analysis Methodology**

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## 1 Introduction

Pursuant to the Groundwater Sustainability Plan (GSP) regulations (23 CCR<sup>1</sup> Section 356.2), the GSP Annual Report for the Corning Subbasin (Subbasin) includes quantification of water supplies and water uses in the reporting year, including groundwater extraction by water use sector<sup>2</sup>. Water supplies and water uses in the Subbasin have been quantified based on the best available data sources and information, either collected from measured records or estimated where necessary.

While some groundwater extraction in the Subbasin is measured, most groundwater extraction is unmeasured, including extraction from privately owned wells. For the Corning Subbasin Annual Report (Annual Report), the approach used to estimate unmeasured groundwater extraction for the agricultural water use sector is referred to as the Groundwater Extraction Estimates from Earth Observations (GEEEO) process. In this approach, a spatial water use analysis is computed on a monthly basis using current land use data, climate conditions (e.g., precipitation and evapotranspiration), crop water demands, and other local information, allowing for estimation of total water use and estimated groundwater extraction, after accounting for the use of other available water supplies.

This approach differs from the water budget methodology used in GSP development, where a C2VSim-Fine Grid (C2VSim-FG) model application was used to generate historical, current, and projected water budgets for the Subbasin. The shift toward the GEEEO process is due to the time and cost constraints associated with updating the GSP groundwater model annually. Despite this change, key inputs and results from the GEEEO process have been compared with those of the GSP groundwater model to ensure consistency in the water use analyses.

This technical memorandum (TM) describes the methodology and data sources used in the GEEEO process. Results of the GEEEO process are documented in the Annual Report.

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<sup>1</sup> California Code of Regulations, Title 23, Division 2, Chapter 1.5, Subchapter 2. Groundwater Sustainability Plans.

<sup>2</sup> Water use sectors are identified in the GSP Regulations as “categories of water demand based on the general land uses to which the water is applied, including urban, industrial, agricultural, managed wetlands, managed recharge, and native vegetation” (23 CCR Section 351(a)).

## 2 GEEEO Process and Computational Approach

### 2.1 Computational Approach

The GEEEO process utilizes available geospatial data and information to quantify water use, including groundwater extraction volumes, spatially across the Subbasin:

1. First, geospatial evapotranspiration (ET) information at a pixel-scale is used to quantify the total consumptive water use and total applied water requirements during a given time period in a given area of the Subbasin, and geospatial land use information is used to help identify where irrigation water may have been applied (i.e., whether the area in question features irrigated agricultural land, versus idled land or undeveloped vegetation).
2. After quantifying total applied water requirements, available surface water supply and groundwater extraction data is incorporated into the GEEEO process by distributing that water out to specific regions where that water is applied (e.g., irrigated lands in surface water supplier service areas).
3. The remaining groundwater extraction needed to meet applied water demands is then calculated based on the difference between total applied water requirements and available water supply information, with consideration for effective precipitation.
4. Finally, the pixel-scale results can then be aggregated to the desired spatial or temporal domains of interest.

The result is a spatially distributed water use analysis calculated with a finer spatial resolution than was possible in the GSP water budgets. The pixel-scale water budget results provide greater insight into where water use occurs in the Subbasin and are configurable to create water use summaries for any region of the Subbasin. Additional details about the GEEEO computational approach are provided in Attachment A, generally following the process described in Hessels et al. (2022).

### 2.2 Spatial Resolution

GEEEO quantifies water use and groundwater extraction volumes with pixel-scale resolution (30 meters (m) x 30 m), corresponding to the spatial resolution of satellite imagery used in developing many of the GEEEO inputs. For those inputs that are not available at the 30 m x 30 m resolution, available data and information is distributed as averages over the area where that information is applicable (e.g., district-reported surface water deliveries are distributed as an average acre-feet per acre (AF/ac) over irrigated lands in that district's service area<sup>3</sup>). Additional information about the spatial resolution of specific data sources is provided in Section 3.

The fine spatial resolution of the GEEEO inputs and computations allows for highly configurable GEEEO results summaries. For the Annual Report, results are summarized by subregions that are defined to roughly correspond with the boundaries of the water budget regions in the GSP groundwater model, with distinction between water districts, managed wetlands and refuge areas, and out-of-district lands.

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<sup>3</sup> Future refinements to the GEEEO process could potentially incorporate field-scale surface water delivery records to improve spatial detail of results rather than equally distributing surface water deliveries across the irrigated lands within the district's service area.

## 2.3 Period and Timestep

For each Annual Report, the GEEEO process operates from 2016 through the current reporting year<sup>4</sup> on a monthly timestep, although only the results from the current reporting year are included in the Annual Report. The period and timestep are set according to data availability and reporting needs. However, the GEEEO process is configurable to operate on different timescales (e.g., daily or weekly). The start year is currently limited by the availability of geospatial ET information from OpenET, although further historical ET information is expected to be available in the near future.

## 3 Data Sources

The GEEEO process uses data sources and information that capture the unique, local conditions within the Subbasin to the extent available. Details about the data and information used in the GEEEO process are described below.

### 3.1 Evapotranspiration

ET, or consumptive water use, is the major driver of water use in the Subbasin, particularly agricultural use. In this context, consumptive water use is defined as *“the part of water withdrawn that is evaporated, transpired, incorporated into products or crops, consumed by humans or livestock, or otherwise removed from the immediate water environment”* (ASCE, 2016). Unlike surface runoff or infiltration of water into the groundwater system (through seepage, deep percolation, managed recharge, or other means), ET is water that cannot be recovered or directly reused in the Subbasin.

In the GEEEO process, ET is quantified from satellite-based remote sensing analyses available from OpenET. OpenET is a multi-agency web-based geospatial information system (GIS) utility that quantifies ET over time with a spatial resolution of 30 m x 30 m (approximately 0.22 acres). OpenET information is available in raster coverages of the Subbasin on both a daily and monthly timestep from 2016 through present.<sup>5</sup> The GEEEO process utilizes monthly rasters of the ensemble ET from OpenET to calculate total water use for the Annual Report.

While OpenET is a new utility, the underlying methodologies to quantify ET apply a variety of well-established modeling approaches that are widely used in government and research applications. The OpenET modeling approaches are also similar to the approaches used to quantify ET in the GSP groundwater model. Additional information about the OpenET team, data sources, and methodologies are available at: <https://openetdata.org/>.

### 3.2 Land Use

Areas in each water use sector in the Subbasin were identified using the most recent and reliable spatial land use data in the region, including:

1. Statewide crop mapping, available from the California Department of Water Resources (DWR) (DWR, 2024)

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<sup>4</sup> Annual Reports are required to be submitted by April 1 each year following the adoption of the GSP. The current reporting year for each Annual Report is the preceding water year (i.e., October 1 through September 30)

<sup>5</sup> OpenET raster information is typically available within about one month after the period has ended.

2. CropScape Cropland Data Layer coverage, available from the United States Department of Agriculture (USDA, 2024).

Land use data from these sources were compiled into 30 m x 30 m raster coverages of the Subbasin. To prepare the GEEEO process inputs, DWR data, which includes extensive ground-truthing review of results, is preferentially used to identify agricultural land (including irrigated and non-irrigated lands) and urban areas, and then USDA data is utilized to back-fill gaps of non-irrigated, idled, and non-developed land in the Subbasin. Local refinements are also applied, as needed, to account for local land use information.

These land use data sources and applications were similar to those used in development of the GSP water budgets. Comparisons were made to evaluate the consistency of the datasets and with earlier land use analyses; good correspondence was found for the major land use classes found in the Subbasin.

DWR data is typically available in provisional form approximately two years after a given year has passed. USDA data is typically available for the prior year in early- to mid-February. When data for the current reporting year is not yet available, raster coverages of the Subbasin are generally assembled utilizing land use data from the most recent, hydrologically similar year (i.e., similar water supply conditions and similar cropping patterns, to the extent possible). Idling of annual and ponded crops in a given year may also be locally refined through comparison with USDA data for the current reporting year or through an analysis of vegetation coverage in the current reporting year. However, it is noted that land use data is only used in the GEEEO process to identify areas in each water use sector where water is applied. The total water use for lands in the agricultural and managed wetlands water use sectors are determined through an analysis of OpenET data, regardless of the precise land use classification.

### 3.3 Precipitation

Spatial precipitation estimates were extracted from the Parameter-elevation Regressions on Independent Slopes Model (PRISM), developed by the PRISM Climate Group at Oregon State University. PRISM quantifies spatial precipitation estimates, among other climate parameters, based on available weather station data and modeled spatial relationships with topography and other factors influencing weather and climate.

PRISM data is available in raster coverages of the Subbasin on both a daily and monthly timestep, with a spatial resolution of 4 kilometer (km) x 4 km. The GEEEO process utilizes monthly rasters for the Annual Report analysis, and the precipitation results for each 4 km pixel are applied to each of the 30 m pixels within it (i.e., downscaled) for which ET and land use data are available. Additional information about the PRISM data and methodologies are available at: <https://prism.oregonstate.edu>. PRISM precipitation data is consistent with the historical precipitation inputs to the GSP groundwater model.

To calculate effective precipitation and, subsequently, evapotranspiration from precipitation (ETPR), PRISM precipitation data, estimated crop rooting depths, and soil property information are used as inputs. Estimated rooting depths are taken from the ranges listed in Appendix B of ASCE 70 (2016). For crops not listed in ASCE 70, rooting depths are based on the rooting depths of similar crops and professional judgement. Relevant soil properties include total soil depth, depth to restrictive layer, and available water holding capacity. Estimated soil properties are aggregated from the USDA soil survey geographic database (SSURGO) (Soil Survey Staff, 2025). ETPR is computed using the input parameters

(soil, precipitation, and rooting depth) and either the U.S. Bureau of Reclamation (USBR) method (Stamm, 1967) or the National Engineering Handbook Part 623 method (USDA, 1993), depending on local data availability, results, and conditions. For the USBR method, the effective precipitation bins have been modified from the original bins outlined in the USBR method documentation to match regional hydrology patterns..

### 3.4 Local Water Supply Data

As described in Section 2, available surface water supply and groundwater extraction data is incorporated into the GEEEO process to quantify the amount of known water supply available, prior to estimating the remaining groundwater extraction needed to meet demand. Where field-scale delivery measurements are available, the water supply volume delivered was distributed evenly across all irrigated areas of that field. Where field-scale delivery measurements are not available and only diversion volumes or aggregated delivery volumes for a larger area are available, water supply data is distributed evenly over the area where that water can be delivered for irrigation (e.g., average AF/ac over lands where that water is available for use).

Surface water supply and groundwater extraction data are collected from both publicly available and local sources. Information gathered may include, where applicable:

1. Water supply contract delivery records, from the United States Bureau of Reclamation (USBR), State Water Project (SWP), or other publicly available sources as applicable.
2. Water rights diversions records, from the State Water Resources Control Board (SWRCB) through the Electronic Water Rights Information Management System (eWRIMS)
3. Data requests to local water agencies and water users, requesting surface water diversions, surface water deliveries, surface water outflows, groundwater pumping records, or other available water use data. At the most detailed possible level, these include field-scale volumetric delivery measurements taken by Water or Irrigation District water operators, as required per the Water Conservation Act of 2009.

In cases where current surface water data is not available, general information on surface water inflows and outflows may be gathered from other local sources as available (e.g., Agricultural Water Management Plan water budgets). More information about surface water data sources is described in the Annual Report.

While groundwater extraction data is not available in many parts of the Subbasin, local data is requested each year so that new data can be incorporated into the GEEEO process as it becomes available. It is noted that while groundwater extraction for municipal water supply systems is generally reported for urban areas in the Annual Report based on SWRCB and locally provided data, groundwater extraction for municipal areas is not directly included in the GEEEO process due to underlying differences in how the majority of water is used in urban areas. This also applies to estimates of rural residential groundwater use (e.g., domestic water use pumped through private domestic wells) outside of urban areas. The data sources and approaches used to quantify municipal and rural residential groundwater extraction are described in the Annual Report.

### 3.5 Other Agronomic Data

Other agronomic and climate-related data that is incorporated into the GEEEO process includes:

1. Representative consumptive use fractions for crops (i.e., fraction of total applied water that is consumed through ET). Values are based on typical irrigation methods and efficiencies for crops.
2. Conveyance system fractions for subregions (i.e., fraction of diverted water that is delivered, accounting for losses).
3. Reuse fractions for subregions (i.e., fraction of delivered water that is reused).

Information gathered from local sources is used where available, otherwise representative values for agronomic practices in the region are used.

## 4 References

American Society of Civil Engineers (ASCE). 2016. ASCE Manuals and Reports on Engineering Practice No. 70, Evaporation, Evapotranspiration, and Irrigation Water Requirements (Second Edition).

California Department of Water Resources (DWR). 2024. Provisional 2022 Statewide Crop Mapping GIS Data, Updated January 2024. Available at: <https://data.cnra.ca.gov/dataset/statewide-crop-mapping>.

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Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database for California. Available online. Accessed January 15, 2025.

[Stamm, G.G. \(1967\). Problems and Procedures in Determining Water Supply Requirements for Irrigation Projects. In \*Irrigation of Agricultural Lands\* \(eds R.M. Hagan, H.R. Haise and T.W. Edminster\). <https://doi.org/10.2134/agronmonogr11.c45>](https://doi.org/10.2134/agronmonogr11.c45)

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United States Department of Agriculture (USDA); National Agricultural Statistics Service (NASS). 2024. 2023 Nationwide Crop Mapping GIS Data, Released January 31, 2024. Available at: <https://croplandcros.scinet.usda.gov/>.

United States Department of Agriculture (USDA). 1993. National Engineering Handbook (NEH). Chapter 2, part 623, Irrigation water requirements. Washington, D.C.: U.S. Dept. Of Agriculture, Soil Conservation Service.

## Attachment A. GEEEO Computational Approach Details

Figures A-1 and A-2, below, present a schematic of the GEEEO computational approach as it has been developed and is being generally applied to support Annual Report Development.

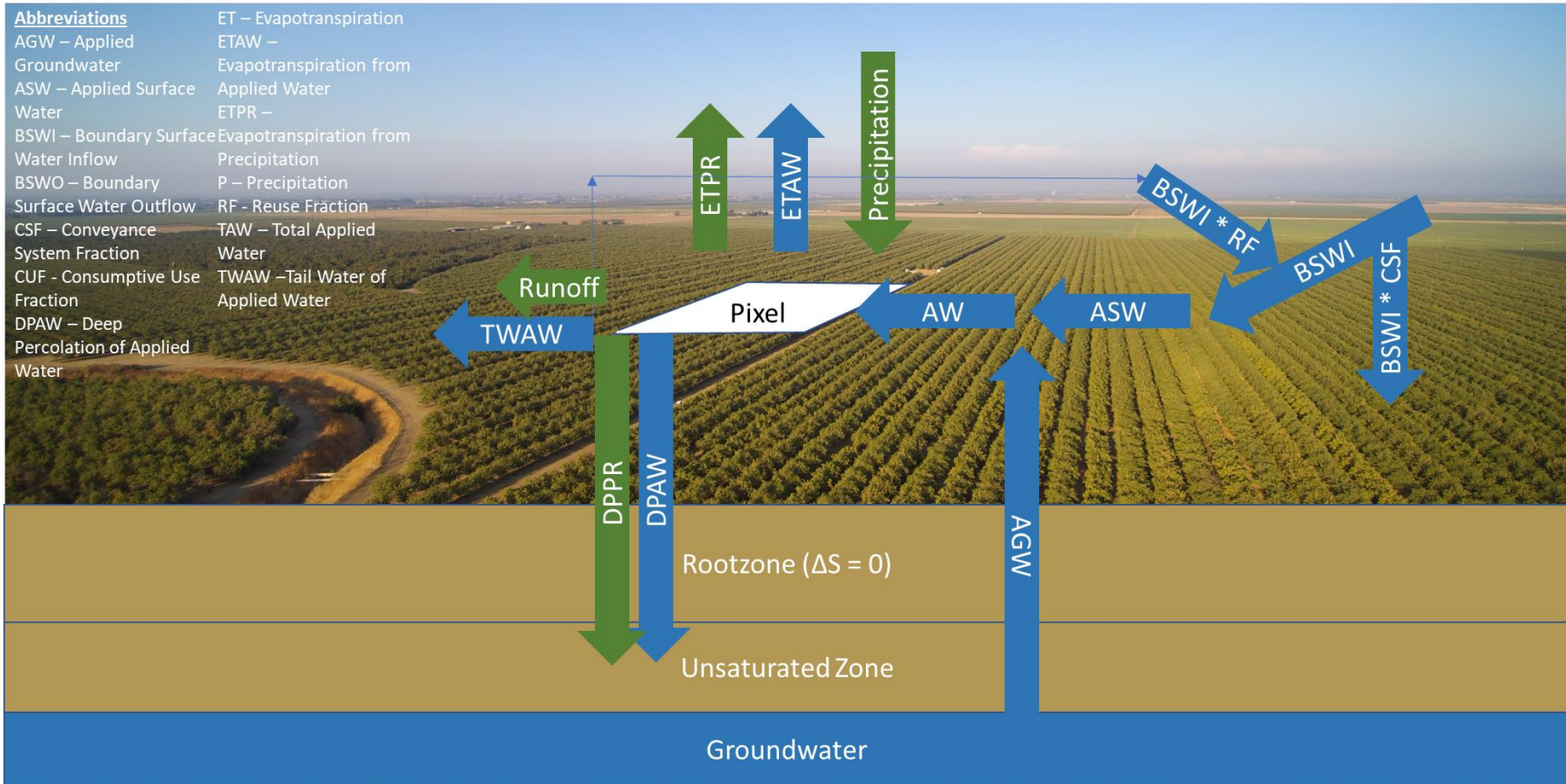


Figure A-1. Inflows and Outflows to Each 30 m x 30 m Pixel in the GEEEO Process.

**Abbreviations**  
 AGW – Applied Groundwater  
 ASW – Applied Surface Water  
 AW – Total Applied Water  
 BSWI – Boundary Surface Water Inflow  
 BSWO – Boundary Surface Water Outflow  
 CSF – Conveyance System Fraction  
 CUF - Consumptive Use Fraction  
 DPAW – Deep Percolation of Applied Water

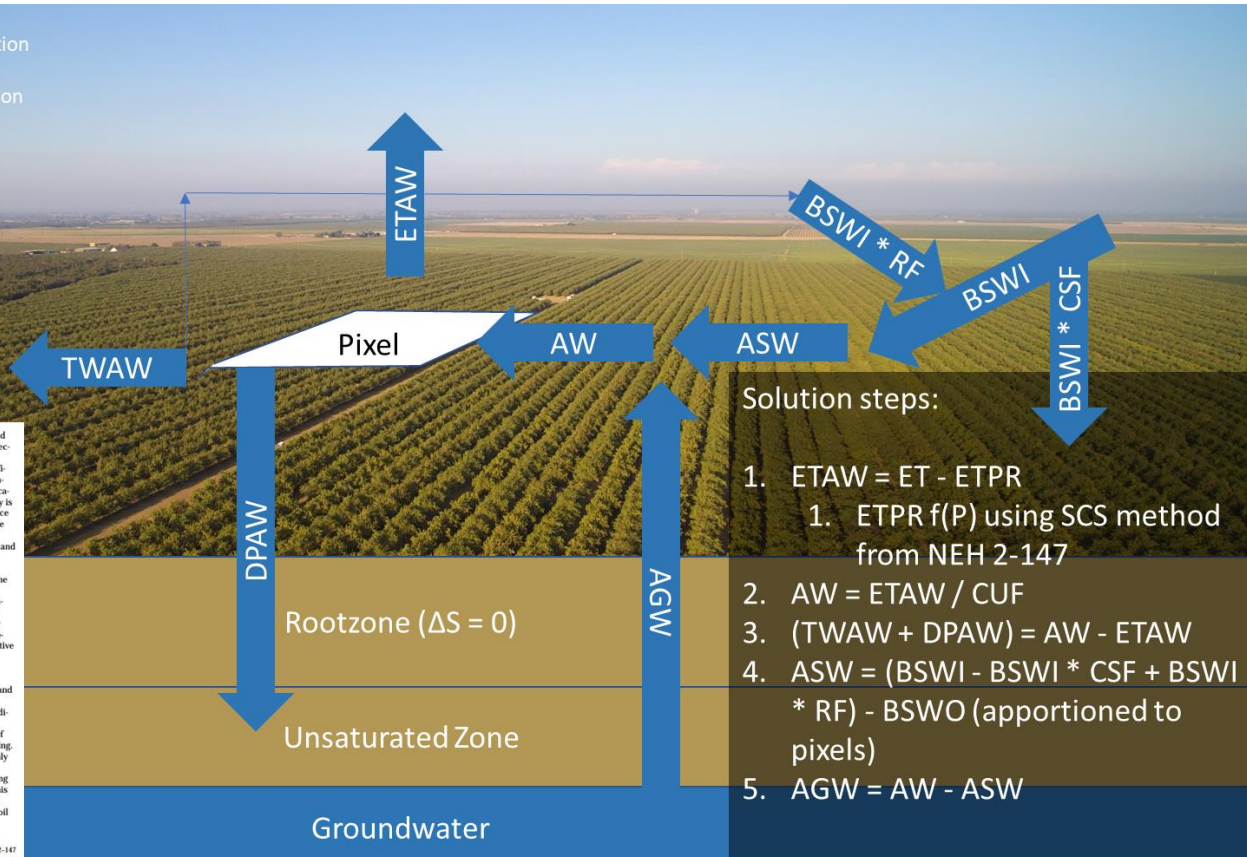
ET – Evapotranspiration  
 ETAW – Evapotranspiration from Applied Water  
 ETPR – Evapotranspiration from Precipitation  
 P – Precipitation  
 RF - Reuse Fraction  
 TAW – Tail Water of Applied Water

(2) Monthly effective precipitation  
 SCS scientists analyzed 50 years of rainfall records at 22 locations throughout the United States to develop a technique to predict effective precipitation (USDA 1970). A daily soil moisture balance incorporating crop evapotranspiration, rainfall, and irrigation was used to determine the evapotranspiration effectiveness. The resulting equation for estimating effective precipitation is: [2-84]  

$$P_e = SF \left( 0.70917 P_m^{0.82418} - 0.11556 \left( 10^{0.02428 E T_c} \right) \right)$$
  
 where:  
 $P_e$  = average monthly effective monthly precipitation (in)  
 $P_m$  = monthly mean precipitation (in)  
 $E T_c$  = average monthly crop evapotranspiration (in)  
 $SF$  = soil water storage factor  
 The soil water storage factor was defined by: [2-85]  

$$SF = (0.531747 + 0.285164 D - 0.057697 D^2 + 0.003804 D^3)$$
  
 where:  
 $D$  = the usable soil water storage (in)  
 The term D was generally calculated as 40 to 60 percent of the available soil water capacity in the crop root zone, depending on the irrigation management practices used.  
 The solution to equation 2-84 for D = 3 inches is given in table 2-43 and figure 2-38. For other values of D, the effective precipitation values must be multiplied by the corresponding soil water storage factor given in

The procedures used to develop equations 2-84 and 2-85 did not include two factors that affect the effectiveness of rainfall. The soil infiltration rate and rainfall intensity were not considered because sufficient data were not available or they were too complex to be readily considered. If in a specific application the infiltration rate is low and rainfall intensity is high, large amounts of rainfall may be lost to surface runoff. A sloping land surface would further reduce infiltration amounts. In these cases the effective precipitation values obtained from equations 2-84 and 2-85 need to be reduced.  
 A recent comparison (Patswardhan, et al. 1990) of the USDA-SCS method (USDA 1970) with a daily soil moisture balance incorporating surface runoff highlighted the need for this modification. The authors concluded that the USDA-SCS method was in fairly good agreement with the daily water balance procedure for well drained soils, but overpredicted effective precipitation for poorly drained soils.  
 The USDA-SCS method is generally recognized as applicable to areas receiving low intensity rainfall and to soils that have a high infiltration rate (Dastane 1974). The method averages soil type, climatic conditions, and soil-water storage to estimate effective precipitation. This provides reasonable estimates of effective precipitation, especially for project planning. Further, the procedures were designed for a monthly time step. If additional detail is needed for a more thorough project analysis or for irrigation scheduling purposes, a daily time step would be required. In this case more sophisticated techniques can be used to estimate effective precipitation. Computer-based soil



- Solution steps:**
1.  $ETAW = ET - ETPR$ 
    1.  $ETPR = f(P)$  using SCS method from NEH 2-147
  2.  $AW = ETAW / CUF$
  3.  $(TAW + DPAW) = AW - ETAW$
  4.  $ASW = (BSWI - BSWI * CSF + BSWI * RF) - BSWO$  (apportioned to pixels)
  5.  $AGW = AW - ASW$

**Figure A-2. Solution Steps for Calculating Applied Groundwater (AGW) in Each 30 m x 30 m Pixel in the GEEEO Process.**



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# Appendix F

Water Quality



Well ID	Alt/New Well ID	Water System No.	Local Well ID	Type	Monitoring Program	Well Screen Interval (ft bgs)	Latitude (NAD 83)	Longitude (NAD 83)	Last Sample Date	TDS (mg/L)	Nitrate (mg/L)	Arsenic (mg/L)
22N01W29N001M				Observation	DWR	859 - 1135	39.72627	-122.01052	5/2/2017	303	0	4.63
22N01W29N002M				Observation	DWR	549 - 641	39.72627	-122.01052	5/8/2017	200	0.2	4.65
22N01W29N003M				Observation	DWR	189 - 380	39.72627	-122.01052	5/2/2017	350	5.49	1.36
22N01W29N004M				Observation	DWR	89 - 99	39.72627	-122.01052	5/2/2017	329	2.67	1.14
22N02W01N001M				Observation	DWR	810 - 1050	39.78356	-122.04614	5/8/2017	189	0	4.7
22N02W01N002M				Observation	DWR	700 - 710	39.78356	-122.04614	5/8/2017	189	0	6.87
22N02W01N003M				Observation	DWR	210 - 370	39.78356	-122.04614	5/8/2017	256	3.95	2.23
22N02W01N004M				Observation	DWR	70 - 80	39.78356	-122.04614	5/8/2017	144	0.5	0.703
22N02W15C003M				Observation	DWR	370 - 380	39.76344	-122.07716	5/2/2017	166	0	0.699
22N02W15C004M				Observation	DWR	210 - 220	39.76344	-122.07716	5/2/2017	244	0	0.574
22N02W15C005M				Observation	DWR	60 - 70	39.76344	-122.07716	5/2/2017	290	0.1	0.384
22N02W18C001M				Observation	DWR	841 - 1029	39.76820	-122.13645	4/25/2017	1005	0	7.67
22N02W18C002M				Observation	DWR	414 - 434	39.76820	-122.13645	4/25/2017	3722	0	0.702
22N02W18C003M				Observation	DWR	165 - 175	39.76820	-122.13645	4/25/2017	256	1.6	1.69
22N02W18C004M				Observation	DWR	55 - 65	39.76820	-122.13640	4/25/2017	336	5.22	0.633
22N03W01R001M				Observation	DWR	470 - 480	39.78662	-122.14550	4/25/2017	298	6.35	0.758
22N03W01R002M				Observation	DWR	270 - 280	39.78662	-122.14552	4/25/2017	177	0	13.8
22N03W01R003M				Observation	DWR	60 - 70	39.78662	-122.14552	4/25/2017	290	8.04	0.605
24N02W29N003M				Observation	DWR	200 - 290	39.89962	-122.12275	12/10/2015	202	0	6.11
24N03W29Q001M				Observation	DWR	130 - 360	39.90305	-122.22456	12/9/2015	94	1.2	0.91
24N03W29Q002M				Observation	DWR	490 - 550	39.90305	-122.22456	12/16/2015	206	1.1	2.93
24N03W29Q003M				Observation	DWR	650 - 710	39.90305	-122.22456	12/9/2015	173	0.84	1.66
SWWQC00020				Domestic	ILRP	134 - 161	39.94540	-122.22980	9/1/2025	NA	20	NA
BRE-MW1S				Observation	Dairy	15 - 30	39.83378	-122.133	11/26/2013	250	6.9	NA
BRE-MW1D				Observation	Dairy	85 - 100	39.83378	-122.133	NA	NA	NA	NA
BRE-MW2S				Observation	Dairy	95 - 105	39.82874	-122.133	11/26/2013	310	2.9	NA
BRE-MW2D				Observation	Dairy	116 - 126	39.82871	-122.132	NA	NA	NA	NA
BRE-MW3S				Observation	Dairy	88 - 98	39.83096	-122.125	11/26/2013	200	2.6	NA
Red 5				Irrigation	Glenn County	140 - 350	39.7834	-122.14048	8/7/2025	597	NA	NA
Red 11				Irrigation	Glenn County	100 - 320	39.73185	-122.0094	8/21/2025	NA	NA	NA
Red 12				Irrigation	Glenn County	--	39.68637	-121.97684	8/7/2025	875	NA	NA
Red 13				Irrigation	Glenn County	80 - 430	39.75342	-122.076373	NA	NA	NA	NA
5201083-001		Bartels Giant Burger	WELL 01	Public Drinking Water Supply	SWRCB DDW	180-260	39.92794	-122.20275	--	--	--	--

5200670-001	CA5200 670_001 _001	Black Butte Lake, Buckhorn Group, USCOE	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.81224	-122.37418	4/3/2025	NA	< 0.4	NA
5200672-001	CA5200 672_001 _001	Black Butte Lake, Buckhorn RA, USCOE	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.81061	-122.36676	4/3/2025	NA	< 0.4	NA
5201142-002	CA5201 142_002 _002	Black Butte Lake, Headqua rters, USCOE	WELL 02 NEW WELL	Public Drinking Water Supply	SWRCB DDW	136 - 196	39.81384	-122.32873	4/3/2025	NA	< 0.4	NA
1110002-001	CA1110 002_001 _001	Cal- Water Service Co. - Hamilton City	WELL 01 01	Public Drinking Water Supply	SWRCB DDW	60 - 312	39.73898	-122.00993	7/9/2025	NA	2.5	NA
1110002-002	CA1110 002_002 _002	Cal- Water Service Co. - Hamilton City	WELL 02 01	Public Drinking Water Supply	SWRCB DDW	70 - 130	39.74412	-122.01423	7/9/2025	NA	2.9	NA
1110002-003	CA1110 002_003 _003	Cal- Water Service Co. - Hamilton City	WELL 02 02	Public Drinking Water Supply	SWRCB DDW	71 - 122	39.74400	-122.01417	6/24/2025	260	2.6	< 2
1100527-001	CA1100 527_001 _001	Capay Joint Union Elem. School	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.79773	-122.08427	7/7/2025	NA	7.9	NA
5210001-001	CA5210 001_001 _001	City of Corning	6TH ST. WELL	Public Drinking Water Supply	SWRCB DDW	123 - 260	39.93101	-122.18367	9/25/2024	NA	3.4	NA
5210001-002	CA5210 001_002 _002	City of Corning	BLACKB URN AVE. WELL	Public Drinking Water Supply	SWRCB DDW	195 - 205	39.93525	-122.16973	9/24/2025	NA	1.01	NA
5210001-003	CA5210 001_003 _003	City of Corning	BUTTE ST. WELL	Public Drinking Water Supply	SWRCB DDW	130 - 230	39.93017	-122.17953	9/24/2025	NA	3	NA
5210001-005*		City of Corning	PEACH ST. WELL	Public Drinking Water Supply	SWRCB DDW	150 - 500	39.92502	-122.17414	--	--	--	--
5210001-008	CA5210 001_008 _008	City of Corning	WELL 06 EDITH AVE.	Public Drinking Water Supply	SWRCB DDW	160 - 262	39.93415	-122.19724	9/24/2025	NA	2.12	NA
5210001-009	CA5210 001_009 _009	City of Corning	FRIPP STREET WELL	Public Drinking Water Supply	SWRCB DDW	200 - 260	39.92948	-122.16488	9/24/2025	NA	0.96	NA
5210001-010	CA5210 001_01 _010	City of Corning	HIGHWA Y 99W WELL	Public Drinking Water Supply	SWRCB DDW	120 - 300	39.91625	-122.19534	9/24/2025	NA	3.82	NA

5210001-019	CA521001_019_019	City of Corning	CLARK PARK WELL	Public Drinking Water Supply	SWRCB DDW	--	39.92042	-122.16678	11/20/2024	NA	0.94	NA
5200255-001	CA5200255_001_001	Corning RV Park	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.93436	-122.20217	9/11/2025	NA	6	NA
5200541-001	CA5200541_001_001	E Headstart	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.97890	-122.16485	8/7/2025	NA	2.5	NA
1110300-001	CA1110300_001_001	Irvine Finch River Access	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.75027	-121.99764	10/9/2024	NA	< 0.4	NA
5200338-001	CA5200338_001_001	Jehovah's Witnesses - Corning	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.92836	-122.15456	8/13/2025	NA	1.2	NA
5200520-003	CA5200520_003_003	Kirkwood Elementary School	WELL 02	Public Drinking Water Supply	SWRCB DDW	--	39.85710	-122.16315	6/18/2025	NA	1.55	< 2
1100440-001	CA1100440_001_001	Lake Elementary School	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.76932	-122.15948	4/30/2025	NA	4.28	< 2
5200516-001*		Lazy Corral Mobile Home Park	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.92106	-122.19675	--	--	--	--
5200865-001	CA5200865_001_001	Maywood Farms	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.90502	-122.22567	4/9/2025	NA	1.78	NA
5200556-001	CA5200556_001_001	Maywood Mobile Home Park	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.93689	-122.20201	3/27/2025	NA	5.8	NA
5200565-001	CA5200565_001_001	Richfield Elementary School	WELL 01	Public Drinking Water Supply	SWRCB DDW	--	39.97455	-122.14360	11/12/2024	NA	1.8	NA
5201055-001	CA5201055_001_001	Sierra Pacific Industries - Richfield	WELL 01 - RICHFIELD	Public Drinking Water Supply	SWRCB DDW	--	39.98038	-122.17052	3/19/2025	NA	0.44	NA
5200551-001	CA5200551_001_001	Woodson Bridge Mobile Home Park	WELL 01	Public Drinking Water Supply	SWRCB DDW	100 - 140	39.90942	-122.09708	7/16/2025	NA	1.2	NA

\* indicates inactive well or unavailable data



Water Year 2025 Annual Report

# Appendix G

PMA Progress







Water Year 2025 Annual Report

# Appendix H

DWR Letter





CALIFORNIA DEPARTMENT OF WATER RESOURCES

# SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE

715 P Street, 8<sup>th</sup> Floor | Sacramento, CA 95814 | P.O. Box 942836 | Sacramento, CA 94236-0001

August 22, 2025

Lisa Hunter  
Corning Subbasin – Plan Manager  
225 North Tehama Street  
Willows, CA 95988  
[lhunter@countyofglenn.net](mailto:lhunter@countyofglenn.net)

RE: Review of Annual Report for the Corning Subbasin, Water Year 2024

Dear Lisa Hunter,

As the basin point of contact for the groundwater sustainability plan (GSP) in the Corning Subbasin (Subbasin), this letter is to inform you that the Department of Water Resources (Department) has completed the review of the annual report for the Subbasin for Water Year 2024 and is requesting additional information.

The Sustainable Groundwater Management Act (SGMA) requires on April 1, following the adoption of a GSP and annually thereafter, an annual report be submitted to the Department. (Wat. Code § 10728). Once an annual report has been submitted, the Department is required to: notify the submitting agency of receipt within 20 days, notify the submitting agency in writing if additional information is required, and review the information to determine whether the basin's GSP is being implemented in a manner likely to achieve the sustainability goal for the basin (23 CCR § 355.8).

The Department noted that the annual report provided an update on all the applicable sustainable management criteria for the Basin/Subbasin, as required by GSP Regulations (23 CCR § 356.2). The Department expects this information will continue to be provided in subsequent annual reports, along with a description of progress made toward implementing the Plan for each of the applicable sustainable indicators.

Based on the review of the annual report, the Department requests additional information pursuant to 23 CCR § 355.8.(b). Department staff identified several pieces of additional information the GSA should provide.

Department staff note that according to several undesirable result metrics, the Corning Subbasin is currently experiencing multiple minimum threshold exceedances and appears to be at risk for experiencing undesirable results during the upcoming water year. The fact that these groundwater level conditions were experienced during an above normal water year in 2024 merits consideration of whether adjustments in basin management are required to remain on track to achieve sustainability. Staff request

additional information from the GSA on how the GSA is or will be implementing Projects and Management Actions (PMAs) in response to exceeding minimum thresholds.

The 2024 GSP identifies an undesirable result condition for groundwater levels as one where 10 dry supply wells occur within a Thiessen polygon or when water levels at any Representative Monitoring Points (RMP) decline 7.5 feet over a five year period.<sup>1</sup> Staff note that the 2024 Annual Report provides a comparison of Fall 2023 and Fall 2024 groundwater levels that indicates of 54 RMPs, 17 did not have enough measurements taken to make a comparison, 17 experienced higher groundwater elevations in fall 2024 than fall 2023, and 20 experienced lower groundwater elevations in fall 2024 than fall 2023.<sup>2</sup> Table 5-2 also indicates that nine RMP were lower in fall 2024 by over five feet, and five of those nine experienced a decline in elevation over 7.5 feet, indicating that these five locations are potentially going to experience an undesirable result as defined in the 2024 GSP.

The 2024 Corning Annual Report identifies an undesirable result for groundwater storage as occurring when more than 20% of wells drop below their groundwater levels minimum threshold in two consecutive fall measurements, using levels as a proxy for storage,<sup>3</sup> and the 2024 Corning Annual Report indicates that 13 RMPs fell below minimum thresholds during this year.<sup>4</sup> Staff note that 20% of the monitoring network's 54 RMP locations is 11 RMPs, and that if the same 13 wells fall below minimum thresholds next year, the Subbasin would be experiencing undesirable results.

Staff additionally note that the 2024 Corning GSP identifies declining groundwater levels as an ongoing concern in the basin and states that "substantial portions of the subbasin appear to have an unsustainable water supply."<sup>5</sup> However, the 2024 Corning Annual Report indicates that minimal progress has been made on implementation of PMAs that address declining groundwater levels, with only the California Olive Ranch project showing progress.<sup>6</sup> The GSAs should clearly identify specific projects and management actions to address the "substantial portions of the subbasin that appear to have an unsustainable water supply."

Based on the issues identified above, the additional information that must be submitted in all future annual reports includes the following:

1. Detailed description of implementation actions taken by the GSAs to avoid and reverse the occurrence of minimum threshold exceedances and/or undesirable results. This information should clearly articulate how the GSAs are making adequate progress to reach the Subbasin's sustainability goal.

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<sup>1</sup> 2024 Corning GSP, Section 6.6.1, p. 428.

<sup>2</sup> 2024 Corning Annual Report, Table 5-2, pp. 39-40.

<sup>3</sup> 2024 Corning Annual Report, Section 5.2.1, p. 38.

<sup>4</sup> 2024 Corning Annual Report, Section 5.2.1, p. 38.

<sup>5</sup> 2024 Corning GSP, Section 6.6.1, p. 428.

<sup>6</sup> 2024 Corning Annual Report, Table 5-6, p. 49, Section 5.4, pp. 49-54.

2. Description of specific projects and management actions to address the “substantial portions of the subbasin that appear to have an unsustainable water supply” as described by the GSAs.

Inclusion of the information requested in future annual reports is particularly relevant when the Department initiates a periodic review of a GSP. Periodic reviews utilize annual report information to examine basin condition trends and assess whether or not GSP implementation remains on track to achieve sustainability. Failure to provide the additional information requested may prompt the Department to initiate a periodic review, which may result in DWR determining that a Plan or its implementation is inadequate and referral to the State Water Resources Control Board under SGMA’s state intervention provisions.

Additionally, two minor issues were noted during the review:

- The annual report’s monitoring summary table<sup>7</sup> provides values for Representative Monitoring Sites (RMS) that are labeled as the 2024 ‘spring (seasonal high)’ and ‘fall (seasonal low)’, however Department staff note that based on data submitted to the SGMA Portal,<sup>8</sup> measurements taken by the GSA in August are lower than those taken in October in many RMS, and note that the table presents the higher elevation October measurements, which are not the seasonal low. Staff recommend the GSA provide the seasonal low as required by the GSP regulations<sup>9</sup> in future annual reports. Additionally, staff recommend the GSA include the date of monitoring in its reporting of seasonal highs and lows in its annual reports and when providing these measurements in other contexts.
- The GSP indicates that the GSA has selected 54 representative monitoring site (RMS) locations for the chronic lowering of groundwater levels. The annual report indicates the GSA performed spring (seasonal high) monitoring on 36 (66%) of the RMS wells, and fall (seasonal low) monitoring on 43 (80%) of the RMS wells.<sup>10</sup> Failure to collect data from a significant number of representative monitoring sites will likely affect the ability of the GSA to evaluate whether undesirable results are occurring and could affect the ability of the GSA to achieve its sustainability goal. The lack of such information also may hinder or prevent the Department from tracking plan implementation and assessing the continued likelihood of achieving sustainability.

Therefore, to address these minor issues, Department staff request that the GSA use the seasonal low measurement as required by GSP regulations and include the measurement date of the seasonal low measurement. Additionally, the GSA should provide additional information describing how the GSA will perform the monitoring prescribed in its GSP and how any missed measurements over the water year still allow

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<sup>7</sup> 2024 Corning Annual Report, Table 5.2, p p. 39-40.

<sup>8</sup> <https://sgma.water.ca.gov/SgmaWell/>.

<sup>9</sup> 23 CCR § 354.34 (c)(1)(B).

<sup>10</sup> 2024 Corning Annual Report, Table 5.2, pp. 39-40.

the GSA to monitor impacts to beneficial uses or users of groundwater,<sup>11</sup> understand conditions relative to measurable objectives and minimum thresholds,<sup>12</sup> quantify water budget components across the Subbasin,<sup>13</sup> and represent and assess seasonal low and seasonal high groundwater conditions in the basin or plan area,<sup>14</sup> in the next annual report. Based on the issues identified above, the additional information that must be submitted in all future annual reports includes a detailed field plan or program to perform required monitoring and prevent missed measurements during future sampling events to avoid the creation of new or additional data gaps within the monitoring network. This may include replacing inaccessible or damaged wells.

Please contact the assigned DWR basin point-of-contact or [sgmps@water.ca.gov](mailto:sgmps@water.ca.gov) if you have questions about this notice or the annual reporting process. The Department looks forward to receiving your Water Year 2025 Annual Report by April 1, 2026.

Thank You,

*Paul Gosselin*

Paul Gosselin  
Deputy Director  
Sustainable Groundwater Management

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<sup>11</sup> 23 CCR § 354.34 (b)(1).

<sup>12</sup> 23 CCR 354.34 (b)(2).

<sup>13</sup> 23 CCR 354.34 (b)(3).

<sup>14</sup> 23 CCR 354.34 (c)(1)(B).