April 2024

SUMMARY

This report summarizes March 2024 groundwater storage, recharge, pumping, and level conditions for the Santa Clara Subbasin (the Santa Clara Plain and Coyote Valley groundwater management areas) and the Llagas Subbasin.

Groundwater levels in all regional monitoring wells are higher than last month due to recent rainfall and seasonal recovery. Most water levels are higher relative to March 2023, and all are higher than the prior five-year average for March. The end of 2024 groundwater storage is projected to be in Stage 1 (Normal) of the Water Shortage Contingency Plan.

- March managed recharge is 86% to 146% of the five-year average.
- February pumping is 94% to 129% of the five-year average.

Groundwater Condition

REPORT | SANTA CLARA COUNTY

• Groundwater levels in index wells for March 2024 range from 5 feet lower to 3 feet higher than the March levels of 2023.

| | Santa Clara | | |
|---|----------------------|------------------|--------------------|
| | Santa Clara Plain | Coyote Valley | Llagas Subbasin |
| March 2024 managed recharge estimate | 7,200 | 1,400 | 1,200 |
| YTD managed recharge estimate | 18,800 | 3,400 | 3,600 |
| YTD managed recharge as % of five-year average | 146% | 111% | 86% |
| February 2024 pumping estimate | 5,100 | 800 | 1,400 |
| YTD pumping estimate | 10,300 | 1,600 | 2,900 |
| YTD pumping as % of five-year average | 129% | 110% | 94% |
| Current index well groundwater levels compared to March 2023 | 3 feet higher | 5 feet lower | 3 feet higher |

Table 1. Summary of Current Groundwater Conditions

All volumes are in acre-feet. All data is for 2024 except where noted. YTD = Year-to-date

Contact US For questions, contact Scott Elkins at (408) 630–2885



Groundwater Recharge

- Figures 1, 2, and 3 show the cumulative managed recharge for 2024 compared to the average of the previous five years (2019 2023).
- Compared to the average of the previous five years, managed recharge for March 2024 was higher in the Santa Clara Plain and Coyote Valley, and lower in the Llagas Subbasin.
- Managed recharge depends on many factors, including water demand and availability, regulatory needs, groundwater storage, and facility maintenance.

Figure 1. Estimated Cumulative Managed Recharge in the Santa Clara Plain

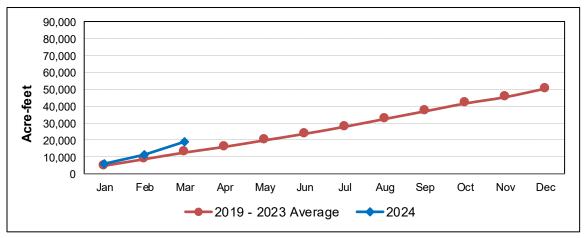
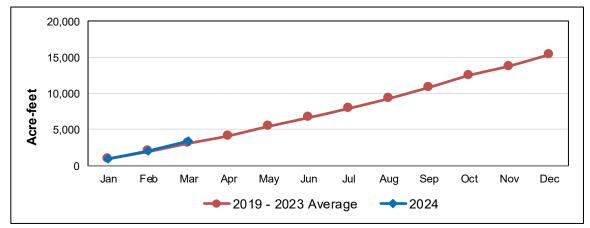
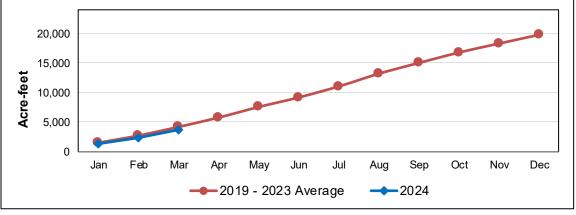


Figure 2. Estimated Cumulative Managed Recharge in the Coyote Valley



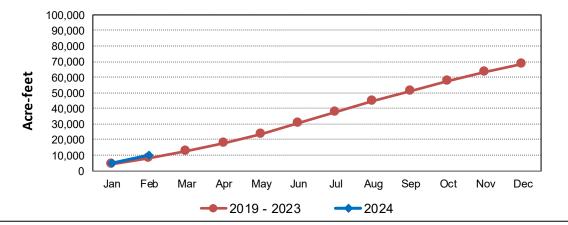




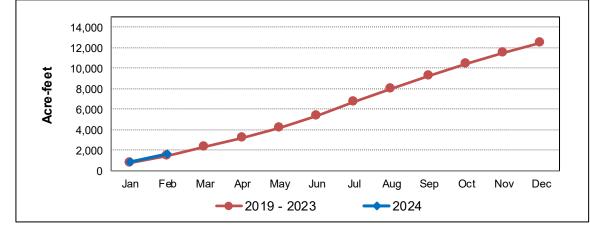
Groundwater Pumping

- Figures 4, 5, and 6 show the cumulative groundwater pumping for 2024 compared to the average of the previous five years (2019 2023).
- Pumping estimates for February 2024 include monthly pumping data reported by water retailers and non-monthly pumping, primarily from domestic and agricultural uses.
- Compared to the average of the previous five years, pumping for February 2024 was higher in the Santa Clara Plain and Coyote Valley, and lower in the Llagas Subbasin.

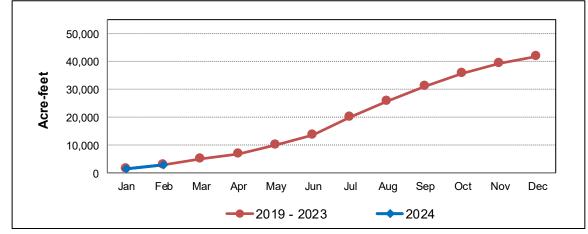
Figure 4. Estimated Cumulative Santa Clara Plain Pumping







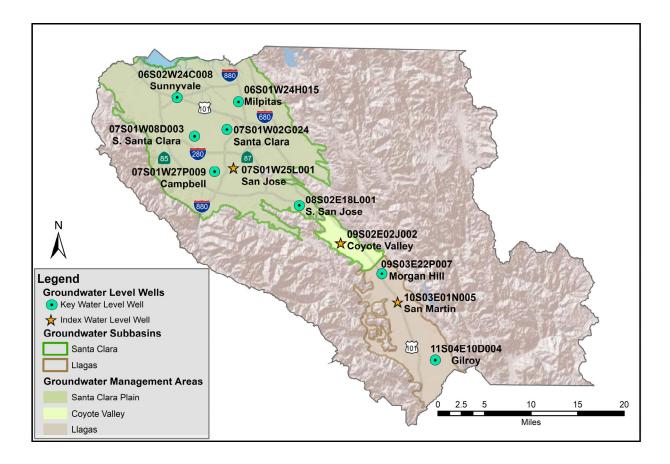




Groundwater Levels

Groundwater levels in all regional monitoring wells¹ have increased since last month. Most water levels are higher than this time last year and all are higher than the March average for the previous five years. Table 2 summarizes current groundwater levels with historical comparisons for 11 regional monitoring wells that are distributed across the three management areas, as shown in Figure 7.

Figure 7. Locations of Regional Water Level Monitoring Wells



This section intentionally left blank

¹ **Note:** While this report summarizes water levels from the 11 combined key and index wells of the regional network (Figure 7), Valley Water monitors groundwater levels from over 230 wells each month and these levels are publicly available at <u>https://gis.valleywater.org/GroundwaterElevations</u>.

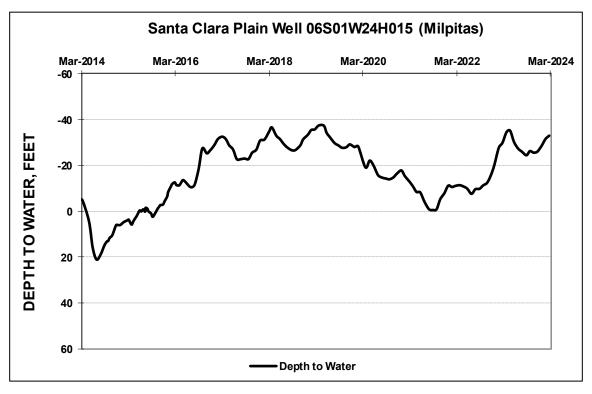
| | | | Difference in March 2023 DTW (feet) Compared to: | | | |
|----------------|---------------|--------------------------|--|---------------|--------------------------------------|---|
| Location | State Well ID | March 2024 DTW (feet) | February 2024 | March 2023 | Prior 5-year Average for March | Maximum DTW during 2012–2016 drought |
| Milpitas | 06S01W24H015 | -33 (artesian) | 2 | 3 | 10 | 54 |
| Sunnyvale | 06S02W24C008 | -39 (artesian) | 11 | 11 | 5 | 19 |
| San Jose | 07S01W25L001 | 67 | 2 | 3 | 18 | 71 |
| Santa Clara | 07S01W02G024 | -2 | 4 | 0 | 16 | 93 |
| S. Santa Clara | 07S01W08D003 | 58 | 1 | 7 | 10 | 87 |
| Campbell | 07S01W27P009 | 101 | 6 | -1 | 21 | 96 |
| S. San Jose | 08S02E18L001 | 19 | 2 | 7 | 3 | 51 |
| Coyote Valley | 09S02E02J002 | 9 | 6 | -5 | 4 | 28 |
| Morgan Hill | 09S03E22P007 | 43 | 2 | 2 | 7 | 52 |
| San Martin | 10S03E01N005 | 21 | 3 | 3 | 12 | 60 |
| Gilroy | 11S04E10D004 | 7 | 1 | 0 | 5 | 56 |

Table 2. Comparisons to March 2024 Depth to Water (DTW) in Regional Wells

Notes: Depth to water is measured to the hundredth of a foot but data shown here are rounded to the nearest foot. Negative values in the last 4 columns indicate current groundwater levels are lower than the comparison time. Well 09S03E22P005 was replaced with well 09S03E22P007; water level data from well 09S03E22P005 were used for historical comparison calculations. The (artesian) indicates aquifer pressure conditions that push water level elevations higher than land surface. The maximum DTW during the 2012–2016 drought occurred between July 2014 and December 2015, depending on the well, and reflect some of the lowest water levels over the past 25 years.

Figures 8 through 18 show ten-year hydrographs for each of the eleven regional monitoring wells.

Figure 8. Milpitas Well Hydrograph





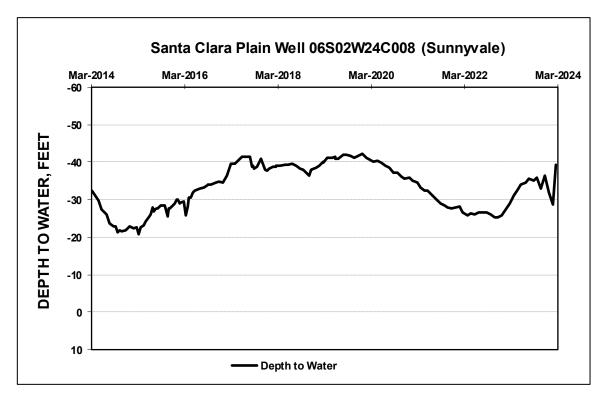
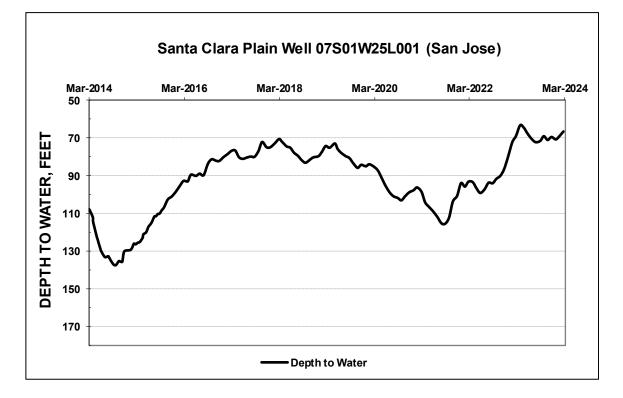


Figure 10. San Jose Well Hydrograph (Index Well for the Santa Clara Plain)





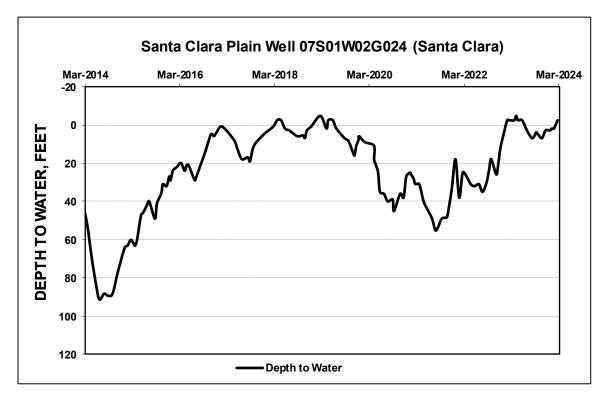
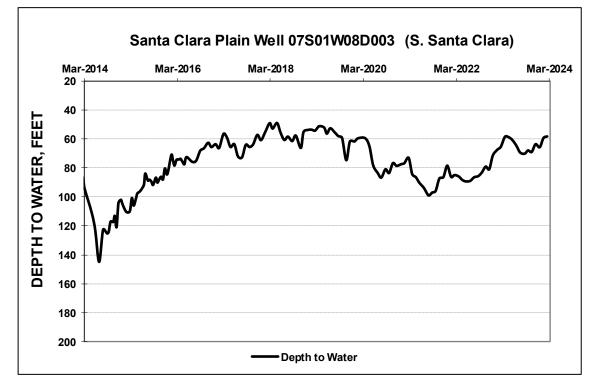
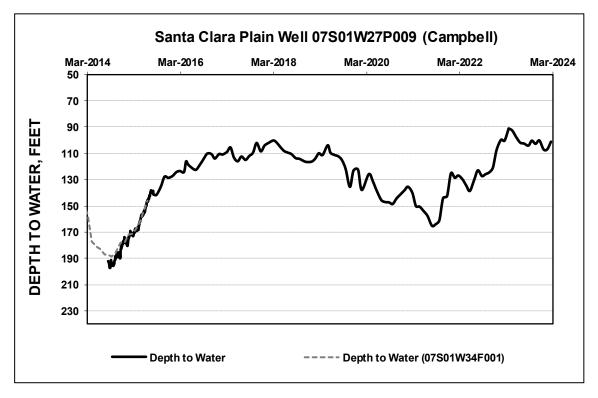


Figure 12. South Santa Clara Well Hydrograph

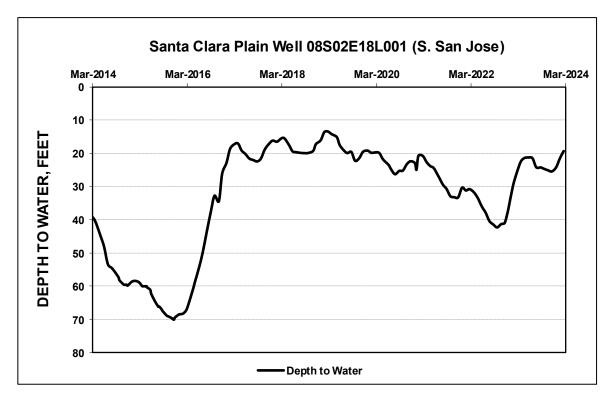






The Campbell index well was replaced in August 2015 with a nearby well with similar water levels. Data in the chart prior to September 2014 is from the former index well (07S01W34F001).

Figure 14. South San Jose Well Hydrograph





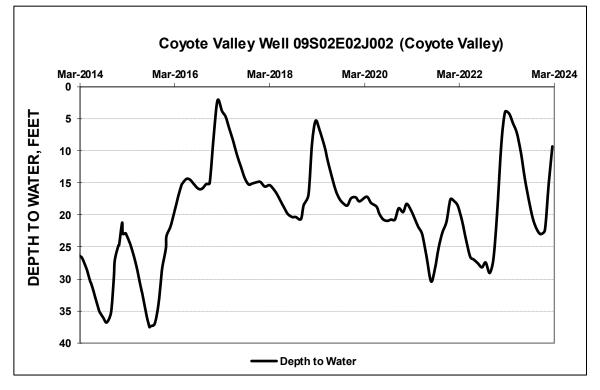
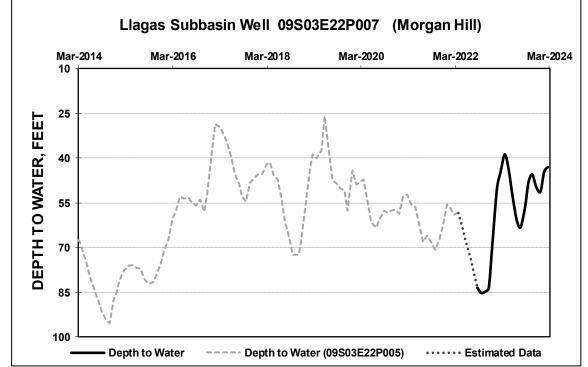


Figure 16. Morgan Hill Well Hydrograph



The Morgan Hill well 09S03E22P005 is no longer accessible and was replaced by well 09S03E22P007 in September 2022. Water levels from May 2022 to September 2022, represented by the dotted line, are estimated.



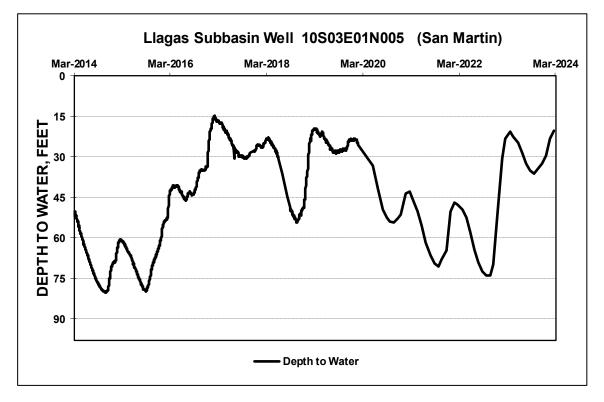


Figure 18. Gilroy Well Hydrograph

