SUMMARY

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

- Estimated countywide groundwater storage is above average and is projected to remain within the Stage 1 (Normal) range of Valley Water’s Water Shortage Contingency Plan throughout 2020.

- Santa Clara Plain:
  - The April managed recharge estimate is 4,100 acre-feet. The 2020 managed recharge to date is 14,900 acre-feet, which is 116% of the five-year average.
  - The March groundwater pumping estimate is 3,350 acre-feet. The 2020 groundwater pumping to date is 12,800 acre-feet, which is 101% of the five-year average. Note: March data is the most recent data for pumping.
  - The groundwater level in the Santa Clara Plain (San Jose) index well is 11 feet lower than it was last April and 2 feet higher than the five-year average for April.

- Coyote Valley:
  - The April managed recharge estimate is 1,200 acre-feet. The 2020 managed recharge to date is 3,900 acre-feet, which is 86% of the five-year average.
  - The March groundwater pumping estimate is 750 acre-feet. The 2020 groundwater pumping to date is 1,900 acre-feet, which is 90% of the five-year average.
  - The groundwater level in the Coyote Valley index well is about 10 feet lower than last April and 4 feet lower than the five-year average for April.

- Llagas Subbasin:
  - The April managed recharge estimate is 1,600 acre-feet. The 2020 managed recharge to date is 5,400 acre-feet, which is 137% of the five-year average.
  - The March groundwater pumping estimate is 2,700 acre-feet. The 2020 groundwater pumping to date is 7,900 acre-feet, which is 139% of the five-year average.
  - The groundwater level in the Llagas Subbasin (San Martin) index well is about 3 feet lower than last April and about the same as the five-year average for April.
Groundwater Recharge

Compared to the April averages of the last five years (2015-2019), the estimated April 2020 managed recharge is higher for the Santa Clara Plain and the Llagas Subbasin and lower for the Coyote Valley. The amount of managed recharge depends on several factors, including water demand, water availability, regulatory requirements, storage levels, and facility maintenance schedules. Figures 1, 2, and 3 compare monthly managed recharge in 2020 to the averages of the previous five years.

Figure 1 - Estimated Managed Recharge in the Santa Clara Plain

Figure 2 - Estimated Managed Recharge in the Coyote Valley

Figure 3 - Estimated Managed Recharge in the Llagas Subbasin
Groundwater Pumping

Pumping data for March 2020 is estimated based on the most current retailer’s pumping data. When compared to the March average of the last five years (2015-2019), March 2020 pumping is estimated to be higher for the Llagas Subbasin and lower for the Santa Clara Plain and Coyote Valley. Figures 4, 5, and 6 show comparisons of the 2020 monthly estimated groundwater pumping to the five-year monthly averages.

Figure 4 – Estimated Santa Clara Plain Pumping

![Estimated Groundwater Pumping - Santa Clara Plain](image)

Figure 5 – Estimated Coyote Valley Pumping

![Estimated Groundwater Pumping - Coyote Valley](image)

Figure 6 – Estimated Llagas Subbasin Pumping

![Estimated Groundwater Pumping - Llagas Subbasin](image)
Groundwater Levels

April 2020 groundwater levels at eleven selected monitoring wells (Figure 7) are compared to April 2019, April 2004 (a normal year), April 1987 (a dry year), and the prior five-year average of April measurements (2015 through 2019). This information is presented in individual well groundwater hydrographs in Figures 8 through 18. Comparisons of April 2020 to March 2020 are not possible for this report because water levels were not measured in March 2020 due to the “shelter at home” order.

Comparing groundwater levels from April 2019 to those in April 2020, one index well had a water level increase of 4 feet and nine wells had water level decreases of between 1 and 18 feet; one well was destroyed and not replaced until November 2019. The April 2020 levels were higher than April 2004 normal year levels by 8 to 20 feet in five of the ten available index wells with 2004 data and lower by 1 to 7 feet in the other five wells. April 2020 levels were higher than the five-year average of April measurements in seven index wells by between 2 and 14 feet and lower in four wells by between 1 and 4 feet. April 2020 groundwater levels were higher than April 1987 dry year levels in all eleven index wells.
A measured value for 2004 is not available for comparison for this well. Between March 1998 and October 2006, this well was flowing artesian and not measured. In October 2006, the well was modified to allow measurement of artesian pressures.

Figure 9 – Sunnyvale Well Hydrograph
Figure 10 - San Jose Well Hydrograph

Santa Clara Plain Well 07S01W25L001 (San Jose)

Figure 11 - Santa Clara Well Hydrograph

Santa Clara Plain Well 07S01W02G024 (Santa Clara)
The Campbell index well was replaced in August 2015 with a nearby well with similar water levels. Historic comparisons for 1987, 2004, and 5-year average use data from the former index well (07S01W34F001).
Figure 14 - South San Jose Well Hydrograph

Figure 15 - Coyote Valley Well Hydrograph
The San Martin index well was replaced in November 2019 with a nearby well with similar water levels. Historic comparison data for 1987, 2004, and 5-year average use data from the former index well (10S03E13D003).
Figure 18 - Gilroy Well Hydrograph