SUMMARY

This report summarizes current groundwater storage, recharge, pumping, 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 May managed recharge estimate is 3,900 acre-feet. The 2020 managed recharge to date is 18,200 acre-feet, which is 93% of the five-year average.
  - The April groundwater pumping estimate is 6,000 acre-feet. The 2020 groundwater pumping to date is 22,200 acre-feet, which is 128% of the five-year average. Note: April data is the most recent data for pumping.
  - The groundwater level in the Santa Clara Plain (San Jose) index well is 18 feet lower than it was last May and 3 feet lower than the five-year average for May.

- Coyote Valley:
  - The May managed recharge estimate is 1,100 acre-feet. The 2020 managed recharge to date is 4,700 acre-feet, which is 76% of the five-year average.
  - The April groundwater pumping estimate is 800 acre-feet. The 2020 groundwater pumping to date is 2,800 acre-feet, which is 94% of the five-year average.
  - The groundwater level in the Coyote Valley index well is about 9 feet lower than last May and 4 feet lower than the five-year average for May.

- Llagas Subbasin:
  - The May managed recharge estimate is 1,700 acre-feet. The 2020 managed recharge to date is 6,400 acre-feet, which is 98% of the five-year average.
  - The April groundwater pumping estimate is 2,700 acre-feet. The 2020 groundwater pumping to date is 10,300 acre-feet, which is 127% of the five-year average.
  - The groundwater level in the Llagas Subbasin (San Martin) index well is about 13 feet lower than last May and about 6 feet lower than the five-year average for May.
Groundwater Recharge

Compared to the May averages of the last five years (2015-2019), the estimated May 2020 managed recharge is lower for all three groundwater areas: the Santa Clara Plain Coyote Valley, and the Llagas Subbasin. 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 April 2020 is estimated based on the most current retailer's pumping data. When compared to the April average of the last five years (2015-2019), April 2020 pumping is estimated to be higher for all three groundwater areas: the Santa Clara Plain, Coyote Valley, and Llagas Subbasin. 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

May 2020 groundwater levels at eleven selected monitoring wells (Figure 7) are compared to April 2020, May 2019, May 2004 (a normal year), May 1987 (a dry year), and the prior five-year average of May measurements (2015 through 2019). This information is presented in individual well groundwater hydrographs in Figures 8 through 18. Comparisons of May 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.

May 2020 groundwater levels compared to April 2020 were higher in two wells and lower in the other nine wells. Comparing groundwater levels from May 2019 to those in May 2020, all eleven wells have water level decreases of between 8 and 27 feet. The May 2020 levels were higher than May 2004 normal year levels by 1 to 34 feet in five of the ten available index wells with 2004 data and lower by 1 to 20 feet in the other five wells. May 2020 levels were higher than the five-year average of May measurements in five index wells by between 1 and 12 feet and lower in six wells by between 1 and 7 feet. May 2020 groundwater levels were higher than May 1987 dry year levels in 10 of the index wells and the same in 1 well.

Figure 7 - Location of Selected Monitoring 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

Figure 11 - Santa Clara Well Hydrograph
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