



TECHNICAL MEMORANDUM

San Antonio Creek Valley Groundwater Basin Quarterly Groundwater Level Monitoring – Third Quarter 2024

To: Ms. Stephanie Bertoux, Executive Director, San Antonio Basin Groundwater Sustainability Agency

From: Sydney Robertson, GIT, GSI Water Solutions, Inc.
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Attachments: Tables:
Table 1. Third Quarter 2024 Groundwater Level Measurements – Depth to Water
Table 2. Third Quarter 2024 Groundwater Level Measurements – Groundwater Elevation

Figure:
Figure 1. Wells Included in the San Antonio Creek Valley Groundwater Basin Groundwater Monitoring Network

Date: September 13, 2024

Introduction

On behalf of the San Antonio Basin Groundwater Sustainability Agency (SABGSA), GSI Water Solutions, Inc. (GSI) completed the third quarter 2024 (3Q2024) San Antonio Creek Valley Groundwater Basin (Basin) groundwater level monitoring event (monitoring event) on August 27th and 28th, 2024. Prior to each quarterly monitoring event, GSI contacts well owners/property managers to coordinate access to the wells and request that wells be shut off for at least 8 hours before the monitoring event so that a static measurement can be obtained. Well owners/property managers were notified on August 14th, 2024. GSI performed site visits to measure and record static water levels in wells on August 27th and 28th, 2024.

GSI was able to successfully measure depth to water in 37 of the 41 wells that have secured access agreements during the monitoring event. Tables 1 and 2 provide statuses of the current well access agreements, and Figure 1 displays the well locations. The following text and tables summarize the results of the 3Q2024 monitoring event.

3Q2024 Groundwater Level Monitoring Event Summary

The attached tables summarize the results of the 3Q2024 monitoring event for the wells in the Basin Groundwater Level Monitoring Network (Monitoring Network). The tables include the statuses of the current well access agreements, depth to water measurements, and calculated groundwater elevations for all wells that were able to be accessed during this monitoring event. Wells identified as a Representative Monitoring Site (RMS) in the Basin's Groundwater Sustainability Plan (GSP) are identified in Table 2 and denoted with their respective RMS sustainable management criteria (i.e., minimum threshold and measurable objective). The following is a summary of observations from the 3Q2024 monitoring event:

- The four wells with an active well access agreement that did not have a groundwater level measurement collected during the 3Q2024 monitoring event were 2M1, 2N1, Well 4, and 34P1.
 - No water level measurement was collected from well 2M1 due to the risk of the sounder becoming stuck in the well. Historically there have been instances of the sounder becoming stuck in the well during monitoring. Groundwater level monitoring at well 2M1 has been halted pending the installation of a sounding tube. Installation of a sounding tube at 2M1 has been evaluated, however installation costs may preclude completion of the work. Therefore, well 14L1 is being evaluated as a replacement RMS well for 2M1 due to their locations within Harris Canyon, consistent water levels, and water level trends.
 - No water level measurement was collected from well 2N1 at the request of Premiere Coastal Vineyards due to a representative not being available to provide oversight.
 - No water level measurement was collected from Well 4 due to an obstruction encountered at approximately 100 feet below the RPE. Multiple attempts were made to record a water level measurement on August 27th and 28th.
 - A water level measurement has not been recorded at well 34P1 since the 4Q2023. An obstruction or collapse has since been encountered at approximately 72 feet below the RPE. Based on historical water levels, the well casing is suspected to have collapsed.
- The vegetation along the Barka Slough area well access trails was trimmed during the 3Q2023 monitoring event.
- Wells without current well access agreements, including RMS wells, are planned to be evaluated for replacement using existing Monitoring Network wells and potential candidate wells to be identified using the data collected from the SABGSA Well Registration Program (see Recommendations, below).

Recommended Action Items

- Investigate the obstruction encountered in well 34P1.
- Consider maintenance on wells 2N1 and Mesa Vineyard to remove rusty material and oil from the water column. The water level reading device becomes coated in either rust or oil when lowered into the well, occasionally blocking the sensor and preventing an accurate water level measurement.
- Perform a RPE Survey for the wells in the Monitoring Network in accordance with the Sustainable Groundwater Management Act (SGMA) well elevation accuracy requirements.
- Perform video survey inspections of the wells in the Monitoring Network with unknown well construction information (total depth and screened intervals).
- Continue public outreach to Basin stakeholders to expand participation in the Monitoring Network.
- Collaborate with Central Coast Water Quality Preservation, Inc. to request and share existing Irrigated Lands Regulatory Program well information.
- Review SABGSA Well Registration Program data to identify existing candidate wells to incorporate into the Monitoring Network.
- Continue to perform routine vegetation trimming for access routes to all wells located in the Barka Slough area, including wells SAHC and 34P1 located to the north of the slough and to the west of Highway 135.

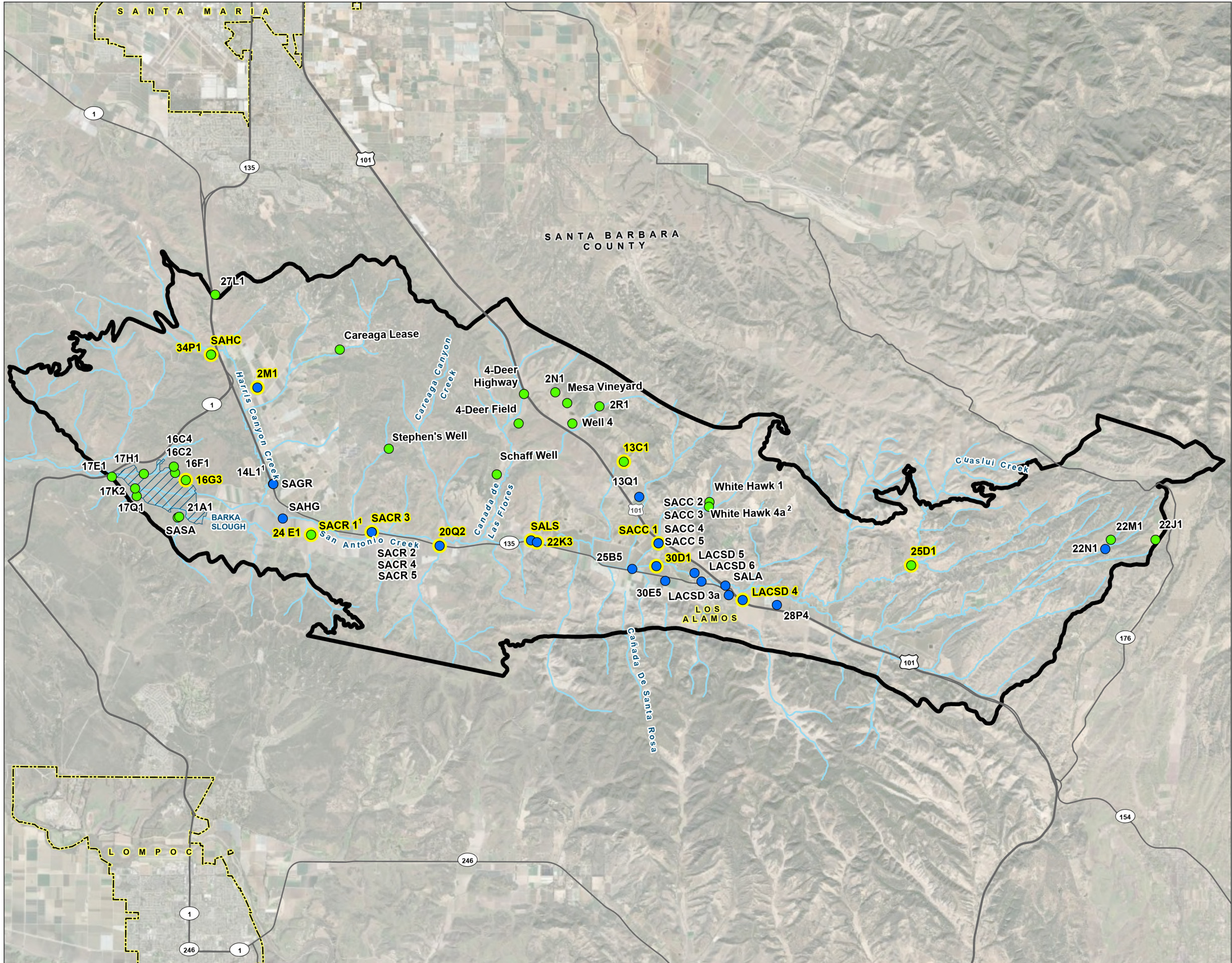


FIGURE 1 Wells Included in the San Antonio Creek Valley Groundwater Basin Groundwater Level Monitoring Network

San Antonio Creek Valley
Groundwater Basin Quarterly
Groundwater Level Monitoring

Third Quarter 2024

LEGEND

- Representative Well
- Wells (by screened aquifer)**

 - Paso Robles Formation
 - Careaga Sand

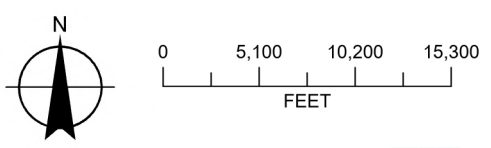
- All Other Features**

 - ~ San Antonio Creek or Tributary
 - Major Road
 - San Antonio Creek Valley Groundwater Basin
 - Barka Slough
 - City Boundary



NOTES

1. SACR 1 and 14L1 are screened in the Careaga Sand.
2. White Hawk 4 was destroyed in December 2023. Replacement well White Hawk 4a was constructed and completed in June 2024.



Date: September 9, 2024
Data Sources: BLM, ESRI, ODOT, USGS,
Imagery (2022)

