TECHNICAL MEMORANDUM

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

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

From: Amanda Webb, PG, GSI Water Solutions, Inc.
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Attachments: Tables:
Table 1. Fourth Quarter 2024 Groundwater Level Measurements – Depth to Water
Table 2. Fourth Quarter 2024 Groundwater Level Measurements – Groundwater Elevation

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

Date: December 12, 2024

Introduction

On behalf of the San Antonio Basin Groundwater Sustainability Agency (SABGSA), GSI Water Solutions, Inc. (GSI) completed the fourth quarter 2024 (4Q2024) San Antonio Creek Valley Groundwater Basin (Basin) groundwater level monitoring event (monitoring event) on November 26th and 27th, 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 November 13th, 2024. GSI performed site visits to measure and record static water levels in wells on November 26th and 27th, 2024.

GSI was able to successfully measure depth to water in 37 of the 42 wells that have secured access agreements during the monitoring event. Tables 1 and 2 provide the status of the current well access agreements, and Figure 1 displays the well locations. The following text and tables summarize the results of the 4Q2024 monitoring event.

4Q2024 Groundwater Level Monitoring Event Summary

The attached Tables 1 and 2 summarize the results of the 4Q2024 monitoring event for the wells in the Basin Groundwater Level Monitoring Network (Monitoring Network). The tables include the status of the current well access agreements, depth to water measurements (Table 1), and calculated groundwater elevations (Table 2) 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 4Q2024 monitoring event:

- The five wells with an active well access agreement that did not have a groundwater level measurement collected during the 4Q2024 monitoring event were 2M1, 2N1, Well 4, 34P1, and Stephen's Well.
  - 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. A water level measurement at well 2M1 was last recorded during the 1Q2022 monitoring event. 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. A water level measurement at well 2N1 was last recorded during the 1Q2024 monitoring event.
  - No water level measurement was collected from Well 4 due to an obstruction encountered at approximately 104 feet below the RPE. An obstruction at approximately 100 feet below the RPE was encountered during the 3Q2024 monitoring event. A water level measurement at Well 4 was last recorded during the 2Q2024 monitoring event.
  - A water level measurement at well 34P1 was last recorded during the 4Q2023 monitoring event. 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.
  - A measurement was collected at Stephen's well, however, the well was confirmed to be pumping during the measurement. The measurement was not recorded for 4Q2024.
- 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).
- A new well was added to the Monitoring Network for 4Q2024 – Char 1.
- Pressure transducers were installed in 13C1, 22K3, SACR 3, 14L1, and 16G3.

Recommended Action Items

- Investigate the obstruction encountered in well 34P1 or remove from program (due to the suspected collapse of the well).
- Investigate the obstruction encountered in Well 4.
- Consider maintenance on wells 2N1 and Mesa Vineyard well 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.

Table 1. Fourth Quarter 2024 Groundwater Level Measurements – Depth to Water

State Well Number	Site Name	Well Type	Water Level Measurement Frequency/Type	Area	Total Depth (feet bgs)	Aquifer of Completion	DTW on 12/8/21 and 12/9/21	DTW on 3/10/22 and 3/11/22	DTW on 6/21/22 and 6/22/22	DTW on 9/15/22 and 9/16/22	DTW on 12/14/22 and 12/15/22	DTW on 3/15/23, 3/16/23 and 3/23/23	DTW on 6/20/23, 6/21/23 and 6/28/23	DTW on 9/12/23 and 9/13/23	DTW on 12/12/23 and 12/13/23	DTW on 2/27/24 and 2/28/24	DTW on 6/4/24 and 6/5/24	DTW on 8/27/24 and 8/28/24	DTW on 11/26/24 and 11/27/24	Notes on 11/26/24 and 11/27/24
009N034W34N002S	SAHC	Monitoring	Continuous/Transducer	West San Antonio Basin	90	Careaga Sand	73.68	73.79	73.93	74.07	74.20	74.43	74.34	74.06	73.86	73.52	73.06	72.54	71.78	
008N034W21A002S	SASA	Monitoring	Continuous/Transducer	West San Antonio Basin	65	Careaga Sand	45.69	45.85	46.19	46.98	47.33	46.37	44.82	45.39	46.25	45.59	43.54	44.47	45.46	
008N034W14L002S	SAGR	Monitoring	Continuous/Transducer	West San Antonio Basin	90	Paso Robles Formation	63.25	62.89	64.50	66.88	65.72	64.18	62.18	62.31	61.81	60.62	60.13	61.30	61.41	
008N034W23H001S	SAHG	Monitoring	Continuous/Transducer	West San Antonio Basin	75	Paso Robles Formation	42.72	43.12	41.42	41.71	40.80	27.74	27.99	30.60	33.22	30.09	29.55	29.83	32.70	
008N033W22G001S	SALS	Monitoring	Continuous/Transducer	Central San Antonio Basin	70	Paso Robles Formation	39.73	39.50	39.44	39.34	39.69	31.15	29.29	28.64	29.83	26.88	26.17	27.96	29.63	
008N032W29L004S	SALA	Monitoring	Continuous/Transducer	Central San Antonio Basin	90	Paso Robles Formation	48.79	48.95	49.25	49.85	50.46	27.96	26.79	32.32	36.12	25.85	26.79	32.01	35.15	
008N033W19K002S	SACR 1	Monitoring	Continuous/Transducer	West San Antonio Basin	690	Careaga Sand	46.27	46.25	51.05	54.90	47.50	--	47.90	53.74	48.68	48.68	49.17	54.06	49.98	
008N033W19K003S	SACR 2	Monitoring	Quarterly/Discrete	West San Antonio Basin	540	Paso Robles Formation	75.51	78.76	81.30	83.33	72.58	--	77.38	79.39	73.10	72.08	75.67	84.68	73.11	
008N033W19K004S	SACR 3	Monitoring	Continuous/Transducer	West San Antonio Basin	350	Paso Robles Formation	99.00	102.25	119.95	122.83	99.33	--	110.41	117.35	99.95	95.83	103.84	117.91	99.86	
008N033W19K005S	SACR 4	Monitoring	Quarterly/Discrete	West San Antonio Basin	220	Paso Robles Formation	94.72	94.07	95.70	97.73	96.15	--	90.53	91.87	92.38	91.58	91.51	93.26	93.18	
008N033W19K006S	SACR 5	Monitoring	Quarterly/Discrete	West San Antonio Basin	110	Paso Robles Formation	100.30	99.68	99.98	100.47	100.87	95.86	91.91	94.34	95.62	96.16	95.74	97.06	98.61	
008N032W19M001S	SACC 1	Monitoring	Continuous/Transducer	Central San Antonio Basin	980	Paso Robles Formation	229.72	235.35	236.20	241.70	220.97	214.99	224.04	232.96	222.72	214.81	224.72	232.65	223.95	
008N032W19M002S	SACC 2	Monitoring	Quarterly/Discrete	Central San Antonio Basin	720	Paso Robles Formation	215.05	217.05	217.45	222.83	215.17	210.04	212.87	219.52	214.50	208.10	211.82	218.35	218.17	
008N032W19M003S	SACC 3	Monitoring	Quarterly/Discrete	Central San Antonio Basin	530	Paso Robles Formation	220.42	219.40	220.10	223.35	213.49	208.65	213.21	219.74	213.49	206.69	214.97	218.65	217.62	
008N032W19M004S	SACC 4	Monitoring	Quarterly/Discrete	Central San Antonio Basin	325	Paso Robles Formation	172.79	173.70	175.70	177.90	175.98	172.58	174.52	177.45	176.87	173.61	174.46	176.76	177.42	
008N032W19M005S	SACC 5	Monitoring	Quarterly/Discrete	Central San Antonio Basin	120	Paso Robles Formation	107.13	107.10	107.05	107.30	107.20	107.01	106.94	106.50	105.82	105.66	105.08	104.95	104.84	
008N034W02M001S	2M1	Irrigation	Quarterly/Discrete	West San Antonio Basin	750	Paso Robles Formation	152.60	154.55	--	--	--	--	--	--	--	--	--	--	--	Temporarily discontinued due to risk of stuck sounder.
--	White Hawk 1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	560	Careaga Sand	124.03	112.73	125.50	126.50	125.10	123.96	123.96	124.58	123.29	122.81	122.32	122.78	122.09	
--	White Hawk 4a	Irrigation	Quarterly/Discrete	Central San Antonio Basin	--	Careaga Sand	--	--	--	--	--	--	--	--	--	--	93.61	94.48	93.12	Newly constructed White Hawk 4 replacement well.
--	Mesa Vineyard	Irrigation	Quarterly/Discrete	Central San Antonio Basin	--	Careaga Sand	218.08	218.80	219.50	220.50	216.10	215.85	--	219.17	216.91	214.89	215.50	216.23	217.19	Oil in well column.
008N033W02N001S	2N1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	980	Careaga Sand	224.65	227.10	226.20	228.00	225.50	--	224.23	228.06	224.33	222.20	--	--	--	Water level not attempted per owner's request.
008N033W02R001S	2R1	Domestic	Quarterly/Discrete	Central San Antonio Basin	370	Careaga Sand	119.42	118.75	173.55	120.50	120.45	120.30	120.61	120.94	121.02	121.48	123.06	122.25	122.46	
--	Well 4	Irrigation	Quarterly/Discrete	Central San Antonio Basin	1,000	Careaga Sand	--	--	--	--	--	--	--	--	122.50	122.29	122.01	--	--	Obstruction encountered at 104 feet below RPE. Water level not recorded.
008N033W10	4-Deer Field	Irrigation	Quarterly/Discrete	Central San Antonio Basin	490	Careaga Sand	27.67	27.09	65.90	68.00	28.61	25.59	27.53	30.39	29.48	26.75	27.02	35.41	29.44	
008N033W03L001S	4-Deer Highway	Irrigation	Quarterly/Discrete	Central San Antonio Basin	349	Careaga Sand	95.05	96.10	96.59	98.10	96.11	94.82	98.01	98.79	97.63	95.02	96.07	98.78	97.40	
--	Schaff Well	Monitoring	Quarterly/Discrete	Central San Antonio Basin	669	Careaga Sand	216.65	216.76	217.24	217.90	218.05	218.24	218.29	218.97	219.15	219.12	219.40	220.00	220.26	
008N034W14L001S	14L1	Monitoring	Continuous/Transducer	West San Antonio Basin	593	Careaga Sand	68.99	68.12	71.18	73.70	69.95	68.24	70.85	74.84	72.16	69.04	70.22	73.37	70.55	
009N034W34P001S	34P1	Monitoring	Quarterly/Discrete	West San Antonio Basin	223	Careaga Sand	68.55	72.66	71.85	70.80	70.15	66.50	--	67.65	66.19	--	--	--	--	Obstruction or collapse encountered at 72 feet below RPE. Water level not recorded.
008N034W17Q001S	17Q1	Monitoring	Quarterly/Discrete	West San Antonio Basin	48	Careaga Sand	14.78	14.80	15.40	--	--	13.31	13.72	14.80	15.21	12.96	13.20	14.32	14.80	
008N034W21A001S	21A1	Monitoring	Quarterly/Discrete	West San Antonio Basin	271	Careaga Sand	36.79	36.93	37.80	38.75	38.83	37.70	37.40	38.62	38.88	37.77	37.51	38.12	38.61	
008N034W17K002S	17K2	Monitoring	Quarterly/Discrete	West San Antonio Basin	60	Careaga Sand	6.98	6.98	7.13	7.30	7.40	7.38	7.30	7.31	7.31	7.33	--	7.25	7.26	
008N034W17E001S	17E1	Monitoring	Quarterly/Discrete	West San Antonio Basin	89	Careaga Sand	22.03	22.20	22.28	22.35	22.38	19.72	19.44	20.26	20.67	19.42	18.80	19.96	20.39	
008N034W16C002S	16C2	Monitoring	Continuous/Transducer	West San Antonio Basin	169	Careaga Sand	86.75	87.76	74.72	94.03	87.72	92.73	82.20	91.43	84.44	81.70	81.02	81.33	83.45	
008N034W16C004S	16C4	Monitoring	Continuous/Transducer	West San Antonio Basin	560	Careaga Sand	73.94	74.66	87.21	79.63	75.30	78.30	74.79	78.03	73.70	71.79	71.43	71.82	72.67	
008N034W17H001S	17H1	Monitoring	Quarterly/Discrete	West San Antonio Basin	61	Careaga Sand	17.20	16.97	17.81	18.81	18.90	13.24	13.94	15.65	16.43	13.19	14.33	15.59	16.61	
008N034W16F001S	16F1	Monitoring	Quarterly/Discrete	West San Antonio Basin	58	Careaga Sand	38.50	40.34	43.83	46.30	45.47	45.09	38.45	43.17	41.39	38.03	36.47	35.91	38.86	
008N034W16G003S	16G3	Monitoring	Continuous/Transducer	West San Antonio Basin	56	Careaga Sand	49.31	49.86	50.52	51.17	51.85	52.36	52.47	52.40	52.65	52.70	52.54	52.36	52.28	
008N033W13C001S	13C1	Irrigation	Continuous/Transducer	Central San Antonio Basin	1,070	Careaga Sand	188.10	188.90	190.20	188.00	187.30	--	188.40	186.08	185.94	185.39	184.99	185.58	185.75	
008N033W07	Stephen's Well	Irrigation	Quarterly/Discrete	West San Antonio Basin	590	Careaga Sand	338.73	341.04	339.88	343.35	339.88	--	342.19	381.46	379.15	343.34	343.34	349.12	--	Measured with airline. Confirmed pumping DTW of 383.77 feet
008N033W22K003S	22K3	Irrigation	Continuous/Transducer	Central San Antonio Basin	250	Paso Robles Formation	--	--	--	--	--	--	79.65	82.59	79.45	78.91	76.90	75.82	73.87	
008N033W13Q001S	13Q1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	295	Paso Robles Formation	--	--	--	--	--	--	--	--	--	116.71	112.13	113.82	112.55	
--	Char 1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	330	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	99.03	Measured with airline.
008N032W30D001S	30D1	Monitoring	--	Central San Antonio Basin	895	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--		
008N032W25D001S	25D1	Irrigation	--	East San Antonio Basin	700	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--		
008N031W22J001S	22J1	Unknown	--	East San Antonio Basin	--	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--		
008N031W22N001S	22N1	Unknown	--	East San Antonio Basin	175	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--		
008N031W22M001S	22M1	Unknown	--	East San Antonio Basin	--	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--		
008N034W24E001S	24E1	Monitoring	--	West San Antonio Basin	--	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--		
008N033W20Q002S	20Q2	Irrigation	--	West San Antonio Basin	--	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--		
--	VERNAS 1	Unknown	--	Central San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
--	VERNAS 2	Unknown	--	Central San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
--	HWY 101 CATTLE	Unknown	--	East San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
008N032W27P003S	GUZMAN 2	Unknown	--	East San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
008N032W30E005S	30E5	Unknown	--	Central San Antonio Basin	1,001	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--		
008N033W25B005S	25B5	Unknown	--	Central San Antonio Basin	100	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--		
008N032W28P004S	28P4	Unknown	--	East San Antonio Basin	524	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--		
008N034W36R	Careaga Lease	Unknown	--	West San Antonio Basin	284	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--		
008N32W17N001S	White Hawk 4	Irrigation	Quarterly/Discrete	Central San Antonio Basin	820	Careaga Sand	98.85	97.90	100.55	101.20	98.50	98.00	98.77	98.97	--	--	--	--	--	Well Destroyed December 2023
009N034W27L001S	27L1	Unknown	--	West San Antonio Basin	405	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Destroyed March 2021

Notes:

Green highlighted cells indicate well access agreement has been acquired
Yellow highlighted cells indicate well access agreement is pending
Red highlighted cells indicate well access denied
Gray highlighted cells indicate well access not applicable
bgs = below ground surface
DTW = Depth to Water (feet below reference point elevation)
-- = unknown or not applicable

Table 2. Fourth Quarter 2024 Groundwater Level Measurements – Groundwater Elevation

State Well Number	Site Name	Well Type	Water Level Measurement Frequency/Type	Area	Total Depth (feet NAVD88)	Aquifer of Completion	MT Elevation (feet NAVD88)	MO Elevation (feet NAVD88)	GWE on 12/8/21 and 12/9/21	GWE on 3/10/22 and 3/11/22	GWE on 6/21/22 and 6/22/22	GWE on 9/15/22 and 9/16/22	GWE on 12/14/22 and 12/15/22	GWE on 3/15/23, 3/16/23 and 3/23/23	GWE on 6/20/23, 6/21/23 and 6/28/23	GWE on 9/12/23 and 9/13/23	GWE on 12/12/23 and 12/13/23	GWE on 2/27/24 and 2/28/24	GWE on 6/4/24 and 6/5/24	GWE on 8/27/24 and 8/28/24	GWE on 11/26/24 and 11/27/24	Notes on 11/26/24 and 11/27/24
009N034W34N002S	SAHC	Monitoring	Continuous/Transducer	West San Antonio Basin	363	Careaga Sand	358	--	381.66	381.55	381.41	381.27	381.14	380.91	381.00	381.28	381.48	381.82	382.28	382.80	383.56	
008N034W21A002S	SASA	Monitoring	Continuous/Transducer	West San Antonio Basin	245	Careaga Sand	--	--	266.12	265.96	265.62	264.83	264.48	265.44	266.99	266.42	265.56	266.22	268.27	267.34	266.35	
008N034W14L002S	SAGR	Monitoring	Continuous/Transducer	West San Antonio Basin	240	Paso Robles Formation	--	--	266.30	266.66	265.05	262.67	263.83	265.37	267.37	267.24	267.74	268.93	269.42	268.25	268.14	
008N034W23H001S	SAHG	Monitoring	Continuous/Transducer	West San Antonio Basin	246	Paso Robles Formation	--	--	280.89	280.49	282.19	281.90	282.81	295.87	295.62	293.01	290.39	293.52	294.06	293.78	290.91	
008N033W22G001S	SALS	Monitoring	Continuous/Transducer	Central San Antonio Basin	390	Paso Robles Formation	397	--	419.53	419.76	419.82	419.92	419.57	428.11	429.97	430.62	429.43	432.38	433.09	431.30	429.63	
008N032W29L004S	SALA	Monitoring	Continuous/Transducer	Central San Antonio Basin	506	Paso Robles Formation	--	--	547.58	547.42	547.12	546.52	545.91	568.41	569.58	564.05	560.25	570.52	569.58	564.36	561.22	
008N033W19K002S	SACR 1	Monitoring	Continuous/Transducer	West San Antonio Basin	-327	Careaga Sand	291	--	315.55	315.57	310.77	306.92	314.32	--	313.92	308.08	313.14	313.14	312.65	307.76	311.84	
008N033W19K003S	SACR 2	Monitoring	Quarterly/Discrete	West San Antonio Basin	-177	Paso Robles Formation		--	286.31	283.06	280.52	278.49	289.24	--	284.44	282.43	288.72	289.74	286.15	277.14	288.71	
008N033W19K004S	SACR 3	Monitoring	Continuous/Transducer	West San Antonio Basin	13	Paso Robles Formation	233	--	262.81	259.56	241.86	238.98	262.48	--	251.40	244.46	261.86	265.98	257.97	243.90	261.95	
008N033W19K005S	SACR 4	Monitoring	Quarterly/Discrete	West San Antonio Basin	143	Paso Robles Formation	--	--	267.10	267.75	266.12	264.09	265.67	--	271.29	269.95	269.44	270.24	270.31	268.56	268.64	
008N033W19K006S	SACR 5	Monitoring	Quarterly/Discrete	West San Antonio Basin	252	Paso Robles Formation	--	--	264.94	265.56	265.26	264.77	264.37	269.38	273.33	270.90	269.62	269.08	269.50	268.18	266.63	
008N032W19M001S	SACC 1	Monitoring	Continuous/Transducer	Central San Antonio Basin	-394	Paso Robles Formation	348	--	355.32	349.69	348.84	**343.34**	364.07	370.05	361.00	352.08	362.32	370.23	360.32	352.39	361.09	
008N032W19M002S	SACC 2	Monitoring	Quarterly/Discrete	Central San Antonio Basin	-134	Paso Robles Formation	--	--	369.96	367.96	367.56	362.18	369.84	374.97	372.14	365.49	370.51	376.91	373.19	366.66	366.84	
008N032W19M003S	SACC 3	Monitoring	Quarterly/Discrete	Central San Antonio Basin	56	Paso Robles Formation	--	--	364.63	365.65	364.95	361.70	371.56	376.40	371.84	365.31	371.56	378.36	370.08	366.40	367.43	
008N032W19M004S	SACC 4	Monitoring	Quarterly/Discrete	Central San Antonio Basin	261	Paso Robles Formation	--	--	412.20	411.29	409.29	407.09	409.01	412.41	410.47	407.54	408.12	411.38	410.53	408.23	407.57	
008N032W19M005S	SACC 5	Monitoring	Quarterly/Discrete	Central San Antonio Basin	466	Paso Robles Formation	--	--	478.95	478.98	479.03	478.78	478.88	479.07	479.14	479.58	480.26	480.42	481.00	481.13	481.24	
008N034W02M001S	2M1	Irrigation	Quarterly/Discrete	West San Antonio Basin	-331	Paso Robles Formation	244	286	267.41	265.46	--	--	--	--	--	--	--	--	--	--	--	Temporarily discontinued due to risk of stuck sounder.
--	White Hawk 1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	241	Careaga Sand	--	--	678.33	689.63	676.86	675.86	677.26	678.40	678.40	677.78	679.07	679.55	680.04	679.58	680.27	
--	White Hawk 4a	Irrigation	Quarterly/Discrete	Central San Antonio Basin	--	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	687.39	687.69	689.05	Newly constructed White Hawk 4 replacement well.
--	Mesa Vineyard	Irrigation	Quarterly/Discrete	Central San Antonio Basin	--	Careaga Sand	--	--	588.71	587.99	587.29	586.29	590.69	590.94	--	587.62	589.88	591.90	591.29	589.55	588.59	Oil in well column.
008N033W02N001S	2N1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	-153	Careaga Sand	--	--	602.60	600.15	601.05	599.25	601.75	--	603.02	599.19	602.92	605.05	--	--	--	Water level not attempted per owner's request.
008N033W02R001S	2R1	Domestic	Quarterly/Discrete	Central San Antonio Basin	406	Careaga Sand	--	--	657.98	658.65	603.85	656.90	656.95	657.10	656.79	656.46	656.38	655.92	654.34	655.69	655.48	
--	Well 4	Irrigation	Quarterly/Discrete	Central San Antonio Basin	1,000	Careaga Sand	--	--	--	--	--	--	--	--	--	--	596.57	596.78	597.06	--	--	Obstruction encountered at 104 feet below RPE. Water level not recorded.
008N033W10	4-Deer Field	Irrigation	Quarterly/Discrete	Central San Antonio Basin	149	Careaga Sand	--	--	611.69	612.27	573.46	571.36	610.75	613.77	611.83	608.97	609.88	612.61	612.34	603.95	609.92	
008N033W03L001S	4-Deer Highway	Irrigation	Quarterly/Discrete	Central San Antonio Basin	340	Careaga Sand	--	--	594.63	593.58	593.09	591.58	593.57	594.86	591.67	590.89	592.05	594.66	593.61	590.90	592.28	
--	Schaff Well	Monitoring	Quarterly/Discrete	Central San Antonio Basin	-71	Careaga Sand	--	--	382.85	382.74	382.26	381.60	381.45	381.26	381.21	380.53	380.35	380.38	380.10	379.50	379.24	
008N034W14L001S	14L1	Monitoring	Continuous/Transducer	West San Antonio Basin	-264	Careaga Sand	--	--	261.43	262.30	259.24	256.72	260.47	262.18	259.57	255.58	258.26	261.38	260.20	257.05	259.87	
009N034W34P001S	34P1	Monitoring	Quarterly/Discrete	West San Antonio Basin	230	Careaga Sand	361	386	**386.41**	382.30	383.11	384.16	384.81	**388.46**	--	**387.31**	**388.77**	--	--	--	--	Obstruction or collapse encountered at 72 feet below RPE. Water level not recorded.
008N034W17Q001S	17Q1	Monitoring	Quarterly/Discrete	West San Antonio Basin	222	Careaga Sand	--	--	260.22	260.20	259.60	--	--	261.69	261.28	260.20	259.79	262.04	261.80	260.68	260.20	
008N034W21A001S	21A1	Monitoring	Quarterly/Discrete	West San Antonio Basin	30	Careaga Sand	--	--	266.98	266.84	265.97	265.02	264.94	266.07	266.37	265.15	264.89	266.00	266.26	265.65	265.16	
008N034W17K002S	17K2	Monitoring	Quarterly/Discrete	West San Antonio Basin	200	Careaga Sand	--	--	257.32	257.32	257.17	257.00	256.90	256.92	257.00	256.99	256.99	256.97	--	257.05	257.04	
008N034W17E001S	17E1	Monitoring	Quarterly/Discrete	West San Antonio Basin	154	Careaga Sand	--	--	225.07	224.90	224.82	224.75	224.72	227.38	227.66	226.84	226.43	227.68	228.30	227.14	226.71	
008N034W16C002S	16C2	Monitoring	Continuous/Transducer	West San Antonio Basin	160	Careaga Sand	--	--	243.41	242.40	255.44	236.13	242.44	237.43	247.96	238.73	245.72	248.46	249.14	248.83	246.71	
008N034W16C004S	16C4	Monitoring	Continuous/Transducer	West San Antonio Basin	-231	Careaga Sand	--	--	256.05	255.33	242.78	250.36	254.69	251.69	255.20	251.96	256.29	258.20	258.56	258.17	257.32	
008N034W17H001S	17H1	Monitoring	Quarterly/Discrete	West San Antonio Basin	199	Careaga Sand	--	--	247.40	247.63	246.79	245.79	245.70	251.36	250.66	248.95	248.17	251.41	250.27	249.01	247.99	
008N034W16F001S	16F1	Monitoring	Quarterly/Discrete	West San Antonio Basin	219	Careaga Sand	--	--	241.97	240.13	236.64	234.17	235.00	235.38	242.02	237.30	239.08	242.44	244.00	244.56	241.61	
008N034W16G003S	16G3	Monitoring	Continuous/Transducer	West San Antonio Basin	239	Careaga Sand	226	244	**248.17**	**247.62**	**246.96**	**246.31**	**245.63**	**245.12**	**245.01**	**245.08**	**244.83**	**244.78**	**244.94**	**245.12**	**245.20**	
008N033W13C001S	13C1	Irrigation	Continuous/Transducer	Central San Antonio Basin	-293	Careaga Sand	565	597	589.65	588.85	587.55	589.75	590.45	--	589.35	591.37	591.81	592.36	592.76	592.17	592.00	
008N033W07	Stephen's Well	Irrigation	Quarterly/Discrete	West San Antonio Basin	83	Careaga Sand	--	--	335.29	332.98	334.13	330.67	334.13	--	331.82	292.55	294.86	330.67	330.67	324.89	--	Measured with airline. Confirmed pumping GWE of 290.24 feet
008N033W22K003S	22K3	Irrigation	Continuous/Transducer	Central San Antonio Basin	203	Paso Robles Formation	344	370	--	--	--	--	--	--	**373.68**	**370.74**	**373.88**	**374.42**	**376.43**	**377.51**	**379.46**	
008N033W13Q001S	13Q1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	367	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	546.61	551.19	549.52	550.79	
--	Char 1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	330	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	--	--	658.97	Measured with airline.
008N032W30D001S	30D1	Monitoring	--	Central San Antonio Basin	-355	Paso Robles Formation	345	388	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N032W25D001S	25D1	Irrigation	--	East San Antonio Basin	65	Careaga Sand	634	661	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N031W22J001S	22J1	Unknown	--	East San Antonio Basin	--	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N031W22N001S	22N1	Unknown	--	East San Antonio Basin	1,026	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N031W22M001S	22M1	Unknown	--	East San Antonio Basin	--	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N034W24E001S	24E1	Monitoring	--	West San Antonio Basin	--	Careaga Sand	220	257	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N033W20Q002S	20Q2	Irrigation	--	West San Antonio Basin	--	Paso Robles Formation	298	335	--	--	--	--	--	--	--	--	--	--	--	--	--	
--	VERNAS 1	Unknown	--	Central San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
--	VERNAS 2	Unknown	--	Central San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
--	HWY 101 CATTLE	Unknown	--	East San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N032W27P003S	GUZMAN 2	Unknown	--	East San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N032W30E005S	30E5	Unknown	--	Central San Antonio Basin	-458	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N033W25B005S	25B5	Unknown	--	Central San Antonio Basin	426	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N032W28P004S	28P4	Unknown	--	East San Antonio Basin	99	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N034W36R	Careaga Lease	Unknown	--	West San Antonio Basin	344	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N32W17N001S	White Hawk 4	Irrigation	Quarterly/Discrete	Central San Antonio Basin	-39	Careaga Sand	--	--	682.82	683.77	681.12	680.47	683.17	683.67	682.90	682.70	--	--	--	--	--	Well Destroyed December 2023
009N034W27L001S	27L1	Unknown	--	West San Antonio Basin	110	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Destroyed March 2021

Notes:

Green highlighted cells indicate well access agreement has been acquired
Yellow highlighted cells indicate well access agreement is pending
Red highlighted cells indicate well access denied
Gray highlighted cells indicate well access not applicable
Bold Groundwater elevation lower than Minimum Threshold (MT)
Bold Groundwater elevation greater than Measureable Objective (MO)
NAVD88 = North American Vertical Datum of 1988
GWE = Groundwater Elevation (feet NAVD88)
-- = unknown or not applicable

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

Fourth Quarter 2024

LEGEND

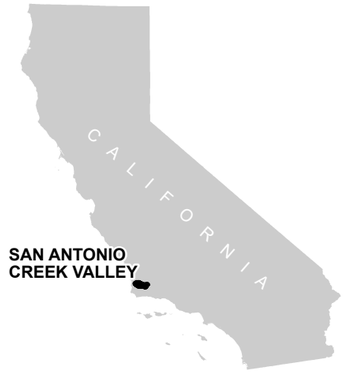
- Representative Well

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.

N

0 5,100 10,200 15,300

FEET

Date: December 11, 2024
Data Sources: BLM, ESRI, ODOT, USGS, Imagery (2022)

GSI Water Solutions, Inc.

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