FIGURES

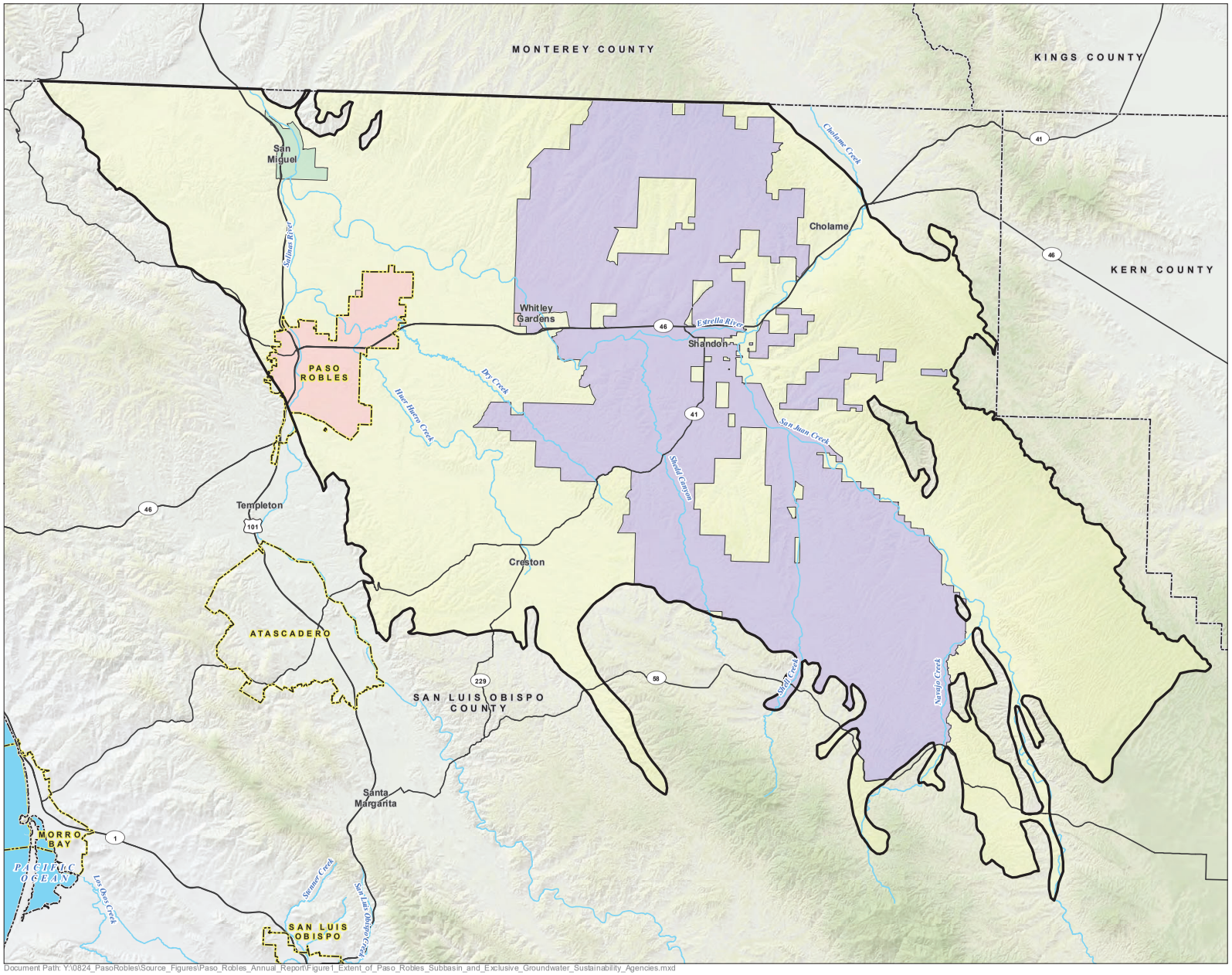


FIGURE 1

Extent of the Paso Robles Subbasin and Exclusive Groundwater Sustainability Agencies

Paso Robles Subbasin
First Annual Report

LEGEND

- Paso Robles Subbasin

Exclusive Groundwater Sustainability Agencies

- San Miguel Community Services District
- City of Paso Robles
- Shandon- San Juan Water District
- Paso Basin - County of San Luis Obispo

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

LOCATOR MAP:

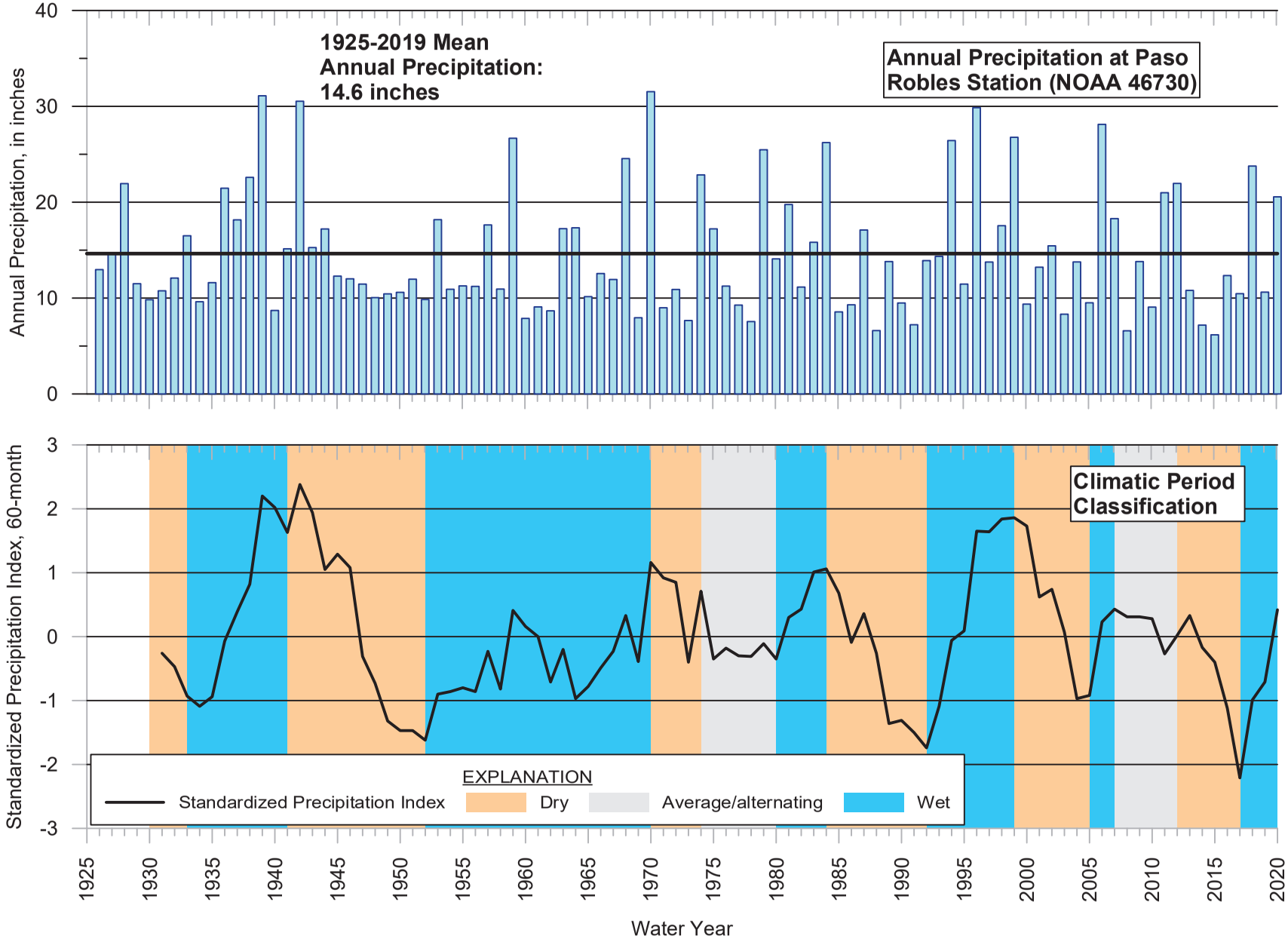
N

0 10,000 20,000 30,000
Feet

Date: January 27, 2020
Data Sources: CA DWR, SLO Co., USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure1_Extent_of_Paso_Robles_Subbasin_and_Exclusive_Groundwater_Sustainability_Agencies.mxd



GSI Water Solutions, Inc.

FIGURE 2
Annual Precipitation and Climatic Periods in the Paso Robles Subbasin
Paso Robles Subbasin First Annual Report

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\ClimatePeriods\Grapher\AnnualRpt_SPI_1925_2019_60month_wTitle.grf

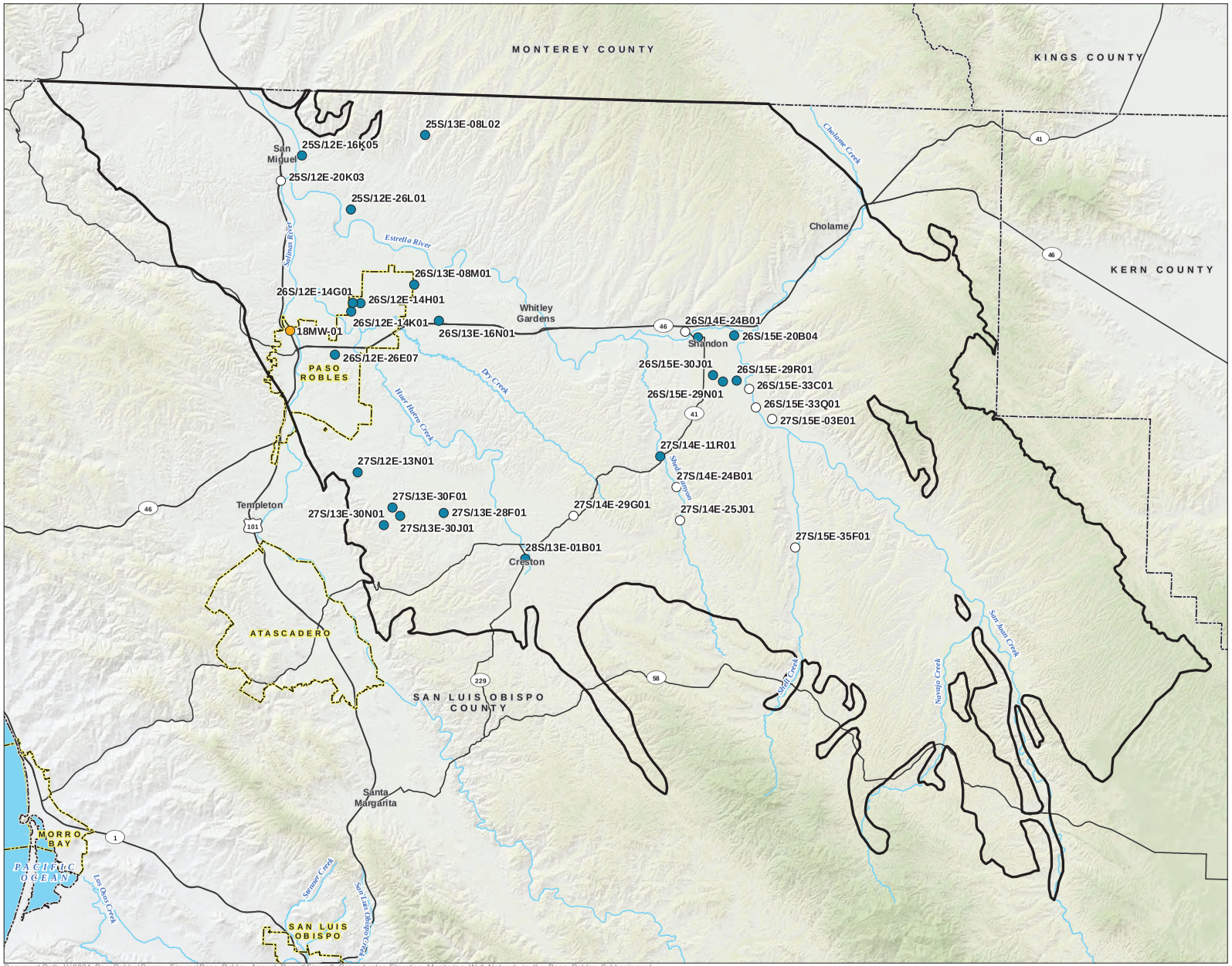


FIGURE 3

Groundwater Elevation Monitoring Well Network in the Paso Robles Subbasin

Paso Robles Subbasin
First Annual Report

LEGEND

Wells

- Paso Robles Formation
- Alluvial Aquifer
- Potential Future Monitoring Well

All Other Features

- Paso Robles Subbasin
- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

N

0 10,000 20,000 30,000
Feet

Date: January 16, 2020
Data Sources: CA DWR, SLO Co., City of Paso Robles, USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure3_Groundwater_Elevation_Monitoring_Well_Network_in_the_Paso_Robles_Subbasin.mxd

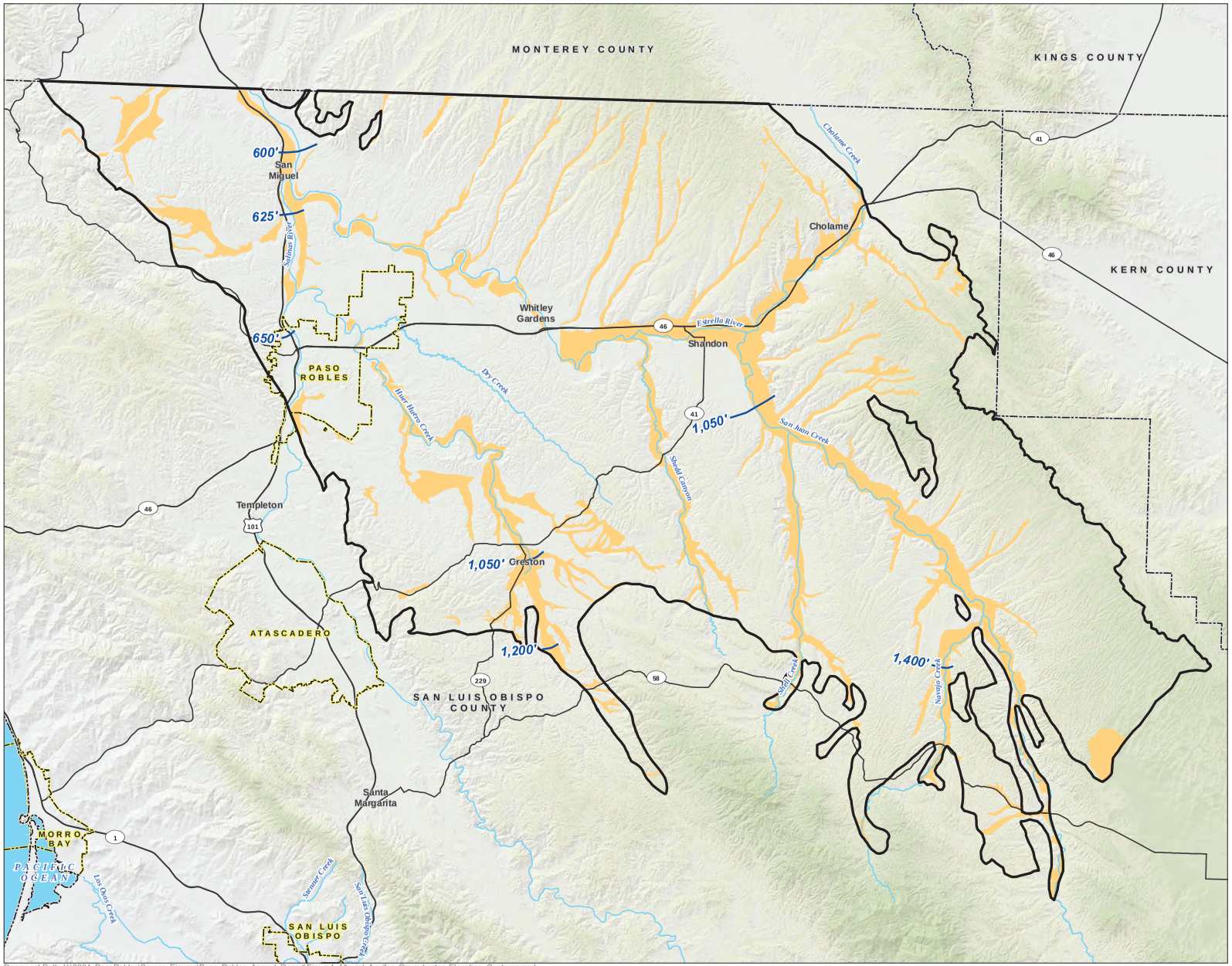


FIGURE 4

Alluvial Aquifer Groundwater Elevation Contours

Paso Robles Subbasin
First Annual Report

LEGEND

- Alluvial Groundwater Elevation Contour, in feet above mean sea level
- Paso Robles Subbasin

Geologic Alluvial Units

- Qal: Alluvial Deposits

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

N

0 10,000 20,000 30,000
Feet

Date: January 16, 2020
Data Sources: CA DWR, SLO Co., Montgomery, USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure4_Alluvial_Aquifer_Groundwater_Elevation_Contours.mxd

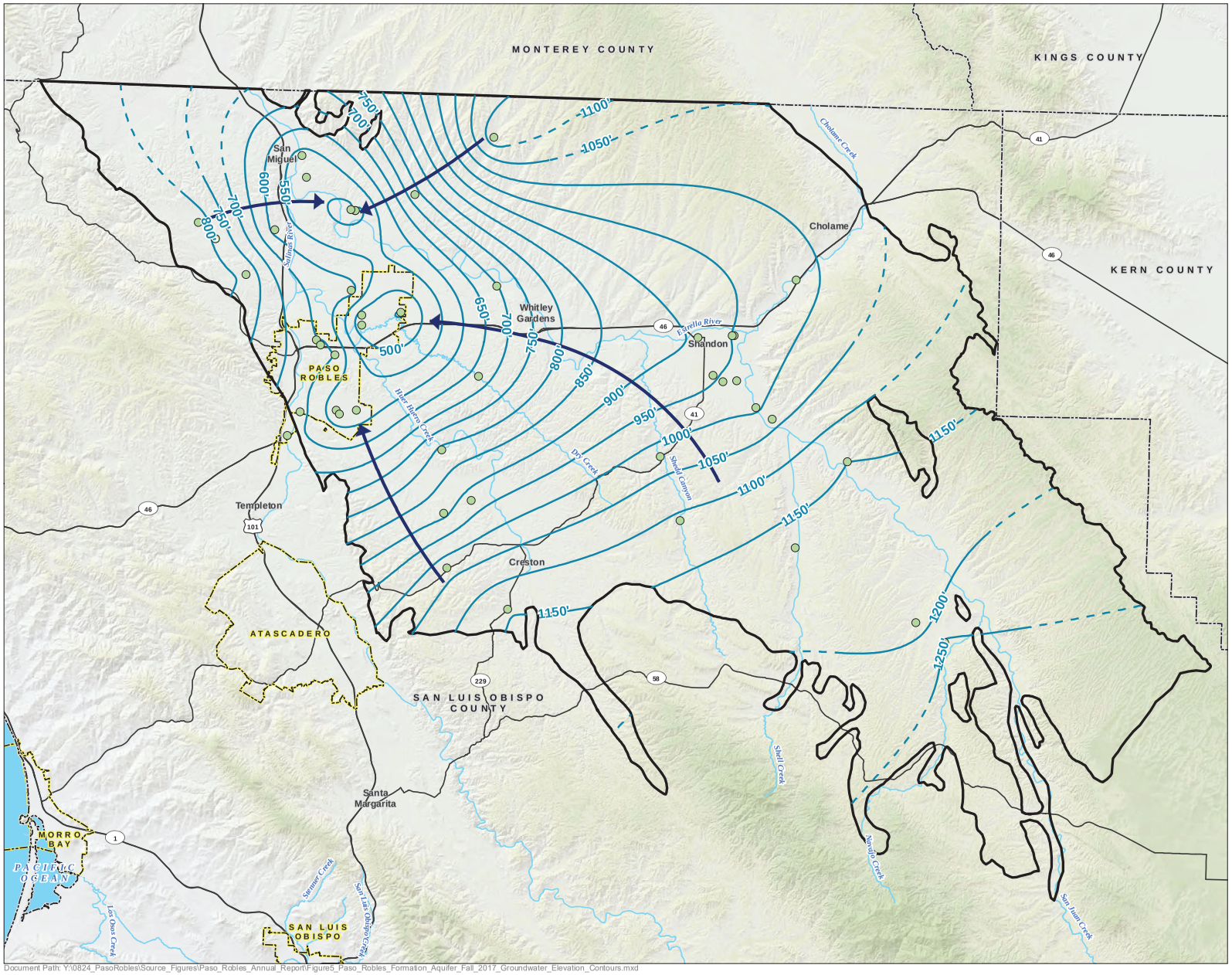


FIGURE 5

Paso Robles Formation Aquifer Fall 2017 Groundwater Elevation Contours

Paso Robles Subbasin
First Annual Report

LEGEND

- Well providing data for Paso Robles Formation Aquifer
- Fall 2017 Groundwater Elevation Contour in feet above mean sea level; dashed where inferred
- Inferred Groundwater Flow Direction
- Paso Robles Subbasin

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

N

0 10,000 20,000 30,000
Feet

Date: January 16, 2020
Data Sources: CA DWR, SLO Co., USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure5_Paso_Robles_Formation_Aquifer_Fall_2017_Groundwater_Elevation_Contours.mxd

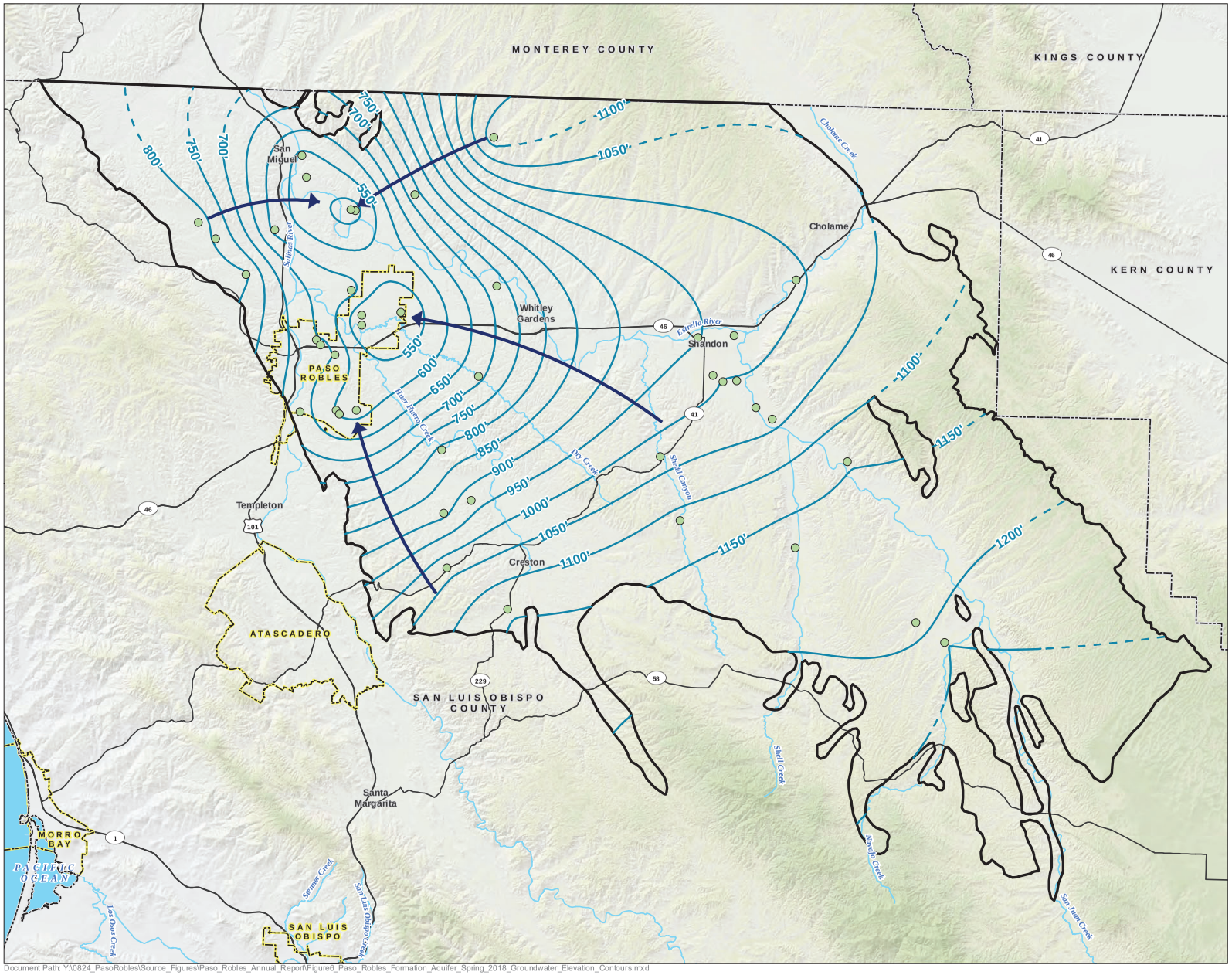


FIGURE 6

Paso Robles Formation Aquifer Spring 2018 Groundwater Elevation Contours

Paso Robles Subbasin
First Annual Report

LEGEND

- Well providing data for Paso Robles Formation Aquifer
- Spring 2018 Groundwater Elevation Contour in feet above mean sea level; dashed where inferred
- Inferred Groundwater Flow Direction
- Paso Robles Subbasin

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

N

0 10,000 20,000 30,000
Feet

Date: January 16, 2020
Data Sources: CA DWR, SLO Co., USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure6_Paso_Robles_Formation_Aquifer_Spring_2018_Groundwater_Elevation_Contours.mxd

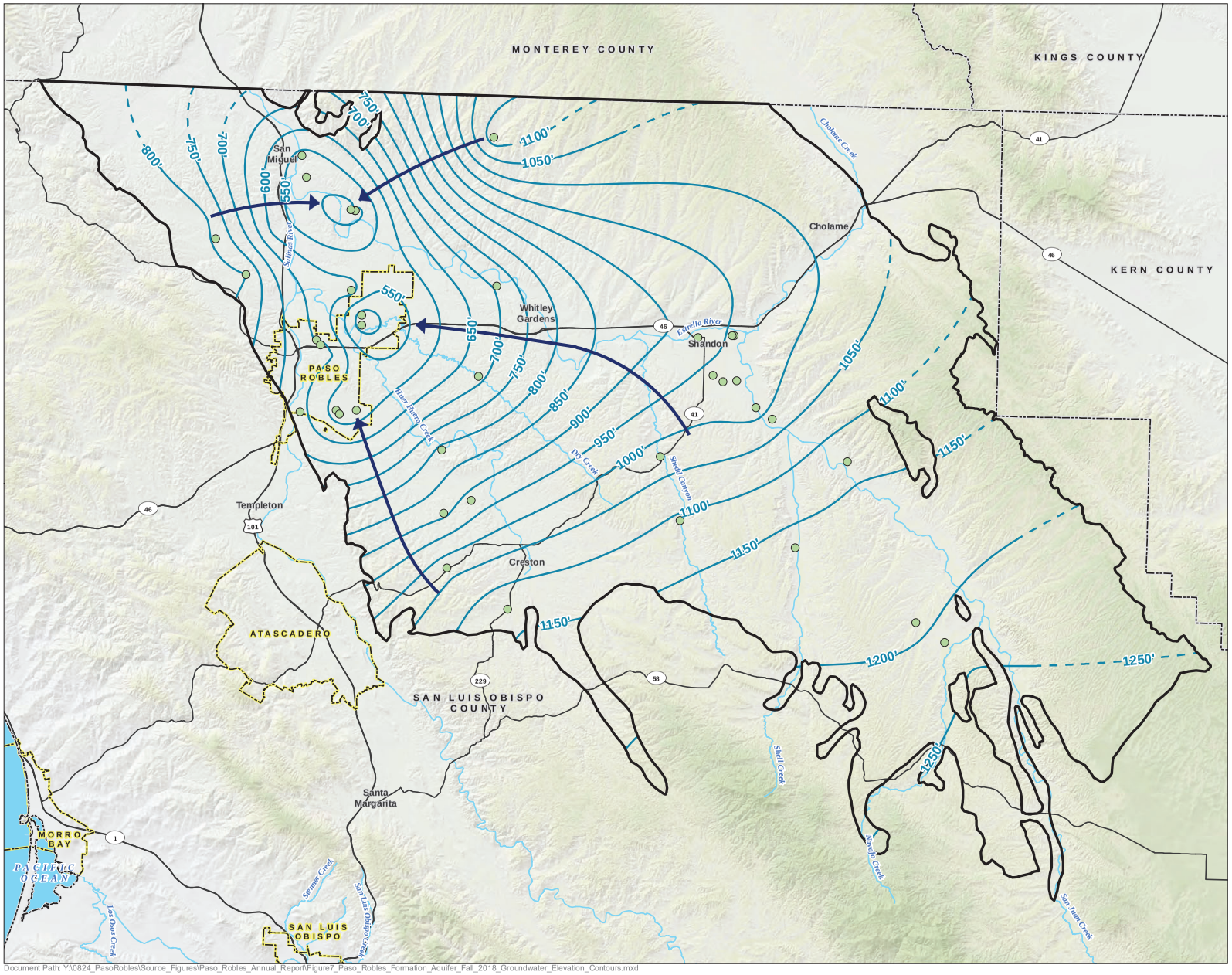


FIGURE 7

Paso Robles Formation Aquifer Fall 2018 Groundwater Elevation Contours

Paso Robles Subbasin
First Annual Report

LEGEND

- Well providing data for Paso Robles Formation Aquifer
- Fall 2018 Groundwater Elevation Contour in feet above mean sea level; dashed where inferred
- Inferred Groundwater Flow Direction
- Paso Robles Subbasin

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

Date: January 16, 2020
Data Sources: CA DWR, SLO Co., USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure7_Paso_Robles_Formation_Aquifer_Fall_2018_Groundwater_Elevation_Contours.mxd

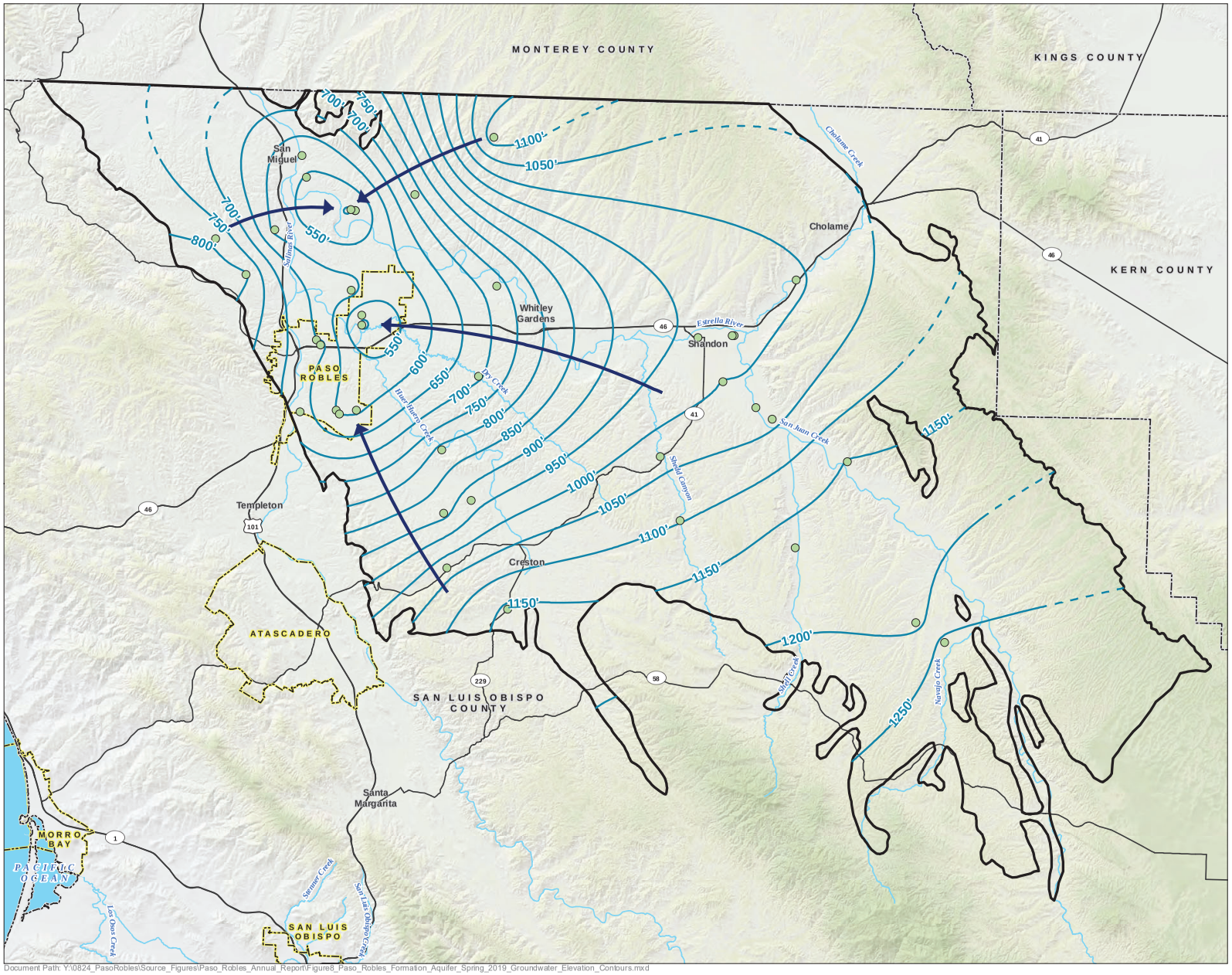


FIGURE 8

Paso Robles Formation Aquifer Spring 2019 Groundwater Elevation Contours

Paso Robles Subbasin
First Annual Report

LEGEND

- Well providing data for Paso Robles Formation Aquifer
- Spring 2019 Groundwater Elevation Contour in feet above mean sea level; dashed where inferred
- Inferred Groundwater Flow Direction
- Paso Robles Subbasin

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

N

0 10,000 20,000 30,000
Feet

Date: January 16, 2020
Data Sources: CA DWR, SLO Co., USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure8_Paso_Robles_Formation_Aquifer_Spring_2019_Groundwater_Elevation_Contours.mxd

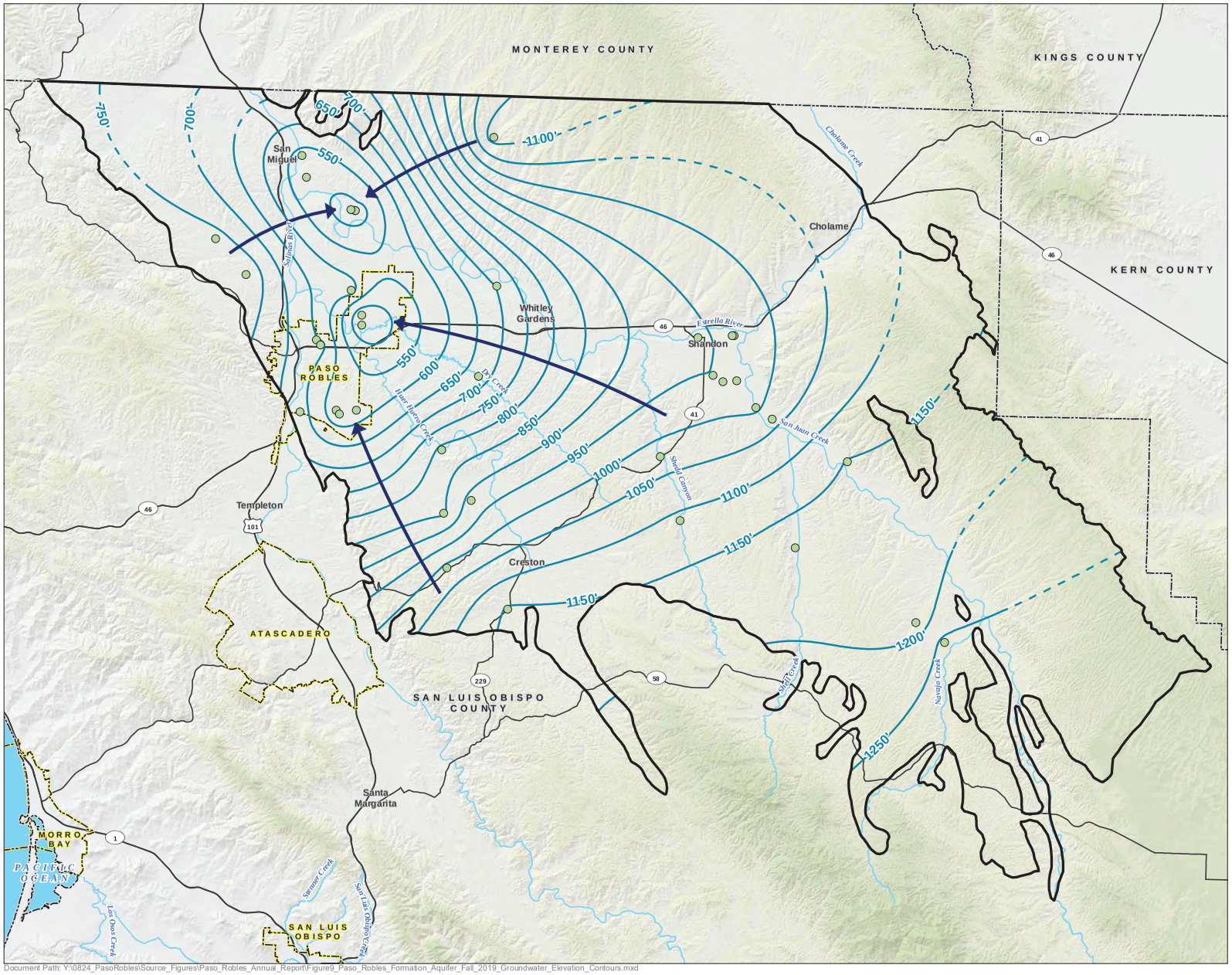


FIGURE 9

Paso Robles Formation Aquifer Fall 2019 Groundwater Elevation Contours

Paso Robles Subbasin
First Annual Report

LEGEND

- Well providing data for Paso Robles Formation Aquifer
- Fall 2019 Groundwater Elevation Contour in feet above mean sea level; dashed where inferred
- Inferred Groundwater Flow Direction
- Paso Robles Subbasin

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

N

0 10,000 20,000 30,000
Feet

Date: January 16, 2020
Data Sources: CA DWR, SLO Co., USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure9_Paso_Robles_Formation_Aquifer_Fall_2019_Groundwater_Elevation_Contours.mxd

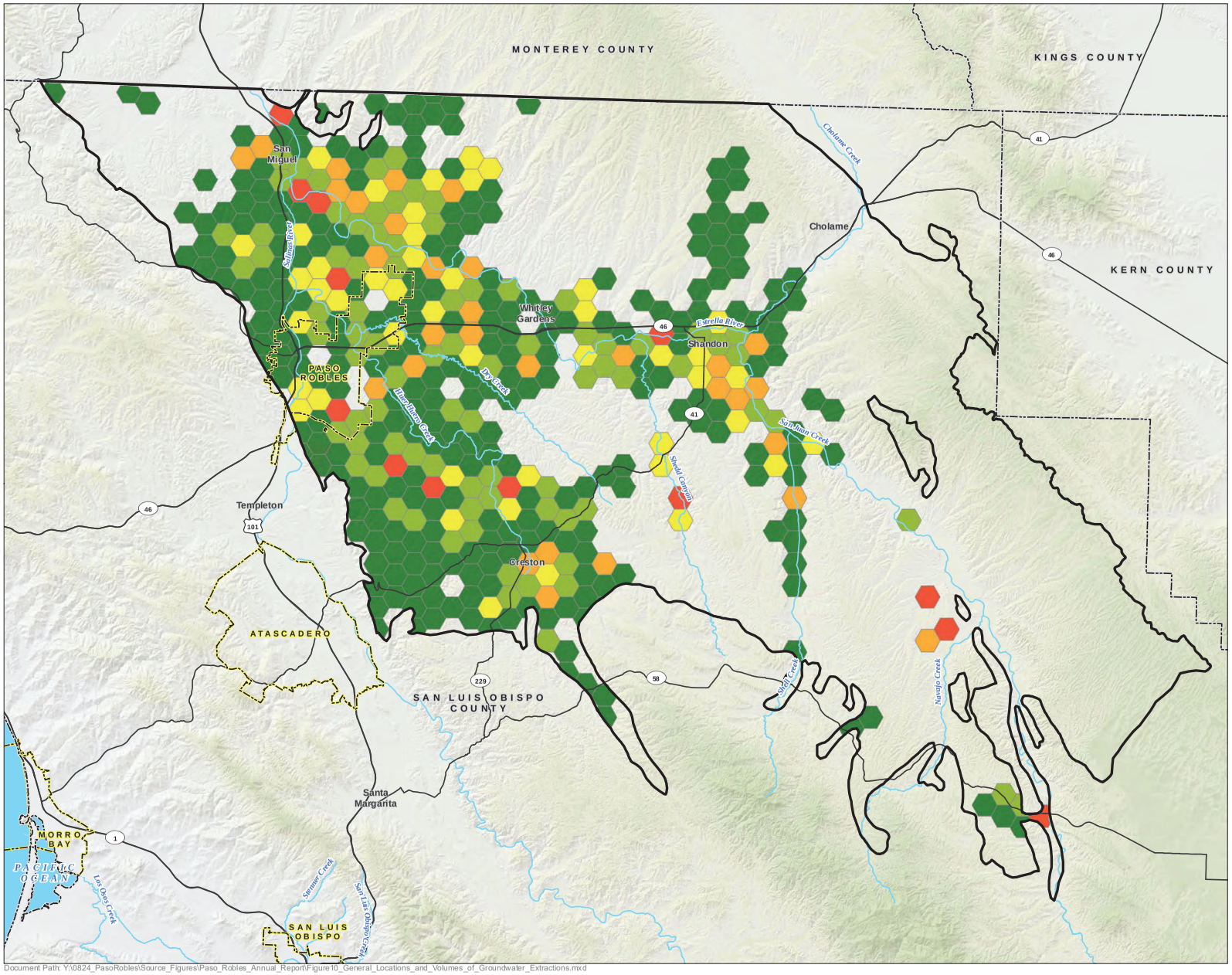


FIGURE 10

General Locations and Volumes of Groundwater Extraction

Paso Robles Subbasin
First Annual Report

LEGEND

- Paso Robles Subbasin

Total Groundwater Extraction (Average AFY)

- 0.036 - 5.00
- 5.00 - 15.00
- 15.00 - 30.00
- 30.00 - 50.00
- 50.00 - 99.101

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

NOTE
AFY: Acre-Feet per Year

N

0 10,000 20,000 30,000
Feet

Date: January 16, 2020
Data Sources: CA DWR, SLO Co., Soil Water Balance Model, USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure10_General_Locations_and_Volumes_of_Groundwater_Extractions.mxd

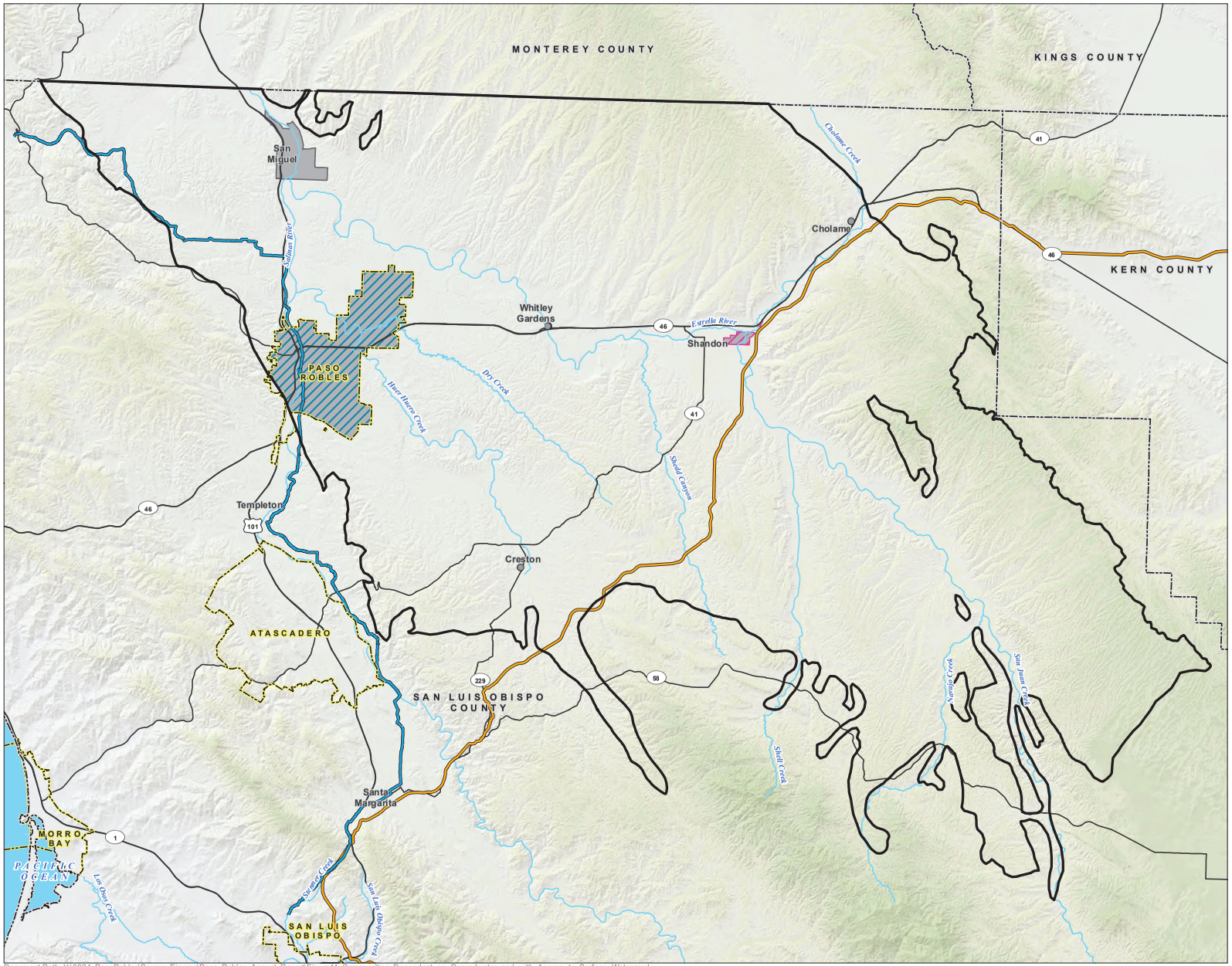


FIGURE 11

Communities Dependent on Groundwater and with Access to Surface Water

Paso Robles Subbasin
First Annual Report

LEGEND

- Nacimiento Water Project Pipeline
- State Water Project Pipeline
- Community Dependent Solely on Groundwater
- Community Served by Groundwater and Nacimiento Water Project
- Community Served by Groundwater and State Water Project
- Paso Robles Subbasin

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

N

0 10,000 20,000 30,000
Feet

Date: January 27, 2020
Data Sources: CA DWR, SLO Co., USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure11_Communities_Dependent_on_Groundwater_and_with_Access_to_Surface_Water.mxd

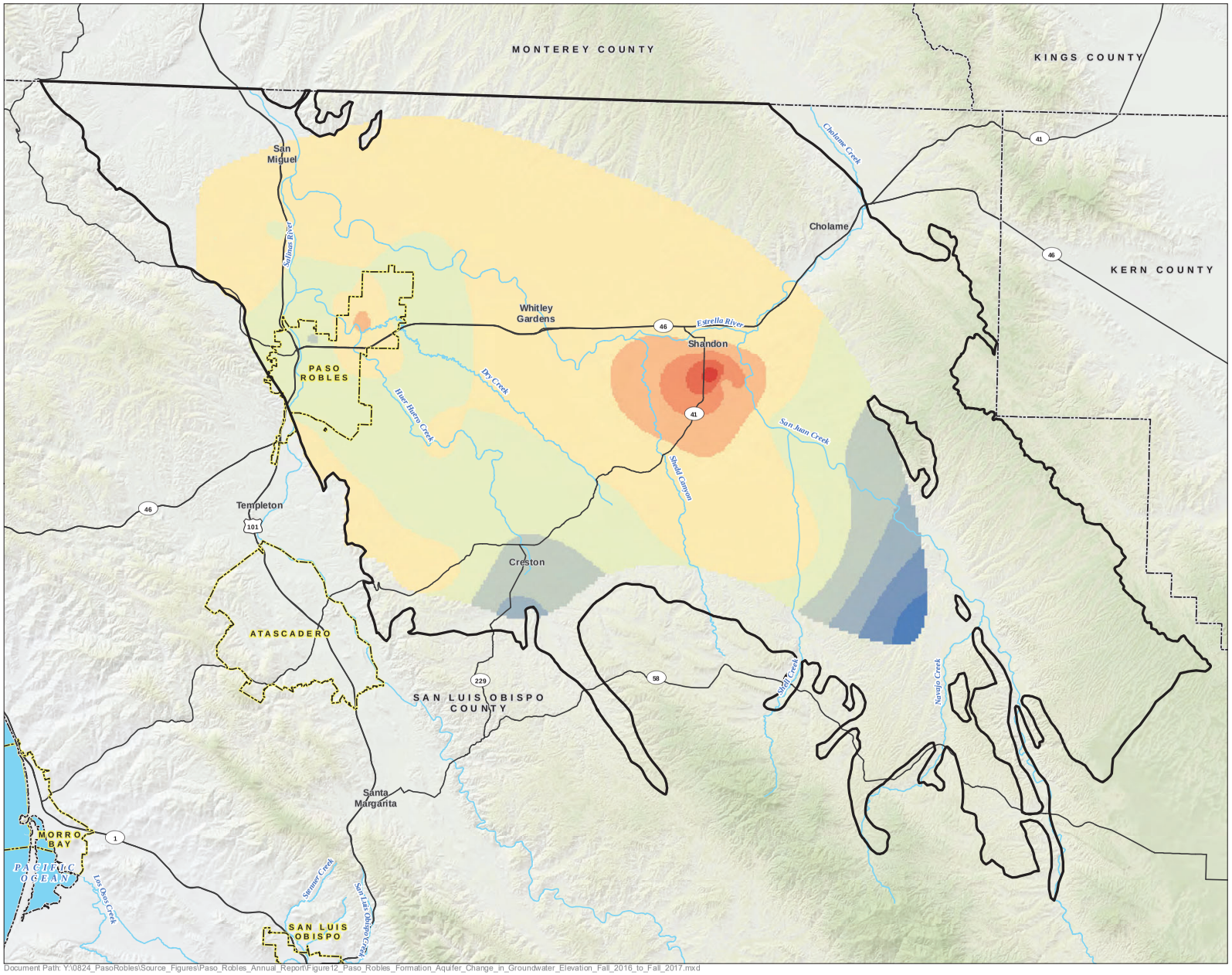


FIGURE 12

Paso Robles Formation Aquifer Change in Groundwater Elevation Fall 2016 to Fall 2017

Paso Robles Subbasin
First Annual Report

LEGEND

Paso Robles Subbasin

Water Level Change, in feet

Fall 2016 to Fall 2017

- < -40 feet
- -40 to -30 feet
- -30 to -20 feet
- -20 to -10 feet
- -10 to 0 feet
- 0 to 10 feet
- 10 to 20 feet
- 20 to 30 feet
- 30 to 40 feet
- > 40 feet

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

N

0 10,000 20,000 30,000
Feet

Date: January 16, 2020
Data Sources: CA DWR, SLO Co., USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure12_Paso_Robles_Formation_Aquifer_Change_in_Groundwater_Elevation_Fall_2016_to_Fall_2017.mxd

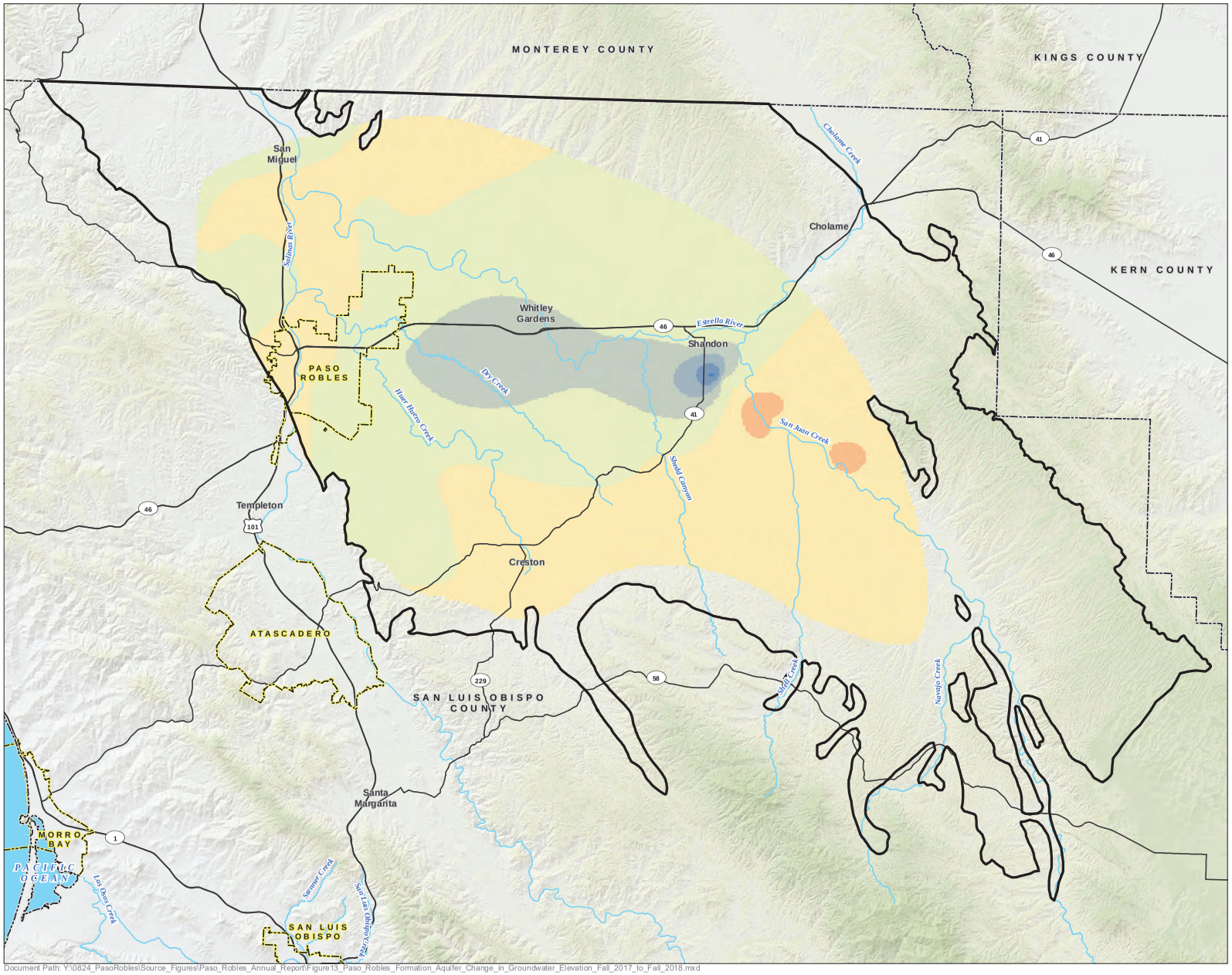


FIGURE 13

Paso Robles Formation Aquifer Change in Groundwater Elevation Fall 2017 to Fall 2018

Paso Robles Subbasin
First Annual Report

LEGEND

Paso Robles Subbasin

Water Level Change, in feet

Fall 2017 to Fall 2018

- < -40 feet
- -40 to -30 feet
- -30 to -20 feet
- -20 to -10 feet
- -10 to 0 feet
- 0 to 10 feet
- 10 to 20 feet
- 20 to 30 feet
- 30 to 40 feet
- > 40 feet

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

N

0 10,000 20,000 30,000
Feet

Date: January 16, 2020
Data Sources: CA DWR, SLO Co., USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure13_Paso_Robles_Formation_Aquifer_Change_in_Groundwater_Elevation_Fall_2017_to_Fall_2018.mxd

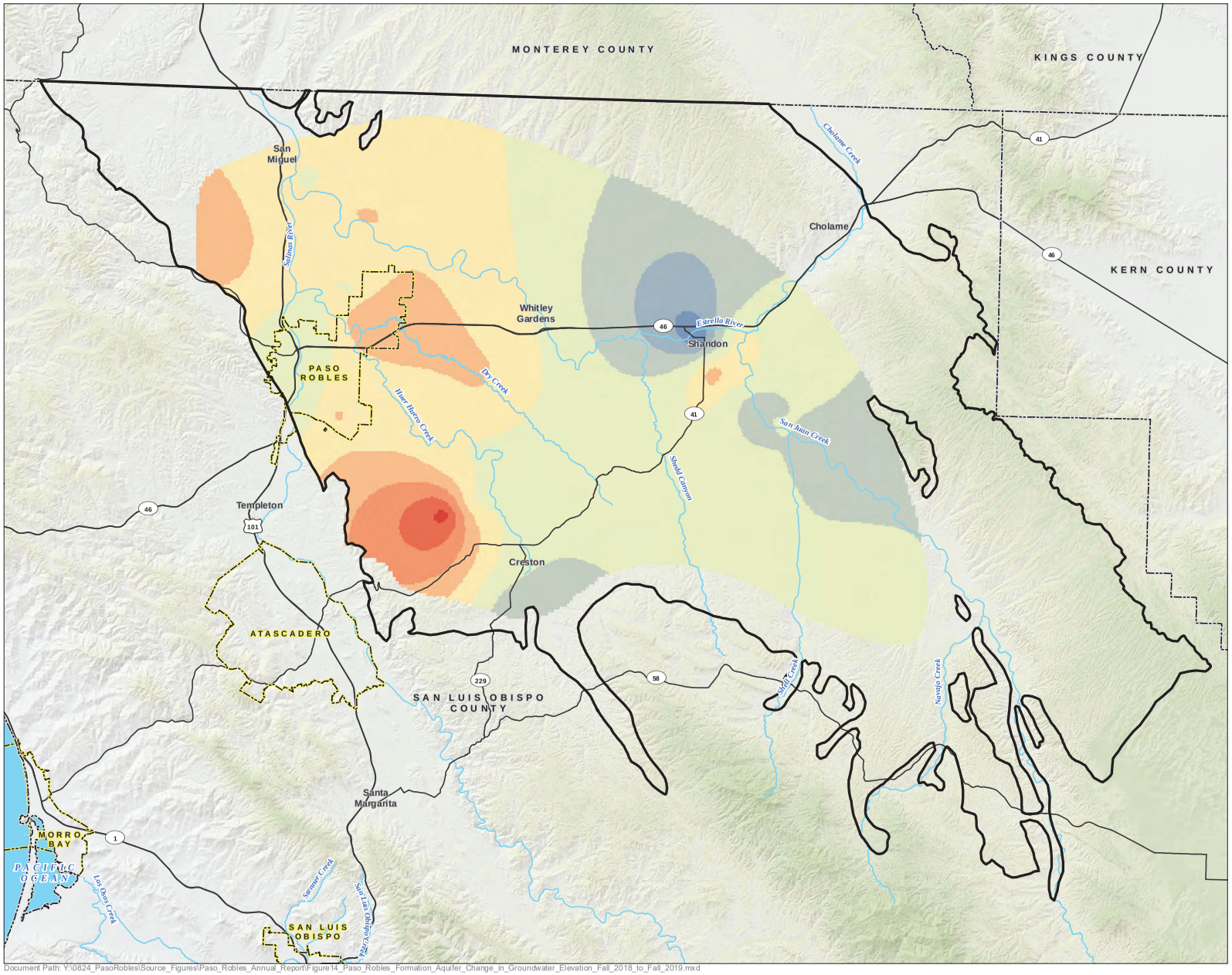


FIGURE 14

Paso Robles Formation Aquifer Change in Groundwater Elevation Fall 2018 to Fall 2019

Paso Robles Subbasin
First Annual Report

LEGEND

- Paso Robles Subbasin

Water Level Change, in feet

Fall 2018 to Fall 2019

- < -40 feet
- -40 to -30 feet
- -30 to -20 feet
- -20 to -10 feet
- -10 to 0 feet
- 0 to 10 feet
- 10 to 20 feet
- 20 to 30 feet
- 30 to 40 feet
- > 40 feet

All Other Features

- County Boundary
- City Boundary
- Major Road
- Watercourse
- Waterbody

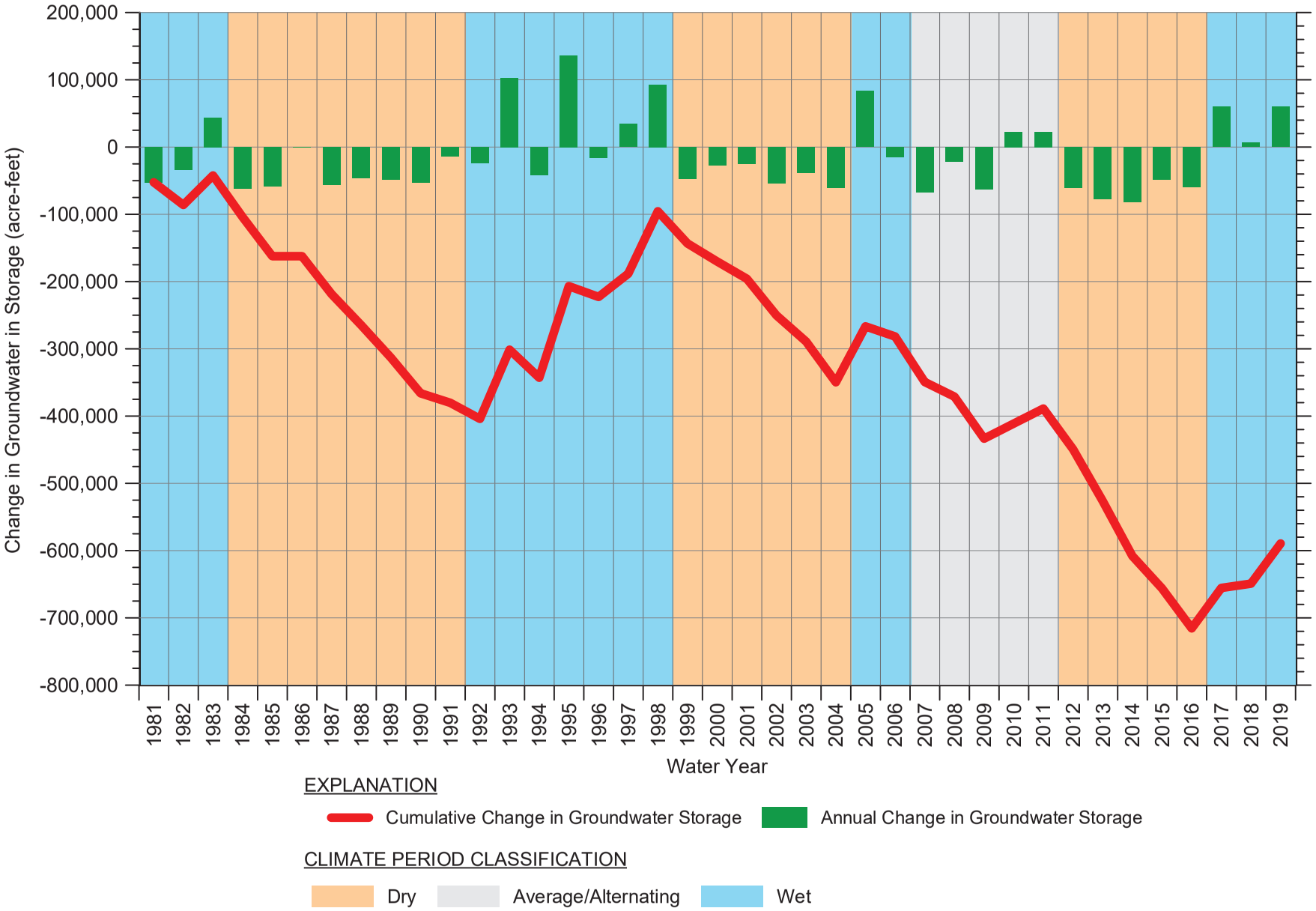
N

0 10,000 20,000 30,000
Feet

Date: January 16, 2020
Data Sources: CA DWR, SLO Co., USGS

GSI Water Solutions, Inc.

Document Path: Y:\0824_PasoRobles\Source_Figures\Paso_Robles_Annual_Report\Figure14_Paso_Robles_Formation_Aquifer_Change_in_Groundwater_Elevation_Fall_2018_to_Fall_2019.mxd



GSI Water Solutions, Inc.

FIGURE 15

Estimated Annual and Cumulative Change in Groundwater in Storage in the Paso Robles Subbasin

Paso Robles Subbasin First Annual Report

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APPENDICES

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APPENDIX A

GSP Regulations for Annual Reports

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§ 356.2. Annual Reports

Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:

(a) General information, including an executive summary and a location map depicting the basin covered by the report.

(b) A detailed description and graphical representation of the following conditions of the basin managed in the Plan:

(1) Groundwater elevation data from monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:

(A) Groundwater elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.

(B) Hydrographs of groundwater elevations and water year type using historical data to the greatest extent available, including from January 1, 2015, to current reporting year.

(2) Groundwater extraction for the preceding water year. Data shall be collected using the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector, and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.

(3) Surface water supply used or available for use, for groundwater recharge or in-lieu use shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.

(4) Total water use shall be collected using the best available measurement methods and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.

(5) Change in groundwater in storage shall include the following:

(A) Change in groundwater in storage maps for each principal aquifer in the basin.

(B) A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year.

(c) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.2, 10728, and 10733.2, Water Code.

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APPENDIX B

Precipitation Data

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Monthly Precipitation at the Paso Robles Station (NOAA 46730)

(inches)

Source: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6730

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	WY Total
1925	0.34	2.44	2.57	2.01	2.41	0.08	0.09	0.12	0.02	0.17	0.21	1.98	**12.95**
1926	2.13	6.26	0.27	3.52	0.00	0.02	0.00	0.00	0.00	0.25	7.14	0.90	**14.56**
1927	1.84	9.04	1.45	1.27	0.00	0.02	0.00	0.00	0.00	1.33	2.02	1.63	**21.91**
1928	0.23	2.87	2.76	0.37	0.29	0.00	0.00	0.00	0.00	0.01	1.82	2.87	**11.50**
1929	1.27	1.65	1.22	0.49	0.00	0.49	0.00	0.00	-----	0.00	0.00	0.24	**9.82**
1930	4.32	1.80	3.00	0.54	1.01	0.04	0.00	0.00	0.04	0.00	1.64	0.16	**10.99**
1931	4.58	1.87	0.39	0.56	2.01	0.93	0.00	0.09	0.00	0.01	1.89	7.04	**12.23**
1932	2.74	3.89	0.50	0.30	0.13	0.00	0.00	0.00	0.00	0.04	0.11	1.28	**16.50**
1933	6.05	0.08	0.84	0.22	0.32	0.68	0.00	0.00	0.00	0.64	0.00	4.26	**9.62**
1934	2.06	3.75	0.04	0.00	0.12	0.75	0.00	0.00	0.00	1.56	2.61	2.66	**11.62**
1935	6.23	0.65	4.08	3.41	0.02	0.00	0.00	0.16	0.07	0.18	1.58	1.66	**21.45**
1936	0.61	11.07	1.24	1.52	0.01	0.04	0.25	0.00	0.00	1.93	0.00	6.10	**18.16**
1937	4.59	4.54	5.25	0.16	0.00	0.00	0.00	0.00	0.00	0.16	0.66	7.40	**22.57**
1938	1.73	12.74	6.77	0.93	0.30	0.00	0.00	0.00	0.41	0.23	0.33	1.45	**31.10**
1939	3.11	1.45	1.58	0.05	0.09	0.00	0.00	0.00	0.43	0.55	0.78	1.29	**8.72**
1940	5.28	5.57	1.13	0.54	0.00	0.00	0.00	0.00	0.00	0.19	0.13	8.18	**15.14**
1941	4.73	8.16	6.14	2.76	0.19	0.00	0.00	0.02	0.00	1.34	0.70	5.15	**30.50**
1942	2.40	0.76	1.77	3.01	0.15	0.00	0.00	0.00	0.00	0.53	1.01	1.64	**15.28**
1943	8.00	1.68	3.63	0.72	0.00	0.00	0.00	0.00	0.00	0.39	0.12	3.38	**17.21**
1944	1.03	5.96	0.64	0.65	0.13	0.00	0.00	0.00	0.00	0.26	2.64	1.09	**12.30**
1945	0.80	4.17	2.76	0.26	0.02	0.00	0.00	0.00	0.00	1.09	0.49	3.89	**12.00**
1946	0.31	1.64	3.01	0.05	0.72	0.00	0.26	0.00	0.00	0.19	4.57	2.17	**11.46**
1947	0.56	0.97	1.14	0.13	0.28	0.00	0.00	0.00	0.04	0.32	0.18	0.62	**10.05**
1948	0.00	1.85	3.51	3.50	0.45	0.00	0.00	0.00	0.00	0.06	0.00	3.04	**10.43**
1949	1.09	1.95	3.73	0.36	0.38	0.00	0.00	0.00	0.00	0.00	0.78	2.33	**10.61**
1950	3.05	2.43	1.65	1.00	0.05	0.00	0.68	0.00	0.00	1.24	1.18	2.50	**11.97**
1951	2.50	0.68	0.58	1.11	0.00	0.00	0.00	0.00	0.03	0.33	1.91	4.64	**9.82**
1952	5.54	0.20	3.92	1.49	0.03	0.00	0.07	0.00	0.02	0.02	1.76	4.78	**18.15**
1953	1.71	0.00	0.66	1.90	0.06	0.01	0.00	0.00	0.00	0.00	2.46	0.00	**10.90**
1954	3.06	1.89	3.12	0.64	0.10	0.00	0.00	0.00	0.00	0.00	1.29	1.51	**11.27**
1955	3.57	1.85	0.37	1.16	1.31	0.00	0.00	0.13	0.00	0.00	1.36	8.14	**11.19**
1956	3.82	0.99	0.01	1.87	1.45	0.00	0.00	0.00	0.00	1.07	0.00	0.17	**17.64**
1957	4.77	1.90	0.31	1.63	0.70	0.37	0.00	0.00	0.02	0.60	0.30	3.30	**10.94**
1958	2.93	6.02	6.35	5.22	0.37	0.00	0.00	0.38	1.20	0.00	0.13	0.48	**26.67**
1959	1.69	4.53	0.03	0.44	0.05	0.00	0.00	0.00	0.52	0.00	0.00	0.31	**7.87**
1960	2.42	4.20	0.70	1.40	0.04	0.00	0.00	0.00	0.00	0.10	3.63	1.17	**9.07**
1961	1.72	0.20	0.88	0.22	0.74	0.00	0.00	0.00	0.00	0.01	1.99	2.59	**8.66**
1962	2.05	8.49	1.98	0.00	0.12	0.00	0.00	0.00	0.00	0.79	0.01	2.49	**17.23**
1963	4.41	3.79	2.10	3.32	0.17	0.01	0.00	0.00	0.24	1.00	4.25	0.01	**17.33**
1964	1.87	0.15	1.46	0.68	0.55	0.06	0.00	0.08	0.03	1.05	2.27	2.37	**10.14**
1965	2.50	0.51	1.16	2.48	0.00	0.00	0.04	0.03	0.15	0.00	6.43	3.24	**12.56**
1966	1.17	0.68	0.08	0.00	0.01	0.14	0.08	0.00	0.11	0.00	2.43	8.60	**11.94**
1967	3.93	0.35	3.99	4.41	0.03	0.02	0.00	0.00	0.79	0.14	1.74	1.70	**24.55**
1968	1.19	0.68	1.76	0.70	0.04	0.00	0.00	0.00	0.00	1.83	1.14	3.13	**7.95**
1969	13.93	9.12	0.35	1.68	0.06	0.01	0.25	0.00	0.00	0.24	0.44	0.68	**31.50**
1970	3.71	1.66	1.83	0.37	0.00	0.04	0.00	0.00	0.00	0.08	3.14	4.56	**8.97**
1971	1.08	0.24	0.85	0.69	0.21	0.00	0.00	0.00	0.05	0.29	0.88	4.27	**10.90**
1972	1.35	0.30	0.00	0.53	0.00	0.00	0.00	0.00	0.03	1.68	4.14	0.85	**7.65**
1973	6.54	6.95	2.60	0.01	0.06	0.00	0.00	0.00	0.00	0.61	3.09	1.61	**22.83**
1974	6.39	0.05	4.56	0.91	0.00	0.00	0.00	0.00	0.00	0.64	0.43	2.33	**17.22**

Monthly Precipitation at the Paso Robles Station (NOAA 46730)

(inches)

Source: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6730

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	WY Total
1975	0.01	4.12	2.81	0.89	0.00	0.00	0.00	0.01	0.00	0.77	0.03	0.10	**11.24**
1976	0.00	2.61	1.09	0.66	0.00	0.08	0.00	1.02	2.90	0.58	0.55	1.80	**9.26**
1977	1.47	0.03	1.41	0.00	1.71	0.00	0.00	0.00	0.00	0.08	0.25	5.25	**7.55**
1978	5.77	7.31	3.10	2.77	0.00	0.00	0.00	0.00	0.92	0.00	2.47	1.04	**25.45**
1979	4.70	3.52	2.30	0.00	0.00	0.00	0.00	0.00	0.06	0.93	0.85	2.31	**14.09**
1980	4.47	8.05	1.88	0.65	0.24	0.00	0.35	0.00	0.00	0.00	0.02	0.44	**19.73**
1981	4.00	1.60	4.52	0.56	0.00	0.00	0.00	0.00	0.00	1.01	1.44	0.62	**11.14**
1982	2.65	0.88	5.10	3.05	0.00	0.02	0.00	0.00	1.04	0.90	3.98	1.98	**15.81**
1983	5.84	4.53	4.69	3.35	0.05	0.00	0.00	0.52	0.37	1.34	2.07	3.68	**26.21**
1984	0.20	0.24	0.66	0.35	0.00	0.00	0.00	0.00	0.00	0.38	2.10	3.01	**8.54**
1985	0.52	0.92	2.11	0.19	0.00	0.00	0.02	0.00	0.04	0.40	1.07	0.97	**9.29**
1986	2.11	6.93	4.64	0.32	0.00	0.00	0.03	0.00	0.63	0.02	0.15	0.75	**17.10**
1987	0.88	2.01	3.40	0.14	0.06	0.07	0.00	0.00	0.00	1.50	2.63	2.73	**7.48**
1988	1.94	2.54	0.10	2.02	0.21	0.14	0.00	0.00	0.00	0.00	1.29	2.87	**13.81**
1989	0.98	1.59	0.71	0.37	0.07	0.00	0.00	0.00	1.59	0.97	0.22	0.00	**9.47**
1990	3.02	1.48	0.24	0.12	0.66	0.00	0.00	0.00	0.51	0.00	0.14	0.20	**7.22**
1991	0.63	2.17	10.25	0.08	0.03	0.20	0.00	0.10	0.10	0.50	0.16	3.00	**13.90**
1992	1.44	6.09	2.99	0.10	0.00	0.03	0.03	0.00	0.01	0.79	0.00	3.59	**14.35**
1993	9.63	8.31	3.89	0.07	0.01	0.14	0.00	0.00	0.00	0.17	0.86	1.28	**26.43**
1994	1.90	3.37	1.16	0.49	1.05	0.00	0.00	0.00	1.17	0.70	2.32	0.93	**11.45**
1995	11.51	1.42	12.31	0.09	0.44	0.14	0.00	0.00	0.00	0.00	0.12	1.92	**29.86**
1996	1.84	6.52	2.03	0.78	0.55	0.00	0.00	0.00	0.00	1.78	1.85	5.83	**13.76**
1997	7.93	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.10	0.07	4.05	3.93	**17.55**
1998	2.99	9.06	2.71	1.90	1.87	0.11	0.00	0.00	0.08	0.21	0.99	0.73	**26.77**
1999	1.84	1.26	2.68	1.19	0.00	0.00	0.00	0.00	0.47	0.00	0.71	0.22	**9.37**
2000	3.16	5.89	1.55	1.56	0.05	0.04	0.00	0.00	0.03	1.34	0.05	0.16	**13.21**
2001	4.43	5.14	3.59	0.68	0.00	0.00	0.04	0.00	0.00	0.24	2.81	2.19	**15.43**
2002	0.87	0.33	1.40	0.23	0.25	0.00	0.00	0.00	0.00	0.00	2.54	4.36	**8.32**
2003	0.00	2.10	1.85	1.70	1.18	0.00	-----	0.03	0.00	0.00	1.36	2.31	**13.76**
2004	0.91	4.31	0.30	0.32	0.00	0.00	0.00	0.00	0.00	5.11	1.39	6.75	**9.51**
2005	4.81	5.02	3.07	0.76	1.10	0.01	0.00	0.08	0.00	0.02	0.44	2.54	**28.10**
2006	5.78	1.23	4.50	2.74	1.48	0.00	0.00	0.00	0.00	0.61	0.28	1.13	**18.73**
2007	0.74	2.98	0.13	0.37	0.00	0.00	0.00	0.31	0.04	0.96	0.00	2.23	**6.59**
2008	8.44	1.83	0.00	0.33	0.01	0.00	0.00	0.00	0.00	0.14	1.26	1.13	**13.80**
2009	0.91	3.89	1.37	0.17	0.12	0.02	0.00	0.00	0.05	4.04	0.02	3.96	**9.06**
2010	6.09	3.38	0.64	2.71	0.12	0.00	0.03	0.00	0.00	1.06	1.57	7.14	**20.99**
2011	2.07	3.05	5.29	0.28	0.95	0.53	0.00	0.00	0.03	0.90	1.93	0.12	**21.97**
2012	2.38	0.25	2.44	2.60	0.18	0.00	0.00	0.00	0.00	0.28	0.75	3.94	**10.80**
2013	1.02	0.28	0.69	0.07	0.15	0.00	0.00	0.00	0.00	0.01	0.26	0.30	**7.18**
2014	0.00	2.75	1.96	0.85	0.00	0.00	0.03	0.00	0.00	0.00	1.00	5.48	**6.16**
2015	0.32	2.16	0.10	0.37	0.05	0.00	2.82	0.00	0.05	0.07	1.45	0.89	**12.35**
2016	4.13	0.85	2.92	0.15	0.00	0.00	0.00	0.00	0.00	1.61	1.46	1.98	**10.46**
2017	9.50	6.44	0.92	1.46	0.24	0.00	0.00	0.00	0.16	0.08	0.22	0.04	**23.77**
2018	2.08	0.25	7.74	0.21	0.00	0.00	0.00	0.00	0.00	0.28	3.23	1.12	**10.62**
2019	5.30	6.72	3.01	0.08	0.82	0.00	0.00	0.00	0.00	0.00	1.40	5.22	**20.56**
											Water Year Average (1925 - 2019):		**14.65**

APPENDIX C

Groundwater Level and Groundwater Storage Monitoring Well Network

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Table C-1 – Groundwater Level and Groundwater Storage Monitoring Well Network

Well ID (alt ID)	Well Depth (feet)	Screen Interval(s) (feet bls)	Reference Point Elevation (feet AMSL)	First Year of Data	Last Year of Data	Years Measured	Number of Measurement	Aquifer
18MW-0191[1]	50	10-50	672 (LSE)	2018	2018	<1	1	Qa
25S/12E-16K05 (PASO-0345)	350	300-310, 330-340	669.8	1992	2019	27	56	PR
25S/12E-26L01 (PASO-0205)	400	200-400	719.72	1970	2019	49	107	PR
25S/13E-08L02 (PASO-0195)	270	110-270	1,033.81	2012	2019	7	15	PR
26S/12E-14G01 (PASO-0048)	740	---	789.3	1969	2019	50	121	PR
26S/12E-14G02 (PASO-0017)	840	640-840	787	1993	2019	26	28	PR
26S/12E-14H01 (PASO-0184)	1230	180-?	790	1969	2019	50	48	PR
26S/12E-14K01 (PASO-0238)	1100	---	786	1979	2019	40	84	PR
26S/12E-26E07 (PASO-0124)	400	---	835	1958	2018	60	131	PR
26S/13E-08M01 (PASO-0164)	400	260-400	827.92	2013	2019	6	16	PR
26S/13E-16N01 (PASO-0282)	400	200-400	890.17	2012	2019	7	16	PR
26S/15E-19E01 (PASO-0073)	512	223-512	1,020	1987	2019	32	56	PR
26S/15E-20B04 (PASO-0401)	461	297-461	1,036.36	1984	2019	35	71	PR
26S/15E-29N01 (PASO-0226)	350	---	1,135	1958	2019	61	127	PR
26S/15E-29R01 (PASO-0406)	600	180-600	1,109.5	2012	2019	7	12	PR
26S/15E-30J01 (PASO-0393)	605	195-605	1,123.3	1970	2019	49	83	PR
27S/12E-13N01 (PASO-0223)	295	195-295	972.42	2012	2019	7	15	PR
27S/13E-28F01 (PASO-0243)	212	118-212	1,072	1969	2019	50	108	PR
27S/13E-30F01 (PASO-0355)	310	200-310	1,043.2	2012	2019	7	14	PR
27S/13E-30J01 (PASO-0423)	685	225-685	1,095	2012	2019	7	10	PR
27S/13E-30N01 (PASO-0086)	355	215-235, 275-355	1,086.73	2012	2016	4	6	PR
27S/14E-11R01 (PASO-0392)	630	180-630	1,160.5	1974	2019	45	75	PR
28S/13E-01B01 (PASO-0066)	254	154-254	1,099.93	2012	2019	7	17	PR

NOTES: New alluvial monitoring well information provided by City of Paso Robles; well not included in County database.

"—" = unknown; AMSL – above mean sea level; PR Paso Robles Formation Aquifer; Qa Alluvial Aquifer

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APPENDIX D

Potential Future Groundwater Monitoring Wells

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Table D-1 – Potential Future Groundwater Monitoring Wells

Well ID (alt ID)	Well Depth (feet)	Screen Interval(s) (feet bls)	Reference Point Elevation (feet AMSL)	First Year of Data	Last Year of Data	Years Measured (years)	Number of Measurements	Aquifer
25S/12E-20K03 (PASO-0304)	---	---	625	1974	2019	45	86	---
26S/14E-24B01 (PASO-0302)	---	---	1001	1962	2019	57	99	---
26S/15E-33C01 (PASO-0314)	---	---	1095	1973	2019	46	80	---
26S/15E-33Q01 (PASO-0381)	---	---	1102	1973	2019	46	82	---
27S/15E-03E01 (PASO-0277)	---	---	1120.8	1968	2019	51	109	---
27S/14E-24B01 (PASO-0391)	---	---	1180.5	1973	2019	46	74	---
27S/14E-25J01 (PASO-0074)	---	---	1,225.5	1972	2019	47	72	--
27S/14E-29G01 (PASO-0041)	---	---	1201.5	1974	2019	45	78	---
27S/15E-35F01 (PASO-0053)	---	---	1230	1965	2019	54	82	---

NOTES: "—" = unknown

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APPENDIX E

Hydrographs

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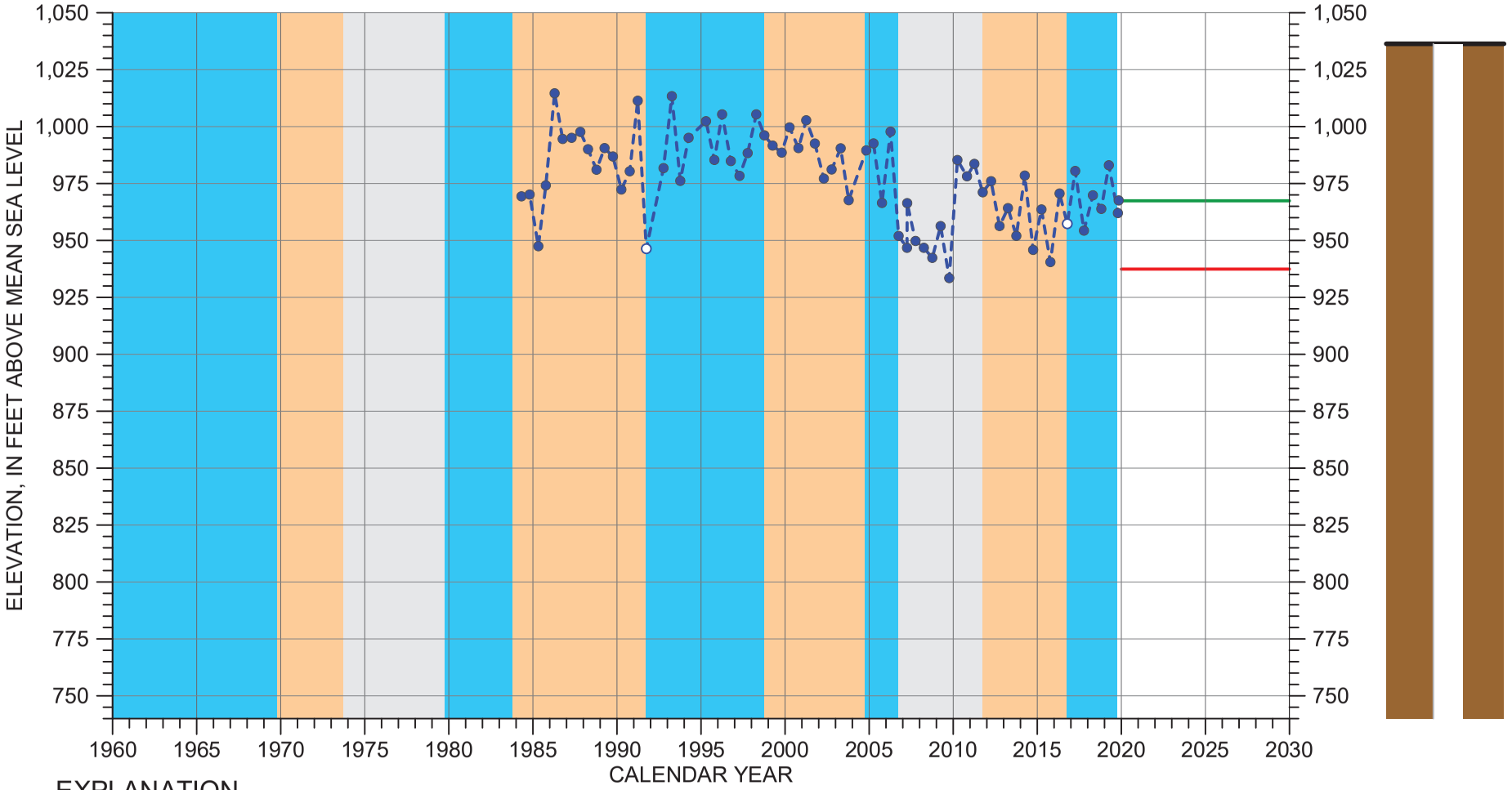
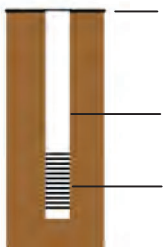


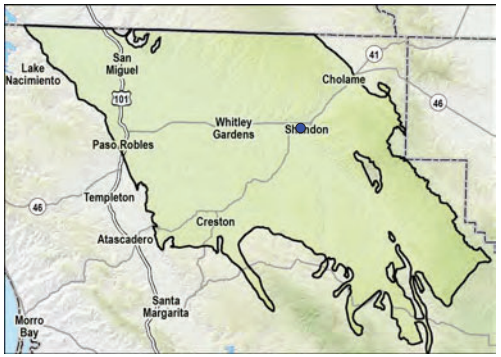
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET





Well Depth: 461 feet
Screened Interval: 297-461 feet below ground surface
Reference Point Elevation: 1036.36 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/15E-20B04

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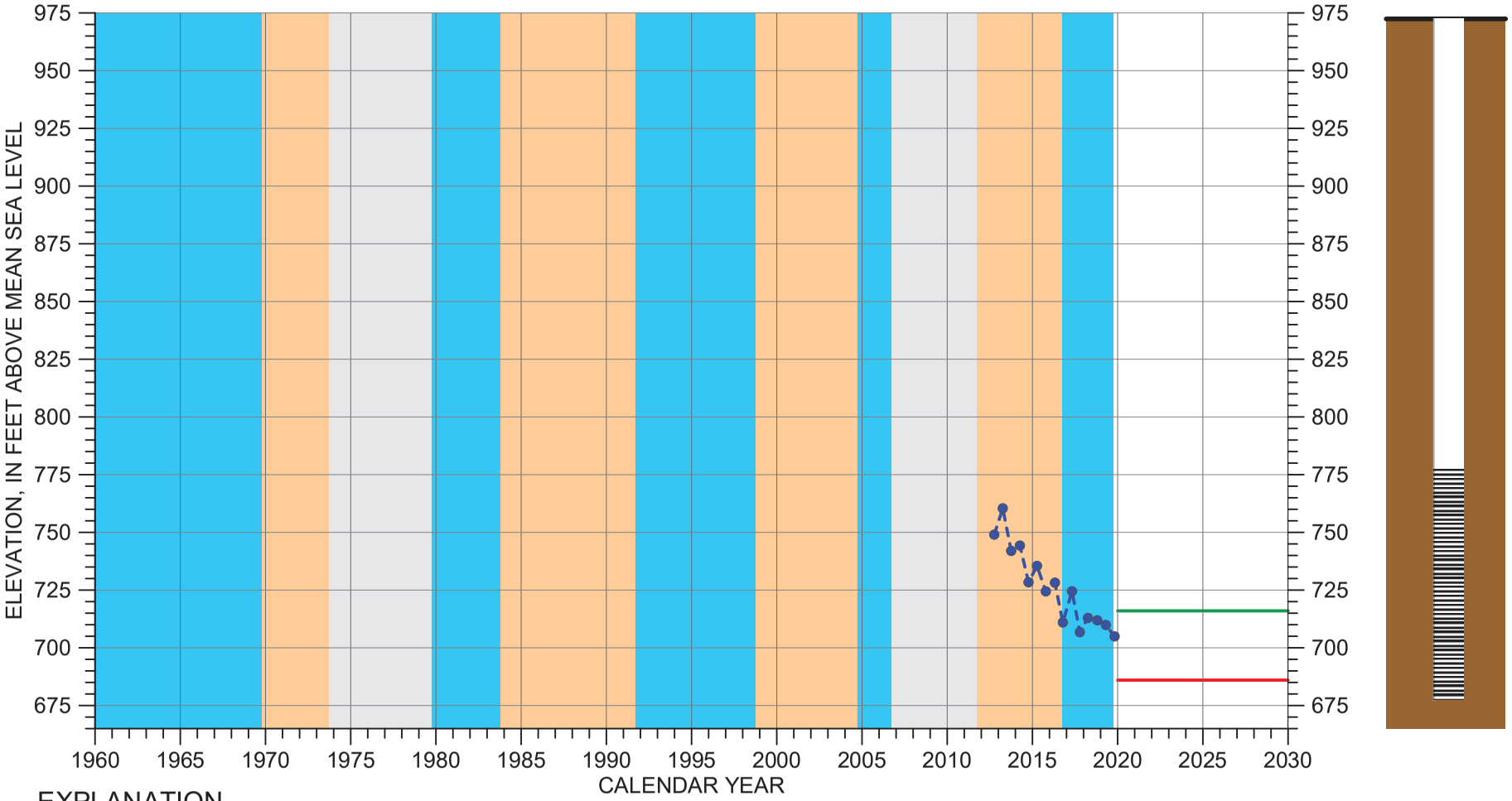
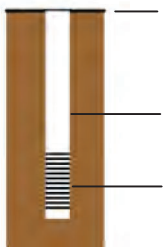


EXPLANATION

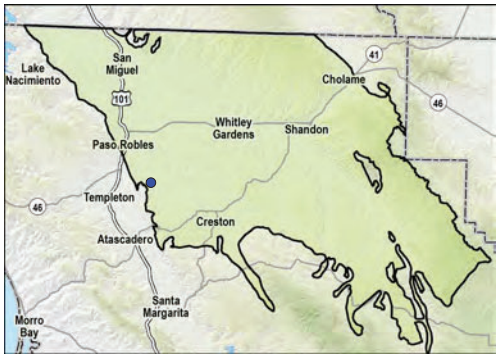
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



- Reference Point Elevation
- Casing
- Perforations (blank when unknown)



Well Depth: 295 feet
Screened Interval: 195-295 feet below ground surface
Reference Point Elevation: 972.4 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 27S/12E-13N01

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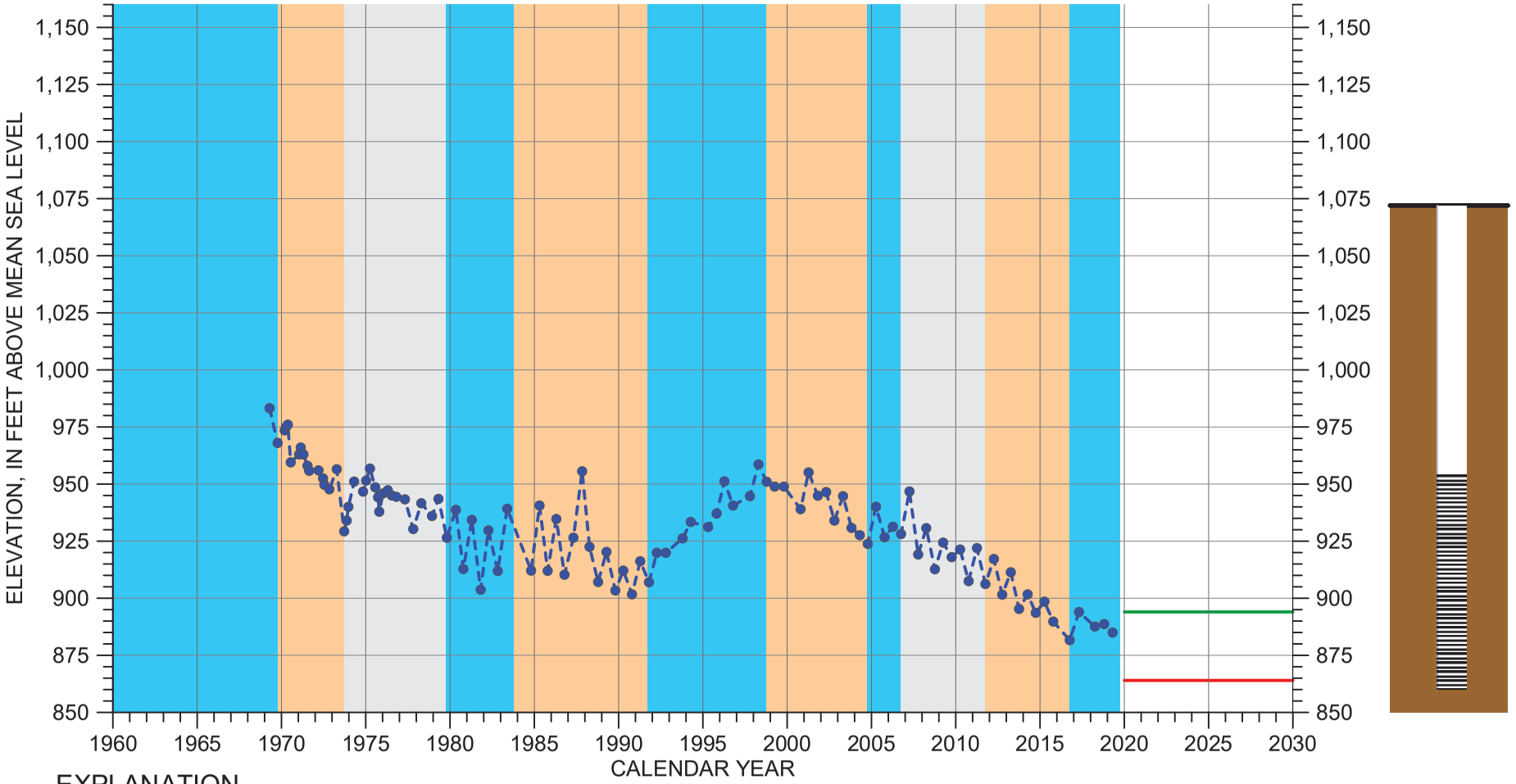
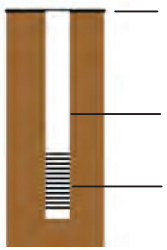


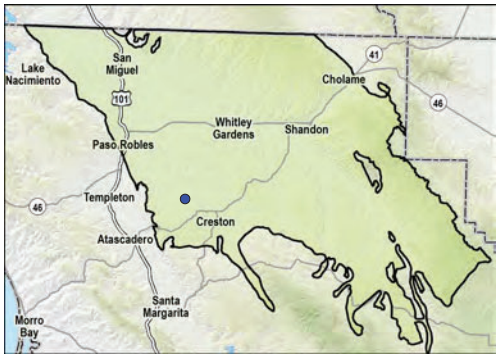
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET





Well Depth: 212 feet
Screened Interval: 118-212 feet below ground surface
Reference Point Elevation: 1072 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 27S/13E-28F01

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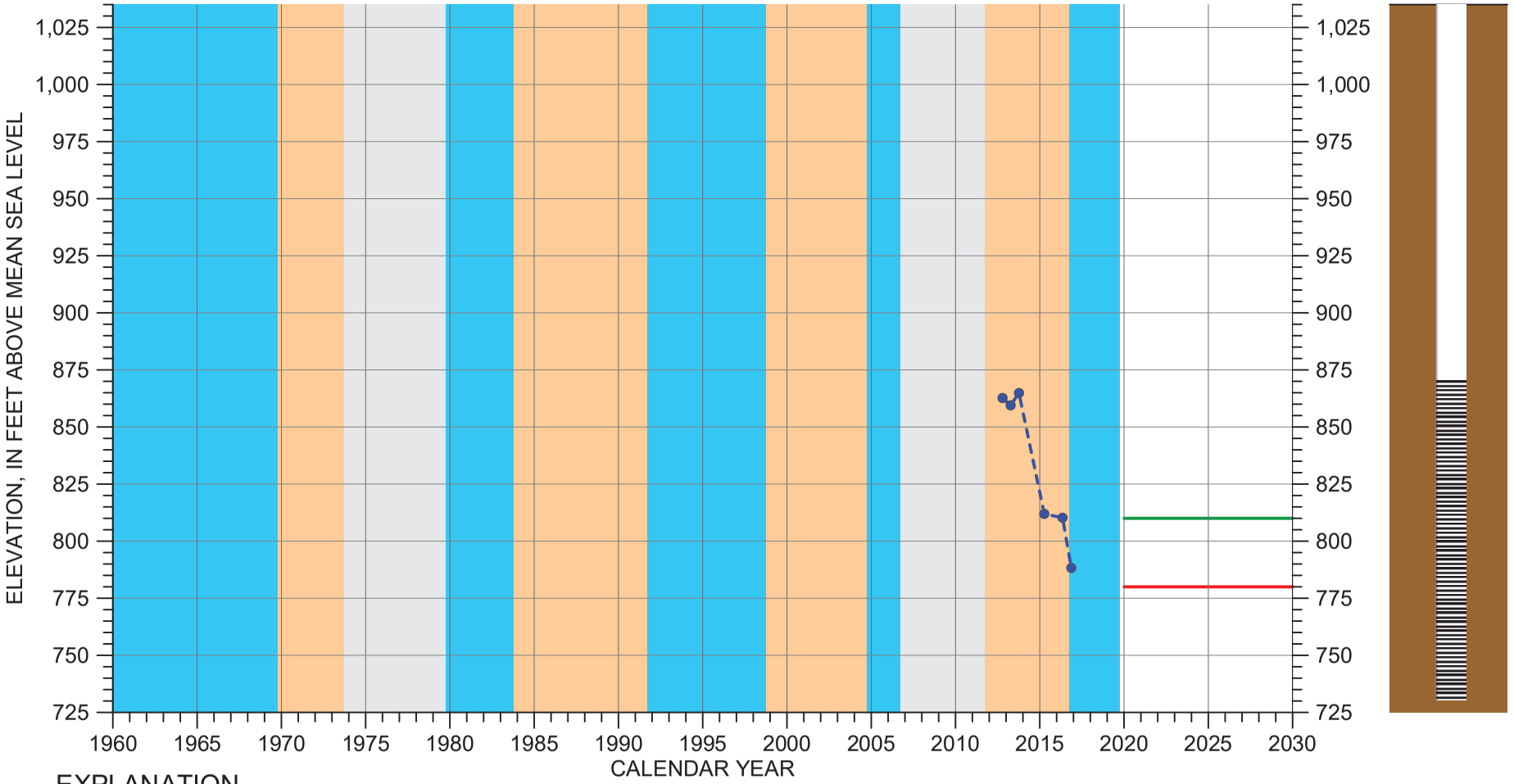
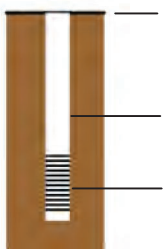


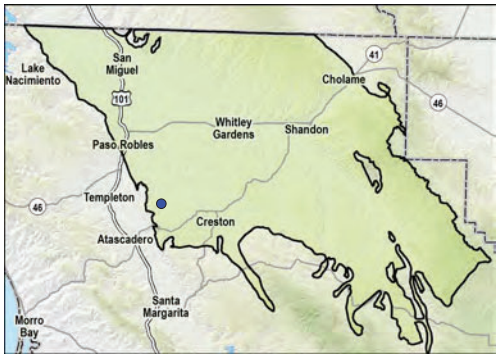
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET





Well Depth: 355 feet
Screened Interval: 215-235, 275-355 feet below ground surface
Reference Point Elevation: 1086.7 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 27S/13E-30N01

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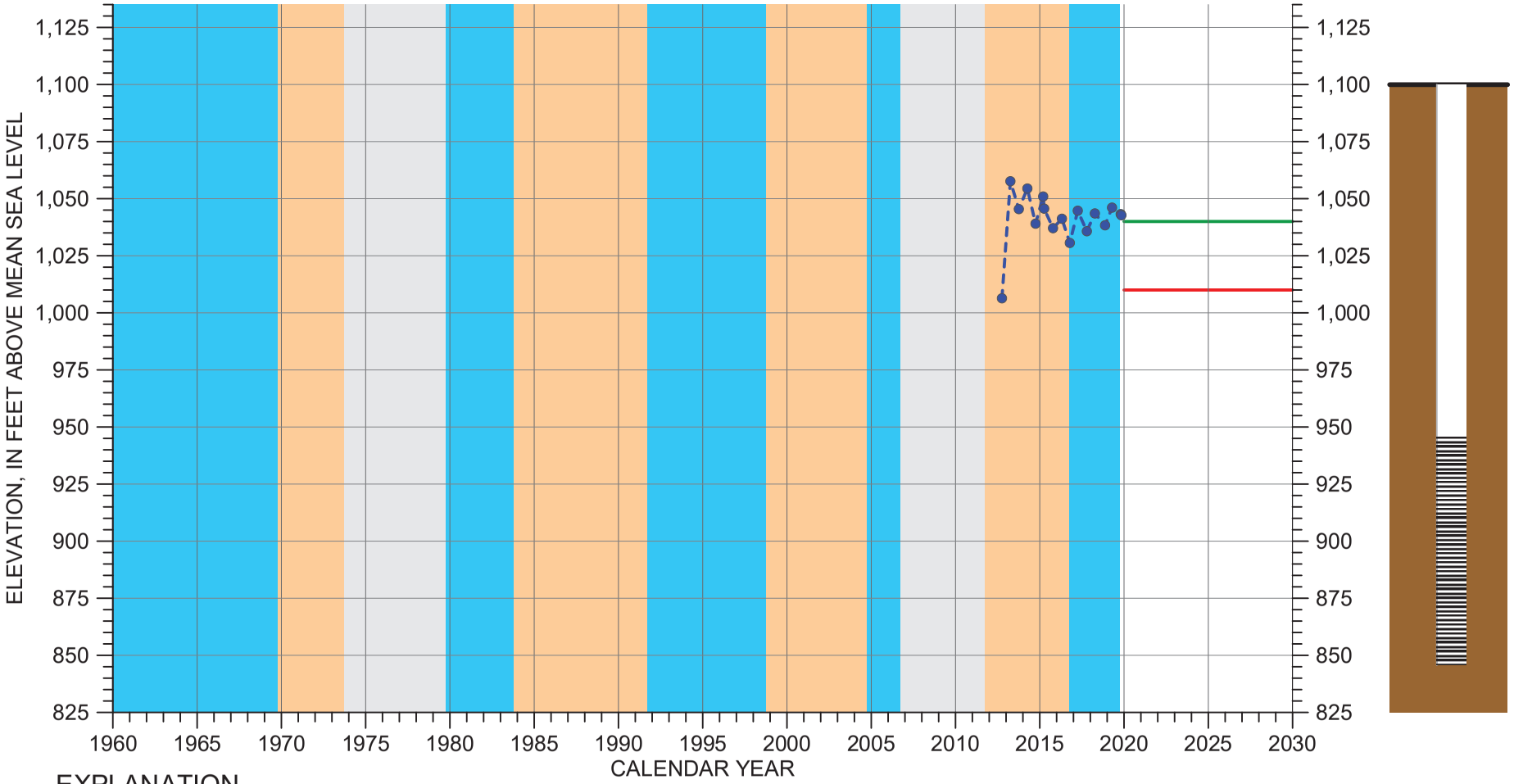
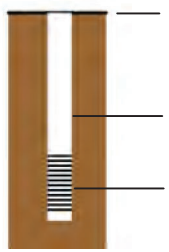


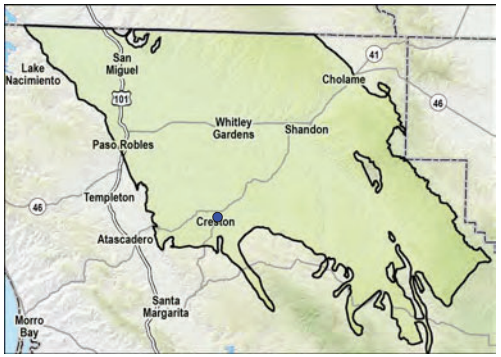
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET





Well Depth: 254 feet
Screened Interval: 154-254 feet below ground surface
Reference Point Elevation: 1099.9 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 28S/13E-01B01

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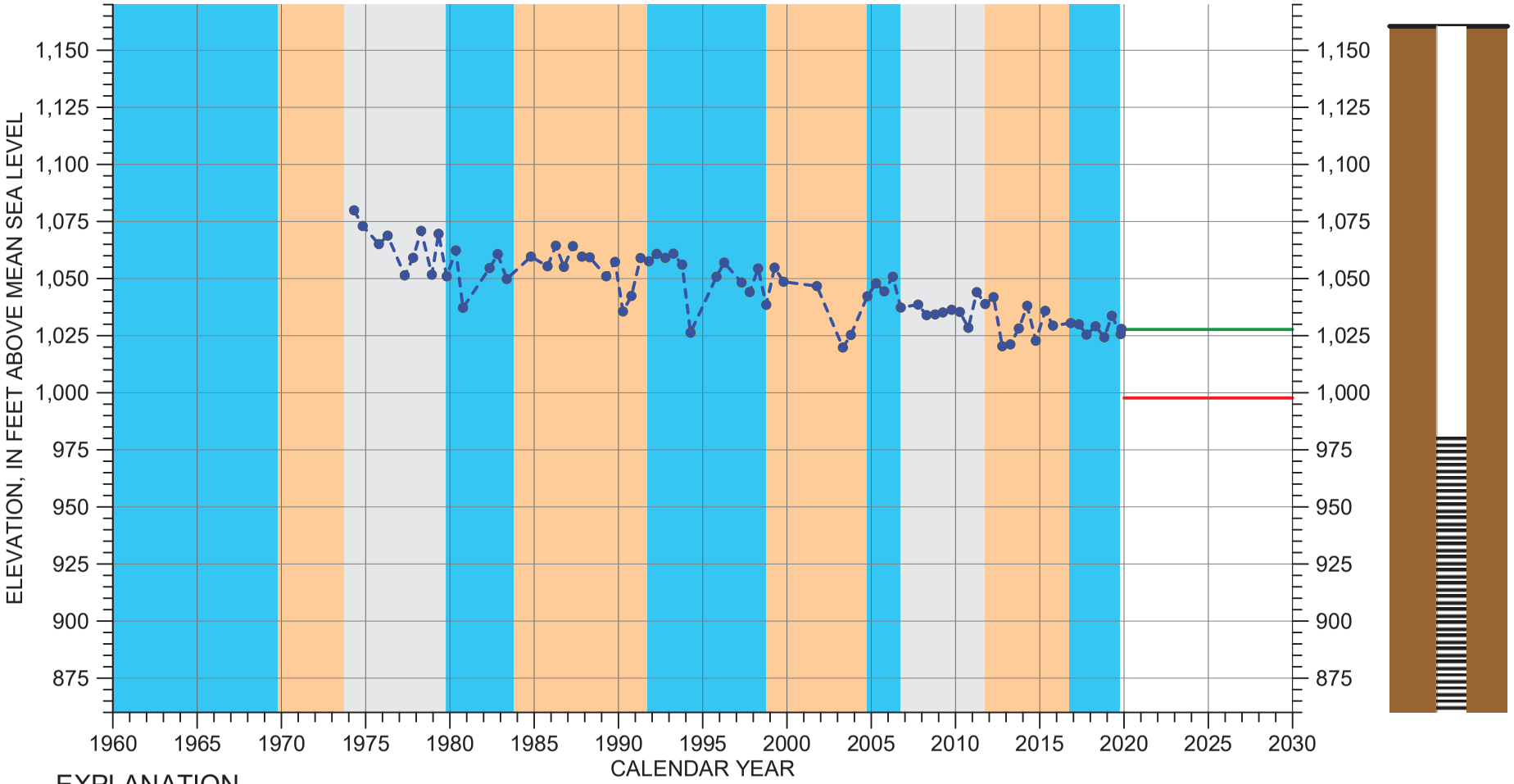
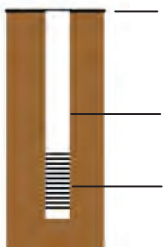


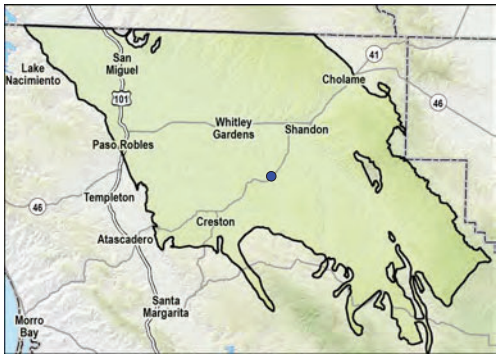
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



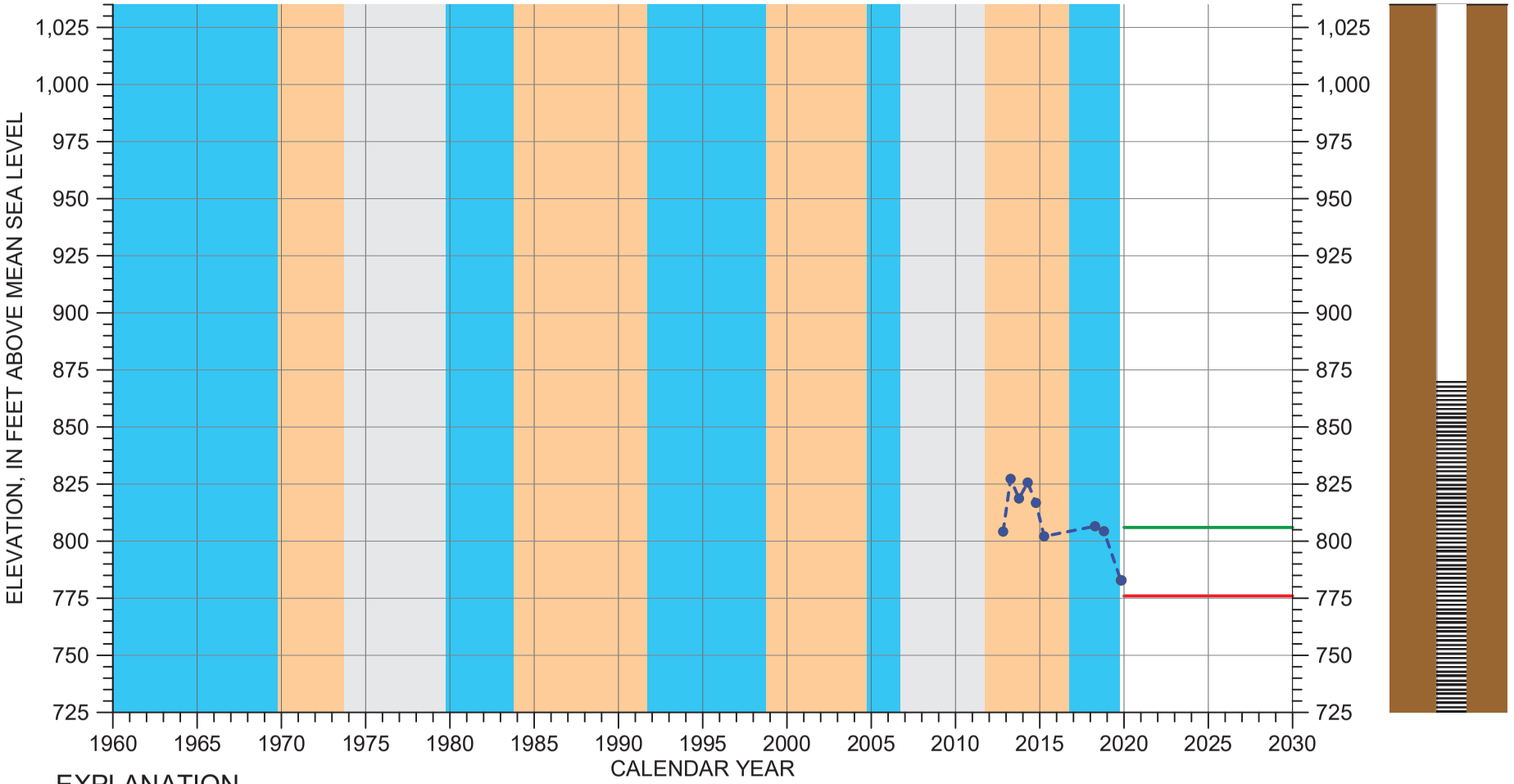


Well Depth: 630 feet
Screened Interval: 180-630 feet below ground surface
Reference Point Elevation: 1160.5 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 27S/14E-11R01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_27S_14E-11R01.grf

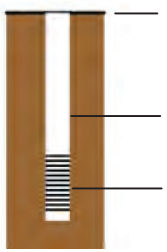


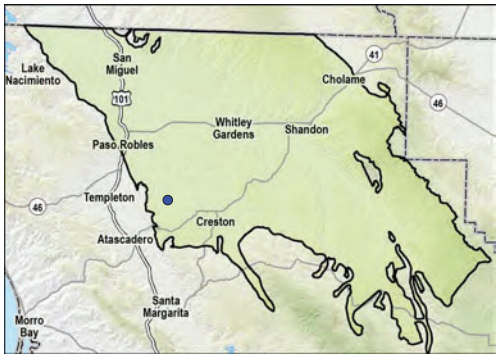
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



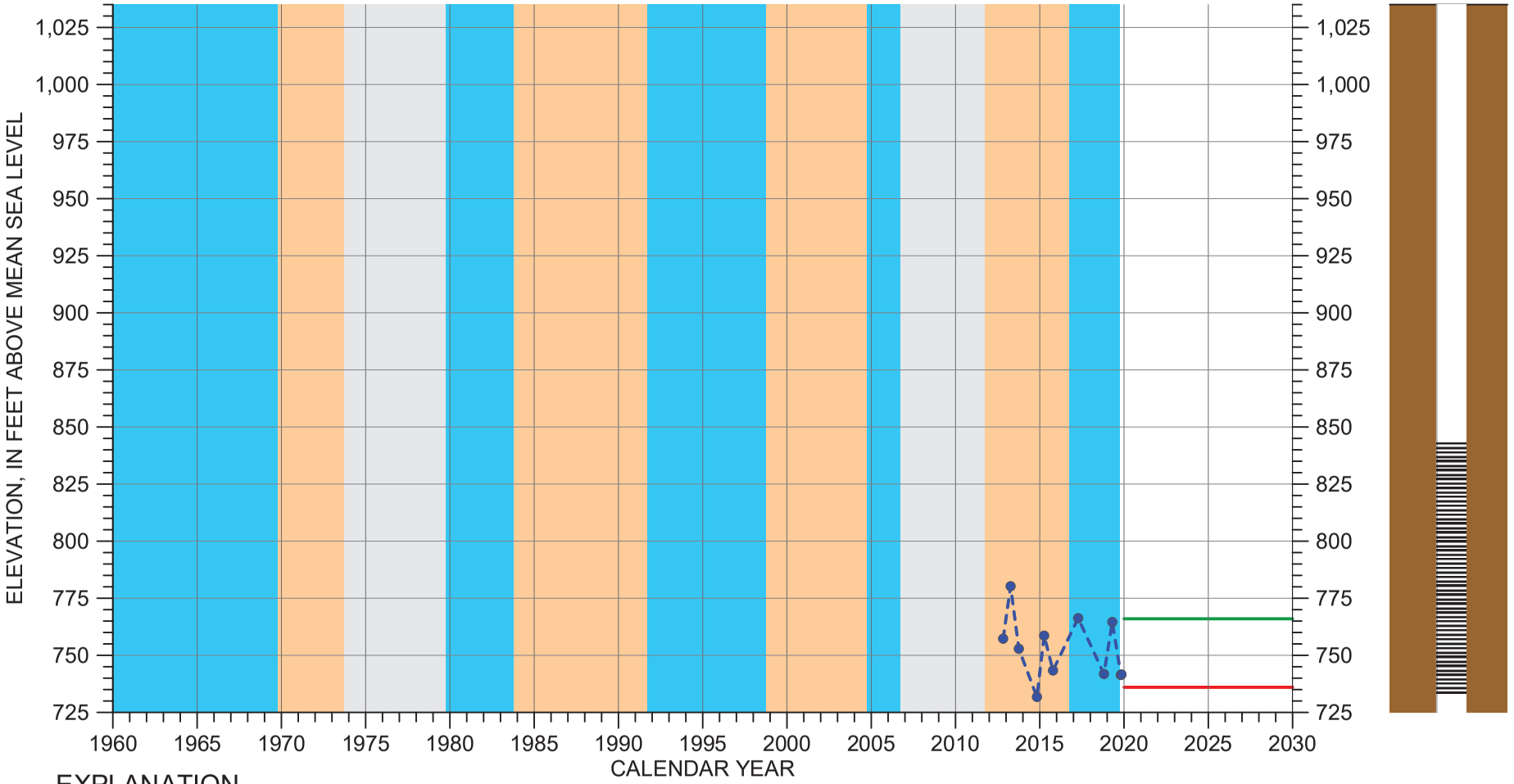


Well Depth: 685 feet
Screened Interval: 225-685 feet below ground surface
Reference Point Elevation: 1095 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 27S/13E-30J01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_27S_13E-30J01.grf

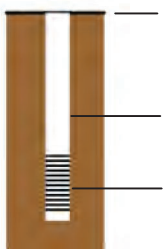


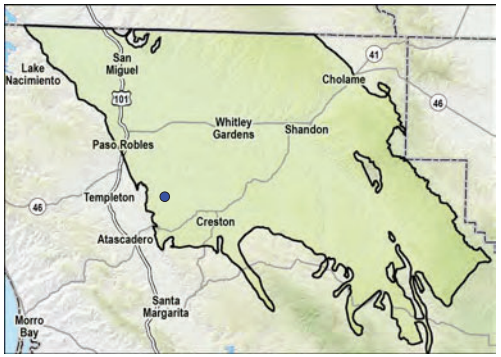
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



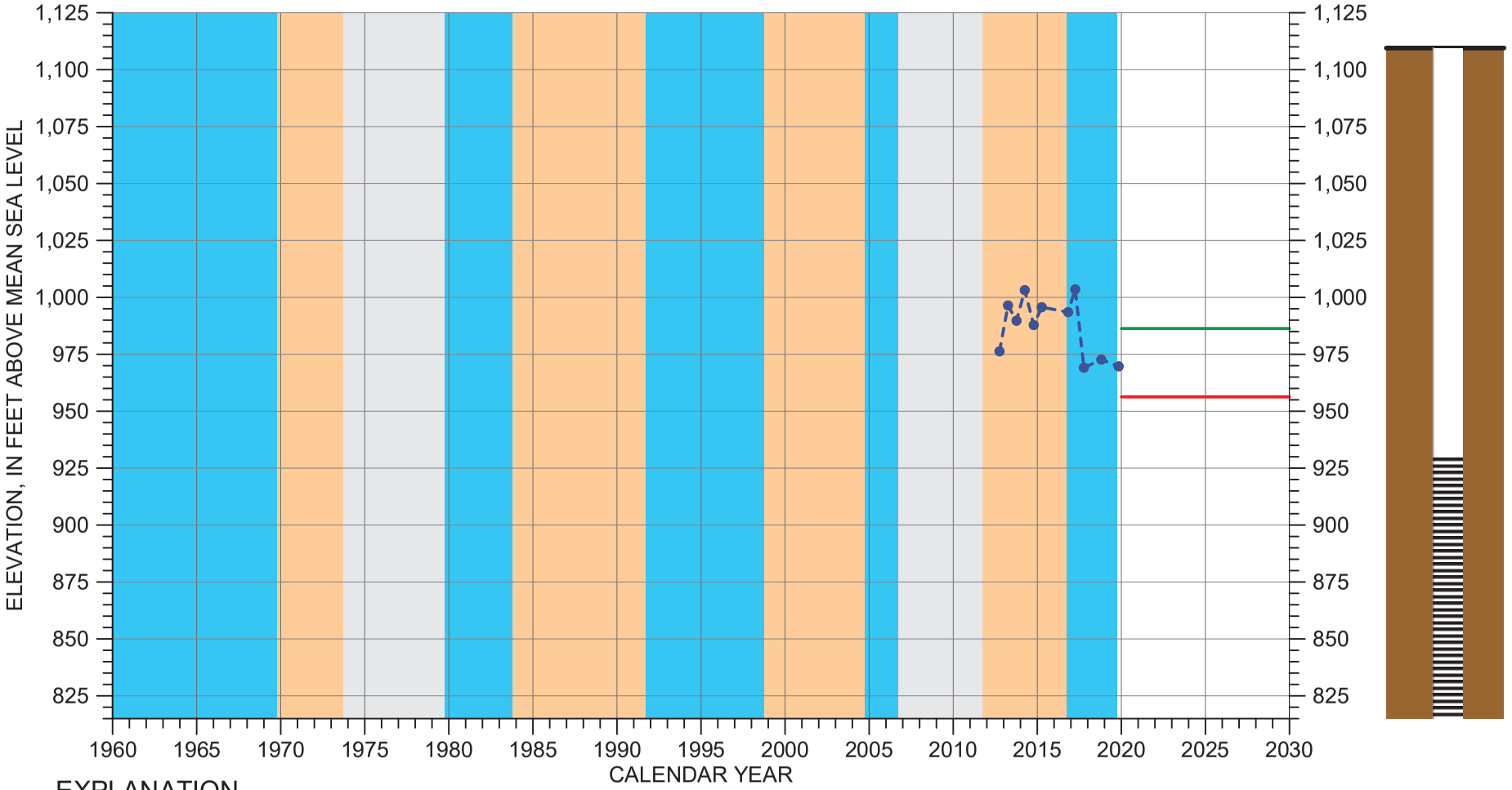


Well Depth: 310 feet
Screened Interval: 200-310 feet below ground surface
Reference Point Elevation: 1043.2 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 27S/13E-30F01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_27S_13E-30F01.grf

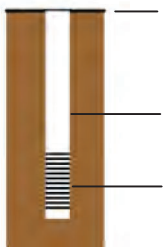


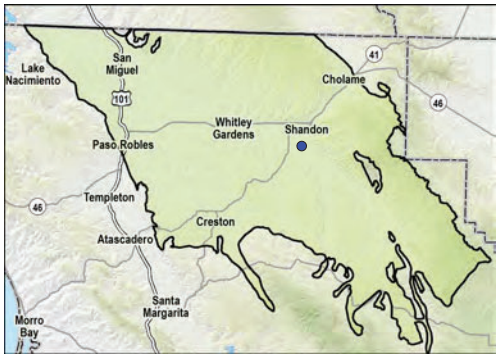
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



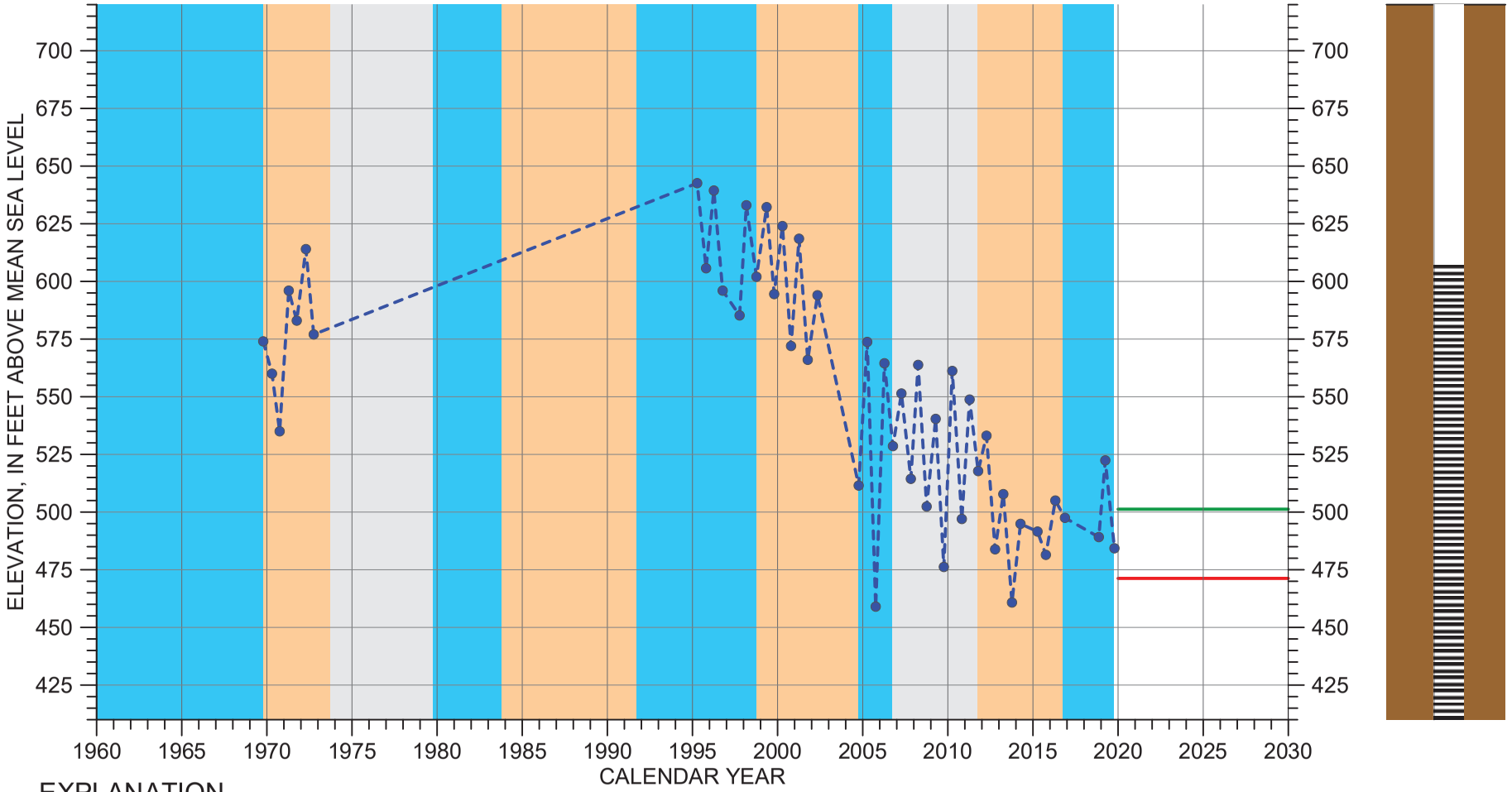


Well Depth: 600 feet
Screened Interval: 180-600 feet below ground surface
Reference Point Elevation: 1109.5 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/15E-29R01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_26S_15E-29R01.grf

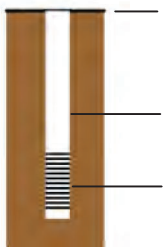


EXPLANATION

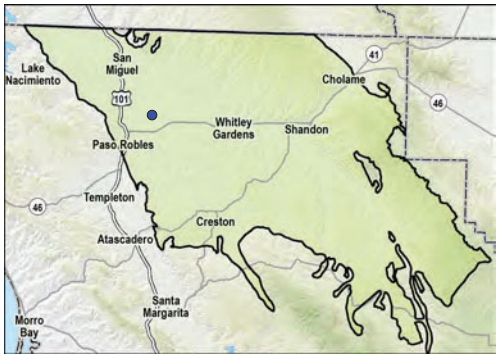
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



- Reference Point Elevation
- Casing
- Perforations (blank when unknown)

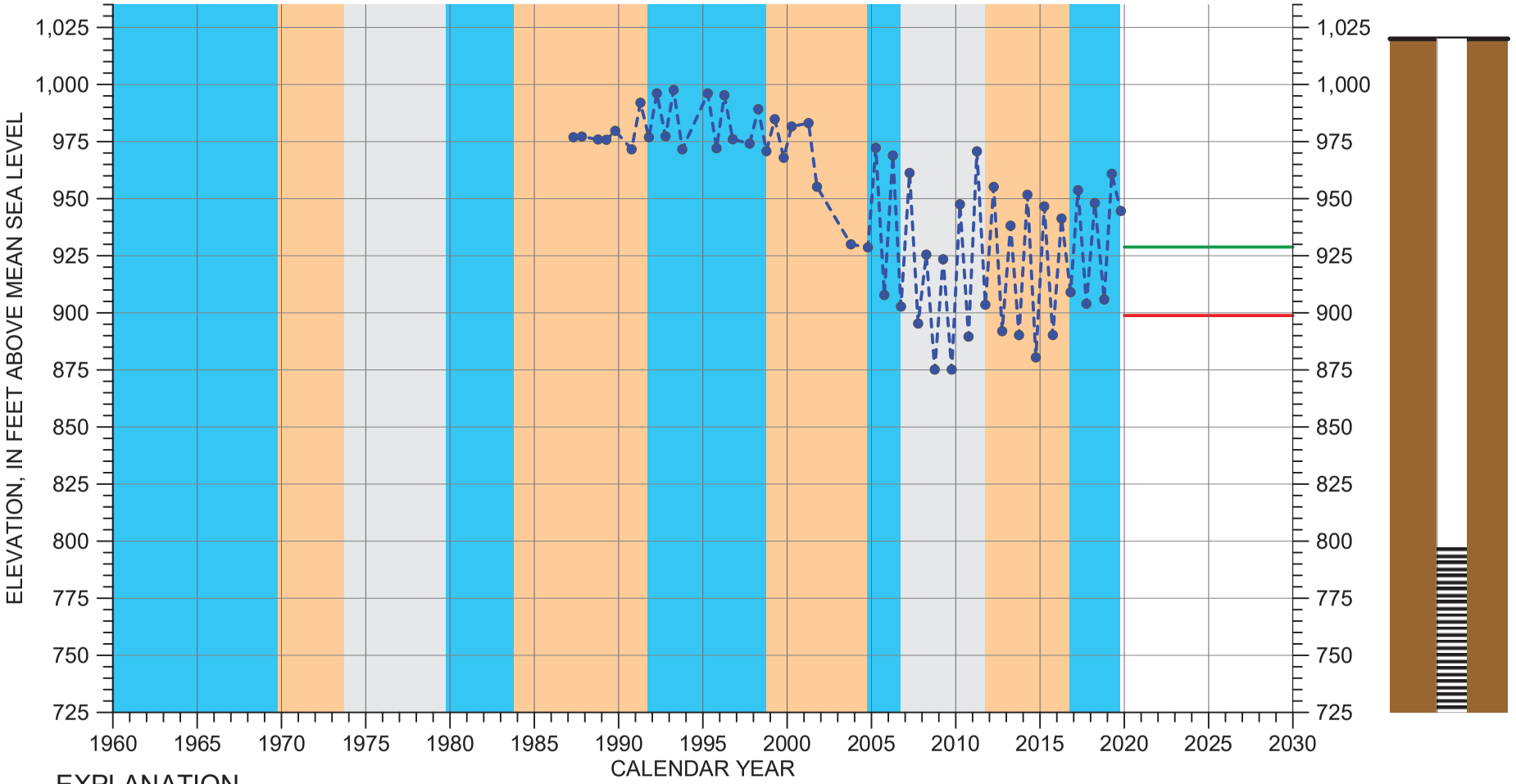


Well Depth: 1230 feet
Screened Interval: 180-1230 feet below ground surface
Reference Point Elevation: 790 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/12E-14H01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_26S_12E-14H01.grf

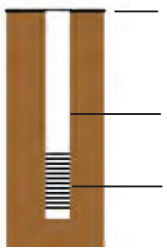


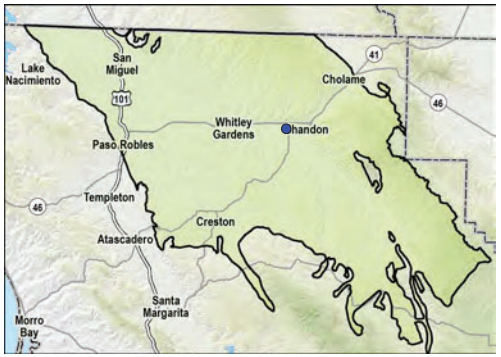
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



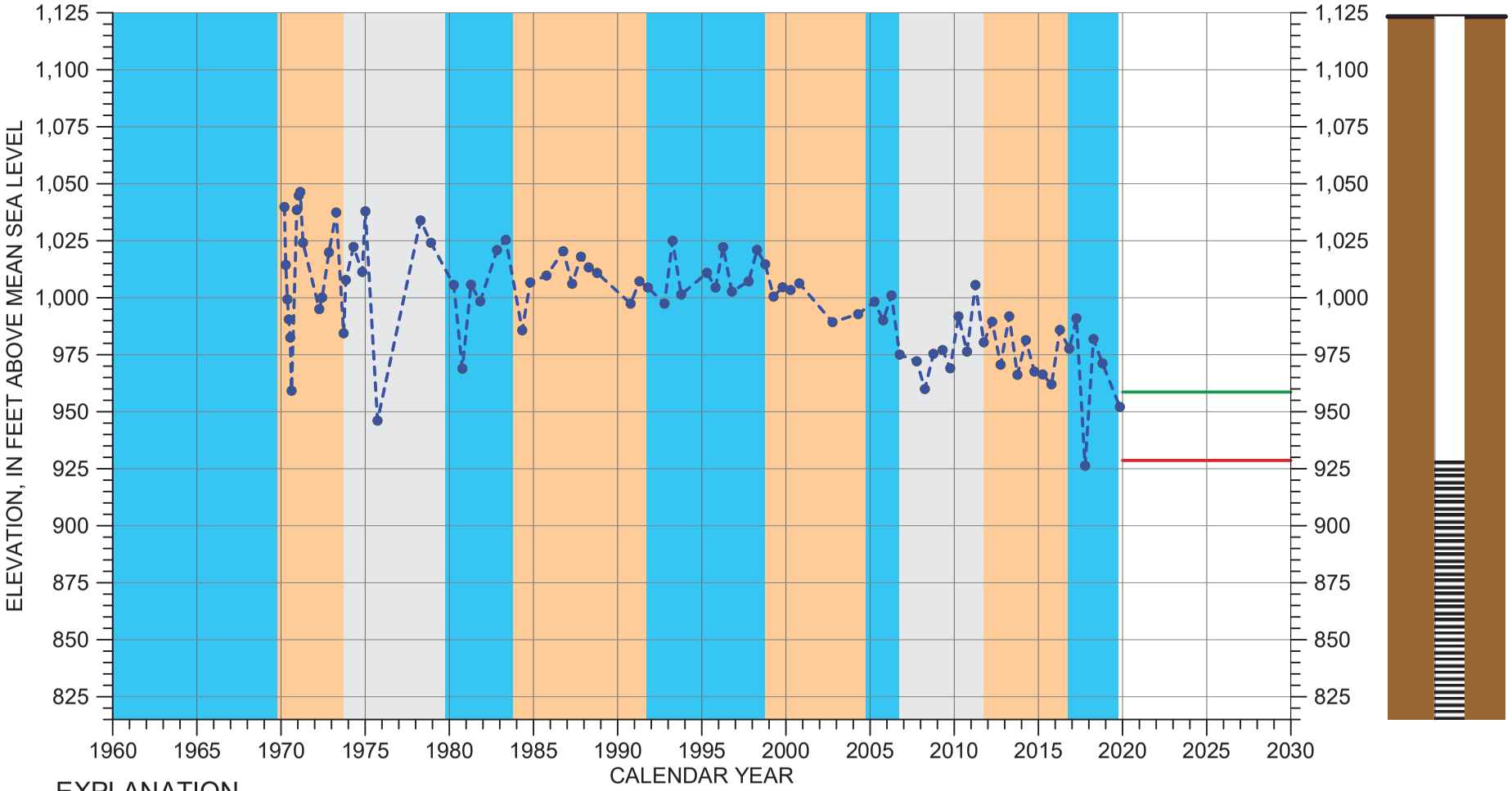


Well Depth: 512 feet
Screened Interval: 223-512 feet below ground surface
Reference Point Elevation: 1020 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/15E-19E01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_26S_15E-19E01.grf

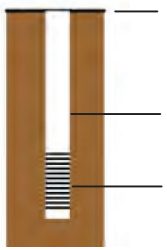


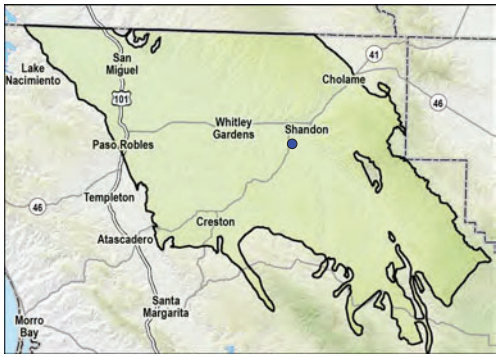
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET





Well Depth: 605 feet
Screened Interval: 195-605 feet below ground surface
Reference Point Elevation: 1123.3 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/15E-30J01

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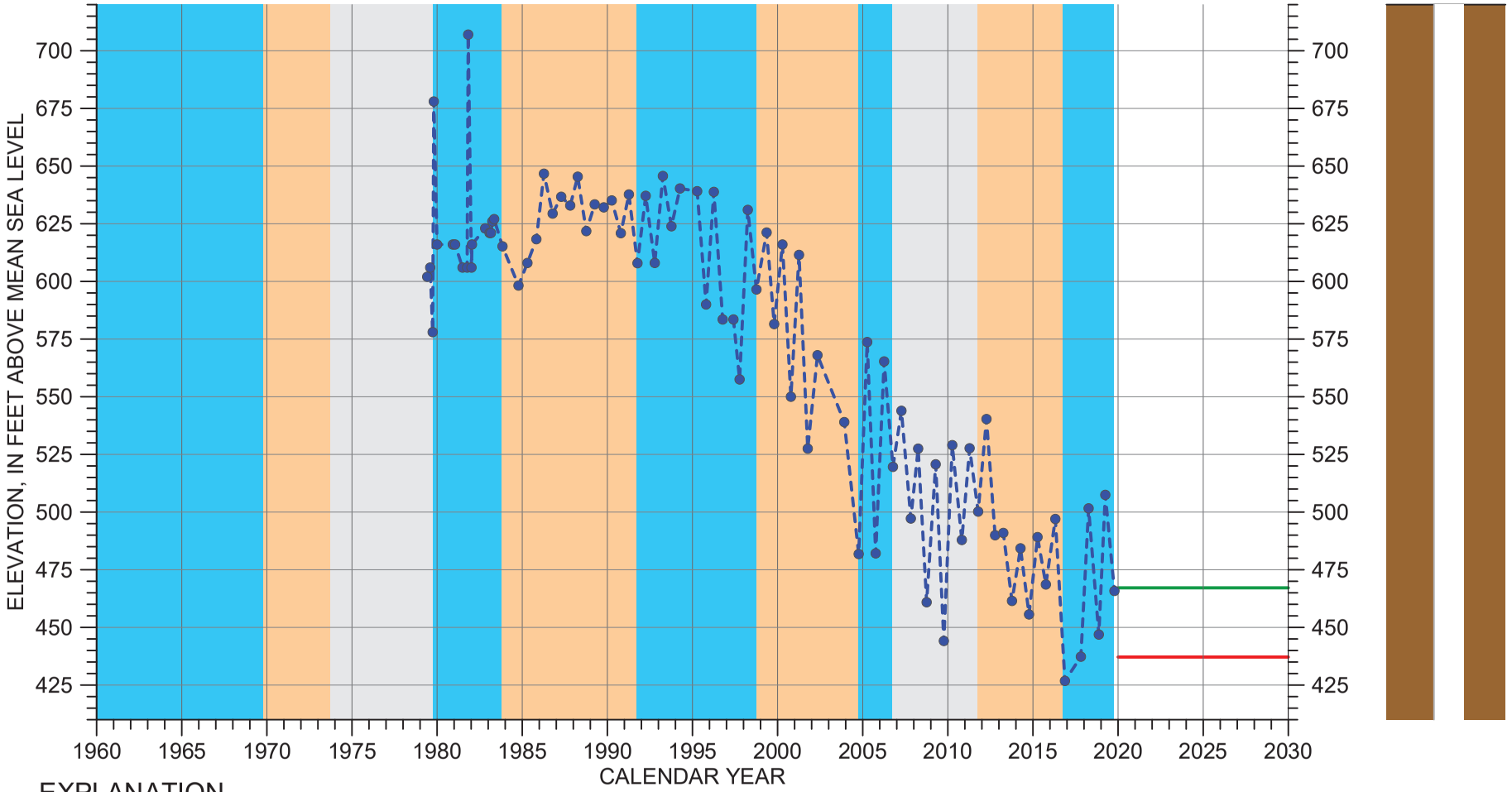
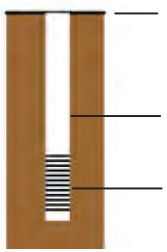


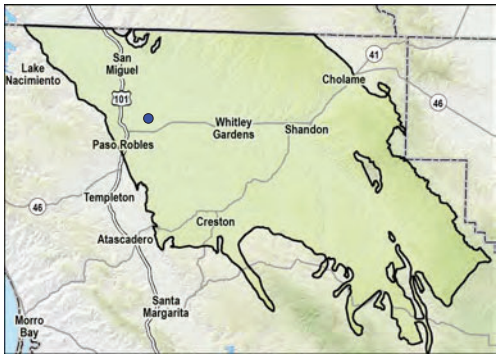
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



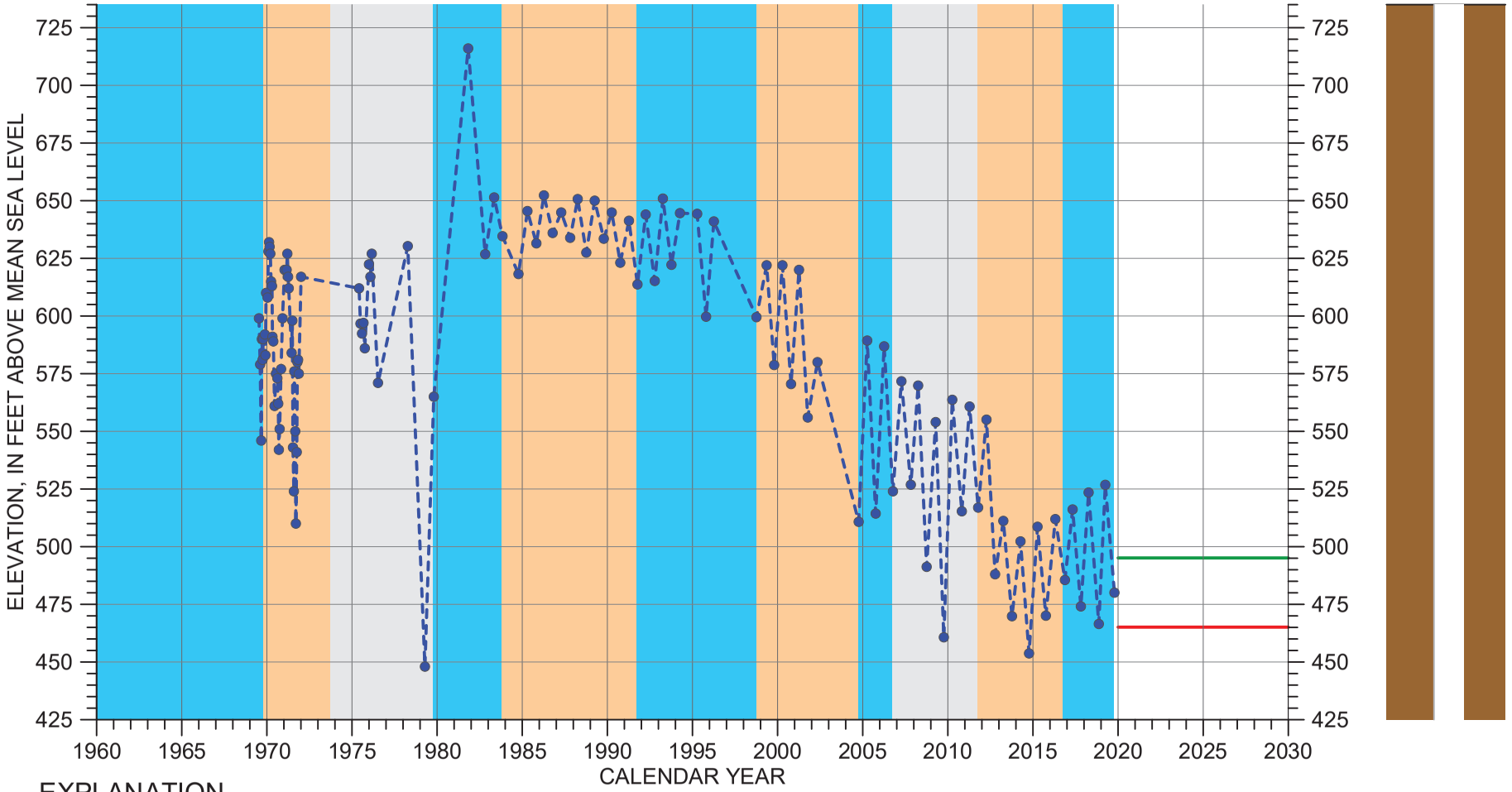


Well Depth: 1100 feet
Screened Interval: unknown
Reference Point Elevation: 786 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/12E-14K01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_26S_12E-14K01.grf

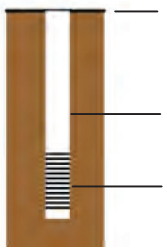


EXPLANATION

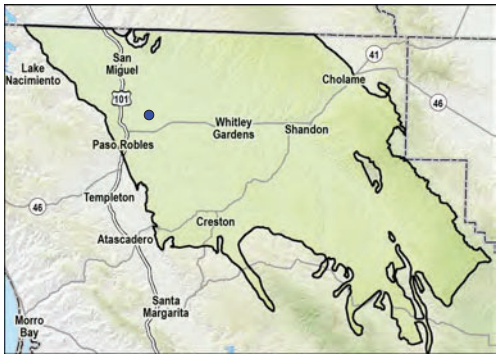
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



- Reference Point Elevation
- Casing
- Perforations (blank when unknown)

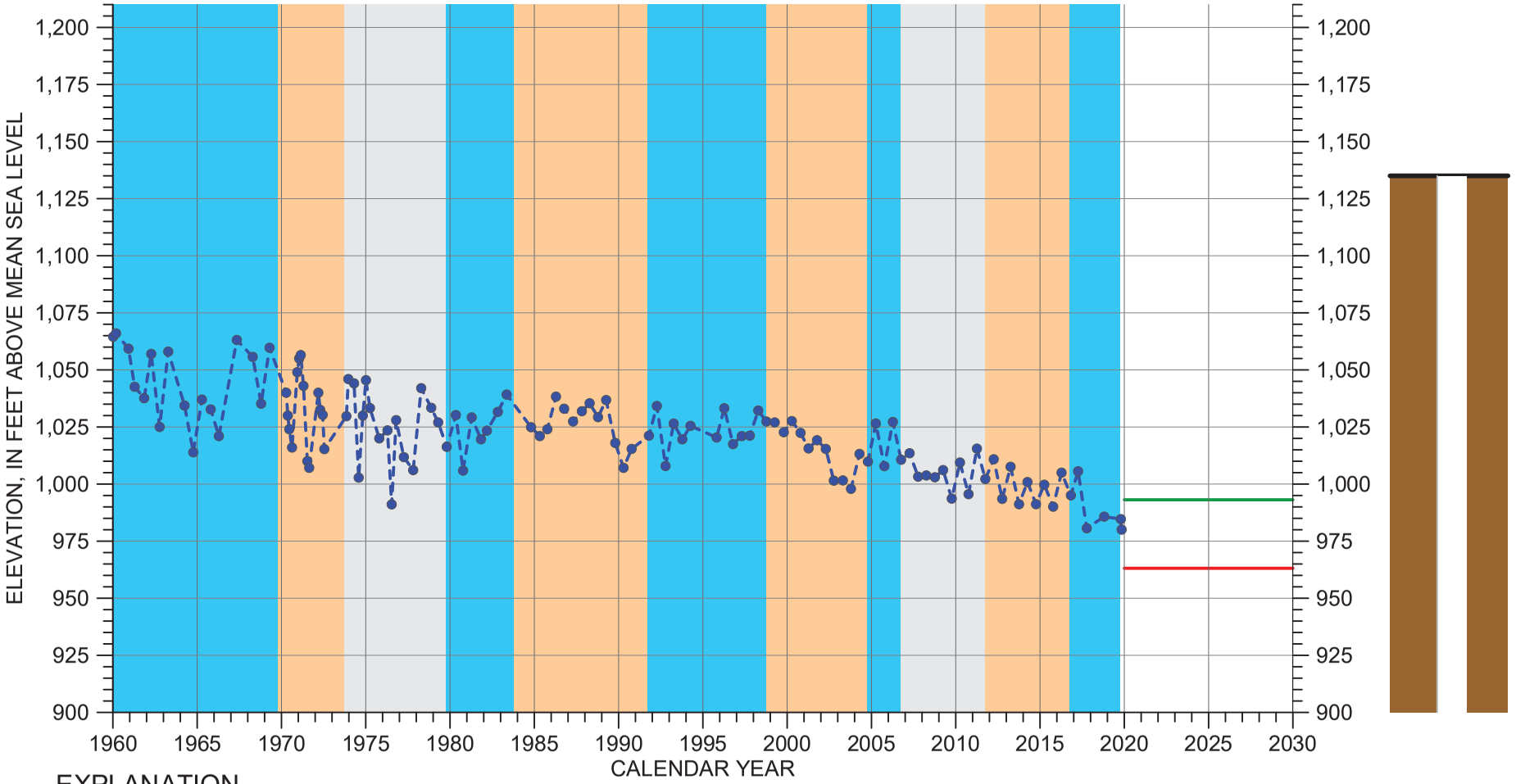


Well Depth: 740 feet
Screened Interval: unknown
Reference Point Elevation: 789.3 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/12E-14G01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_26S_12E-14G01.grf

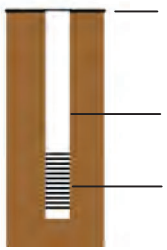


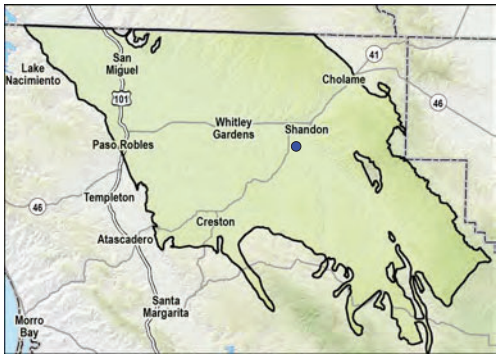
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



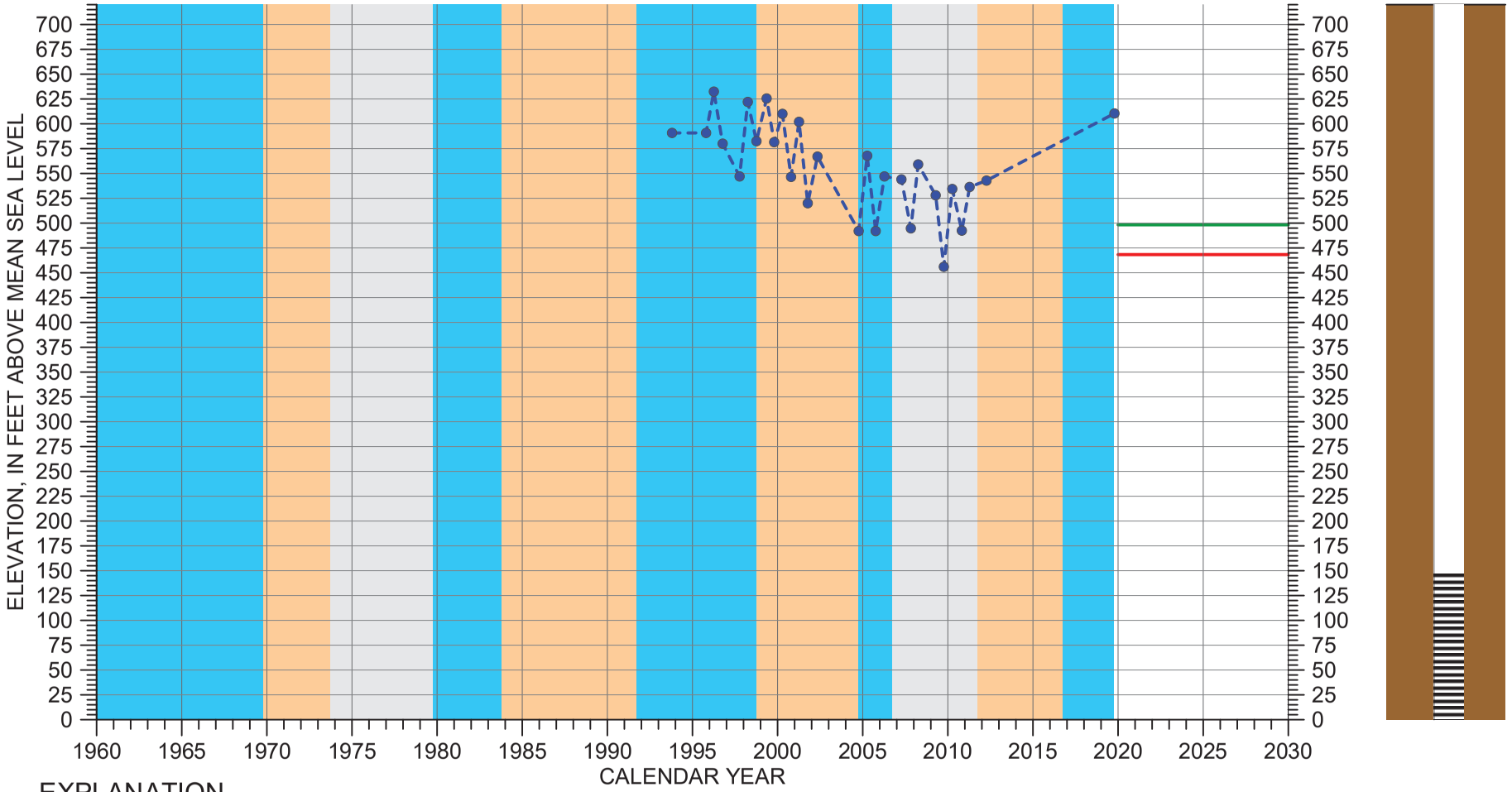


Well Depth: 350 feet
Screened Interval: unknown
Reference Point Elevation: 1135 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/15E-29N01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_26S_15E-29N01.grf

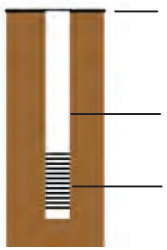


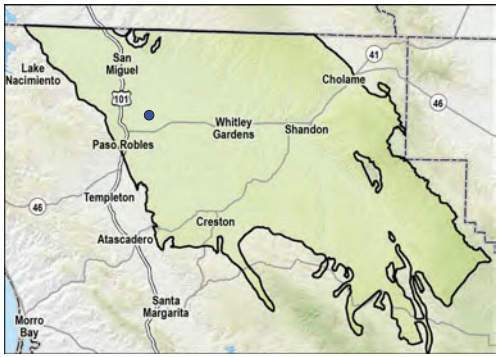
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



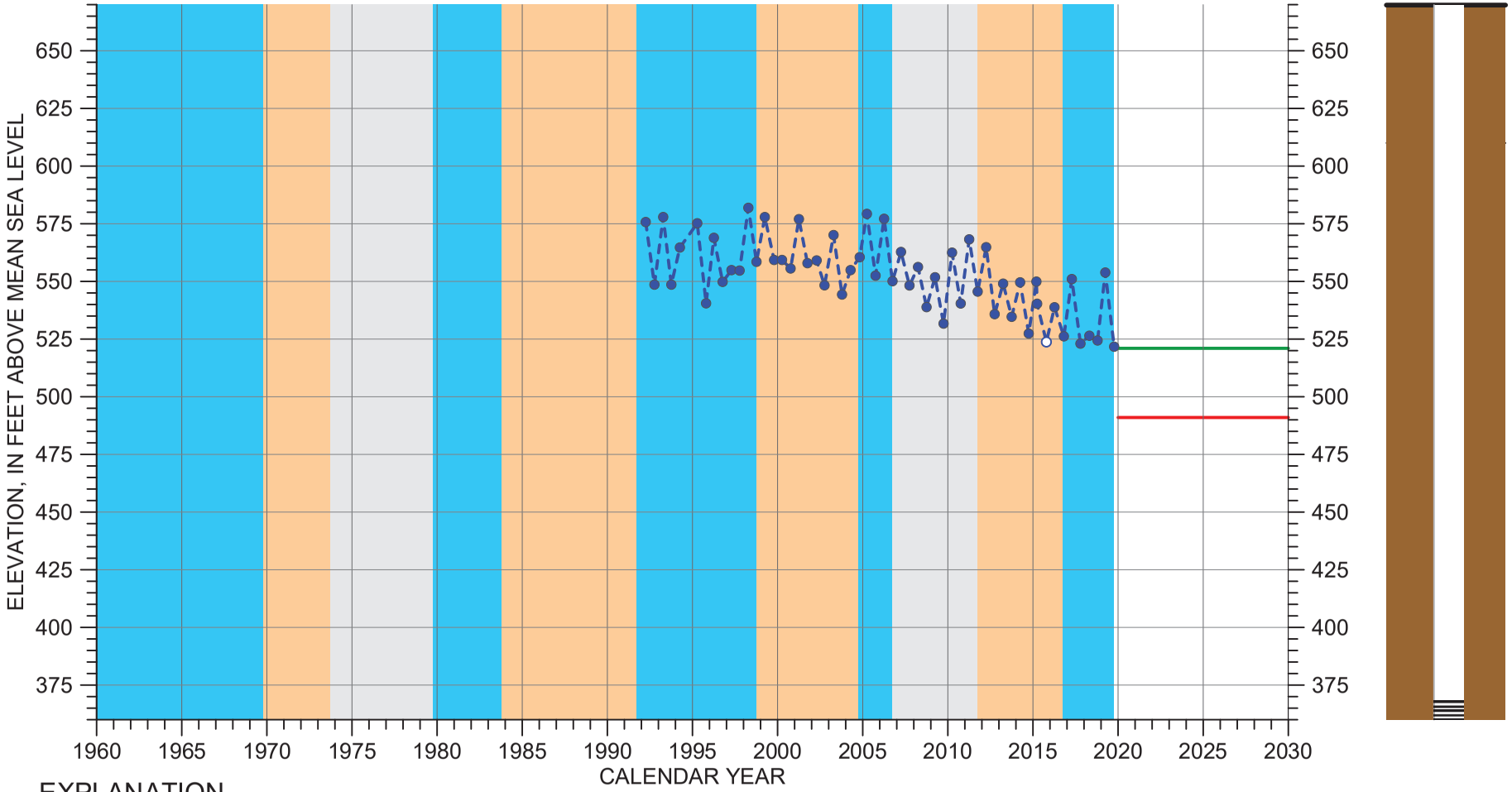


Well Depth: 840 feet
Screened Interval: 640-840 feet below ground surface
Reference Point Elevation: 787 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/12E-14G02

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_26S_12E-14G02.grf

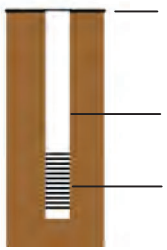


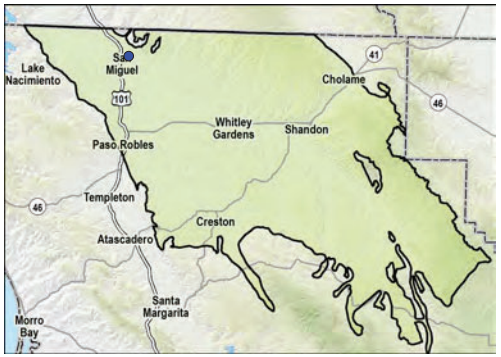
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



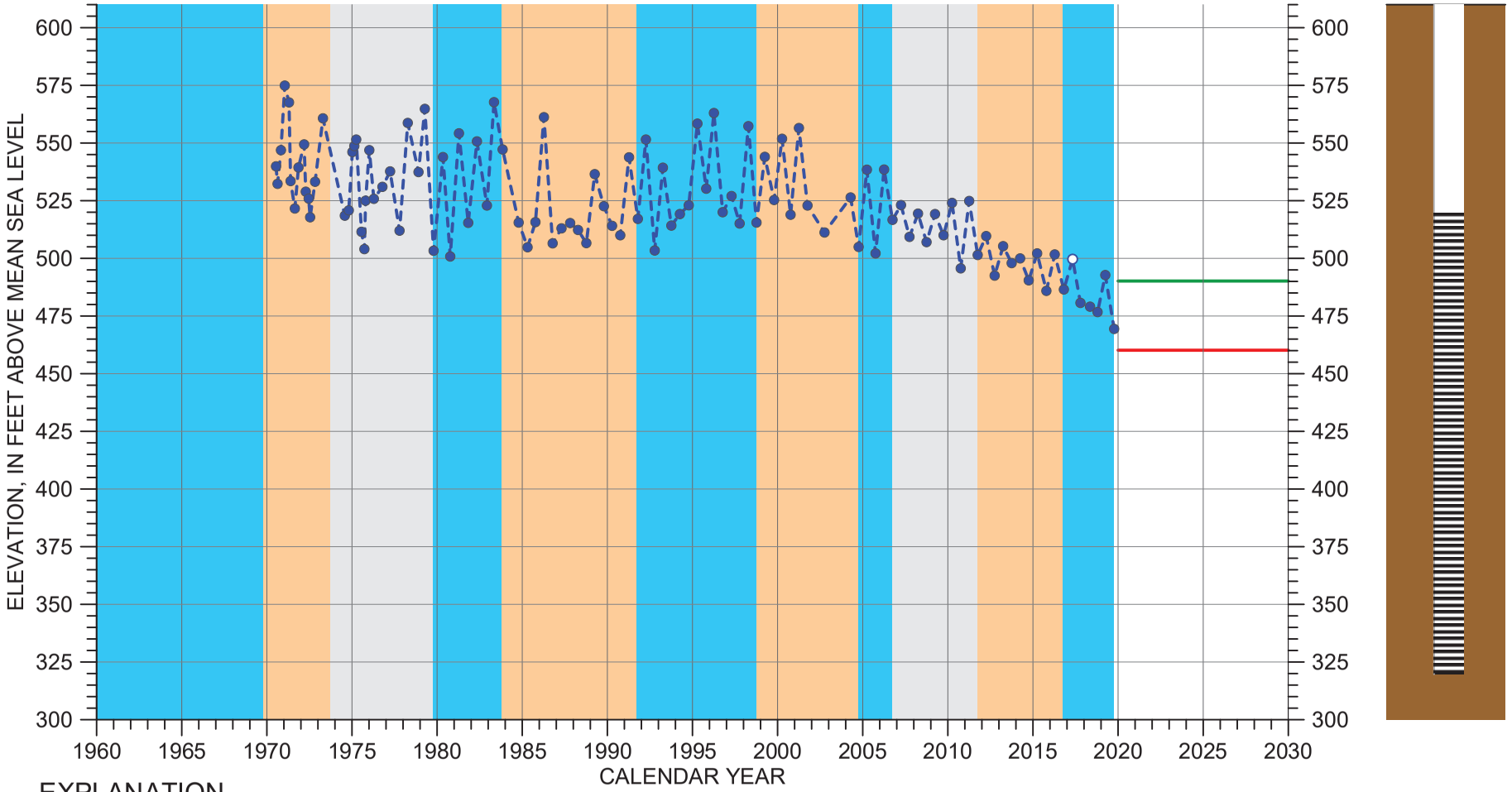


Well Depth: 350 feet
Screened Interval: 300-310, 330-340 feet below ground surface
Reference Point Elevation: 669.8 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 25S/12E-16K05

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_25S_12E-16K05.grf

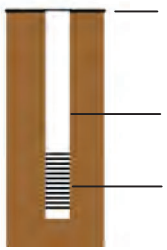


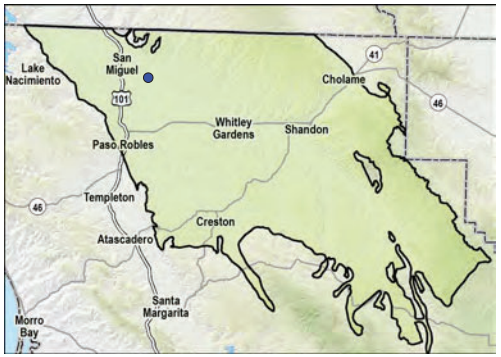
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



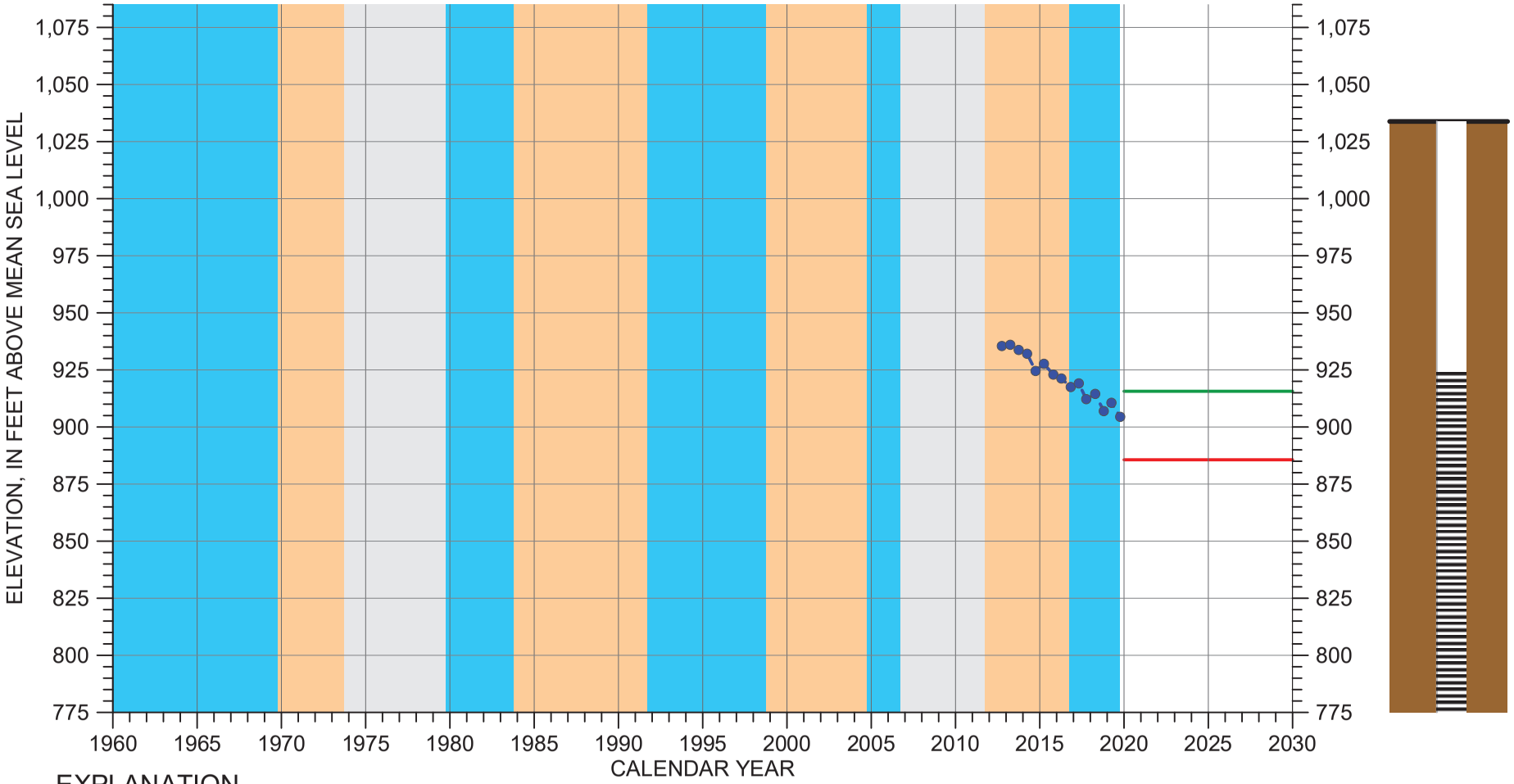


Well Depth: 400 feet
Screened Interval: 200-400 feet below ground surface
Reference Point Elevation: 719.7 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 25S/12E-26L01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_25S_12E-26L01.grf

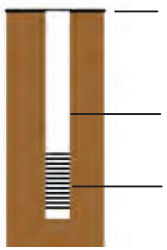


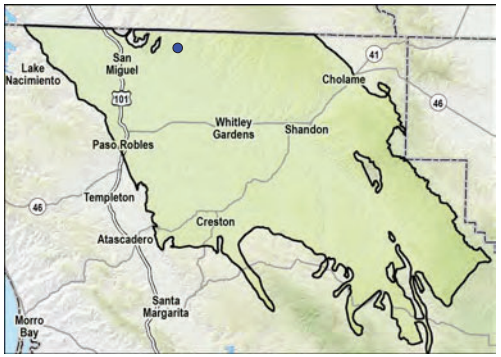
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



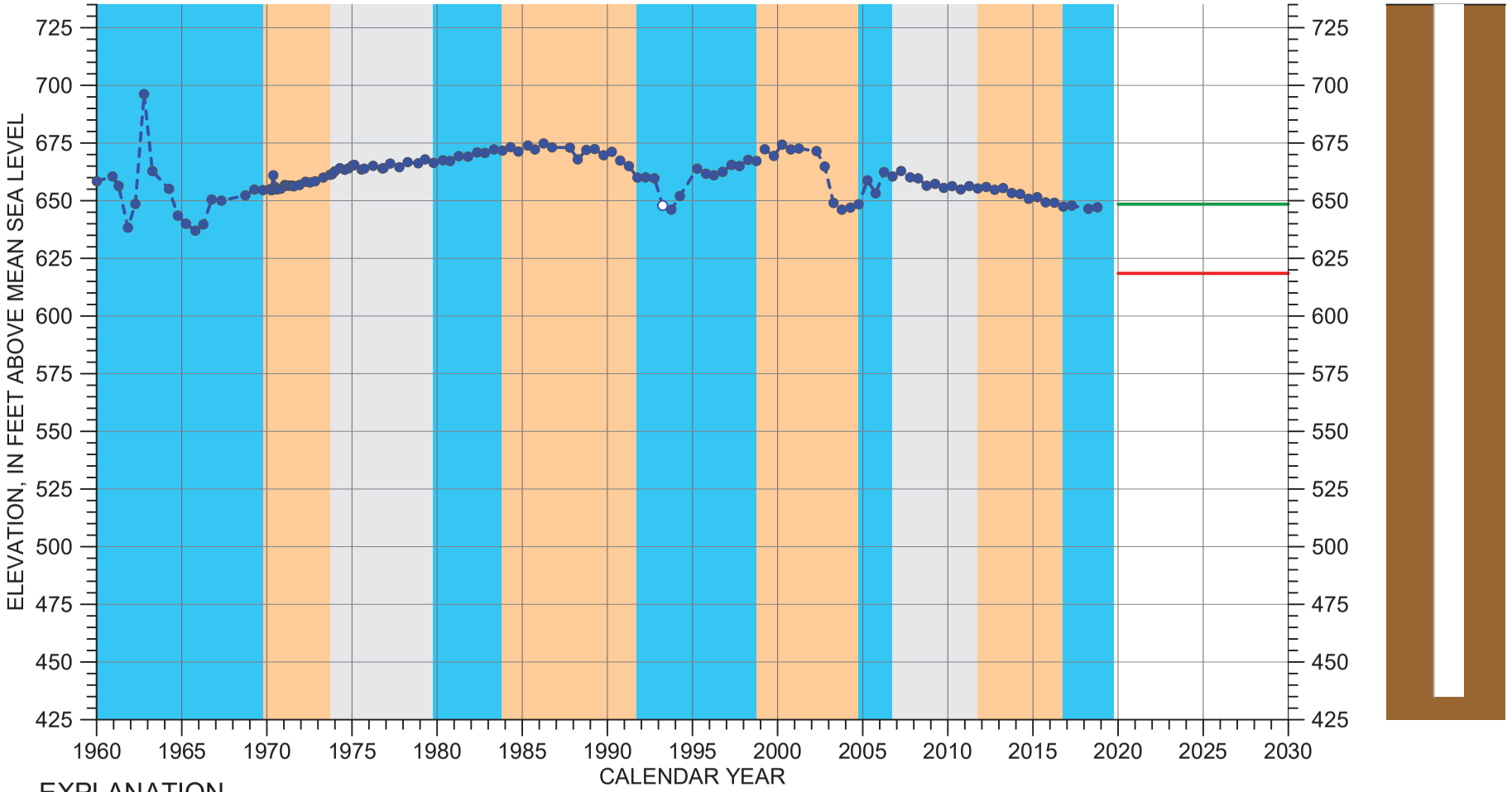


Well Depth: 270 feet
Screened Interval: 110-270 feet below ground surface
Reference Point Elevation: 1033.8 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 25S/13E-08L02

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_25S_13E-08L02.grf

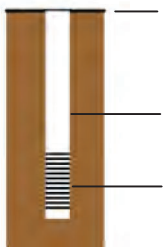


EXPLANATION

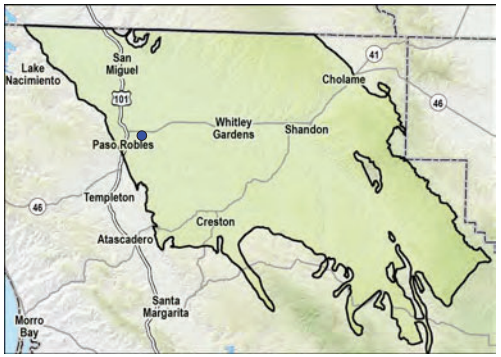
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



- Reference Point Elevation
- Casing
- Perforations (blank when unknown)

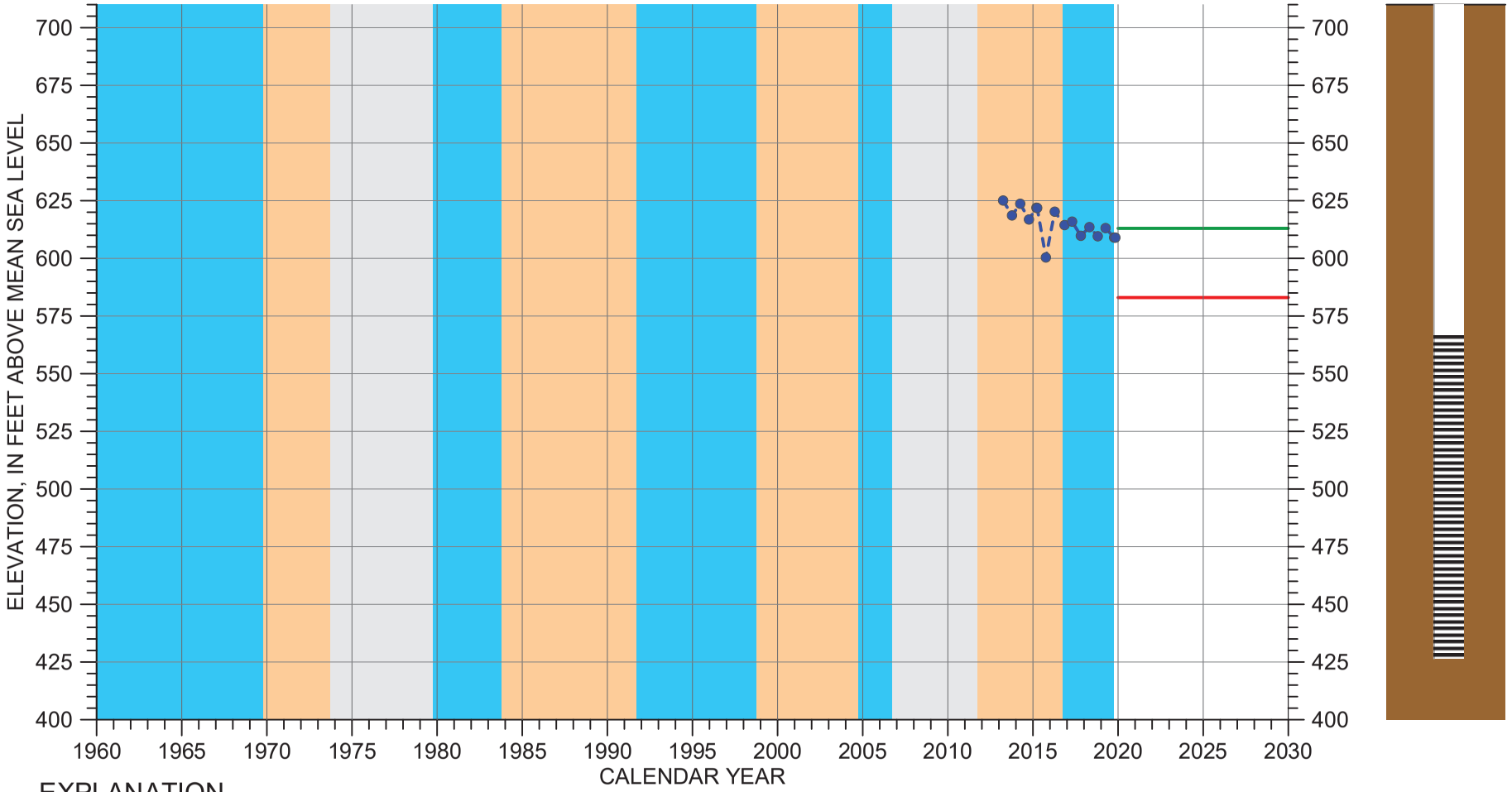


Well Depth: 400 feet
Screened Interval: unknown
Reference Point Elevation: 835 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/12E-26E07

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_26S_12E-26E07.grf

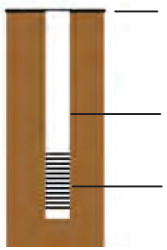


EXPLANATION

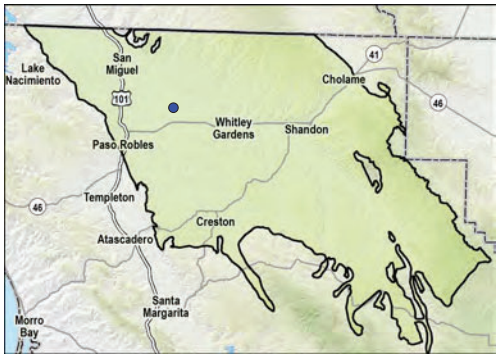
- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET



- Reference Point Elevation
- Casing
- Perforations (blank when unknown)

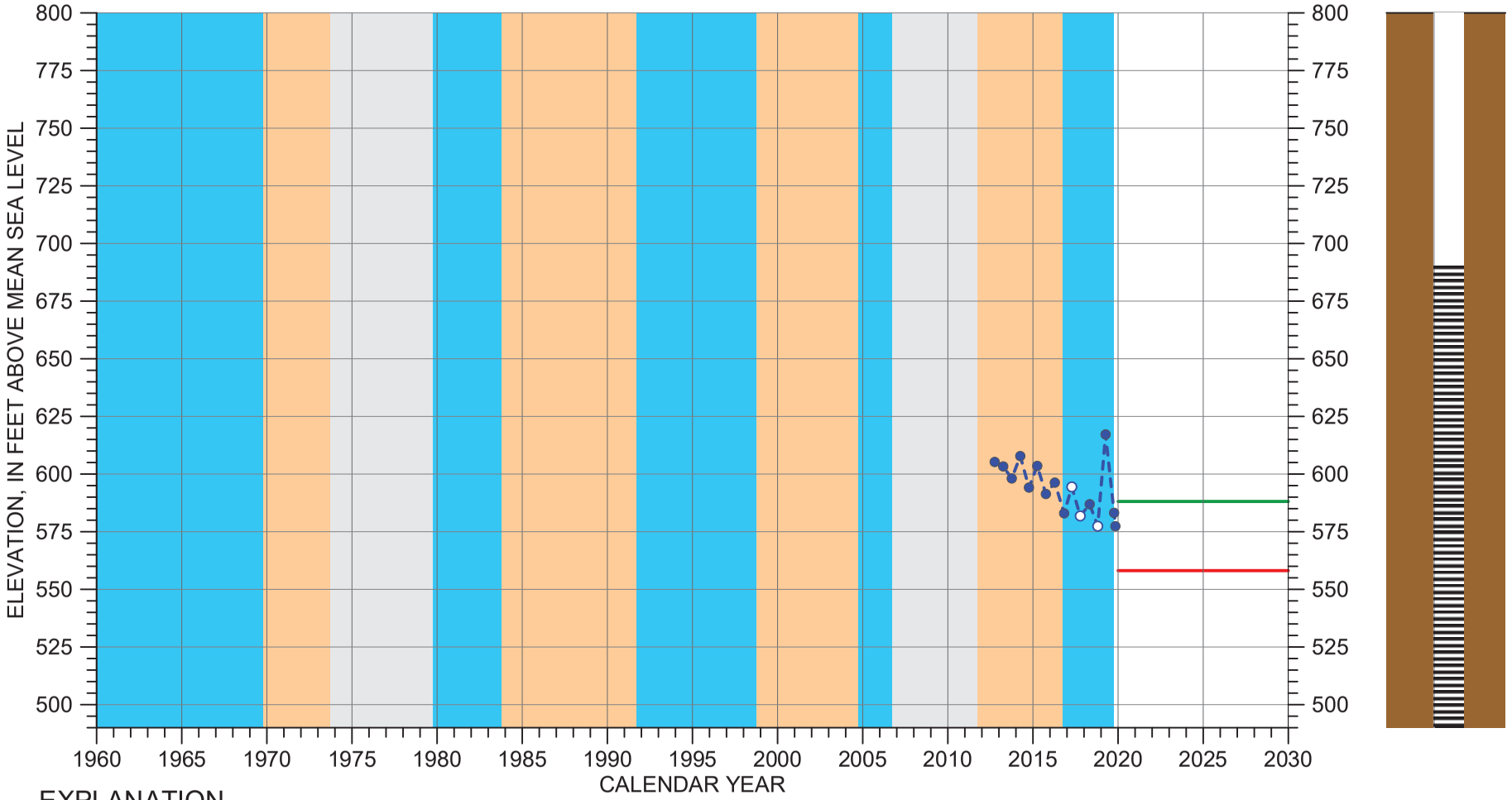


Well Depth: 400 feet
Screened Interval: 260-400 feet below ground surface
Reference Point Elevation: 827.9 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/13E-08M01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_26S_13E-08M01.grf

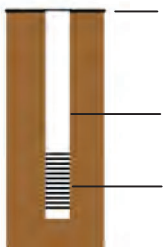


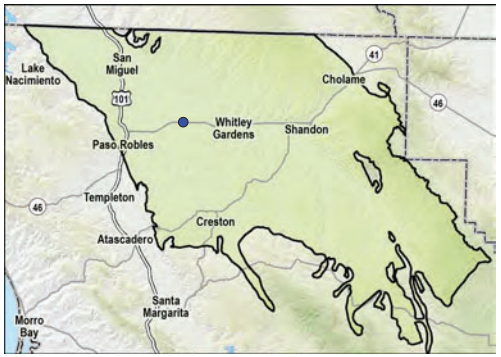
EXPLANATION

- GROUNDWATER ELEVATION
- MEASUREMENT NOT VERIFIED*
- MEASURABLE OBJECTIVE
- MINIMUM THRESHOLD

CLIMATE PERIOD CLASSIFICATION

DRY | AVERAGE/ALTERNATING | WET





Well Depth: 400 feet
Screened Interval: 200-400 feet below ground surface
Reference Point Elevation: 890.2 feet above mean sea level

* Measurement reported as not static

HYDROGRAPH OF MEASURED GROUNDWATER ELEVATION FOR 26S/13E-16N01

P:\Portland\824-Paso Robles\001-GSP Annual Report\Analysis\Hydrographs\Grapher\Annual Rpt\Hydr_26S_13E-16N01.grf

APPENDIX F

Paso Robles Formation Aquifer Storage Coefficient Derivation and Sensitivity Analysis

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Paso Robles Formation Aquifer Storage Coefficient Derivation and Sensitivity Analysis

The annual changes in groundwater in storage calculated for water years 2017, 2018, and 2019 in the Paso Robles Formation Aquifer presented in this first annual report are based on a fixed storage coefficient (S) value derived from groundwater modeling and groundwater elevation data presented in the Groundwater Sustainability Plan (GSP) for water year 2016. The derivation of S for the Paso Robles Formation Aquifer and a sensitivity analysis are presented below. It should be noted that while the GSP groundwater model utilizes a spatially variable S (both laterally and vertically) the S value derived here and used in this first annual report is a single average value representing the Paso Robles Formation Aquifer within the Subbasin.

1.1 Derivation of the Storage Coefficient Term

Derivation of S was accomplished through a back calculation using the change in groundwater in storage in the Paso Robles Formation Aquifer determined from the GSP groundwater model for water year 2016 and the total volume change represented by a Paso Robles Formation Aquifer groundwater elevation change map prepared for water year 2016. The change in groundwater in storage for water year 2016 in the Paso Robles Formation Aquifer is -59,459 acre-feet (AF) based on the GSP groundwater model.

The Paso Robles Formation Aquifer groundwater elevation change map for water year 2016 was prepared for this annual report by comparing the fall 2015 groundwater elevation contour map to the fall 2016 groundwater elevation contour map. The fall 2015 groundwater elevations were subtracted from the fall 2016 groundwater elevations resulting in a map depicting the changes in groundwater elevations in the Paso Robles Formation Aquifer that occurred during the 2016 water year (not pictured, but similar to Figures 12, 13, and 14 in this first annual report).

The groundwater elevation change map for water year 2016 represents a total volume change within the Paso Robles Formation Aquifer of -807,490 AF. As described in Section 7.2 of this annual report, this total volume change includes the volume displaced by the aquifer material and the volume of groundwater stored within the void space of the aquifer. The portion of void space in the aquifer that can be utilized for groundwater storage is represented by S. The change in groundwater in storage is equivalent to the product of S and the total volume change, as shown here:

$$Change\ of\ Groundwater\ in\ Storage = S \times Total\ Volume\ Change$$

This equation can be re-arranged and solved for S:

$$S = \frac{Change\ of\ Groundwater\ in\ Storage}{Total\ Volume\ Change} = \frac{-59{,}459\ AF}{-807{,}490\ AF} = 0.07$$

Therefore, based on analysis of data for water year 2016, an average S value for the Paso Robles Formation Aquifer in the Paso Robles Subbasin is 0.07.

1.2 Sensitivity Analysis

The annual changes in groundwater in storage in the Paso Robles Formation Aquifer calculated for water years 2017, 2018, and 2019 presented in this first annual report are 60,106, 6,398, and 59,682 AF, respectively. These values, calculated using an S value of 0.07, appear reasonable when compared to historical changes in groundwater in storage (see Figure 15 in this first annual report). While the calculated value of S, presented above, is based on sound science and using the best readily available information, it is

necessary to acknowledge that the true value of S in the Paso Robles Formation Aquifer is spatially variable (as indicated in the GSP groundwater model) and ranges in value both above and below the calculated value of 0.07. A sensitivity analysis was performed to demonstrate the range of annual changes in groundwater in storage that result from using a range of S values. Table F1 shows that the annual change in groundwater in storage volumes can range from 27 percent less to 27 percent more than presented in this first annual report based on S values ranging from 0.05 to 0.09. This shows the sensitivity of the S value to determination of annual change in groundwater in storage. However, neither the 27 percent lower nor the 27 percent higher annual change in groundwater in storage volumes seem reasonable when compared to historical changes in groundwater in storage (as shown in Figure 15 in this first annual report). Based on this sensitivity analysis, GSI believes that the calculated value of S (0.07) is reasonable and defensible for the purposes of this first annual report.

Table F 1. Change in Groundwater in Storage Sensitivity Analysis

Water Year	Total Volume of Change (AF)	Change in Groundwater in Storage (AF), based on:								
		S = 0.05		S = 0.06		Calculated S [0.07]	S = 0.08		S = 0.09	
		(AF)	% Diff	(AF)	% Diff	(AF)	(AF)	% Diff	(AF)	% Diff
2017	816,274	43,781	-27%	51,943	-14%	60,106	68,269	14%	76,432	27%
2018	86,885	4,660		5,529		6,398	7,267		8,135	
2019	810,508	43,471		51,577		59,682	67,787		75,892	

notes:

AF = acre-feet, S = storage coefficient, % Diff = percent difference from calculated S