Attachment A. DWR GSP Determination Letter

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CALIFORNIA DEPARTMENT OF WATER RESOURCES
SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE
715 P Street, 8th Floor | Sacramento, CA 95814 | P.O. Box 942836 | Sacramento, CA 94236-0001

January 31, 2024

John Neil
Atascadero Basin Groundwater Sustainability Agency
5005 El Camino Real
Atascadero, CA 93422
jneil@amwc.us

RE: Salinas Valley – Atascadero Area Subbasin – Groundwater Sustainability Plan

Dear John Neil,

The Atascadero Basin Groundwater Sustainability Agency (GSA) submitted the Salinas Valley – Atascadero Area Subbasin Groundwater Sustainability Plan (GSP or Plan) to the Department of Water Resources (Department) for evaluation. The Salinas Valley – Atascadero Area Subbasin is designated by the Department as very low-priority and therefore, is not required to be managed under a GSP and is not subject to state intervention under Chapter 11 of the Sustainable Groundwater Management Act (SGMA). However, SGMA encourages and authorizes basins designated as low- and very low-priority to be managed under a GSP. The Department appreciates the Atascadero Basin GSA voluntarily submitting a GSP for the very low-priority Salinas Valley – Atascadero Area Subbasin. This letter is to acknowledge receipt of the GSP and provide an update regarding the Department's evaluation and assessment of the GSP.

The Department has prioritized the evaluation of GSPs submitted for medium- and high-priority basins to meet statutory deadlines for those plans in which state intervention applies. The Department will evaluate GSPs submitted for low- and very low-priority basins now that the evaluation of medium- and high-priority-basin GSPs has been completed and will provide assessments and determinations as soon as practicable. In the meantime, the Department encourages the Atascadero Basin GSA to continue implementing its GSP and providing information to the Department through annual report submittals by April 1.

The Department appreciates your patience and should you have any questions, please contact the Sustainable Groundwater Management Office by emailing sgmps@water.ca.gov.

Thank you,

Paul Gosselin
Deputy Director of Sustainable Groundwater Management

Attachment B. DWR GSP WY 2023 Annual Report Letter

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CALIFORNIA DEPARTMENT OF WATER RESOURCES
SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE
715 P Street, 8th Floor | Sacramento, CA 95814 | P.O. Box 942836 | Sacramento, CA 94236-0001

May 10, 2024

John Neil
Atascadero Area Subbasin
5005 El Camio Real
Atascadero, CA 93422
jneil@amwc.us

RE: Review of Annual Report for the Atascadero Area Subbasin, Water Year 2023

Dear John Neil,

As the basin point of contact for the groundwater sustainability plan (GSP) in the Atascadero Area Subbasin (Subbasin), this letter is to inform you that the Department of Water Resources (Department) has reviewed the annual report submitted for the Subbasin for Water Year 2023. The Sustainable Groundwater Management Act (SGMA) requires, on April 1 following the adoption of a GSP and annually thereafter, an annual report to be submitted to the Department. The required contents of annual reports are included in the GSP Regulations (23 CCR § 356.2) as is the Department's role in reviewing annual reports (23 CCR § 355.8).

Once an annual report has been submitted, the Department is required: to notify the submitting agency of receipt within 20 days, review the information to determine whether the basin's GSP is being implemented in a manner likely to achieve its established sustainability goal, and notify the submitting agency in writing if additional information is required (23 CCR § 355.8).

The submitted information appears to satisfy the requirements of the GSP Regulations (23 CCR § 356.2) of and so no additional information is required at this time. However, due to the current status of the GSP for the basin, the basin does not yet have a sustainability goal that is part of an approved Plan. As a result, the Department cannot independently evaluate whether information in the annual report indicates that the Plan is being implemented in a manner that will likely achieve the sustainability goal for the basin at this time, but that determination will be included in the Department's forthcoming evaluation of the Plan.

Please contact the assigned DWR basin point-of-contact or sgmps@water.ca.gov if you have questions about this notice or the annual reporting process. The Department looks forward to receiving your Water Year 2024 Annual Report by April 1, 2025.

Thank You,

Paul Gosselin

Paul Gosselin
Deputy Director
Sustainable Water Management

Attachment C. Groundwater Sustainability Plan Regulations - 356.2. Annual Reports

§ 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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Attachment D. Historical Precipitation Records

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Monthly Precipitation at the Atascadero Mutual Water Company Station 34

(inches)

Source: Atascadero Mutual Water Company

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	WY Total
1915							0.00	0.00	0.00	0.00	0.25	3.81	---
1916	15.51	1.72	1.55	0.15	0.00	0.00	0.00	0.08	0.82	1.52	0.36	10.02	23.89
1917	3.62	8.11	0.95	0.08	0.13	0.00	0.00	0.00	0.00	0.04	0.52	0.11	24.79
1918	0.40	9.37	5.59	0.00	0.00	0.00	0.01	0.02	0.16	0.52	1.33	2.48	16.22
1919	3.15	3.02	2.39	1.05	0.24	0.03	0.00	0.00	0.45	0.75	3.34	1.19	14.66
1920	0.57	4.14	2.97	0.26	0.67	0.00	0.00	0.00	0.16	0.12	0.00	5.23	14.05
1921	0.54	2.30	4.85	2.27	0.00	0.00	0.00	0.00	0.70	0.17	0.03	7.32	16.01
1922	5.65	5.61	3.37	0.31	0.91	0.00	0.00	0.00	0.00	0.33	4.16	6.11	23.37
1923	3.43	0.91	0.09	2.59	0.00	0.19	0.00	0.00	0.17	0.16	0.27	0.28	17.98
1924	1.27	0.56	3.57	0.41	0.23	0.00	0.00	0.00	0.00	1.64	2.34	1.84	6.75
1925	1.33	2.75	3.57	1.86	2.66	0.00	0.00	0.00	0.00	0.40	0.11	1.90	17.99
1926	3.12	5.26	0.28	3.67	0.00	0.00	0.00	0.00	0.00	0.00	7.23	1.39	14.74
1927	1.91	7.53	1.93	1.21	0.00	0.08	0.00	0.00	0.00	1.66	1.88	2.53	21.28
1928	0.00	2.19	5.04	0.54	0.13	0.00	0.00	0.00	0.00	0.00	3.58	5.48	13.97
1929	1.60	2.79	1.82	0.53	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.26	16.05
1930	4.86	2.66	2.52	0.54	0.97	0.14	0.00	0.00	0.00	0.00	1.58	0.50	11.95
1931	4.98	1.54	0.43	0.38	2.02	0.13	0.00	0.00	0.00	0.00	1.90	9.10	11.56
1932	3.58	4.98	0.59	0.16	0.11	0.00	0.00	0.00	0.03	0.00	0.14	1.13	20.45
1933	7.79	0.09	0.72	0.14	0.65	0.93	0.00	0.00	0.00	0.36	0.00	4.38	11.59
1934	2.44	3.17	0.17	0.00	1.00	0.00	0.00	0.00	0.00	0.99	2.85	1.56	11.52
1935	4.92	0.68	2.66	3.84	0.00	0.00	0.00	0.00	0.08	0.20	1.35	1.85	17.58
1936	2.00	9.68	1.13	1.25	0.00	0.15	0.00	0.00	0.00	1.47	0.00	5.98	17.61
1937	4.12	4.87	4.86	0.05	0.00	0.00	0.00	0.00	0.00	0.10	0.80	5.29	21.35
1938	1.88	8.97	6.63	0.77	0.03	0.00	0.00	0.00	0.53	0.20	0.48	0.93	25.00
1939	2.70	1.38	1.39	0.14	0.00	0.00	0.00	0.00	0.23	1.02	0.90	1.22	7.45
1940	6.72	5.73	1.81	0.30	0.02	0.00	0.00	0.00	0.00	0.40	0.23	7.91	17.72
1941	5.06	11.22	7.78	3.51	0.00	0.00	0.00	0.00	0.00	1.26	0.84	7.57	36.11
1942	3.00	0.59	2.63	4.28	0.00	0.15	0.00	0.00	0.00	0.66	2.20	2.25	20.32
1943	11.85	2.01	6.85	1.20	0.00	0.00	0.00	0.00	0.00	0.46	0.36	3.73	27.02
1944	1.47	7.67	1.54	1.08	0.00	0.00	0.00	0.00	0.00	0.05	2.87	1.30	16.31
1945	1.54	3.84	4.25	0.15	0.00	0.00	0.01	0.03	0.16	0.51	1.30	2.43	14.20
1946	3.08	2.96	2.34	1.04	0.24	0.03	0.00	0.00	0.00	0.30	6.78	2.20	13.93
1947	0.60	1.42	1.38	0.47	0.91	0.00	0.00	0.00	0.04	0.51	0.16	0.95	14.10
1948	0.00	2.07	4.72	3.30	0.60	0.00	0.00	0.00	0.00	0.06	0.00	3.48	12.31
1949	1.70	2.28	4.47	0.31	0.40	0.00	0.00	0.00	0.00	0.00	1.65	3.14	12.70
1950	4.01	3.52	2.39	1.70	0.00	0.00	0.00	0.00	0.00	1.71	3.27	2.28	16.41
1951	1.91	1.87	0.59	1.58	0.28	0.00	0.00	0.00	0.02	0.81	2.96	7.06	13.51
1952	7.16	0.81	6.65	1.57	0.00	0.00	0.00	0.00	0.00	0.00	2.65	5.98	27.02
1953	1.73	0.00	1.38	2.05	0.25	0.00	0.00	0.00	0.00	0.00	2.29	0.08	14.04
1954	5.16	2.85	4.50	0.74	0.08	0.00	0.00	0.00	0.00	0.00	2.44	1.83	15.70
1955	4.10	2.37	0.15	1.89	1.44	0.00	0.00	0.09	0.00	0.00	1.22	7.88	14.31
1956	5.35	0.94	0.08	2.00	1.39	0.00	0.00	0.00	0.01	1.21	0.00	0.43	18.87
1957	4.38	2.68	0.80	2.77	1.99	0.18	0.00	0.00	0.00	0.82	0.16	5.29	14.44
1958	4.76	7.48	6.56	7.21	0.27	0.00	0.00	0.13	1.02	0.18	0.02	0.28	33.70
1959	2.39	4.84	0.01	0.26	0.02	0.00	0.00	0.00	0.63	0.00	0.00	0.38	8.63

Monthly Precipitation at the Atascadero Mutual Water Company Station 34

(inches)

Source: Atascadero Mutual Water Company

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	WY Total
1960	2.57	5.51	1.31	1.31	0.05	0.00	0.00	0.00	0.00	0.31	4.17	1.57	11.13
1961	1.66	0.56	1.03	0.30	0.80	0.00	0.00	0.00	0.00	0.00	2.43	2.05	10.40
1962	2.14	11.18	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	1.71	19.90
1963	2.10	5.28	3.68	4.21	0.29	0.06	0.00	0.03	0.16	0.95	3.04	0.05	18.26
1964	2.64	0.14	1.48	1.18	0.51	0.13	0.00	0.00	0.13	0.94	2.95	3.76	10.25
1965	2.15	0.68	2.17	3.17	0.00	0.00	0.00	0.00	0.00	0.00	6.92	3.74	15.82
1966	1.59	0.58	0.18	0.09	0.00	0.05	0.00	0.00	0.13	0.00	3.06	9.27	13.28
1967	5.90	0.61	5.43	5.71	0.05	0.10	0.00	0.00	0.76	0.10	2.09	2.50	30.89
1968	1.83	0.99	2.35	1.17	0.00	0.00	0.00	0.00	0.00	2.25	1.12	3.34	11.03
1969	16.62	12.16	0.76	1.63	0.18	0.00	0.30	0.00	0.00	0.13	0.46	0.82	38.36
1970	5.97	1.11	4.07	0.11	0.00	0.00	0.00	0.00	0.00	0.00	4.59	5.69	12.67
1971	1.63	0.22	1.10	0.94	0.30	0.00	0.00	0.00	0.07	0.27	0.81	4.46	14.54
1972	0.80	0.30	0.00	0.44	0.00	0.04	0.00	0.00	0.03	1.30	4.21	1.35	7.15
1973	6.20	7.17	2.45	0.00	0.00	0.00	0.00	0.00	0.00	0.80	3.75	2.34	22.68
1974	6.20	0.08	5.26	1.25	0.00	0.00	0.00	0.00	0.00	0.86	0.47	3.19	19.70
1975	0.09	5.00	4.39	1.58	0.00	0.00	0.00	0.00	0.00	1.15	0.00	0.10	15.58
1976	0.00	2.87	1.59	0.85	0.11	0.00	0.00	1.19	2.67	0.39	1.56	1.87	10.53
1977	1.71	0.16	1.37	0.00	1.99	0.00	0.00	0.00	0.00	0.16	0.33	7.57	9.05
1978	7.92	7.79	6.78	3.21	0.02	0.00	0.00	0.00	1.06	0.00	2.08	1.22	34.84
1979	4.48	4.73	3.91	0.11	0.00	0.00	0.00	0.00	0.15	0.68	0.89	3.37	16.68
1980	6.41	11.55	3.05	1.00	0.73	0.00	0.16	0.00	0.00	0.11	0.01	0.74	27.84
1981	4.07	1.57	6.64	0.93	0.02	0.00	0.00	0.00	0.00	1.20	1.21	1.50	14.09
1982	4.15	1.15	5.93	4.91	0.00	0.12	0.00	0.00	1.36	1.81	5.13	3.79	21.53
1983	9.21	5.72	8.70	3.11	0.21	0.00	0.00	0.80	1.35	0.47	3.61	5.26	39.63
1984	0.20	0.36	1.03	0.64	0.00	0.00	0.00	0.00	0.00	1.03	3.58	3.03	11.57
1985	0.85	1.69	2.77	0.15	0.00	0.00	0.00	0.00	0.00	0.57	3.37	1.12	13.10
1986	2.13	10.07	6.59	0.00	0.00	0.00	0.00	0.00	0.73	0.00	0.24	0.95	24.58
1987	1.80	2.44	3.10	0.00	0.00	0.00	0.00	0.00	0.00	1.75	2.71	3.67	8.53
1988	3.01	2.60	1.50	2.20	0.00	0.15	0.00	0.00	0.00	0.00	1.13	5.22	17.59
1989	1.57	0.87	1.26	0.49	0.20	0.00	0.00	0.00	1.55	1.09	0.50	0.00	12.29
1990	2.69	2.85	0.45	0.26	0.80	0.00	0.00	0.00	0.70	0.00	0.25	0.40	9.34
1991	0.97	4.09	11.10	0.20	0.00	0.00	0.00	0.05	0.10	0.85	0.25	4.30	17.16
1992	1.98	10.47	2.75	0.00	0.00	0.05	0.00	0.00	0.00	2.35	0.00	5.38	20.65
1993	9.51	7.65	3.39	0.15	0.00	0.25	0.00	0.00	0.15	0.81	2.07	2.09	28.83
1994	1.99	0.65	0.20	0.31	0.00	0.00	0.00	0.00	1.17	0.90	0.60	0.10	9.29
1995	13.98	0.25	13.10	0.07	0.75	0.23	0.00	0.00	0.00	0.00	0.20	2.67	29.98
1996	3.40	9.32	2.70	0.75	0.10	0.00	0.00	0.00	0.00	2.54	2.78	7.67	19.14
1997	9.60	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	3.99	4.27	22.69
1998	5.50	11.49	2.25	2.82	2.77	0.00	0.00	0.00	0.17	0.25	1.29	0.88	33.31
1999	3.07	2.02	3.25	1.25	0.00	0.00	0.00	0.00	0.28	0.00	0.72	0.10	12.29
2000	3.91	7.99	1.73	2.03	0.30	0.10	0.00	0.00	0.10	2.30	0.10	0.30	16.98
2001	5.03	5.60	4.15	1.55	0.00	0.00	0.00	0.00	0.00	0.33	2.70	2.42	19.03
2002	0.35	0.30	1.27	0.33	0.18	0.00	0.00	0.00	0.07	0.00	1.88	4.38	7.95
2003	0.13	1.30	1.10	1.00	0.83	0.00	0.07	0.00	0.00	0.00	0.58	1.72	10.69
2004	1.00	4.97	0.37	0.00	0.00	0.00	0.00	0.00	0.00	5.89	2.32	9.38	8.64

Monthly Precipitation at the Atascadero Mutual Water Company Station 34

(inches)

Source: Atascadero Mutual Water Company

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	WY Total
2005	6.07	5.71	3.12	1.09	1.04	0.00	0.00	0.07	0.00	0.07	0.35	1.78	34.69
2006	8.21	1.64	5.39	3.76	1.20	0.00	0.00	0.00	0.00	0.36	0.36	1.97	22.40
2007	0.91	3.14	0.26	0.60	0.00	0.00	0.00	0.26	0.00	0.43	0.03	3.21	7.86
2008	9.20	2.68	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.26	1.41	1.72	15.56
2009	0.85	4.15	1.84	0.60	0.12	0.00	0.00	0.00	0.04	5.87	0.08	4.71	10.99
2010	8.34	3.70	0.70	3.00	0.11	0.00	0.00	0.00	0.00	1.45	2.28	8.86	26.51
2011	2.65	3.63	5.75	0.08	0.82	0.38	0.00	0.00	0.01	1.21	2.14	0.16	25.91
2012	3.09	0.27	2.20	2.60	0.07	0.00	0.00	0.00	0.00	0.61	1.25	4.24	11.74
2013	1.12	0.49	0.47	0.00	0.23	0.00	0.00	0.00	0.00	0.35	0.15	0.54	8.41
2014	0.00	3.48	3.14	1.55	0.00	0.00	0.02	0.00	0.00	0.00	1.12	4.93	9.23
2015	0.57	3.04	0.21	0.67	0.02	0.01	1.28	0.00	0.06	0.16	1.41	1.34	11.91
2016	5.40	1.31	4.30	0.24	0.00	0.00	0.00	0.00	0.00	2.36	2.19	2.02	14.16
2017	12.74	7.51	1.32	1.38	0.28	0.00	0.00	0.00	0.14	0.07	0.11	0.11	29.94
2018	2.62	0.29	8.53	0.30	0.00	0.00	0.00	0.00	0.00	0.16	3.58	1.24	12.03
2019	5.82	9.12	3.75	0.07	0.98	0.00	0.00	0.00	0.00	0.00	1.55	4.96	24.72
2020	0.73	0.05	3.92	1.95	0.29	0.00	0.00	0.05	0.00	0.00	0.36	1.10	13.50
2021	6.10	0.04	1.10	0.02	0.00	0.00	0.01	0.00	0.00	2.01	0.15	8.34	8.73
2022	0.12	0.00	0.94	0.50	0.00	0.00	0.00	0.00	0.63	0.00	1.70	7.67	12.69
2023	15.12	4.19	8.13	0.00	0.14	0.00	0.00	0.09	0.00	0	1.15	4.62	37.04
2024	3.47	7.48	3.71	2.23	0.13	0.00	0.00	0.00	0.06				22.85
											1916-2024 WY Average:		17.61
											1968-2024 WY Average:		18.08

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Attachment E. Monitoring Well Reference Point Technical Memorandum

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GSI Water Solutions, Inc.

TECHNICAL MEMORANDUM

Discovery and Resolution of RMS Groundwater Level Monitoring Network Wells Reference Point Elevations Discrepancies

To: Blaine Reely, San Luis Obispo County Groundwater Sustainability Director

From: Nate Page, GSI Water Solutions, Inc.

Date: February 16, 2024

1. Introduction

It was discovered during the San Luis Obispo Flood Control and Water Conservation District (SLOFCWCD) groundwater monitoring program spring 2023 groundwater level monitoring event that groundwater elevation data exported from the SLOFCWCD water level database was being, and had previously been, misinterpreted by interested parties in the Atascadero Groundwater Basin (Basin). Beginning with preparation of the Groundwater Sustainability Plan (GSP), depth to water (DTW) data[1] received from SLOFCWCD database was interpreted to be reported from the reference point elevation (RPE) of each well. This understanding has been carried forward consistently through all subsequent annual reporting. However, in spring 2023 it was discovered that the DTW data is actually presented as a calculated depth to water from the ground surface elevation (GSE). The ramifications of this discovery and the resolution of the issue are discussed below.

2. Discussion

Five of the 24 representative monitoring site (RMS) wells in the Basin have RPEs that are not equivalent to their respective GSEs (see Table 1). The SLOFCWCD includes a field labeled as "Ft Above", indicating the amount of 'stickup', or distance between the GSE and RPE at each well location. Because the DTWs reported in the SLOFCWCD database were misinterpreted as measured from the RPEs of each well, the resulting groundwater elevation (GWE) calculations are off from their true value by an amount equivalent to the distance reported in the "Ft Above" field for these 5 RMS wells. The Measurable Objectives (MOs) and Minimum Thresholds (MTs) established in the GSP for these 5 RMS wells are subject to this same "Ft Above" issue (*Ft Above Issue*).

All GWEs presented in the Atascadero Basin Water Year 2023 Annual Report have been corrected for the *Ft Above Issue* to represent true groundwater elevations, including both current water year (2023) and historical values. This correction involved moving GWEs downward in 5 RMS wells. GWEs did not have to be moved in the other 19 wells that have RPEs equal to their GSEs. The MOs and MTs for the 5 RMS wells have also been corrected using the same approach. The resolution to the *Ft Above Issue* is essentially clerical. Because both the GWEs and the MOs/MTs have been moved by the same amount in each well there is no change in status, regarding sustainable management criteria for each well. The RPE, GSE, FT Above, and amount of change applied to GWEs and MOs/MTs for each well is shown in the table below.

[1] The SLOFCWCD database uses the field description "Depth (Distance to Water)"

RMS Well ID	RPE (feet NAVD 88)	GSE (feet NAVD 88)	"Ft Above" (feet)	Change applied to GWEs and MOs/MTs (feet)
27S/12E-09N02	721	721	0	0
27S/12E-21XX6	754.18	754.18	0	0
27S/12E-29H03	753.01	753.01	0	0
28S/12E-04J02	795.83	795.83	0	0
28S/12E-04J04	802.37	802.37	0	0
28S/12E-05AX2	796.21	796.21	0	0
28S/12E-10R04	820	820	0	0
28S/12E-14K04	835	835	0	0
28S/12E-25B03	867.8	866.25	1.55	-1.55
29S/13E-19H04	1005	1003	2.00	-2.00
E11W-26B	1003	1003	0	0
27S/12E-17B02	828.31	828.31	0	0
27S/12E-17E01	842.4	842.4	0	0
27S/12E-20A02	776	776	0	0
27S/12E-20R01	771	771	0	0
27S/12E-21XX5	752.46	752.46	0	0
27S/12E-22M01	850.5	850	0.50	-0.50
27S/12E-33F01	880	879.5	0.50	-0.50
27S/12E-33G01	892	891	1.00	-1.00
28S/12E-04J05	803.13	803.13	0	0
28S/12E-04J06	800.51	800.51	0	0
28S/12E-10A03	808.29	808.29	0	0
28S/12E-11K02	882	882	0	0
28S/13E-31F02	884.3	884.3	0	0

Notes

NAVD 88 = North American Vertical Datum of 1988.

3. Summary

It was discovered in spring 2023 that the DTW data reported in the SLOFCWCD database is presented as a calculated depth to water from the ground surface elevation (GSE) rather than as measured from the RPE of each well, as was previously understood. This misunderstanding has resulted in reporting of GWEs that are off from their true value by an amount equivalent to the distance reported in the "Ft Above" field for each well. This same misunderstanding also affected the setting of MOs and MTs in the GSP. However, all GWEs presented in the Atascadero Basin Water Year 2023 Annual Report have been corrected for the *Ft Above Issue* to represent true groundwater elevations, including both current water year (2023) and historical values. The MOs and MTs for each well have been corrected using the same approach. The resolution to the *Ft Above Issue* is essentially clerical. Because both the GWEs and the MOs/MTs have been moved by the same amount in each well there is no change in status, regarding sustainable management criteria for each well.

Attachment F. Monitoring Network Inventory

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	Local Well Name	State Well Number	Well Depth	Ground Surface Elevation	Reference Point Elevation	Screen Interval Range	Spring 2024 Water Surface Elevation	Fall 2024 Water Surface Elevation	Proposed MT	Proposed MO	Interim Milestones				Comments
			(ft)	(ft)	(ft)	(ft btoc)	ft msl	ft msl	(ft)	(ft)	2027	2032	2037	2042	
Alluvial Aquifer (Qa)	27S/12E-09M02	27S12E09N002M	85	721	721	44-85	NM	NM	658	677	663	668	672	677	
	27S/12E-21XX6		61	754.18	754.18	31-51			725	731	727	728	730	731	
	27S/12E-29H03	27S12E29H003M	65		753	35-55	737.51	731.91	709	724	713	717	720	724	
	28S/12E-04J04	28S12E04J004M	70	802.37	802.4	30-70	790.47	767.557	729	761	737	745	753	761	
	28S/12E-05AX2		60	796.21	796.2	25-55			774	778	775	776	777	778	
	28S/12E-04J02	28S12E04J002M	86	801.99	795.8	21-86	778.53	757.73	742	764	748	753	759	764	
	28S/12E-10R04	28S12E10R004M	75	825.02	820	46-75	801.2	796.9	770	787	774	779	783	787	
	28S/12E-14K04	28S12E14K004M	105	838.78	835	50-100	812.1	810.9	785	801	789	793	797	801	
	28S/12E-25B03	28S12E25B003M	120	866.78	867.8	100-120	853	848.7	832	844	835	838	841	844	
	29S/13E-19H04	29S13E19H004M	57	1002.5	1005	29-49	998.8	990.63	979	989	982	984	987	989	
Paso Robles Formation Aquifer (Qtp)	27S/12E-17B02	27S12E17B002M	400	828.31	828.3	200-360	680.56	656.11	570	676	597	623	650	676	
						380-400									
	27S/12E-17E01	27S12E17E001M	310	842.4	842.4	190-300	686.65	681	636	716	656	676	696	716	
	27S/12E-20A02	27S12E20A002M	205	779.35	776	105-195	731.5	691.4	698	726	705	712	719	726	
	27S/12E-20R01	27S12E20R001M	230	771	771	110-230	742.1	729.8	673	710	682	692	701	710	
	27S/12E-33G01	27S12E33G001M	460	901.46	892	200-460	767.63	748.45	678	730	691	704	717	730	
	28S/12E-04J06	28S12E04J006M	153	800.51	800.5	93-153	779.61	753.51	709	750	719	730	740	750	
	28S/12E-10A03	28S12E10A003M	500	810.95	808.3	157-500	779.89	708.19	631	712	651	672	692	712	
	28S/12E-11K02	28S12E11K002M	603	820	882	300-600	820.7	815.8	707	736	714	722	729	736	
	28S/13E-31F02	28S13E31F002M	310	878.54	884.3	55-300	871.4	857.7	786	829	797	808	818	829	
	27S/12E-21XX5		360	752.46	752.5	110-140			661	699	671	680	690	699	
						180-250									
						300-360									
	27S/12E-33F01	27S12E33F001M	340	882.13	880	140-340	770.6	755.1	689	739	702	714	727	739	Pump installed, new RP
	28S/12E-04J05	28S12E04J005M	360	803.13	803.1	145-190	790.03	756.13	697	746	709	722	734	746	
						210-360									

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Attachment G. Monitoring Well Hydrographs

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Figure F-1. 27S/12E-09N02

Site Code: 355878N1206914W001 **State Well Number:** 27S12E09N002M **Local Well Name:** 27S/12E-09N02

Site Code: 355878N1206914W001
Local Well Name: 27S/12E-09N02
State Well Number: 27S12E09N002M
Station ID: 50530
WCR Number:
Latitude: 35.58778
Longitude: -120.69138
Station Organization ID:
Station Organization Name:
Well Location Description:
Well Use Type: Other
Well Completion Type: Single Well
Well Depth (feet bgs): 85
Top Perforation (feet bgs): 44
Bottom Perforation (feet bgs): 90
Ground Surface Elevation: 721
Reference Point Elevation: 721
Reference Point Description: Top of casing
Station Comments: Other' Well Use Type selected. Additional Comments are required.

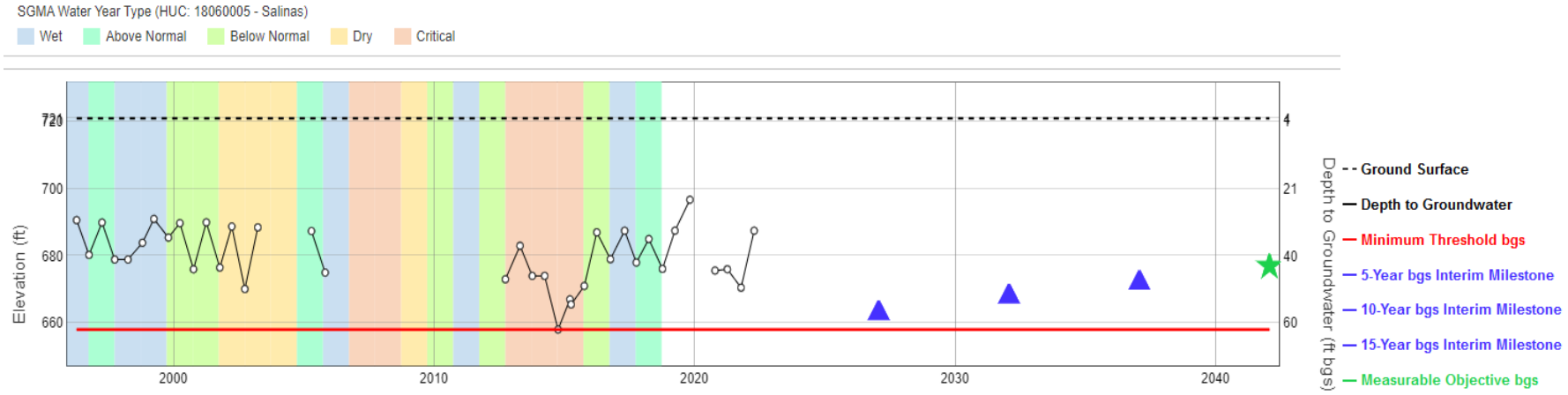


Figure F-2. 27S/12E-21XX6

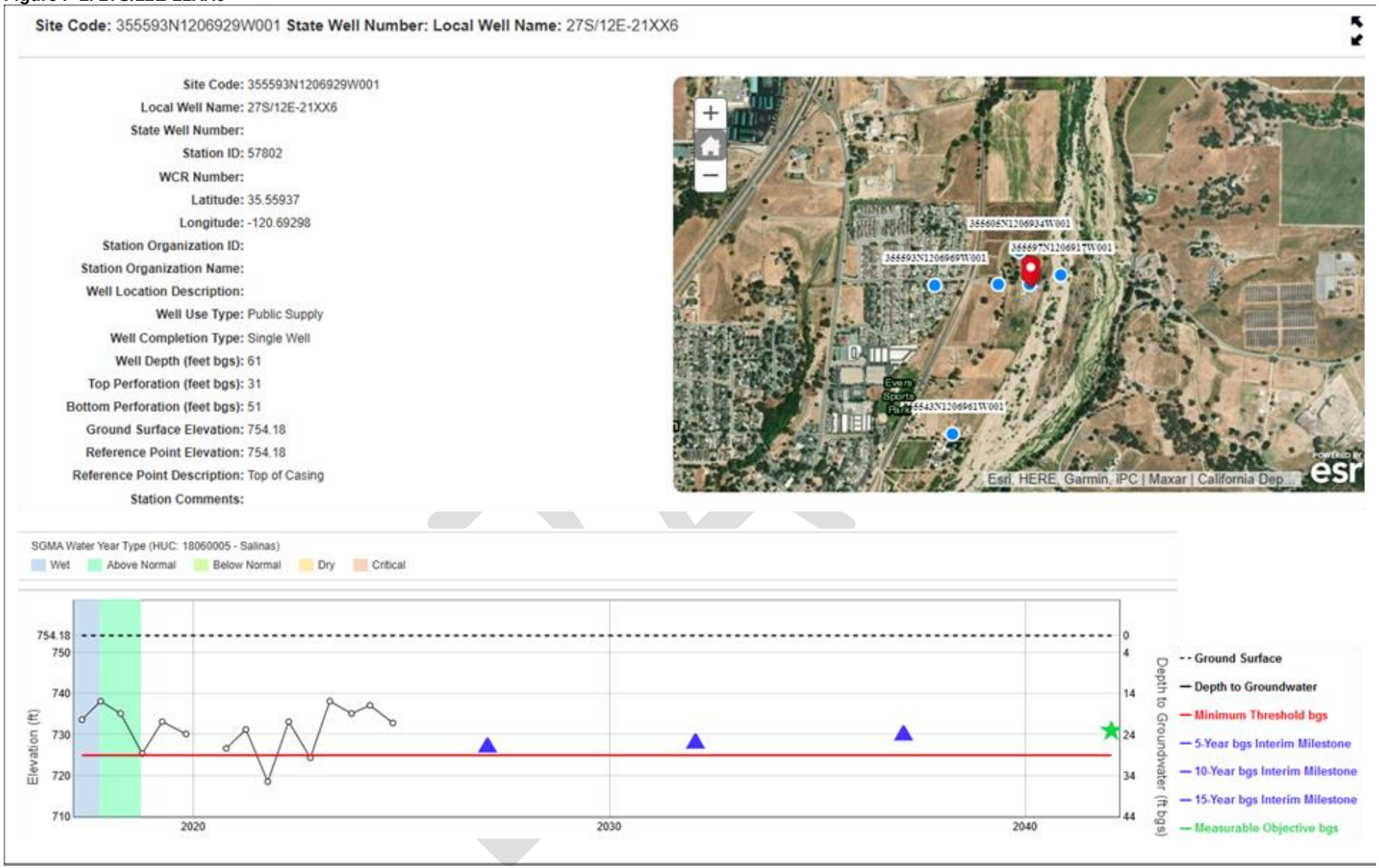


Figure F-3. 27S/12E-29H03

Figure F-4. 28S/12E-04J02

Figure F-5. 28S/12E-04J04

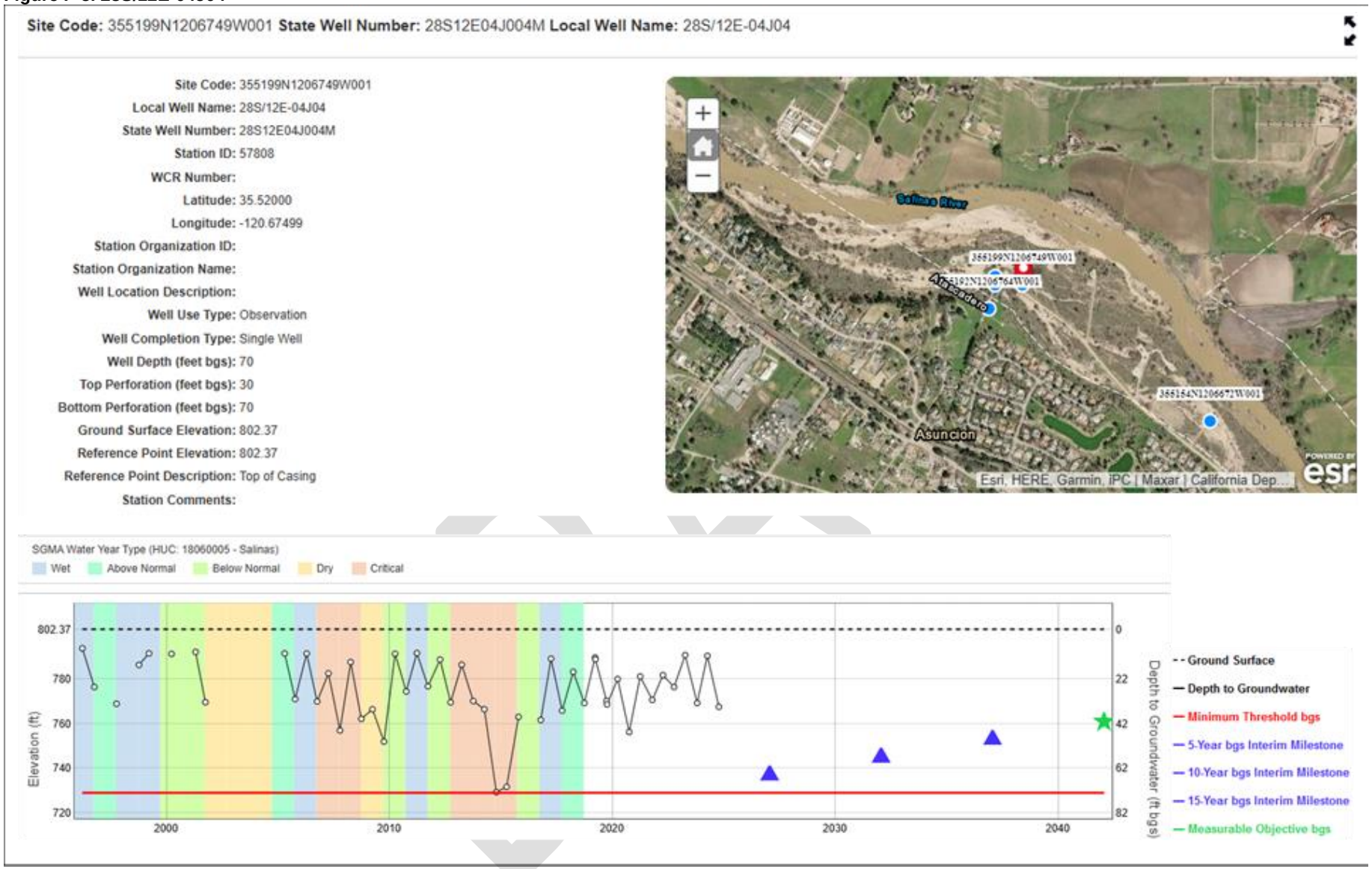


Figure F-6. 28S/12E-05AX2

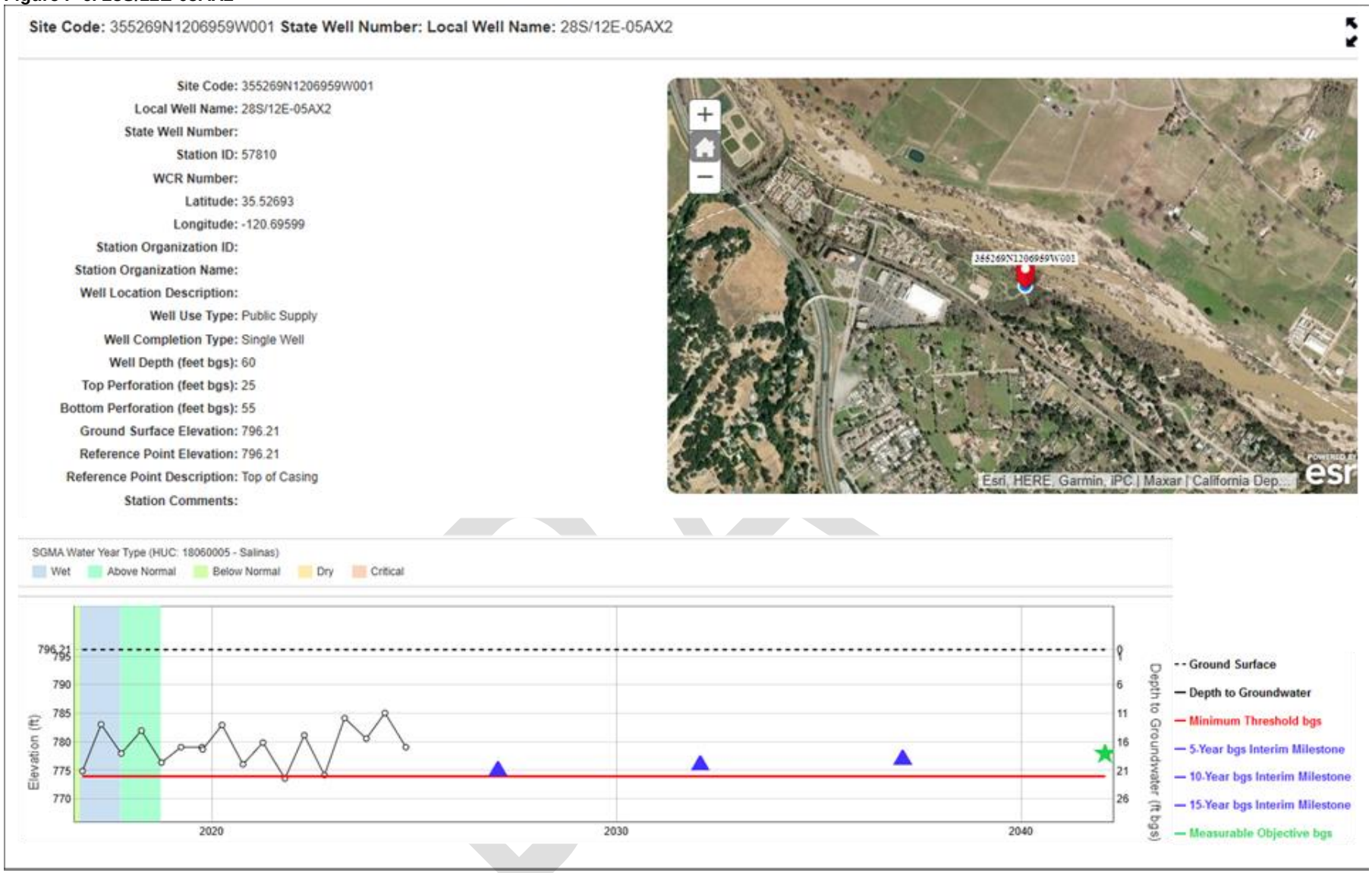


Figure F-7. 28S/12E-10R04

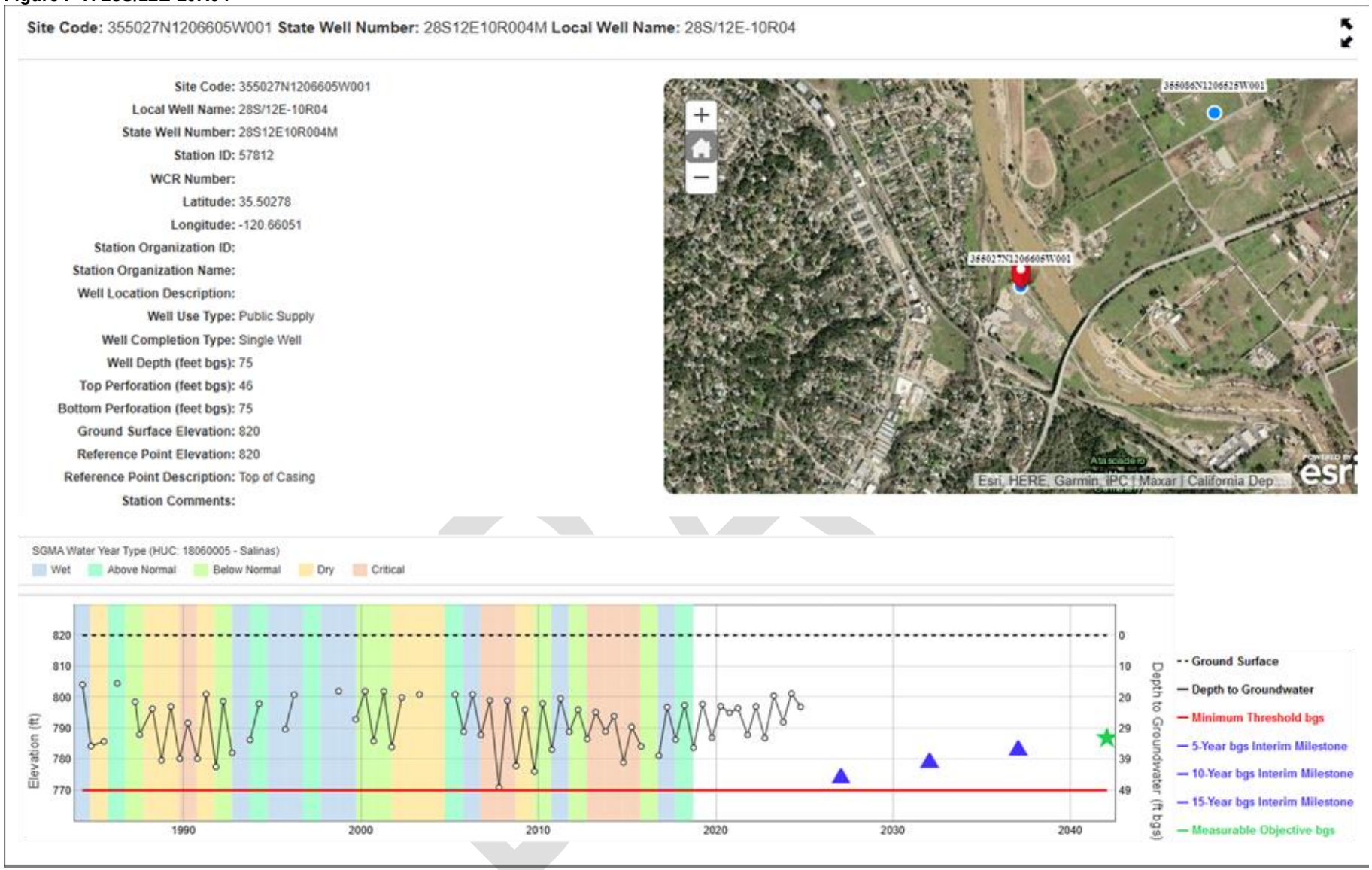


Figure F-8. 28S/12E-14K04

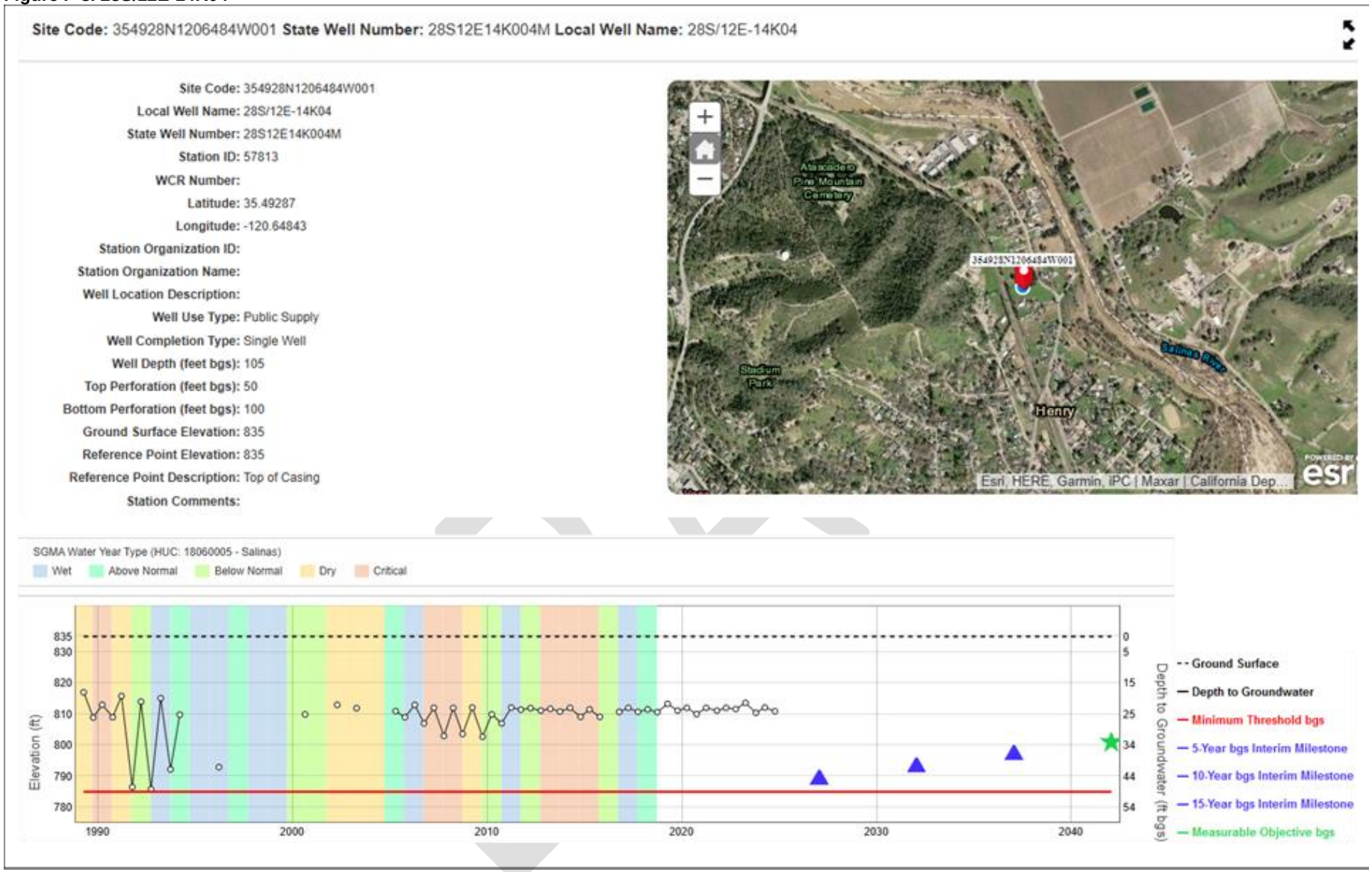


Figure F-9. 28S/12E-25B03

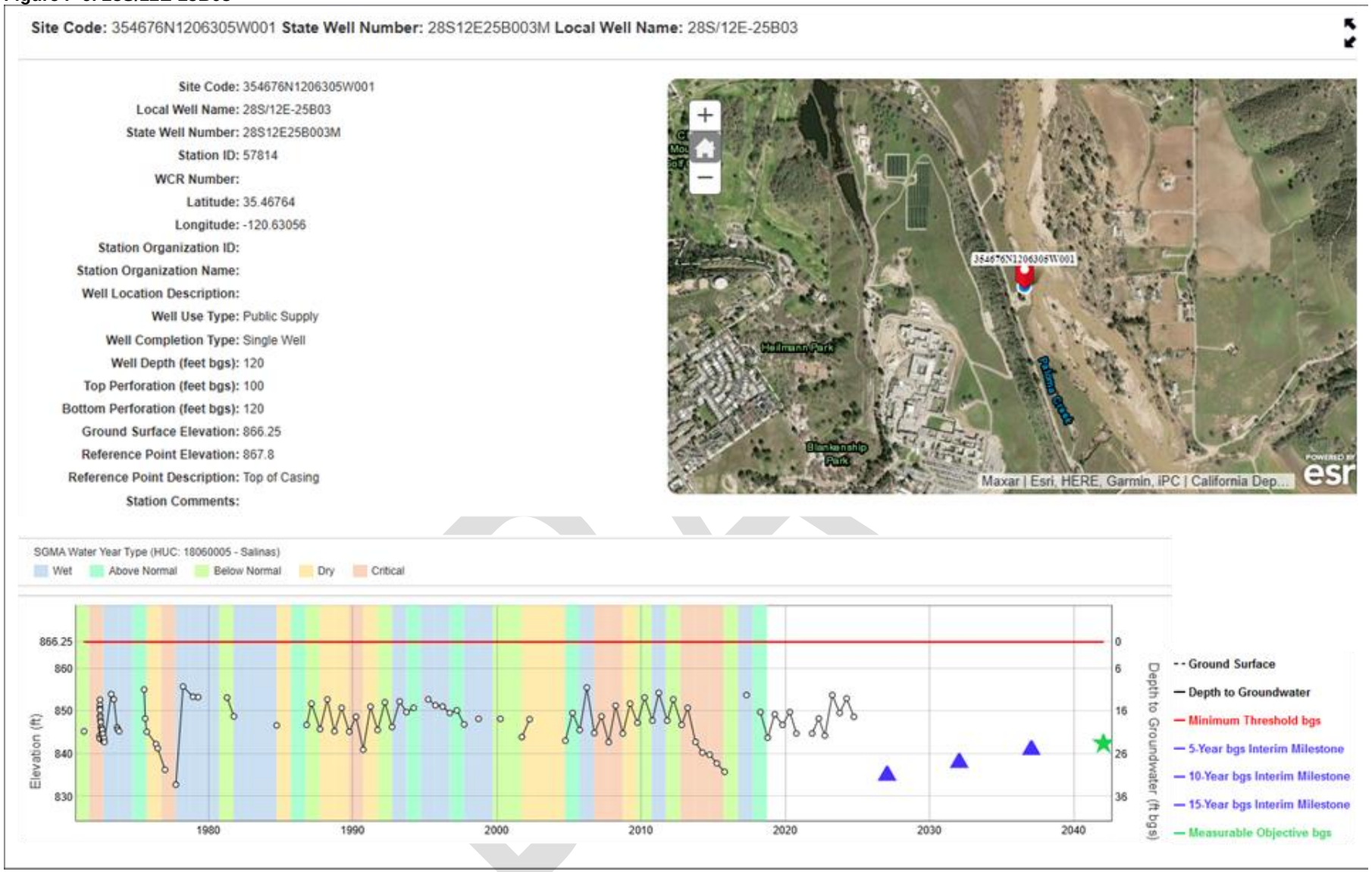


Figure F-10. 29S/13E-19H04

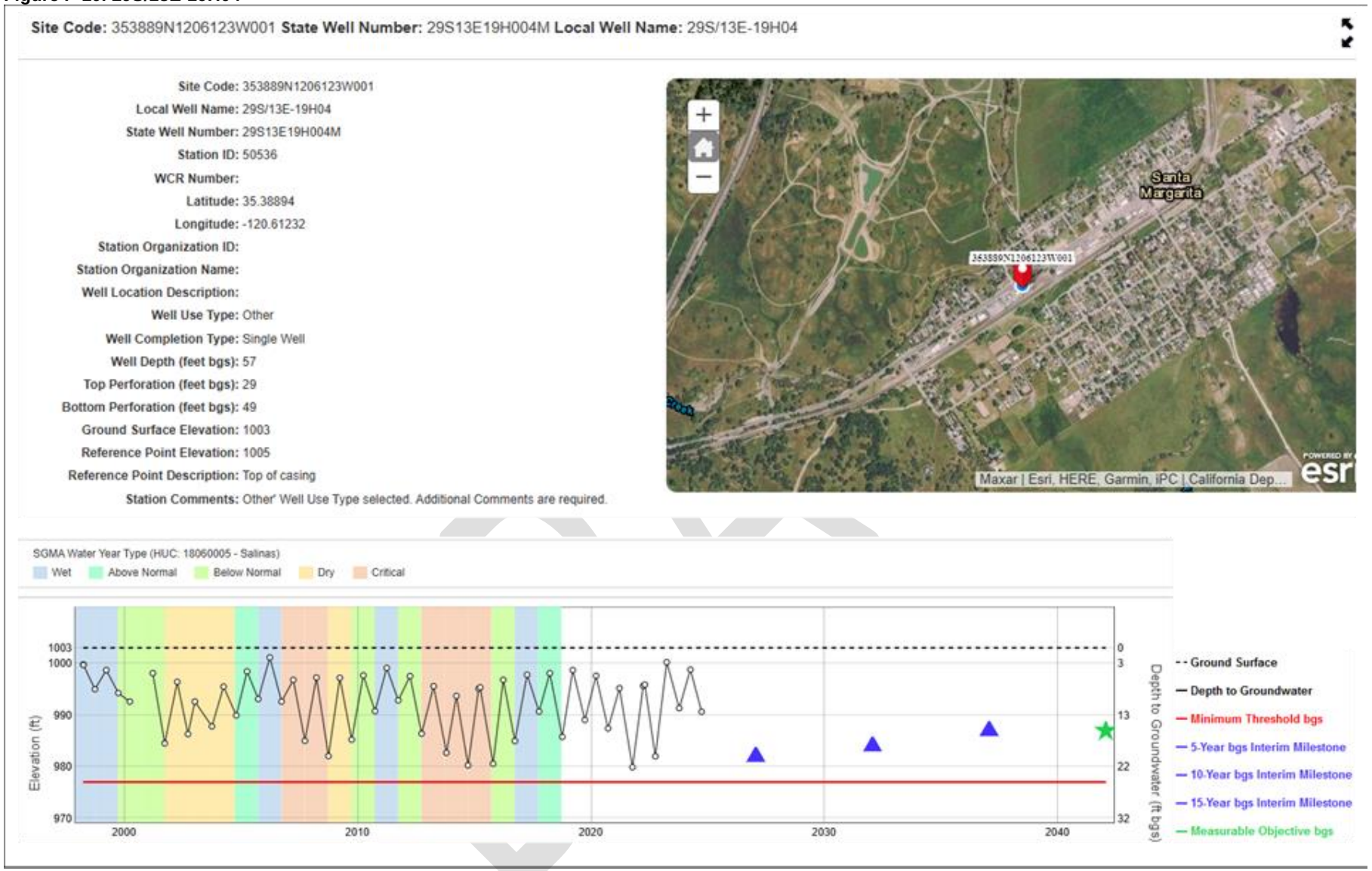


Figure F-11. E11W-26B

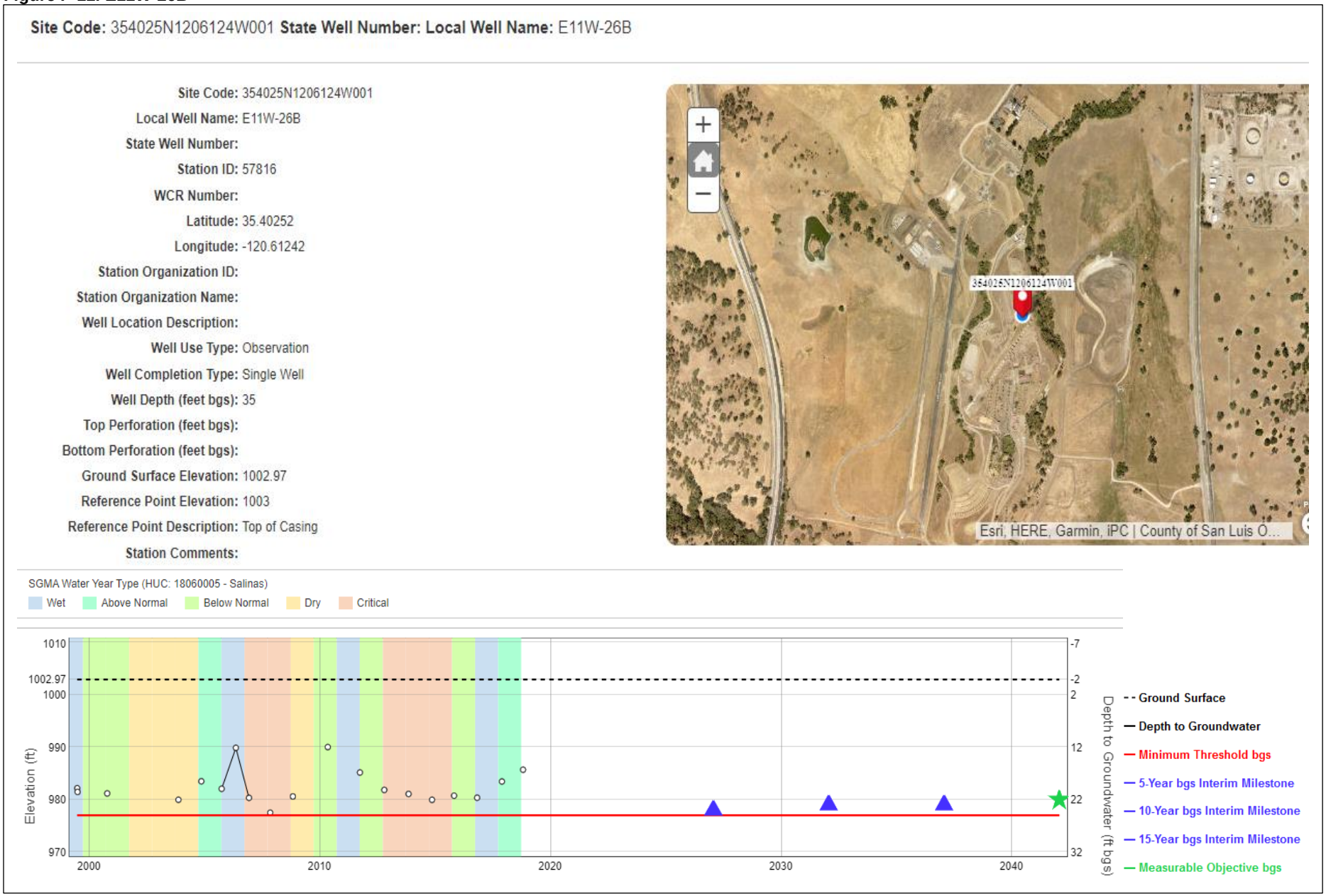


Figure F-12. 27S/12E-17B02

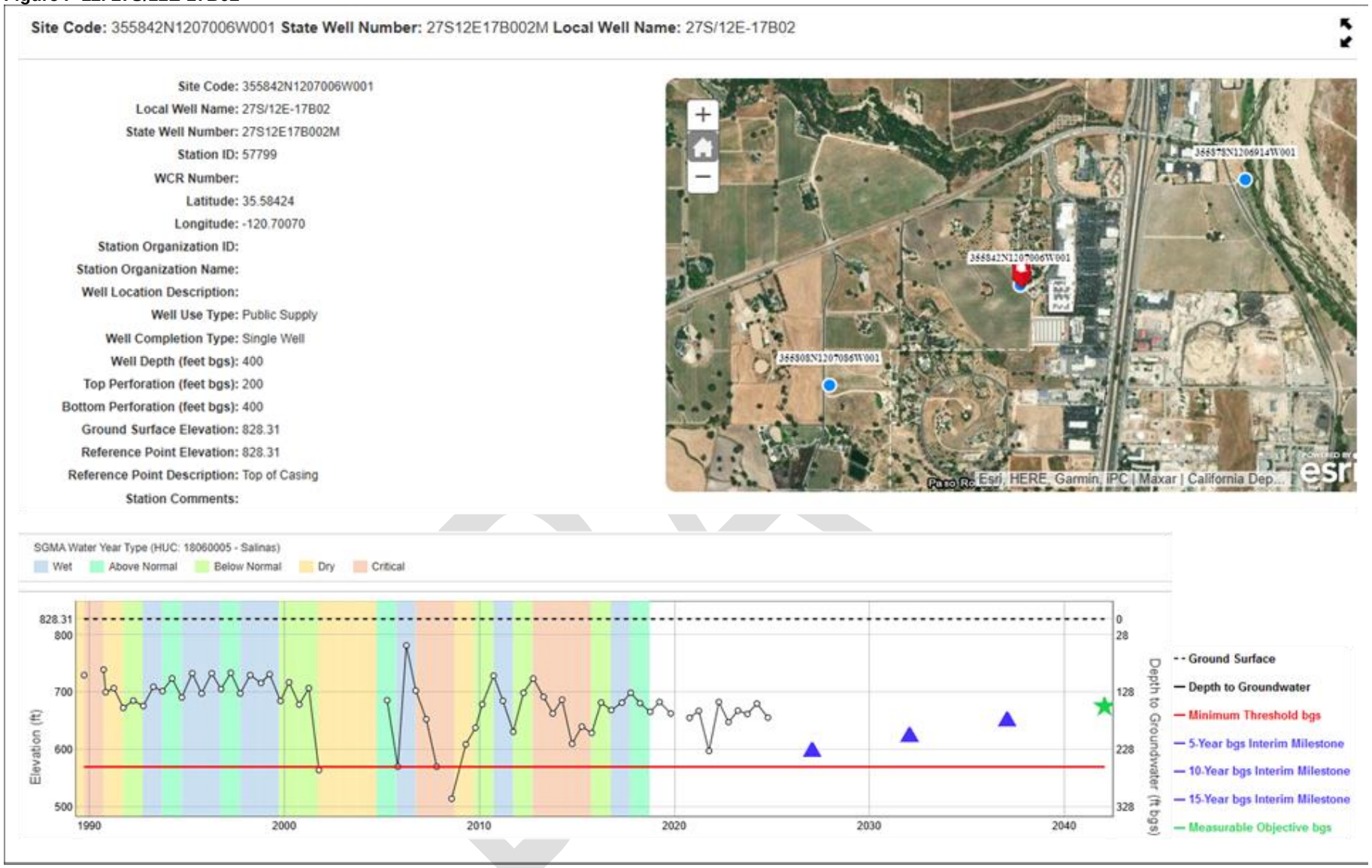


Figure F-13. 27S/12E-17E01

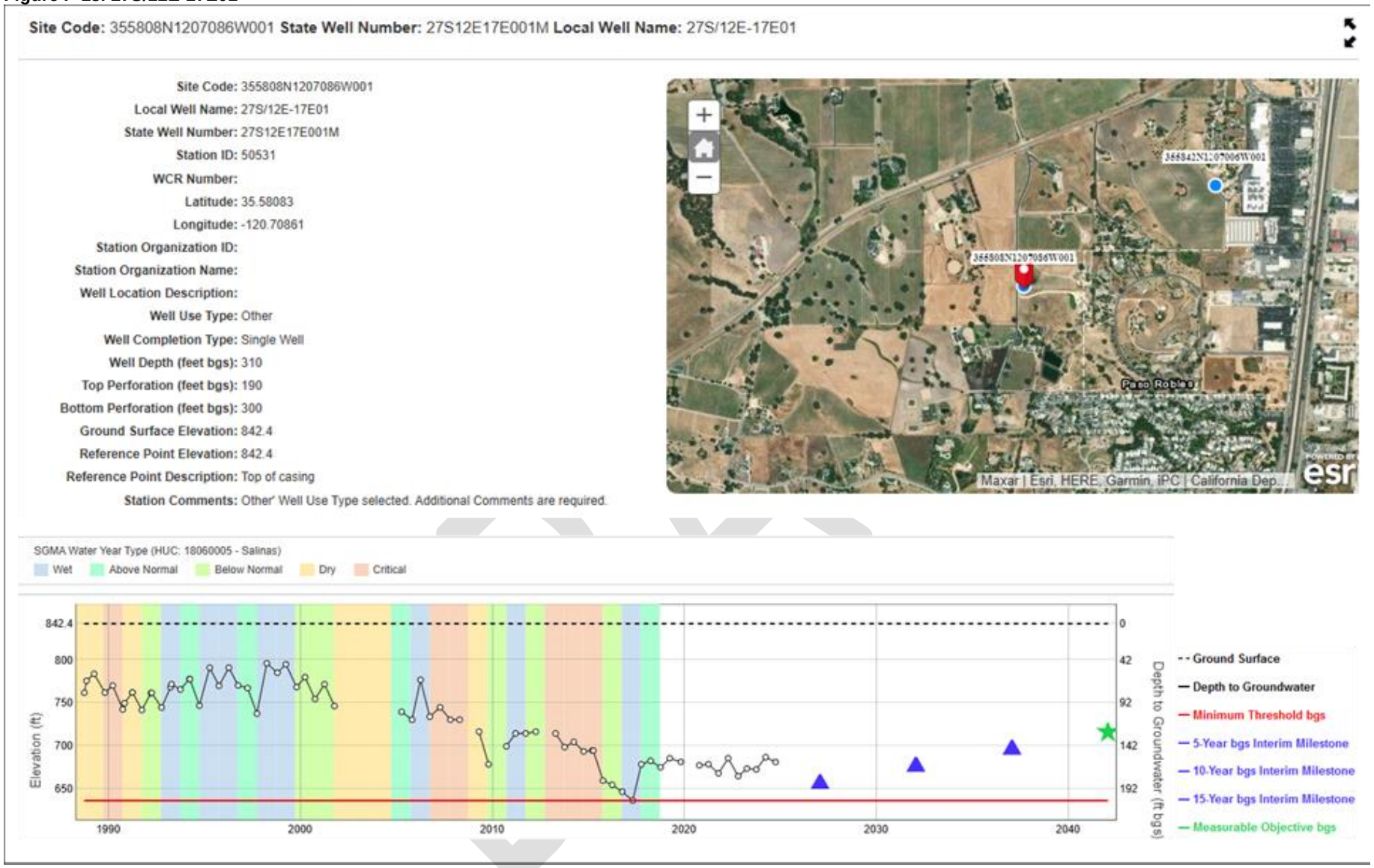


Figure F-14. 27S/12E-20A02

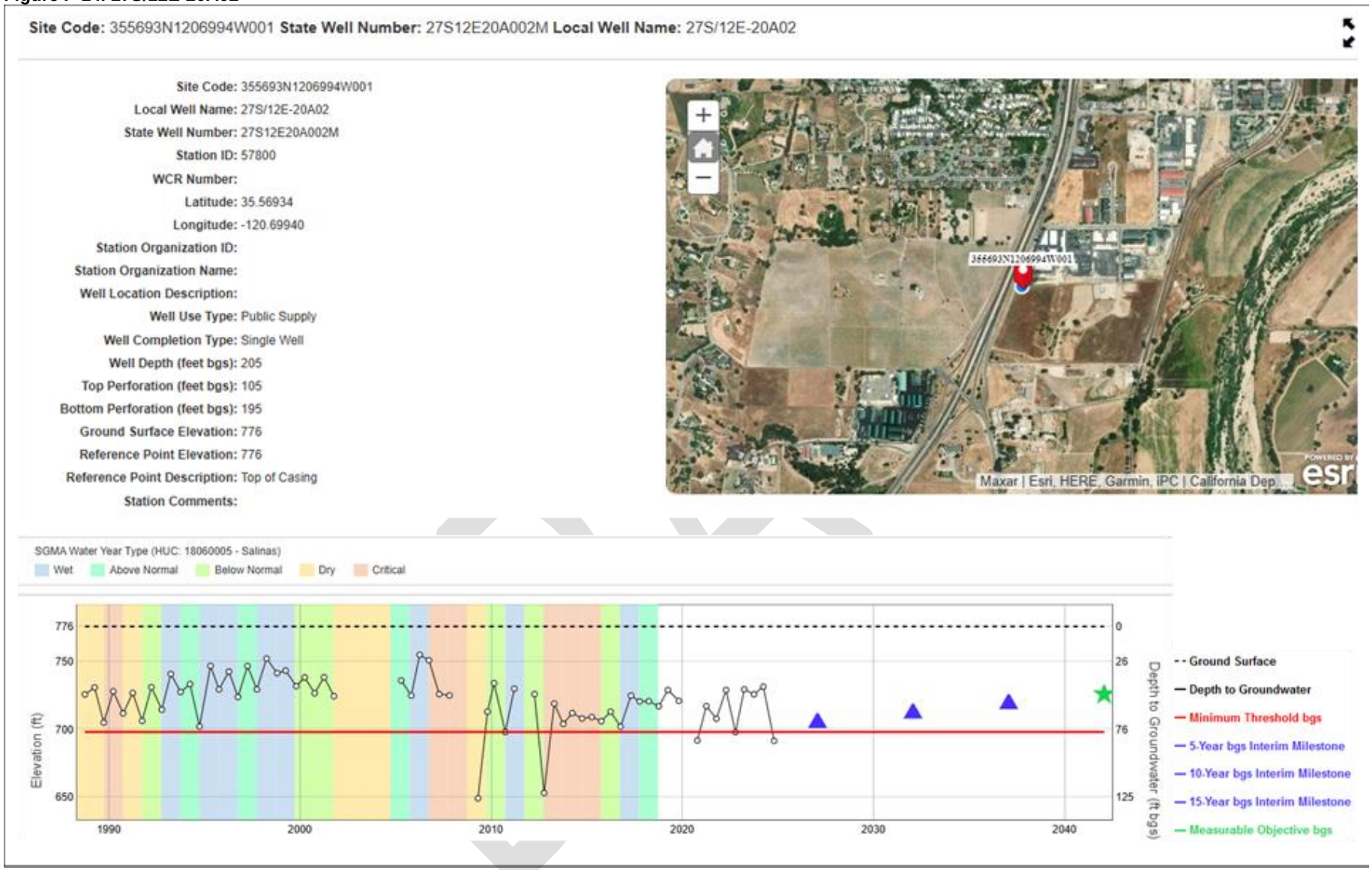


Figure F-15. 27S/12E-20R01

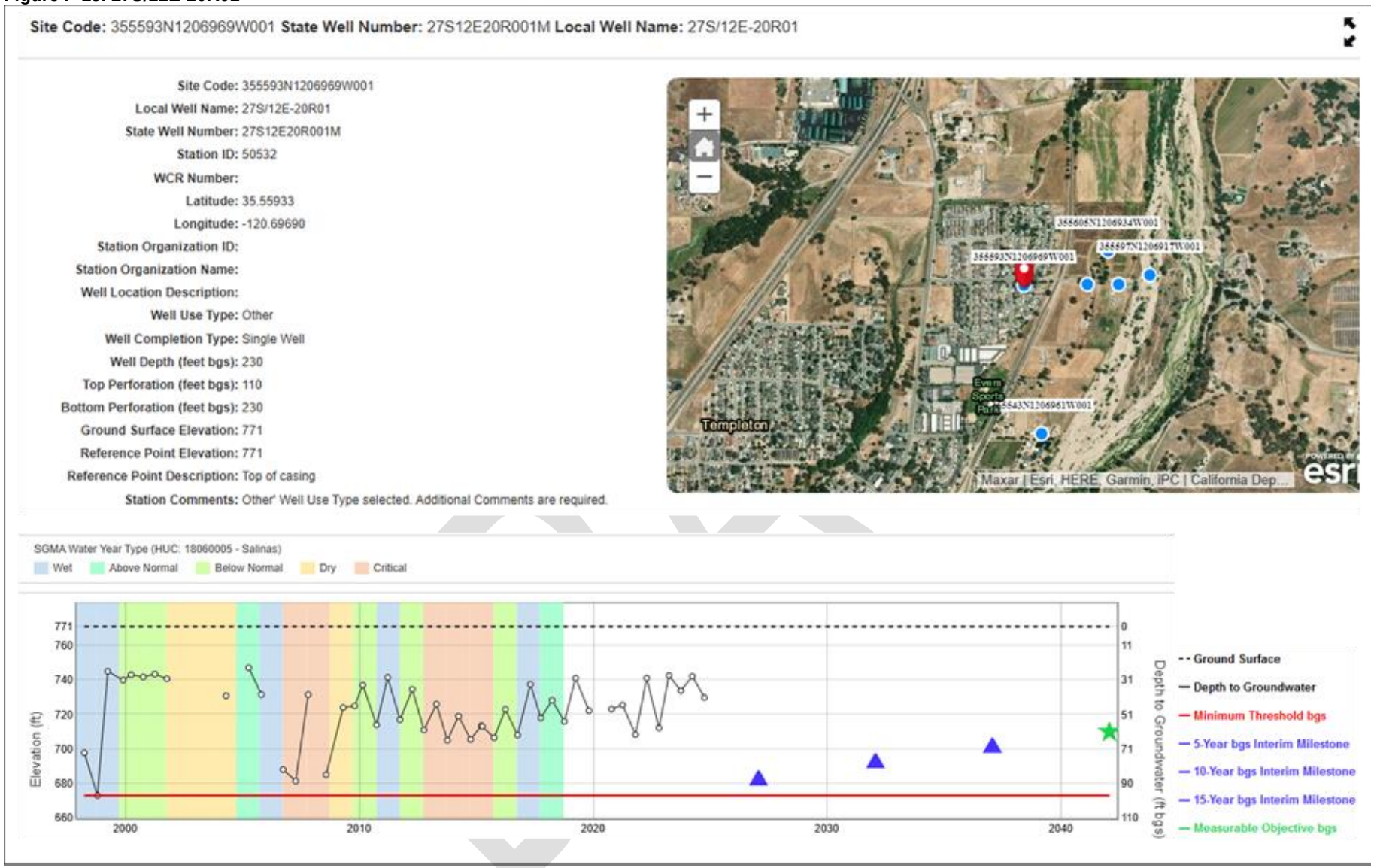


Figure F-16. 27S/12E-21XX5

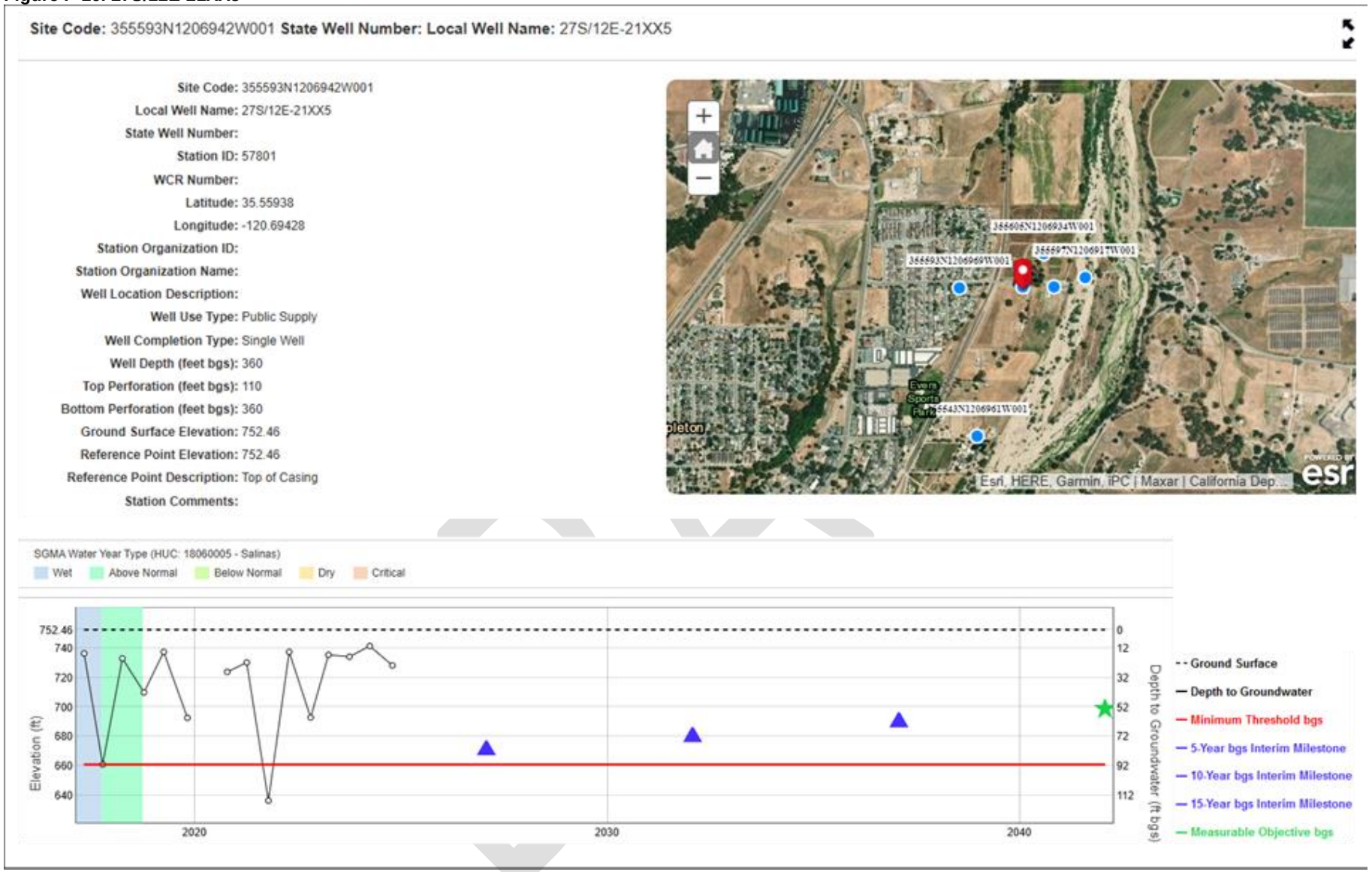


Figure F-17. 27S/12E-22M01

Site Code: 355619N1206741W001 **State Well Number:** 27S12E22M001M **Local Well Name:** 27S/12E-22M01

Site Code: 355619N1206741W001
Local Well Name: 27S/12E-22M01
State Well Number: 27S12E22M001M
Station ID: 57803
WCR Number:
Latitude: 35.56195
Longitude: -120.67414
Station Organization ID:
Station Organization Name:
Well Location Description:
Well Use Type: Irrigation
Well Completion Type: Single Well
Well Depth (feet bgs): 550
Top Perforation (feet bgs):
Bottom Perforation (feet bgs):
Ground Surface Elevation: 850
Reference Point Elevation: 850.5
Reference Point Description: Top of Casing
Station Comments:

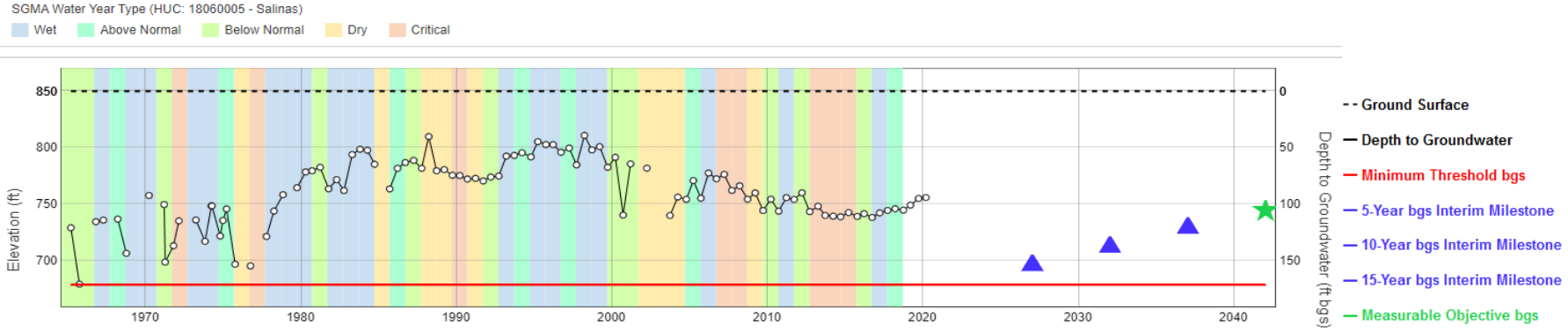


Figure F-18. 27S/12E-33F01

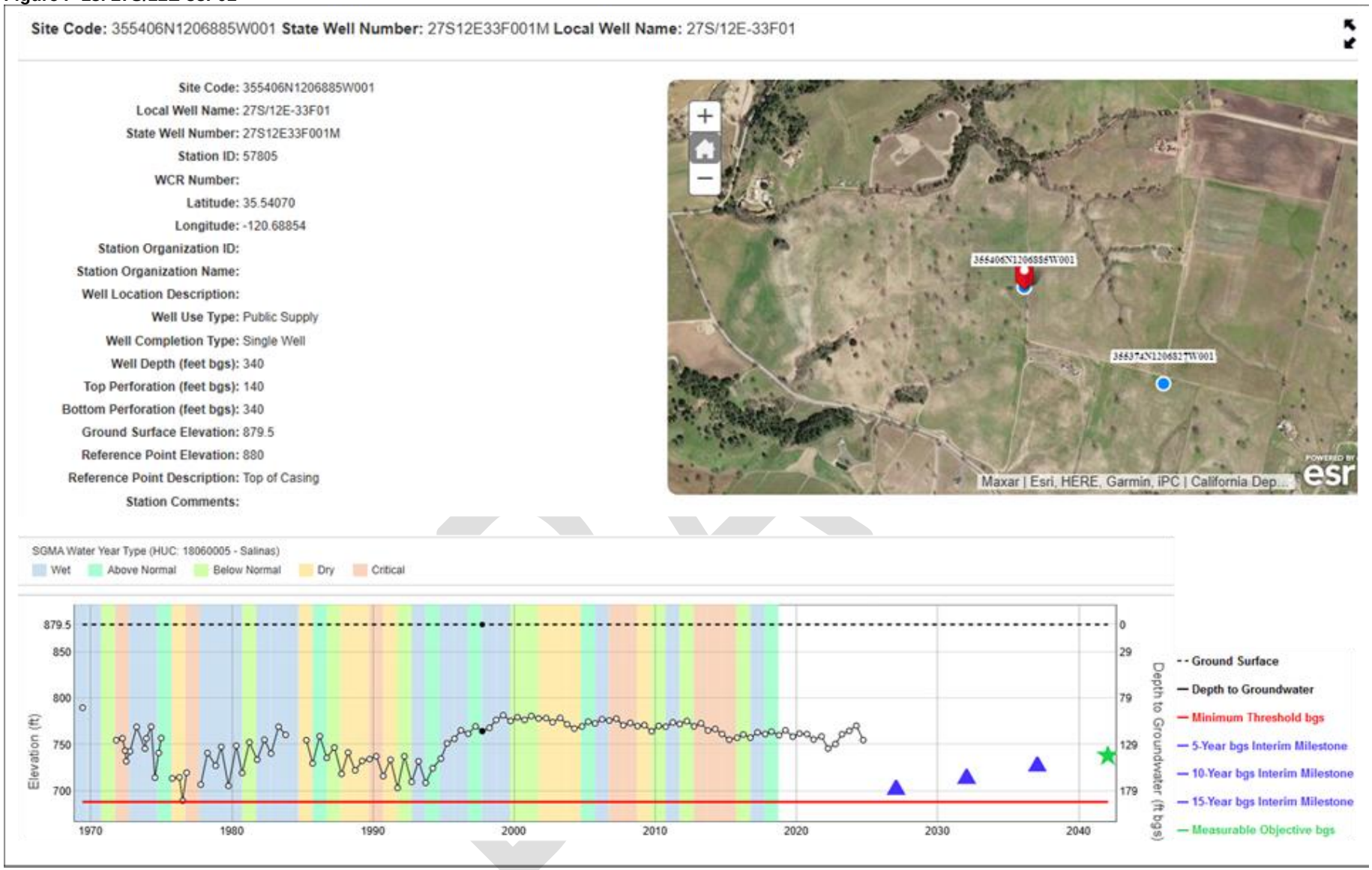


Figure F-19. 27S/12E-33G01

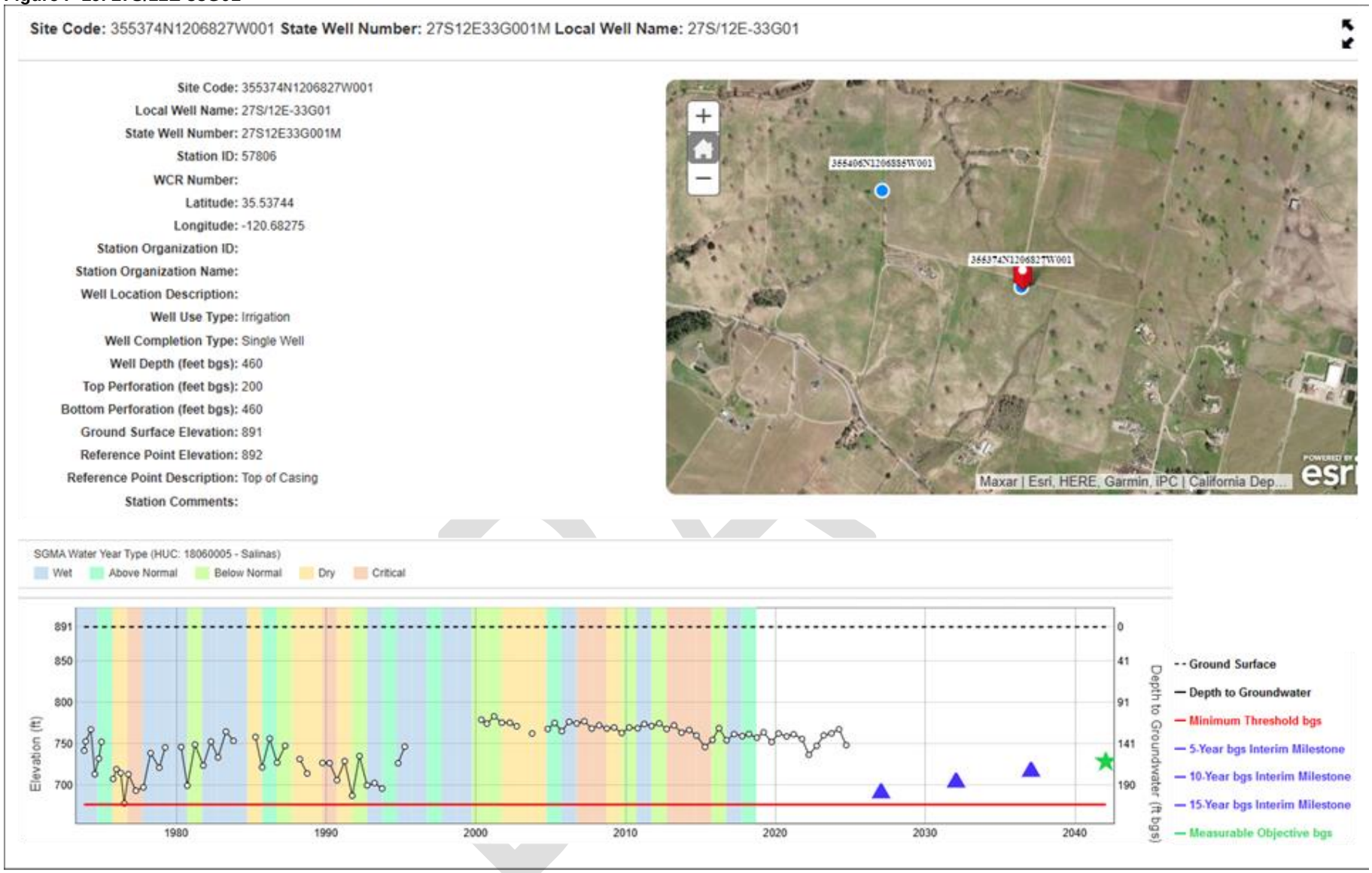


Figure F-20. 28S/12E-04J05

Figure F-21. 28S/12E-04J06

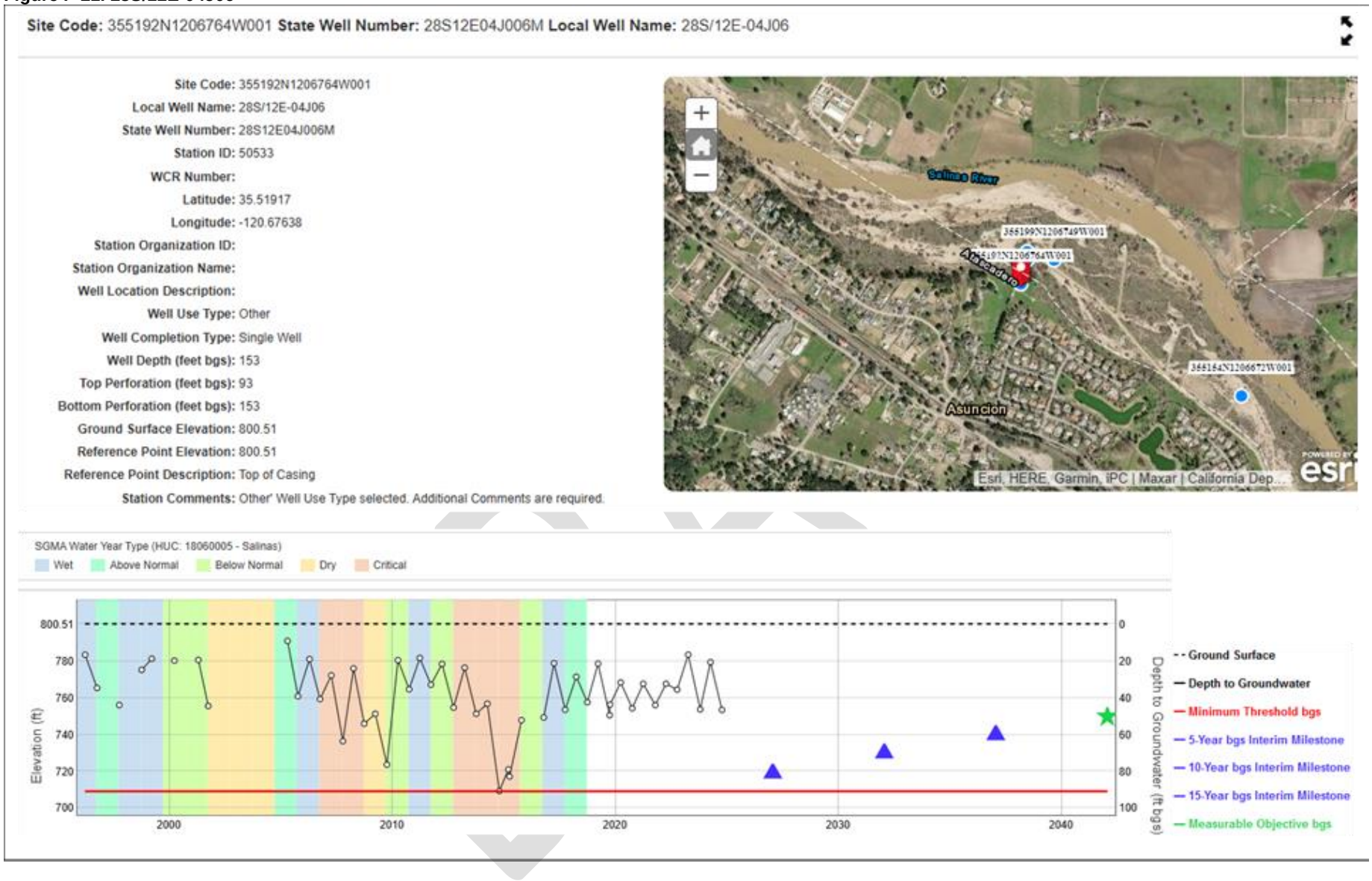


Figure F-22. 28S/12E-10A03

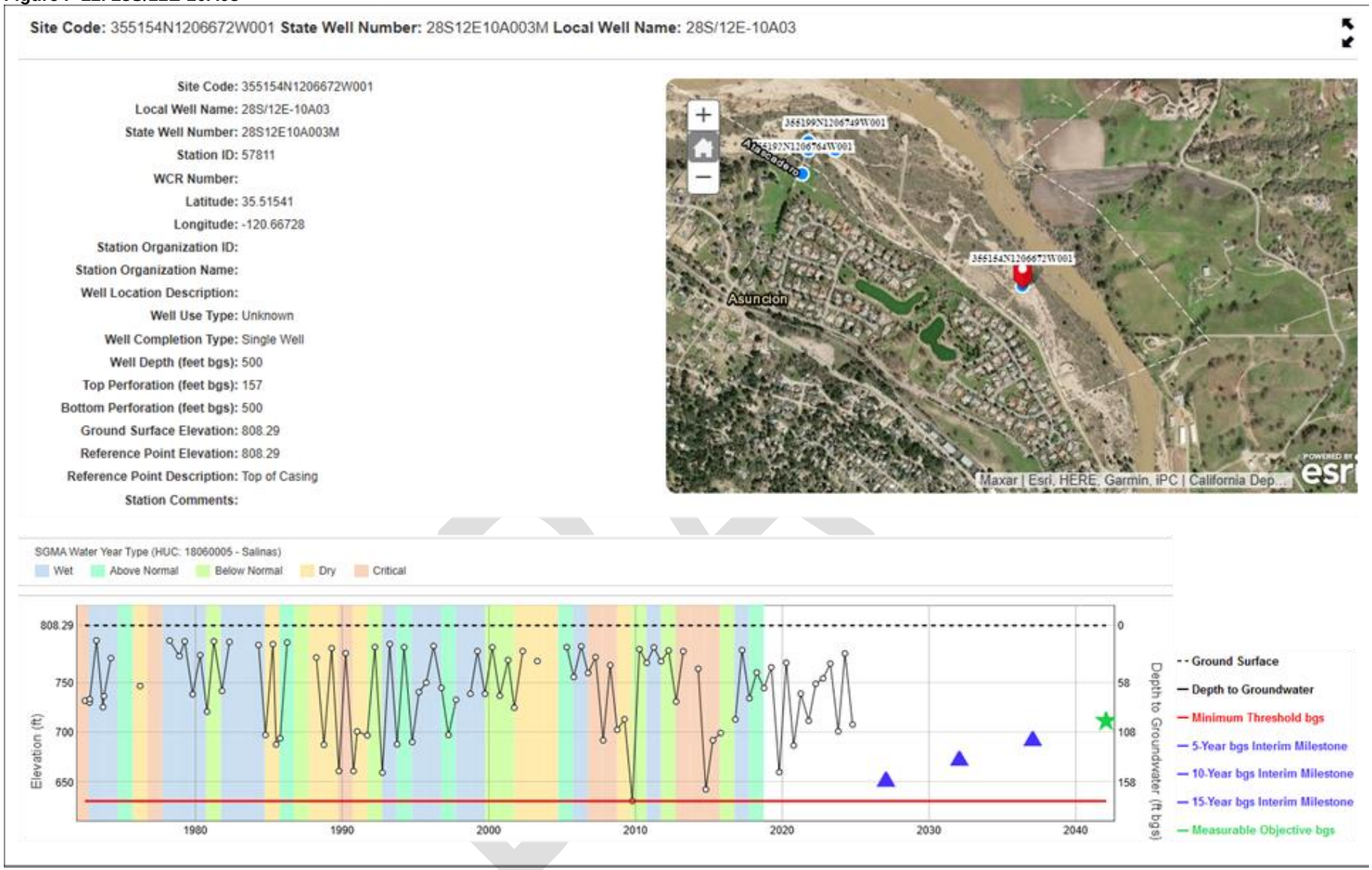
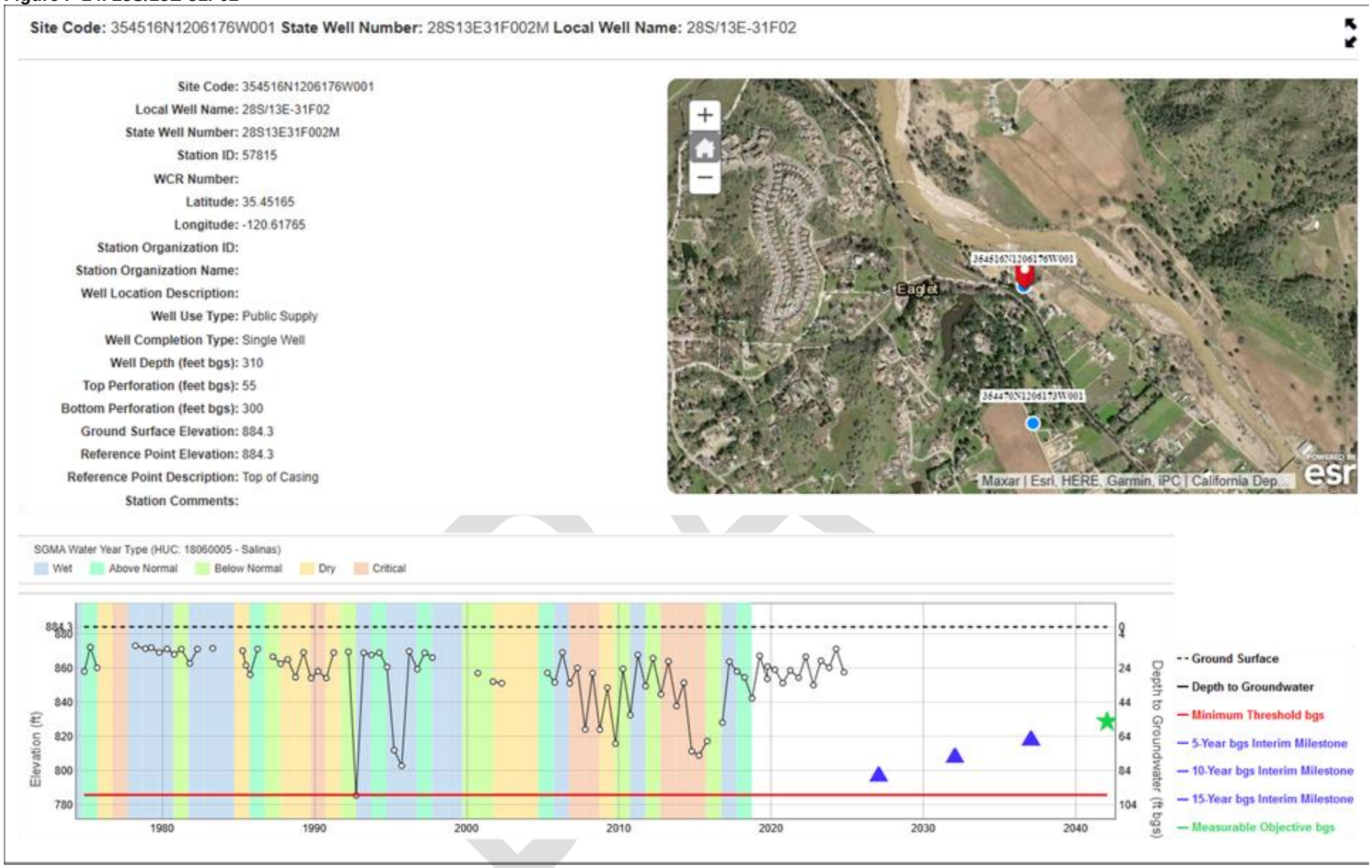


Figure F-23. 28S/12E-11K02

Figure F-24. 28S/13E-31F02



Attachment H. Paso Robles Storage Coefficient Derivative

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APPENDIX X

Paso Robles Formation Aquifer Storage Coefficient Derivation and Sensitivity Analysis (GSI, 2020)

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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