



**GROUNDWATER
CONDITIONS
REPORT –
CUYAMA VALLEY
GROUNDWATER
BASIN**

April 2024

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**Cuyama Basin
Groundwater
Sustainability Agency**

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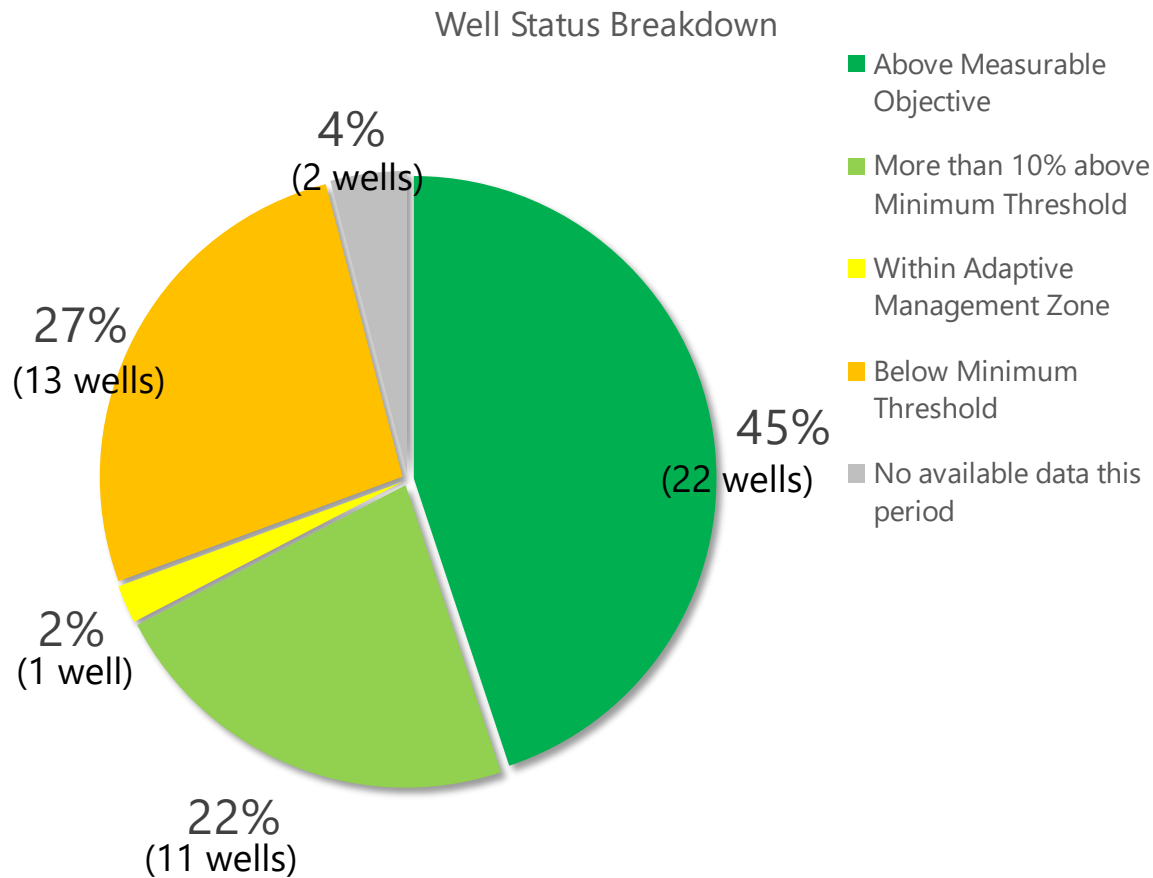
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1. INTRODUCTION

This report is intended to provide an update on the current groundwater level conditions in the Cuyama Valley Groundwater Basin. This work is completed by the Cuyama Basin Groundwater Sustainability Agency (CBGSA), in compliance with the Sustainable Groundwater Management Act (SGMA).

2. SUMMARY STATISTICS



There are currently 13 wells with groundwater levels exceeding minimum thresholds. As outlined in the GSP, undesirable results for the chronic lowering of groundwater levels occurs, "when 30 percent of representative monitoring wells... fall below their minimum groundwater elevation threshold for two consecutive years." (Cuyama GSP, pg. 3-2). Currently, 22% of representative monitoring wells (i.e. 11 wells) have exceeded the minimum threshold for 24 or more consecutive months.

3. CURRENT CONDITIONS

Table 1 includes the most recent groundwater level measurements taken in the Cuyama Basin from representative wells included in the Cuyama GSP Groundwater Level Monitoring Network, as well as the previous two measurements and the measurement from the same time period in the previous year. Table 2 includes all of the wells and their current status in relation to the thresholds applied to each well. This information is also shown on Figure 1.

All measurements are also incorporated into the Cuyama DMS, which may be accessed at <https://opti.woodardcurran.com/cuyama/login.php>.

Table 1: Recent Groundwater Levels for Representative Monitoring Network

Well	Region	Oct-23	Jan-24	Apr-24	Last Year		Annual Elevation Change (ft)
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
72	Central	2017	2027	2034	2019	Apr-23	15.4
74	Central	1940	1940	1941	-	-	-
77	Central	1793	1804	1795	1798	Apr-23	-2.5
91	Central	1800	1811	1813	1810	Apr-23	3.8
95	Central	1841	1850	2389	-	-	-
96	Central	2270	2273	2269	2275	Apr-23	-6.5
98	Central	-	-	-	-	-	-
99	Central	2223	2216	2218	2223	Apr-23	-5.7
102	Central	1758	-	-	-	-	-
103	Central	2044	2046	2050	2045	Apr-23	5.6
112	Central	2053	2041	2042	2053	Apr-23	-11.7
114	Central	-	1879	1880	-	-	-
316	Central	1799	1810	1812	1808	Apr-23	3.7
317	Central	1801	1811	1814	-	-	-
322	Central	2222	2216	2217	2222	Apr-23	-5
324	Central	2221	2215	2216	2220	Apr-23	-3.8
325	Central	2222	2215	2216	2222	Apr-23	-6.3
420	Central	1792	1803	1794	1795	Apr-23	-1.1
421	Central	1793	1802	1800	1802	Apr-23	-1.8

Well	Region	Oct-23	Jan-24	Apr-24	Last Year		Annual Elevation Change (ft)
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
474	Central	-	2228	2232	2202	Apr-23	29.4
568	Central	1867	1874	1874	1870	Apr-23	4.2
604	Central	1684	1655	1655	1656	Apr-23	-0.7
608*	Central	1790	-	1778*	-	-	-
609	Central	1725	1721	1723	1705	Apr-23	17.7
610	Central	1805	1808	1808	1813	Apr-23	-5.6
612	Central	1788	1797	1796	1801	Apr-23	-4.5
613	Central	1801	1799	1797	1788	Apr-23	8.3
615	Central	1809	1808	1806	1810	Apr-23	-3.8
629	Central	1848	1817	1821	1803	Apr-23	18.1
633	Central	1798	1796	1800	1851	Apr-23	-51.4
62	Eastern	2789	2793	2806	2774	Apr-23	32.1
85	Eastern	2870	2883	2891	2844	Apr-23	46.3
100	Eastern	2909	2911	2939	2901	Apr-23	38
101	Eastern	2635	2653	2658	-	-	-
841	Northwestern	1692	1706	1709	1685	Apr-23	24.4
845	Northwestern	1637	1641	1643	1647	Apr-23	-4.6
2	Southeastern	3698	3697	3706	3704	Apr-23	2.1
89	Southeastern	3432	3390	3413	3428	Apr-23	-15.9
106	Western	2185	2175	2175	2184	Apr-23	-8.9

Well	Region	Oct-23	Jan-24	Apr-24	Last Year		Annual Elevation Change (ft)
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
107	Western	-	2422	2419	2390	Apr-23	28.6
117	Western	1946	1947	1947	1950	Apr-23	-3.7
118	Western	2217	2211	2213	2214	Apr-23	-1.8
124	Western	-	-	-	-	-	-
571	Western	2235	2240	2236	2269	Apr-23	-32.6
573	Western	2015	2010	2010	2015	Apr-23	-4.6
830	Far-West Northwestern	1522	1512	1511	1516	Apr-23	-5.3
832	Far-West Northwestern	1595	1604	1604	1596	Apr-23	8.4
833	Far-West Northwestern	1434	1433	1433	1426	Apr-23	7.4
836	Far-West Northwestern	1456	1479	1479	1450	Apr-23	29

*Well 608 is now confirmed to be “destroyed” and is no longer available for monitoring. The landowner and monitoring staff have identified a well within 100 ft that is suitable to continue monitoring in this location, and the groundwater level monitoring network will be modified to remove well 608 and add in this new well. The new well is in the process of being incorporated into Opti and being assigned an ID number.

Table 2: Well Status Related to Thresholds

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
72	Central	131.30	04-24-2024	169	165	124	790	More than 10% Above Minimum Threshold	No
74	Central	246.06	04-25-2024	256	255	243		More than 10% Above Minimum Threshold	No
77	Central	489.27	04-25-2024	450	445	400	980	Below Minimum Threshold (44 months of exceedance)	No
91	Central	667.34	04-26-2024	625	620	576	980	Below Minimum Threshold (44 months of exceedance)	No
95	Central	67.15	04-25-2024	573	570	538	805	Above Measurable Objective	No
96	Central	337.42	04-25-2024	333	332	325	500	Below Minimum Threshold (1 month of exceedance)	No
98	Central	-	-	450	449	439	750	No available data this period	No
99	Central	287.81	04-24-2024	311	310	300	750	Above Measurable Objective	No
102	Central	-	-	235	231	197		No data available this period (Below MT in Oct 2023, 42 months)	No
103	Central	233.41	04-25-2024	290	285	235	1030	Above Measurable Objective	No
112	Central	84.40	04-24-2024	87	87	85	441	Above Measurable Objective	No
114	Central	45.18	04-24-2024	47	47	45	58	More than 10% Above Minimum Threshold	No
316	Central	668.59	04-26-2024	623	618	574	830	Below Minimum Threshold (44 months of exceedance)	No

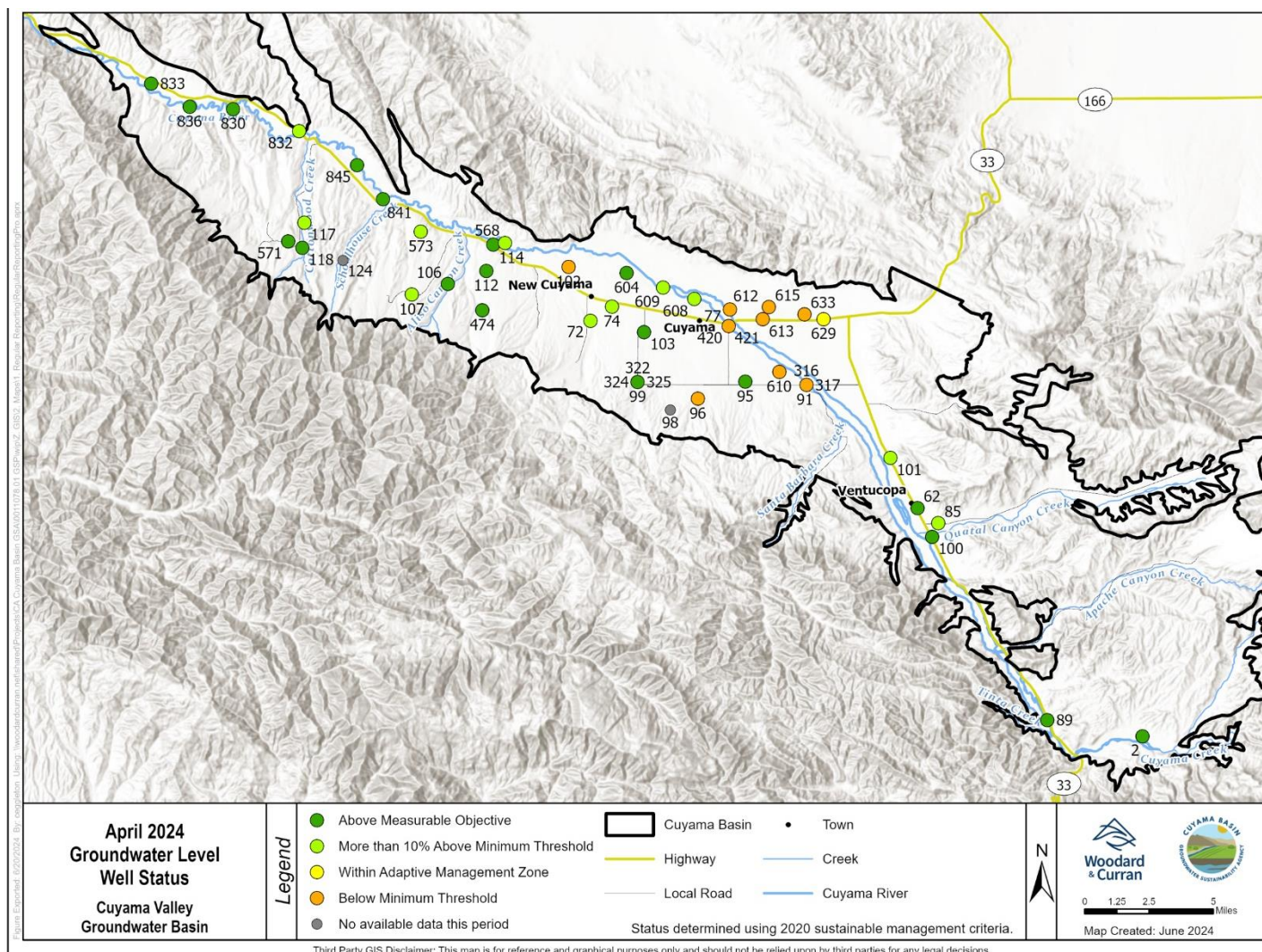
Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
317	Central	666.85	04-26-2024	623	618	573	700	Below Minimum Threshold (44 months of exceedance)	No
322	Central	288.31	04-24-2024	307	306	298	850	Above Measurable Objective	No
324	Central	289.52	04-24-2024	311	310	299	560	Above Measurable Objective	No
325	Central	289.59	04-24-2024	300	299	292	380	Above Measurable Objective	No
420	Central	490.46	04-25-2024	450	445	400	780	Below Minimum Threshold (44 months of exceedance)	No
421	Central	484.66	04-25-2024	446	441	398	620	Below Minimum Threshold (44 months of exceedance)	No
474	Central	130.78	04-24-2024	188	186	169	213	Above Measurable Objective	No
568	Central	33.95	04-24-2024	37	37	36	188	Above Measurable Objective	No
604	Central	460.61	04-26-2024	526	522	487	924	Above Measurable Objective	No
608*	Central	431.24	04-25-2024	436	433	407	745	More than 10% Above Minimum Threshold	No
609	Central	435.09	04-26-2024	458	454	421	970	More than 10% Above Minimum Threshold	No
610	Central	629.28	04-25-2024	621	618	591	780	Below Minimum Threshold (37 months of exceedance)	No
612	Central	472.64	04-25-2024	463	461	440	1070	Below Minimum Threshold (28 months of exceedance)	No
613	Central	527.84	04-25-2024	503	500	475	830	Below Minimum Threshold (42 months of exceedance)	No

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
615	Central	514.74	04-25-2024	500	497	468	865	Below Minimum Threshold (41 months of exceedance)	No
629	Central	557.23	04-25-2024	559	556	527	1000	Within Adaptive Management Zone	No
633	Central	563.67	04-25-2024	547	542	493	1000	Below Minimum Threshold (7 months of exceedance)	No
62	Eastern	110.63	04-25-2024	182.45	178	142	212	Above Measurable Objective	No
85	Eastern	156.76	04-25-2024	233.12	225	147	233	More than 10% Above Minimum Threshold	No
100	Eastern	66.88	04-25-2024	181.02	175	125	284	Above Measurable Objective	No
101	Eastern	87.29	04-25-2024	110.55	108	81	200	More than 10% Above Minimum Threshold	No
830	Far-West Northwestern	49.14	04-24-2024	59	59	56	77.2	Above Measurable Objective	No
832	Far-West Northwestern	32.86	04-24-2024	45	44	30	131.8	More than 10% Above Minimum Threshold	No
833	Far-West Northwestern	20.11	04-24-2024	96	89	24	503.55	Above Measurable Objective	No
836	Far-West Northwestern	27.20	04-24-2024	79	75	36	325	Above Measurable Objective	No
841	Northwestern	50.05	04-20-2024	203	198	153	600	Above Measurable Objective	No
845	Northwestern	69.11	04-20-2024	203	198	153	380	Above Measurable Objective	No
2	Southeastern	14.10	04-24-2024	72	70	55	73	Above Measurable Objective	No

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
89	Southeastern	21.11	04-24-2024	64	62	44	125	Above Measurable Objective	No
106	Western	141.36	04-24-2024	154	153	141.4	227.5	Above Measurable Objective	No
107	Western	72.44	04-24-2024	91	89	72.23	200	More than 10% Above Minimum Threshold	No
117	Western	151.4	04-25-2024	160	159	150.82	212	More than 10% Above Minimum Threshold	No
118	Western	49.62	04-25-2024	124	117	57.22	500	Above Measurable Objective	No
124	Western	-	-	73	71	57.12	160.55	No available data this period	No
571	Western	78.29	04-25-2024	144	142	120.5	280	Above Measurable Objective	No
573	Western	67.66	04-24-2024	118	113	67.5	404	More than 10% Above Minimum Threshold	No
<p>*Well 608 is now confirmed to be “destroyed” and is no longer available for monitoring. The landowner and monitoring staff have identified a well within 100 ft that is suitable to continue monitoring in this location, which is where the measurement shown was taken. The groundwater level representative network will be modified to remove well 608 and add in this new well. The new well is in the process of being incorporated into Opti and being assigned an ID number.</p>									

Note: Wells only count towards the identification of undesirable results if the level measurement is below the minimum threshold for 24 consecutive months.

Figure 1: Groundwater Level Representative Wells and Status in April 2024



Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions.

4. HYDROGRAPHS

The following hydrographs provide an overview of conditions in each of the six areas threshold regions identified in the GSP.

Figure 2: Southeast Region – Well 89

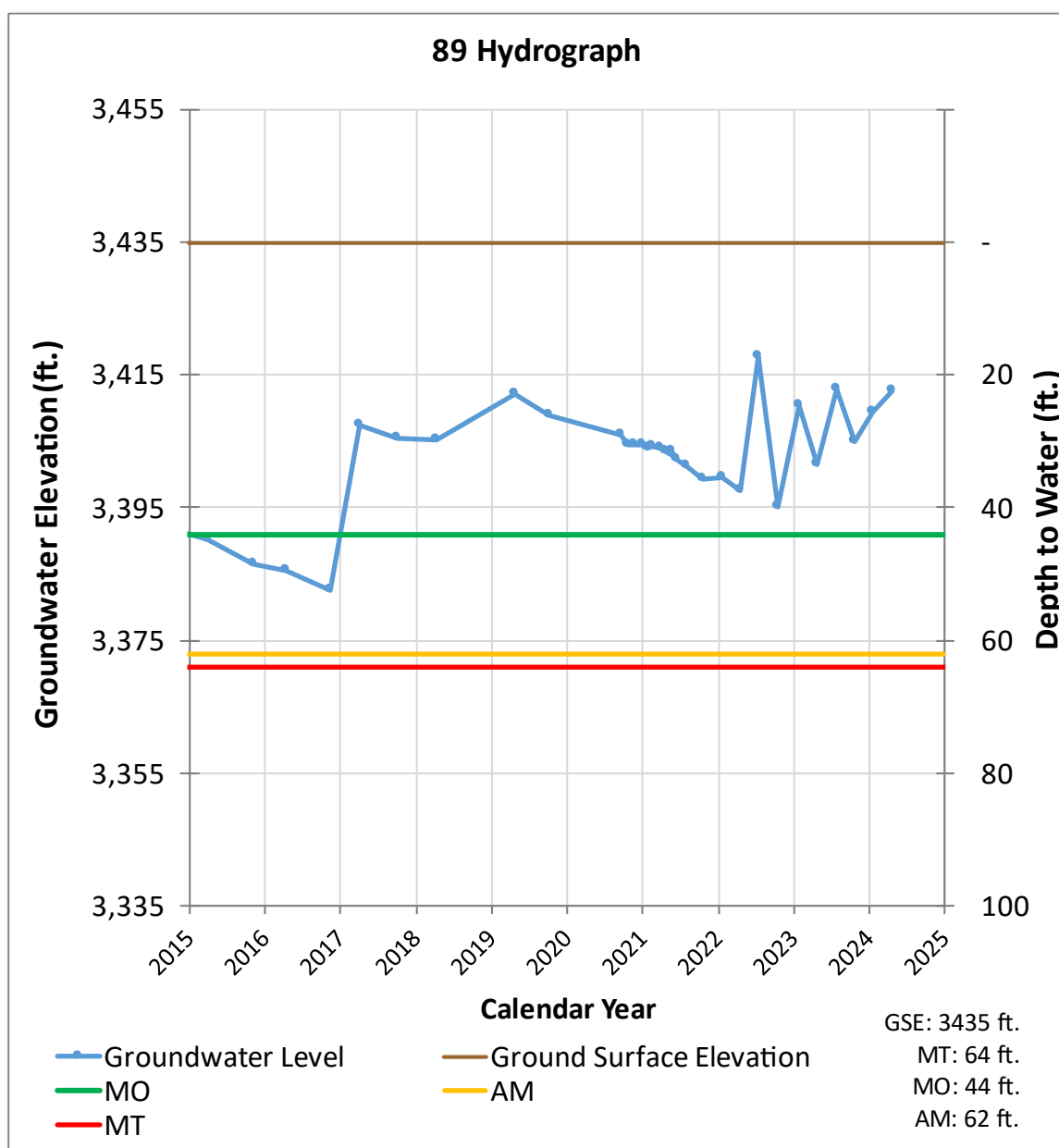


Figure 3: Eastern Region – Well 62

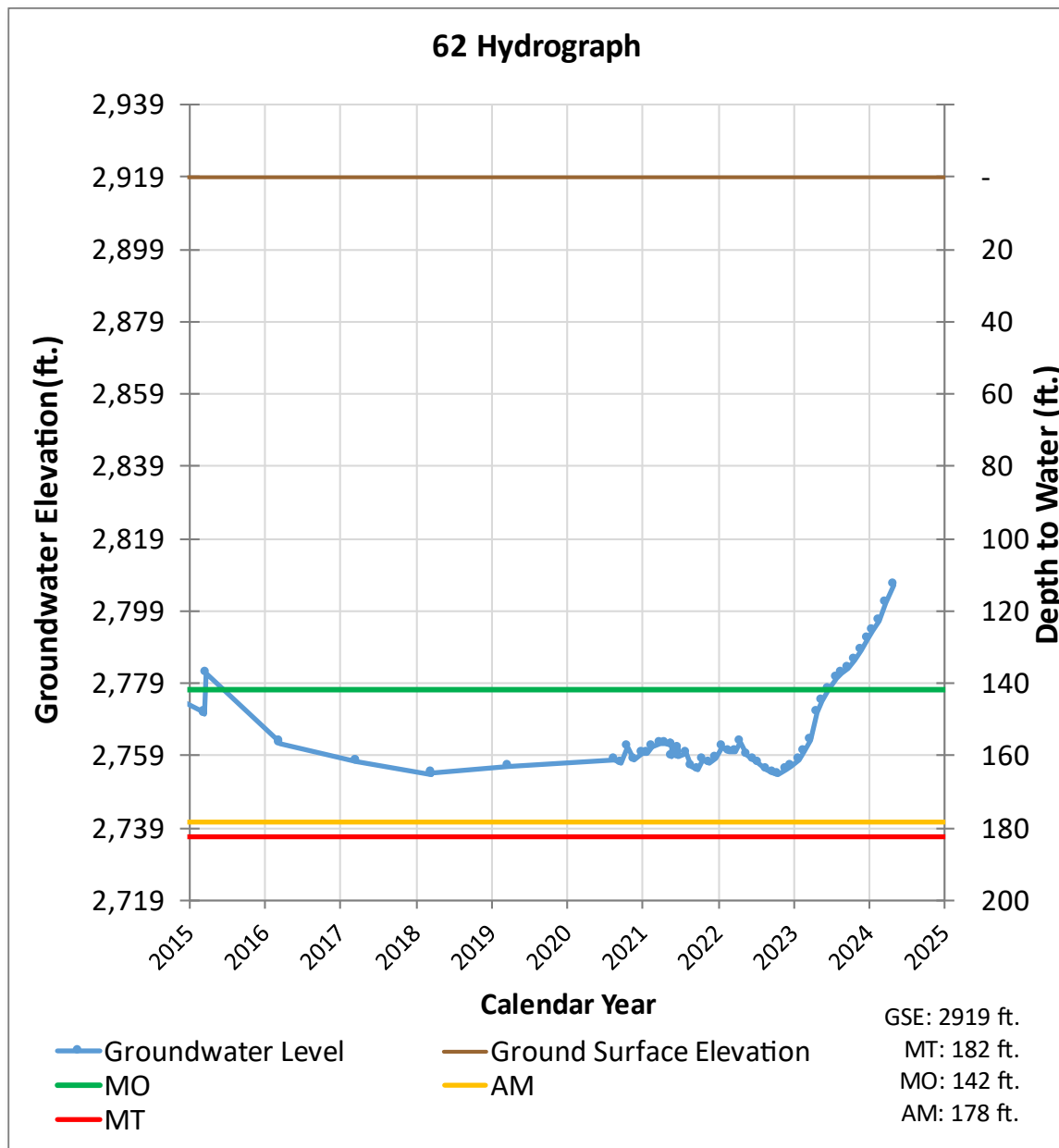


Figure 4: Central Region – Well 91

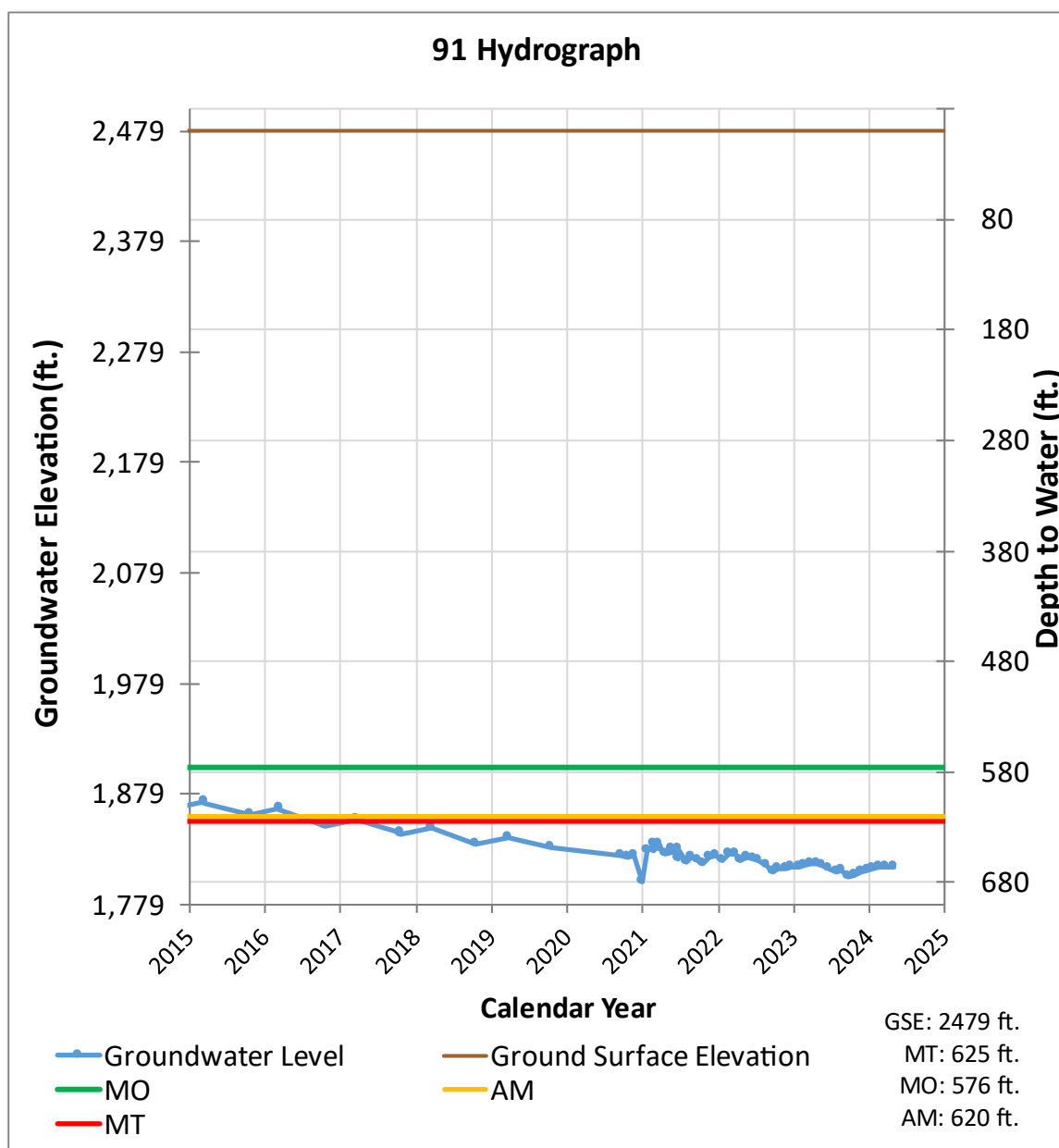


Figure 5: Central Region – Well 74

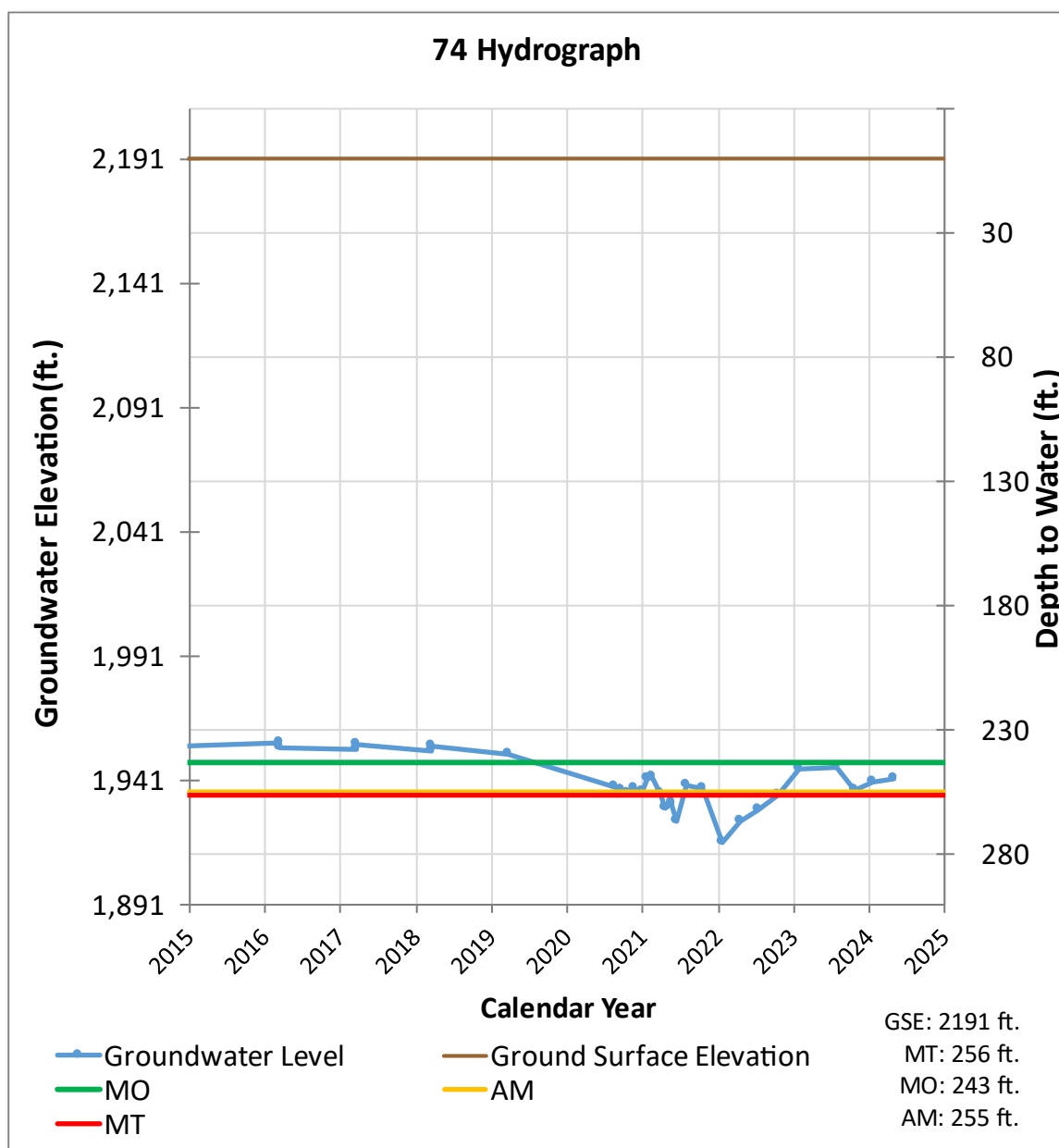


Figure 6: Western Region – Well 571

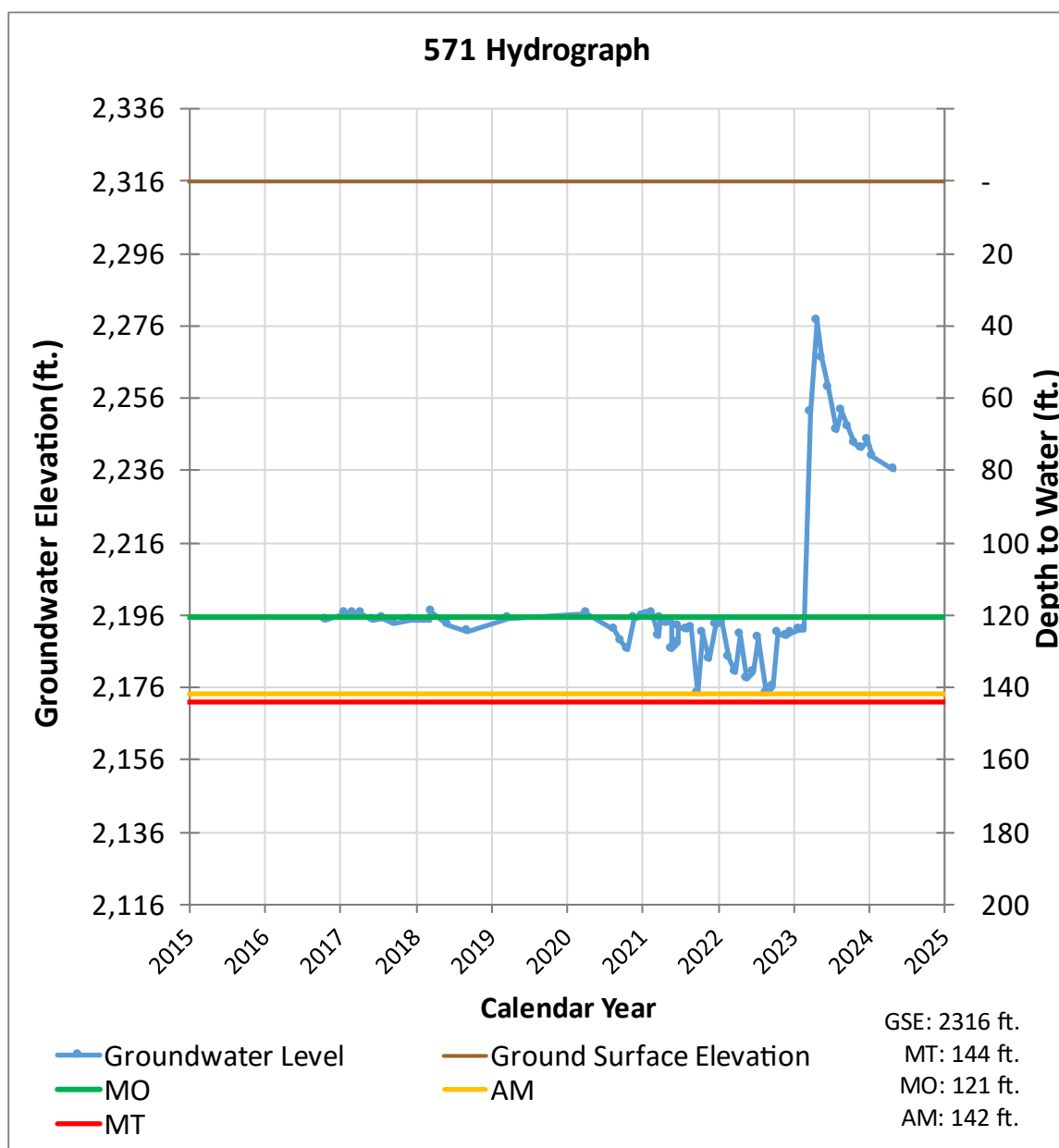
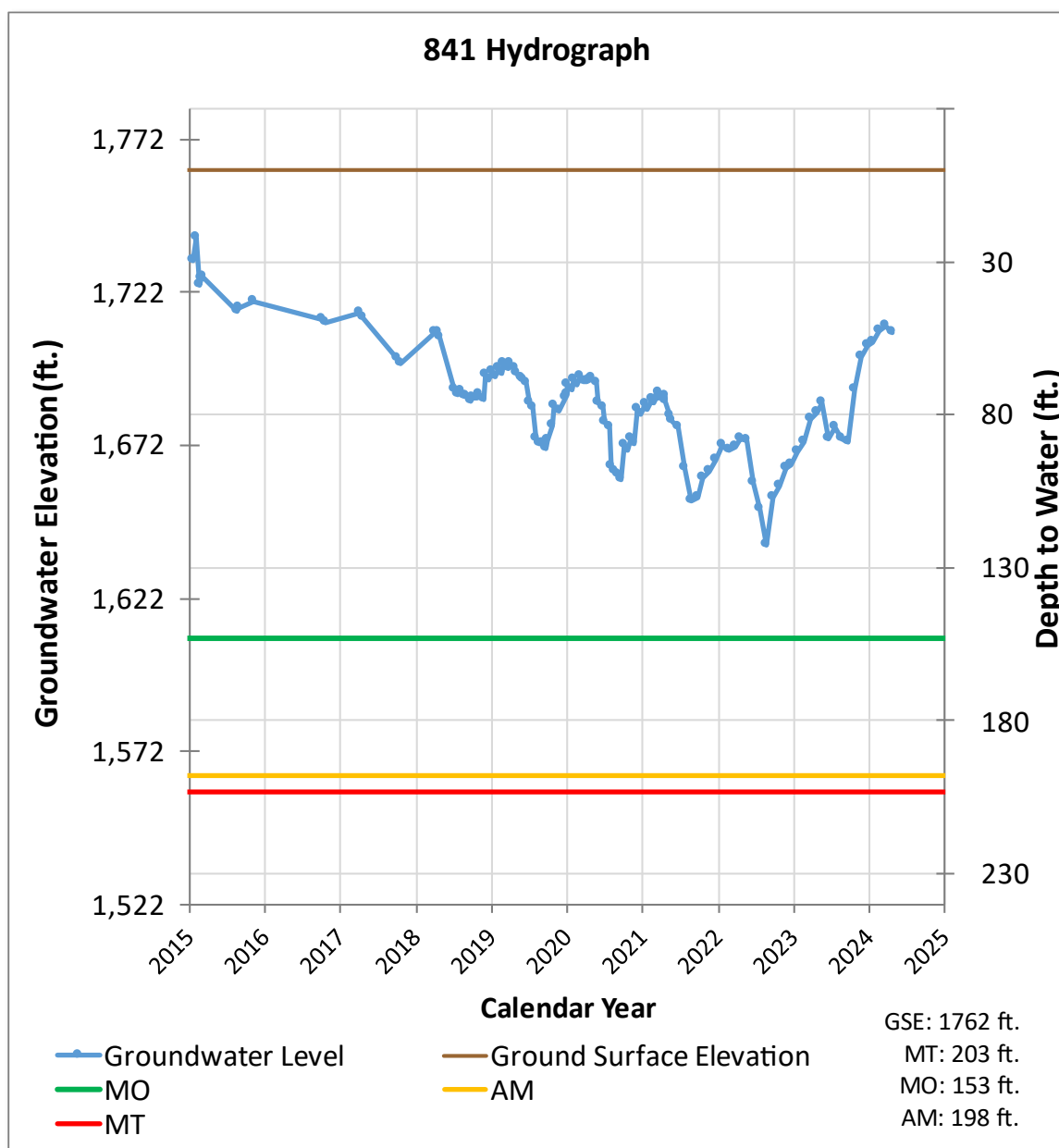


Figure 7: Northwestern Region – Well 841



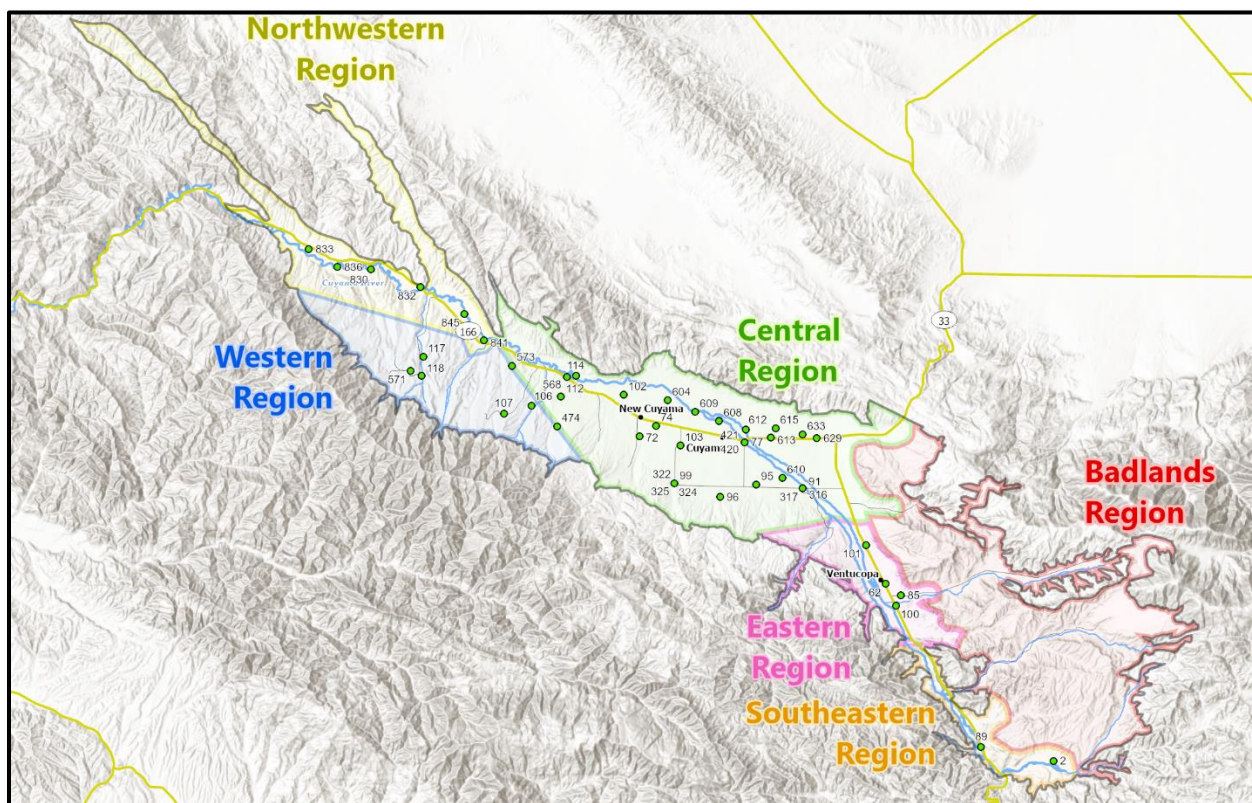


Figure 8: Threshold Regions in the Cuyama Groundwater Basin

5. MONITORING NETWORK UPDATES

As shown in Table 2, there are three wells with no measurement during the current monitoring period. These “no measurement codes” can have different causes as described below.

- Access agreements have not been established with the landowner:
 - Wells 98, 124
- Data not yet available due to transducer malfunction:
 - 102

Additionally, Well 608 is now confirmed to be “destroyed” and is no longer available for monitoring. The landowner and monitoring staff have identified a well within 100 ft that is suitable to continue monitoring in this location; the data from that new well is reported for well 608 in this version of the report. The groundwater level monitoring network will be modified to remove well 608 and add in this new well. The new well is in the process of being incorporated into Opti. The new well will use historical data from Well 608 as a proxy for future analysis conducted for GSP implementation.

