



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

April 2023

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**Cuyama Basin
Groundwater
Sustainability Agency**

TABLE OF CONTENTS

SECTION	PAGE NO.
1. INTRODUCTION.....	1
2. SUMMARY STATISTICS.....	1
3. CURRENT CONDITIONS.....	2
4. HYDROGRAPHS.....	11
5. MONITORING NETWORK UPDATES.....	17

TABLES

Table 1: Recent Groundwater Levels for Representative Monitoring Network.....	3
Table 2: Well Status Related to Thresholds.....	6

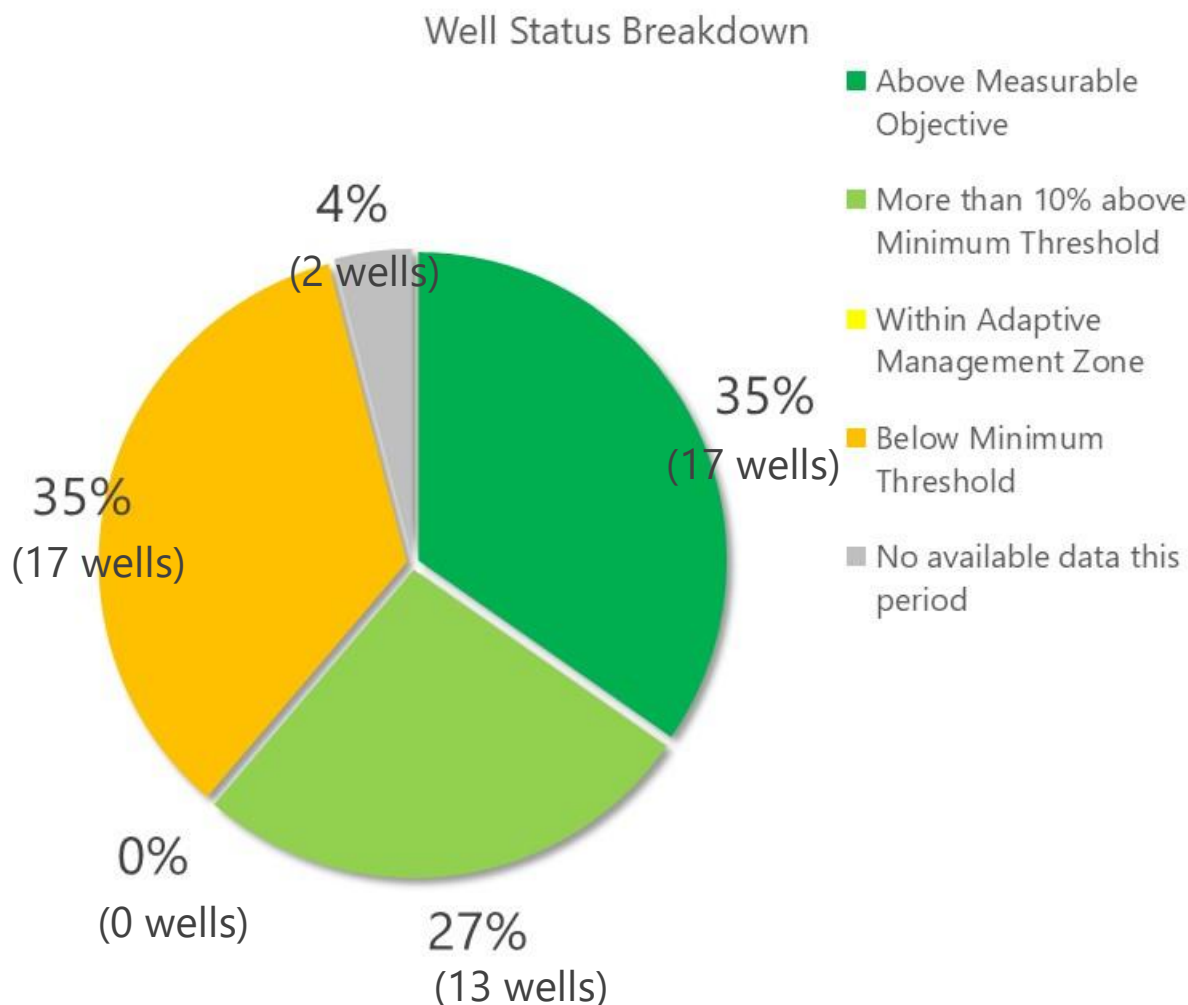
FIGURES

Figure 1: Groundwater Level Representative Wells and Status in April 2023.....	10
Figure 2: Southeast Region – Well 89.....	11
Figure 3: Eastern Region – Well 62.....	12
Figure 4: Central Region – Well 91.....	13
Figure 5: Central Region – Well 74.....	14
Figure 6: Western Region – Well 571.....	15
Figure 7: Northwestern Region – Well 841.....	16
Figure 8: Threshold Regions in the Cuyama Groundwater Basin.....	17

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



Groundwater conditions have improved with the relatively wet conditions the basin has experienced since January. There are currently 17 wells with groundwater levels exceeding minimum thresholds, compared to 24 wells that exceeded minimum thresholds in January 2023. 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, 30% of representative monitoring wells (i.e. 15 wells) have been below the minimum threshold for 7 or more consecutive months (compared to 15 wells below the minimum threshold for 20 or more months in January 2023).

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. 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 have also been 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-22	Jan-22	Apr-23	Last Year		Annual Elevation Change (ft)
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
72	Central	2014	2036	2019	2021	Apr-22	-2
74	Central	1939	1949	-	1928	Apr-22	-
77	Central	1779	1808	1798	1803	Apr-22	-5
91	Central	1805	1807	1810	1813	Apr-22	-4
95	Central	1851	-	-	1847	Apr-22	-
96	Central	2269	2270	2275	2271	Apr-22	4
98	Central	-	-	-	-	-	-
99	Central	2158	2160	2223	2223	Apr-22	0
102	Central	1622	-	-	1622	Apr-22	-
103	Central	2032	2041	2045	2007	Apr-22	37
112	Central	2053	-	2053	2053	Apr-22	0
114	Central	1877	-	-	1878	Apr-22	-
316	Central	1803	1806	1808	1813	Apr-22	-5
317	Central	-	-	-	1813	Apr-22	-
322	Central	2156	2155	2222	2222	Apr-22	0
324	Central	2178	2181	2220	2220	Apr-22	-1
325	Central	2200	2203	2222	2222	Apr-22	0
420	Central	1725	1807	1795	1792	Apr-22	3
421	Central	1787	1806	1802	1793	Apr-22	8
474	Central	2203	2206	2202	2204	Apr-22	-2

Well	Region	Oct-22	Jan-22	Apr-23	Last Year		Annual Elevation Change (ft)
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
568	Central	1851	1828	1870	1868	Apr-22	2
604	Central	-	1655	1656	-	-	-
608	Central	1782	-	-	1817	Apr-22	-
609	Central	1707	1713	1705	1760	Apr-22	-55
610	Central	1808	1812	1813	1814	Apr-22	-1
612	Central	1786	1792	1801	1793	Apr-22	8
613	Central	1794	1798	1788	1809	Apr-22	-21
615	Central	1814	1816	1810	1813	Apr-22	-3
629	Central	1812	1819	1803	1807	Apr-22	-5
633	Central	1792	1805	1851	1794	Apr-22	57
62	Eastern	2757	2761	2774	2766	Apr-22	8
85	Eastern	2841	2845	2844	2847	Apr-22	-2
100	Eastern	2846	2850	2901	2850	Apr-22	51
101	Eastern	-	-	-	-	-	-
841	Northwestern	1661	1672	1685	1676	Apr-22	9
845	Northwestern	1638	1644	1647	1645	Apr-22	3
2	Southeastern	-	-	3704	-	-	-
89	Southeastern	3422	3438	3428	3425	Apr-22	4
106	Western	2182	-	2184	2183	Apr-22	1
107	Western	2390	-	2390	2383	Apr-22	7
117	Western	1945	-	1950	1946	Apr-22	4

Well	Region	Oct-22	Jan-22	Apr-23	Last Year		Annual Elevation Change (ft)
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/ Year	
118	Western	2212	2212	2214	2210	Apr-22	4
124	Western	-	-	-	-	-	-
571	Western	2182	2183	2269	2182	Apr-22	87
573	Western	2012	-	2015	2013	Apr-22	2
830	Far-West Northwestern	1508	1510	1516	1510	Apr-22	7
832	Far-West Northwestern	1588	1589	1596	1590	Apr-22	6
833	Far-West Northwestern	-	-	1426	-	-	-
836	Far-West Northwestern	1447	1450	1450	1448	Apr-22	3

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	152	4/24/2023	169	165	124	790	More than 10% above Minimum Threshold	No
74	Central	-	4/25/2023	256	255	243		No available data this period (>10% above MT in Jan 2023)	No
77	Central	488	4/24/2023	450	445	400	980	Below Minimum Threshold (32 months)	No
91	Central	664	4/25/2023	625	620	576	980	Below Minimum Threshold (32 months)	No
95	Central	-	4/25/2023	573	570	538	805	No available data this period (below MT in Oct 2022, 32 months)	No
96	Central	331	4/24/2023	333	332	325	500	More than 10% above Minimum Threshold	No
98	Central	-		450	449	439	750	No available data since GSA monitoring began	No
99	Central	289	4/24/2023	311	310	300	750	Above Measurable Objective	No
102	Central	-		235	231	197		No available data this period (below MT in Apr 2022, 25 months)	No
103	Central	244	4/24/2023	290	285	235	1030	More than 10% above Minimum Threshold	No
112	Central	86	4/25/2023	87	87	85	441	More than 10% above Minimum Threshold	No
114	Central	-	4/25/2023	47	47	45	58	No available data this period (below MT in Oct 2022, 13 months)	No
316	Central	666	4/25/2023	623	618	574	830	Below Minimum Threshold (32 months)	No

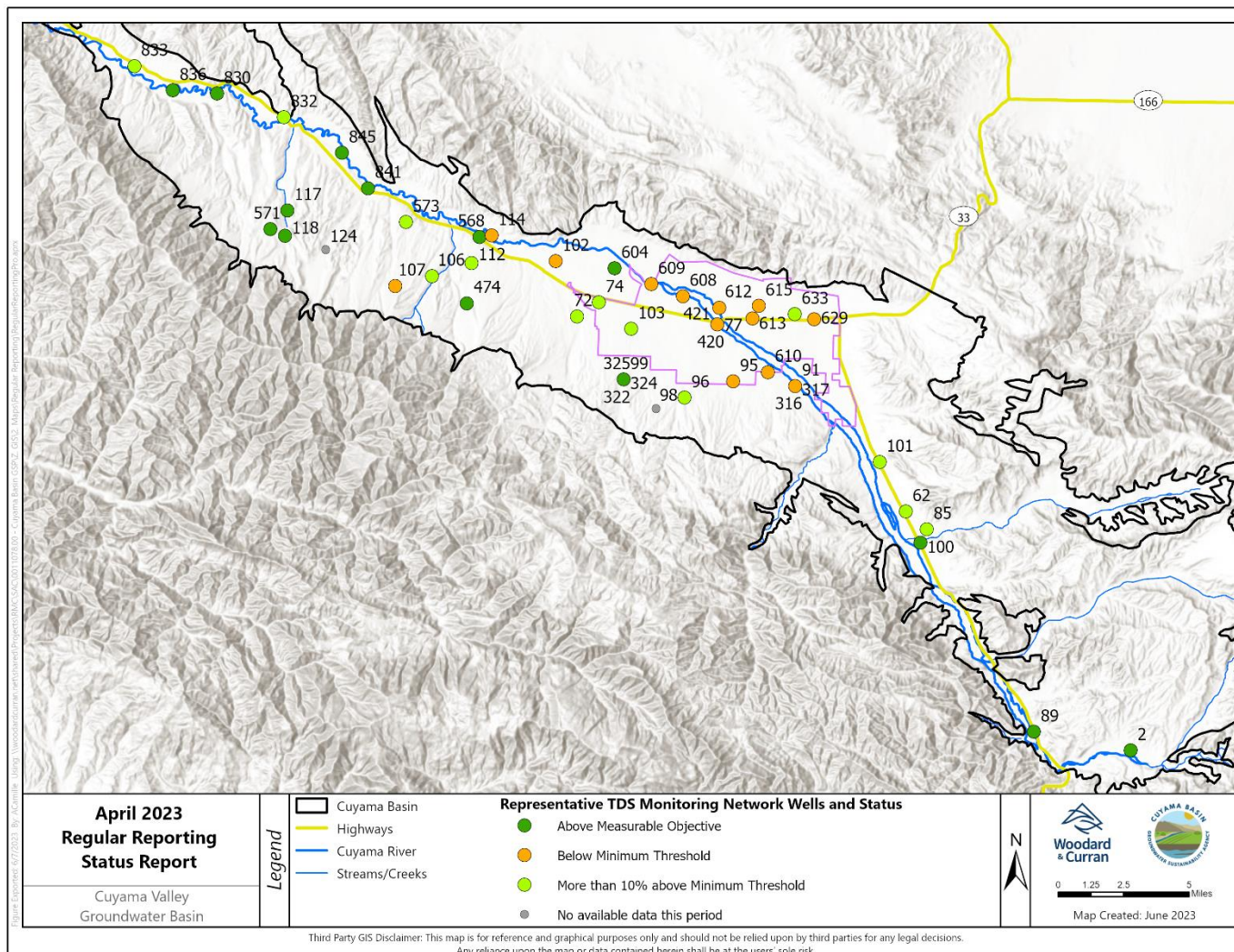
Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
317	Central	-	4/25/2023	623	618	573	700	No available data this period (below MT in Jul 2022, 32 months)	No
322	Central	291	4/24/2023	307	306	298	850	Above Measurable Objective	No
324	Central	293	4/24/2023	311	310	299	560	Above Measurable Objective	No
325	Central	290	4/24/2023	300	299	292	380	Above Measurable Objective	No
420	Central	491	4/24/2023	450	445	400	780	Below Minimum Threshold (32 months)	No
421	Central	484	4/24/2023	446	441	398	620	Below Minimum Threshold (32 months)	No
474	Central	167	4/25/2023	188	186	169	213	Above Measurable Objective	No
568	Central	35	4/25/2023	37	37	36	188	Above Measurable Objective	No
604	Central	469	4/25/2023	526	522	487	924	Above Measurable Objective	No
608	Central	-	4/24/2023	436	433	407	745	No available data this period (below MT in Oct 2022, 7 months)	No
609	Central	462	4/25/2023	458	454	421	970	Below Minimum Threshold 1 month)	No
610	Central	628	4/25/2023	621	618	591	780	Below Minimum Threshold (24 months)	No
612	Central	466	4/24/2023	463	461	440	1070	Below Minimum Threshold (16 months)	No
613	Central	542	4/25/2023	503	500	475	830	Below Minimum Threshold (30 months)	No
615	Central	517	4/24/2023	500	497	468	865	Below Minimum Threshold (29 months)	No
629	Central	576	4/25/2023	559	556	527	1000	Below Minimum Threshold (25 months)	No
633	Central	513	4/25/2023	547	542	493	1000	More than 10% above Minimum Threshold	No

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
62	Eastern	147	4/24/2023	182	178	142	212	More than 10% above Minimum Threshold	No
85	Eastern	203	4/24/2023	233	225	147	233	More than 10% above Minimum Threshold	No
100	Eastern	103	4/24/2023	181	175	125	284	Above Measurable Objective	No
101	Eastern	-	4/24/2023	111	108	81	200	No available data this period (>10% above MT in Jan 2022)	No
841	Northwestern	76	4/25/2023	203	198	153	600	Above Measurable Objective	No
845	Northwestern	64	4/25/2023	203	198	153	380	Above Measurable Objective	No
2	Southeastern	16	4/24/2023	72	70	55	73	Above Measurable Objective	No
89	Southeastern	33	4/24/2023	64	62	44	125	Above Measurable Objective	No
106	Western	142	4/25/2023	154	153	141	228	More than 10% above Minimum Threshold	No
107	Western	92	4/25/2023	91	89	72	200	Below Minimum Threshold 7 months)	No
117	Western	148	4/25/2023	160	159	151	212	Above Measurable Objective	No
118	Western	56	4/25/2023	124	117	57	500	Above Measurable Objective	No
124	Western	-		73	71	57	161	No available data since GSA monitoring began	No
571	Western	38	4/25/2023	144	142	121	280	Above Measurable Objective	No
573	Western	69	4/25/2023	118	113	68	404	More than 10% above Minimum Threshold	No
830	Far-West Northwestern	55	4/25/2023	59	59	56	77	Above Measurable Objective	No
832	Far-West Northwestern	34	4/24/2023	45	44	30	132	More than 10% above Minimum Threshold	No

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
833	Far-West Northwestern	31	4/24/2023	96	89	24	504	More than 10% above Minimum Threshold	No
836	Far-West Northwestern	36	4/24/2023	79	75	36	325	Above Measurable Objective	No

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 2023



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

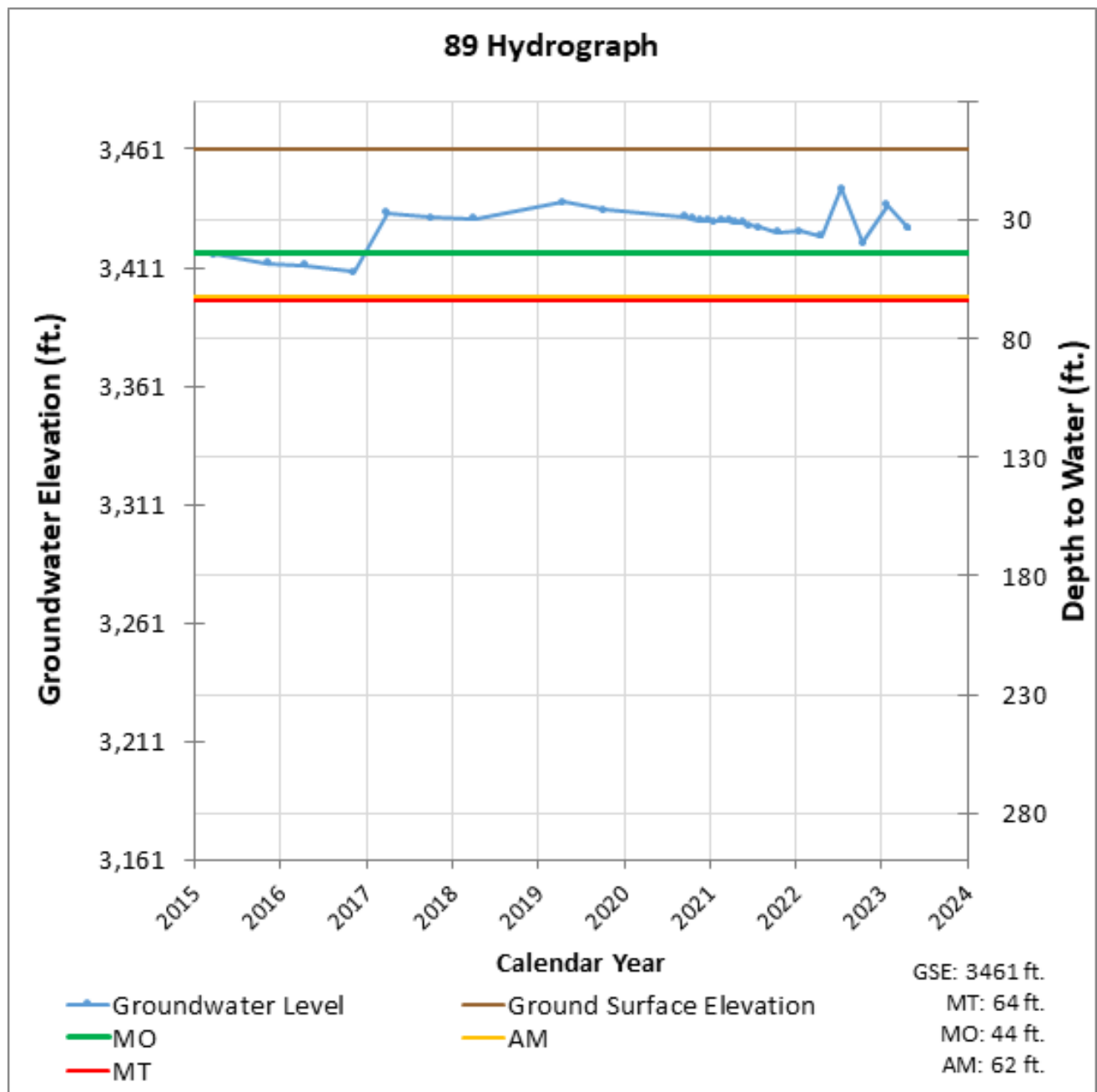


Figure 3: Eastern Region – Well 62

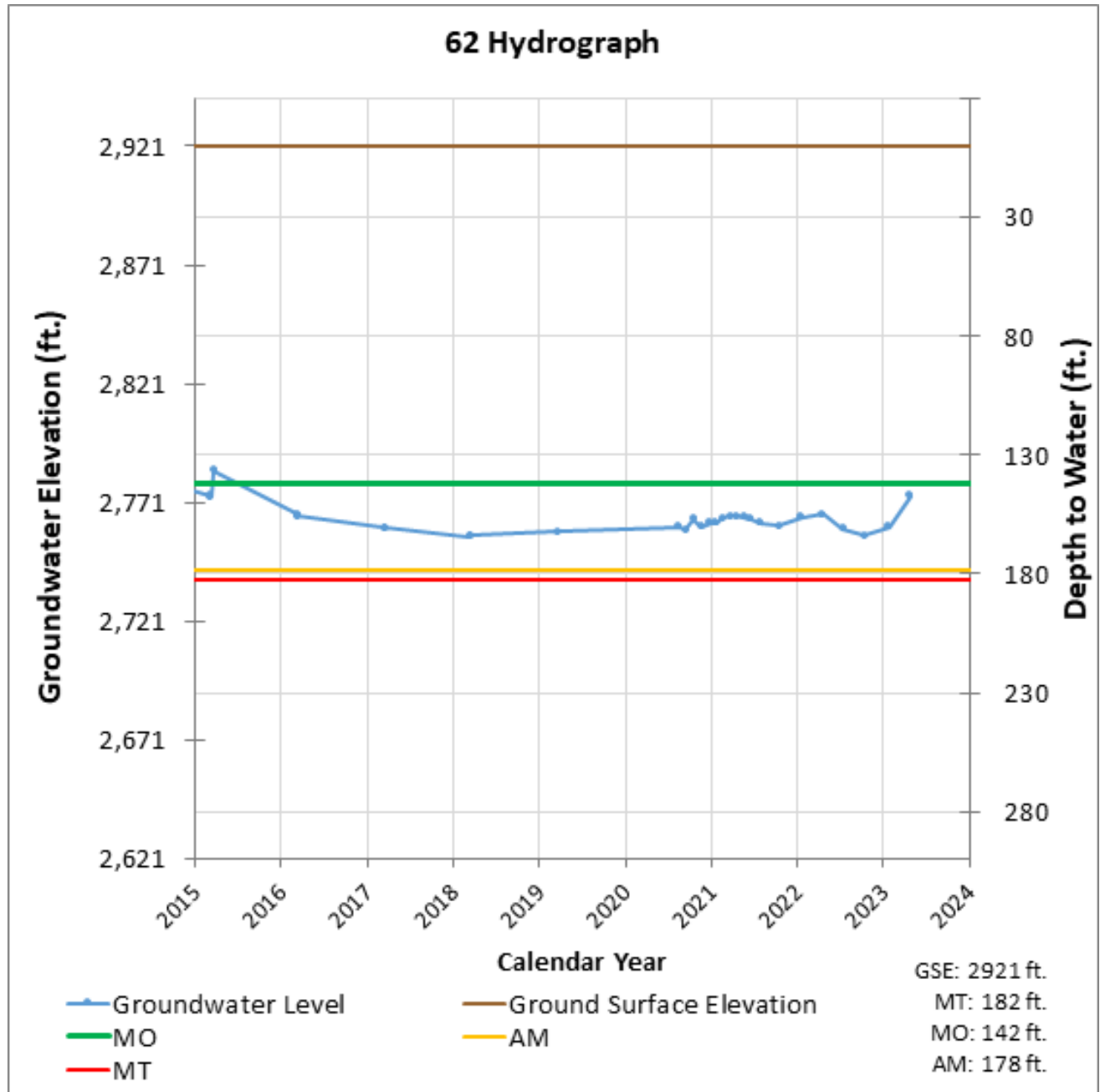


Figure 4: Central Region – Well 91

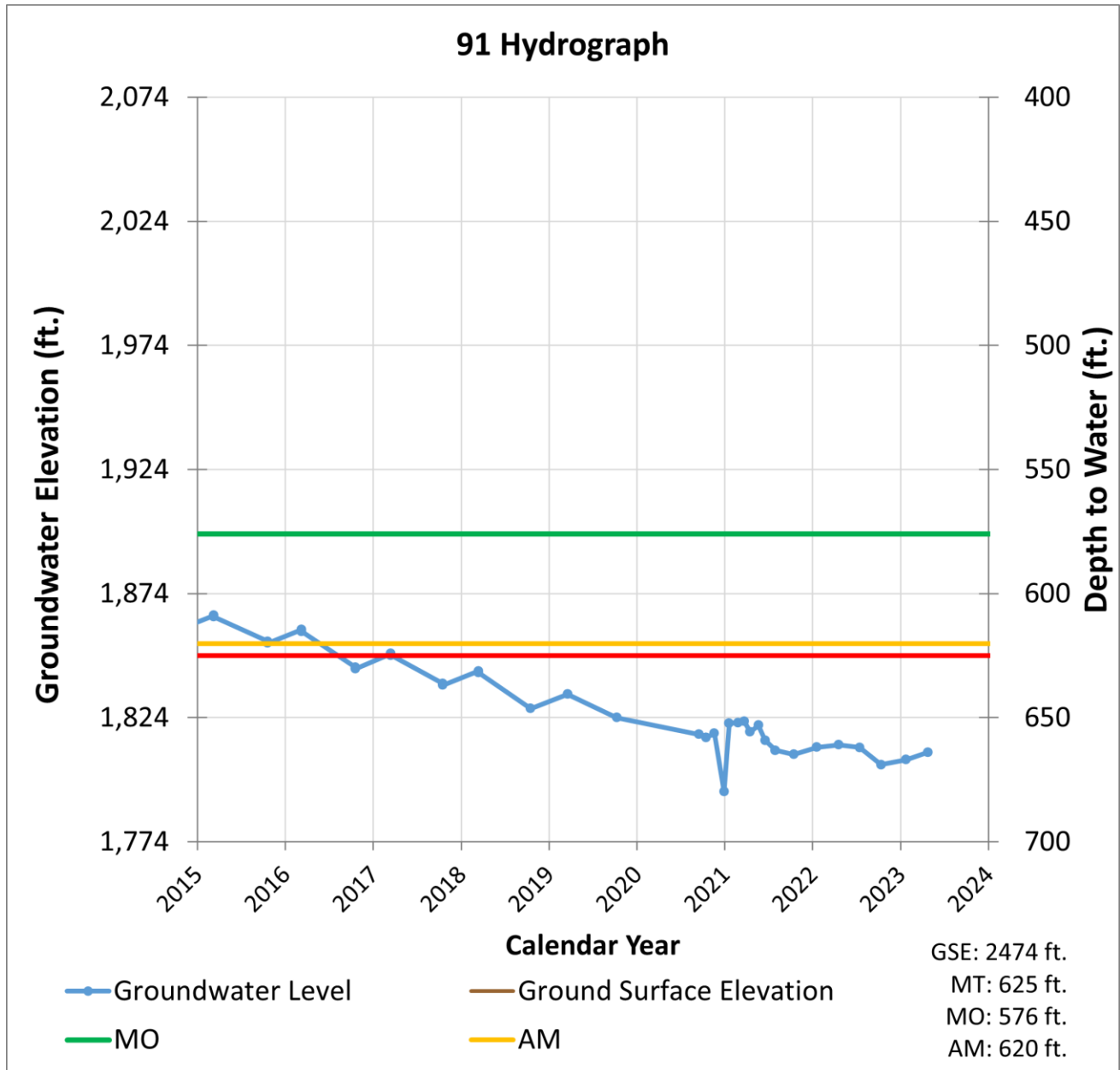


Figure 5: Central Region – Well 74

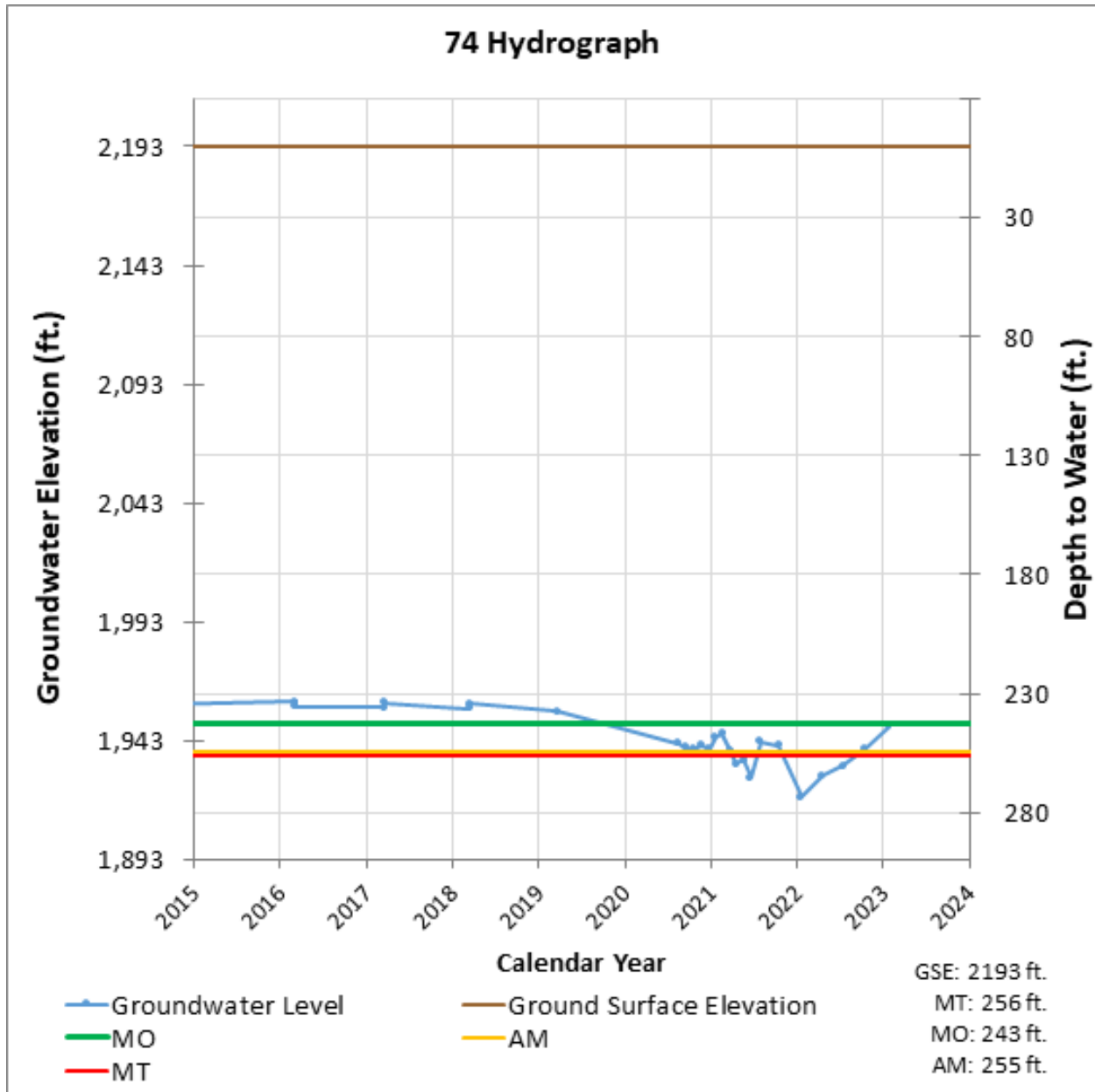


Figure 6: Western Region – Well 571

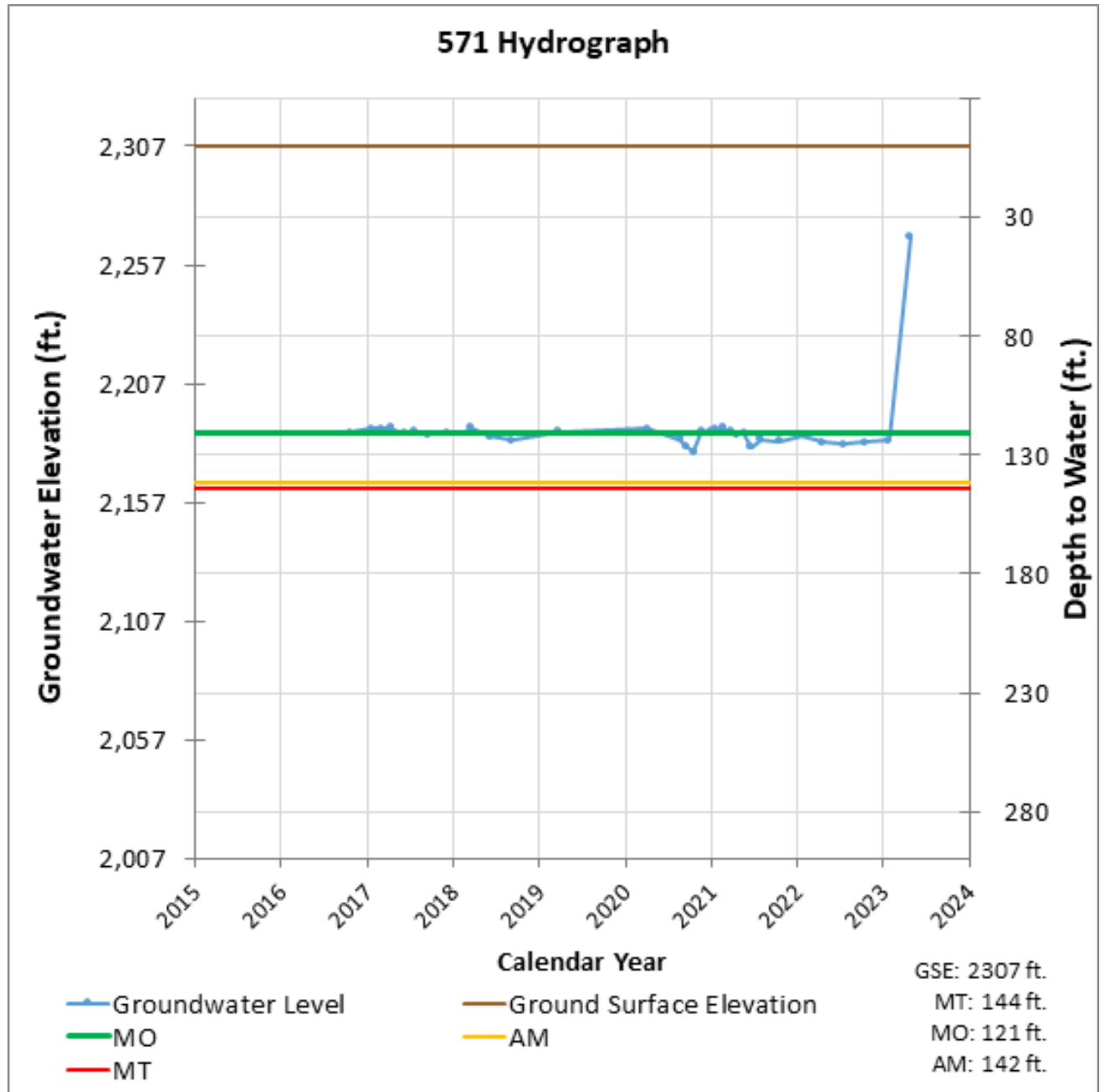
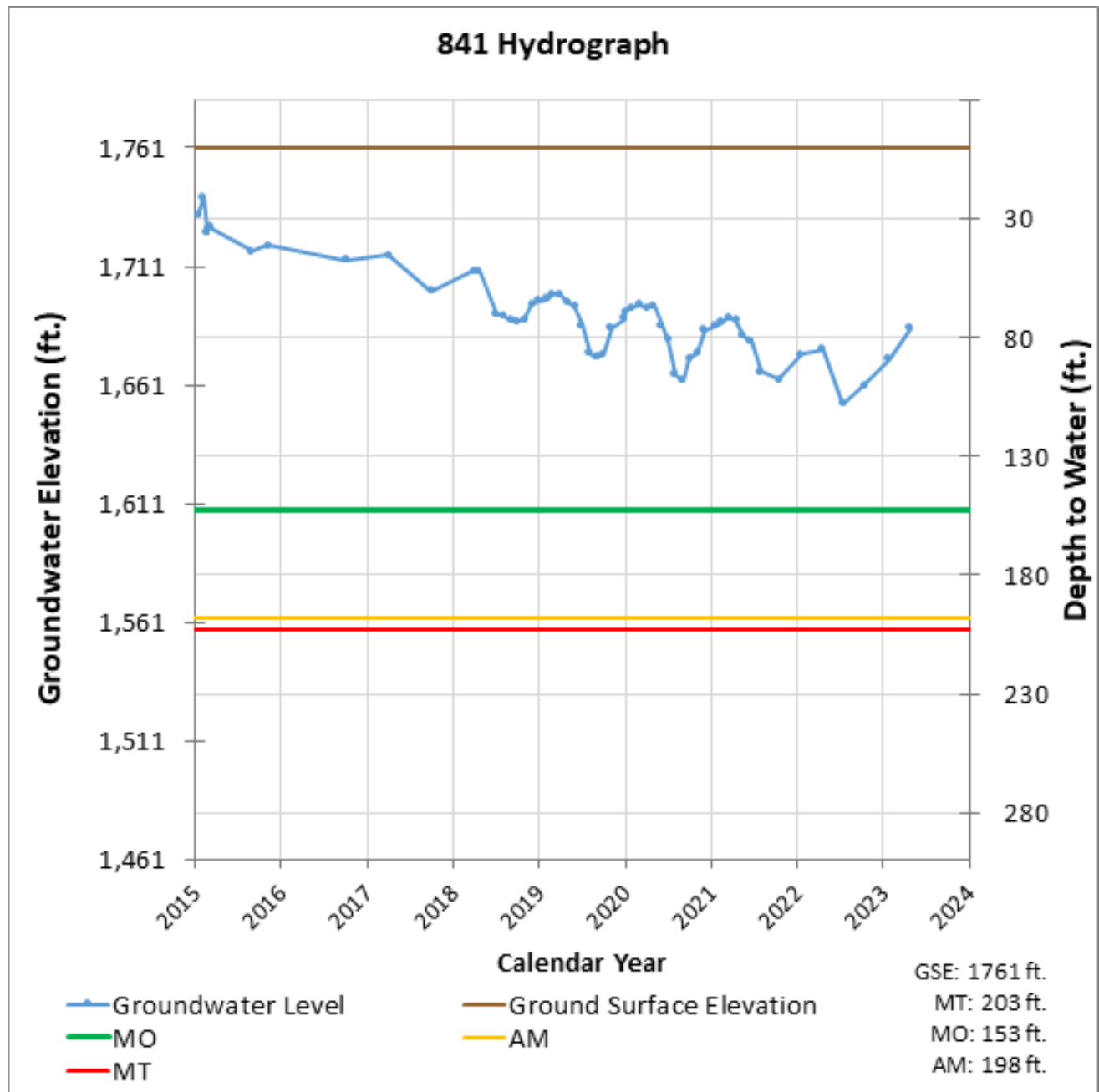


Figure 7: Northwestern Region – Well 841



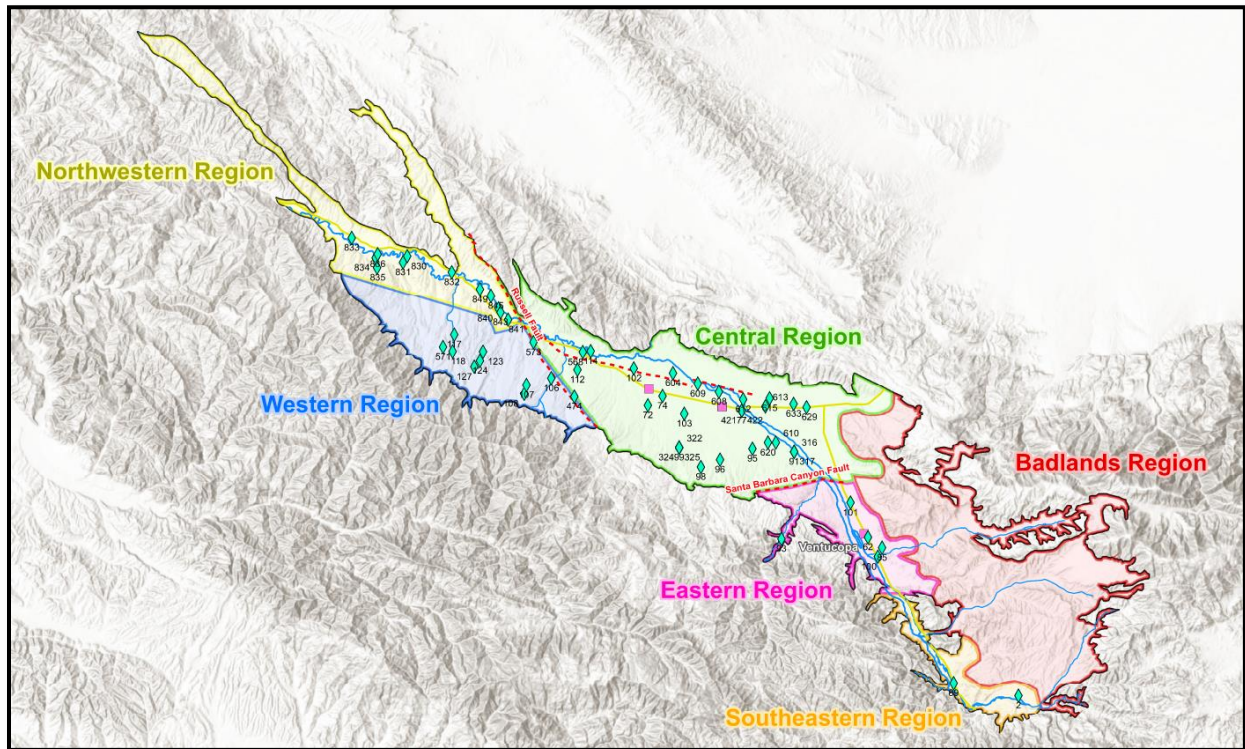


Figure 8: Threshold Regions in the Cuyama Groundwater Basin

5. MONITORING NETWORK UPDATES

As shown in Table 2, there are 9 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
- Transducer data was not able to be downloaded:
 - Wells 102, 317
- Measurement was not possible at the time when the field technician went to take measurements:
 - Wells 74, 95, 101, 114, 608



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