



GROUNDWATER CONDITIONS REPORT – CUYAMA VALLEY GROUNDWATER BASIN

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COMMITMENT & INTEGRITY DRIVE RESULTS

Cuyama Valley
Groundwater
Sustainability Agency

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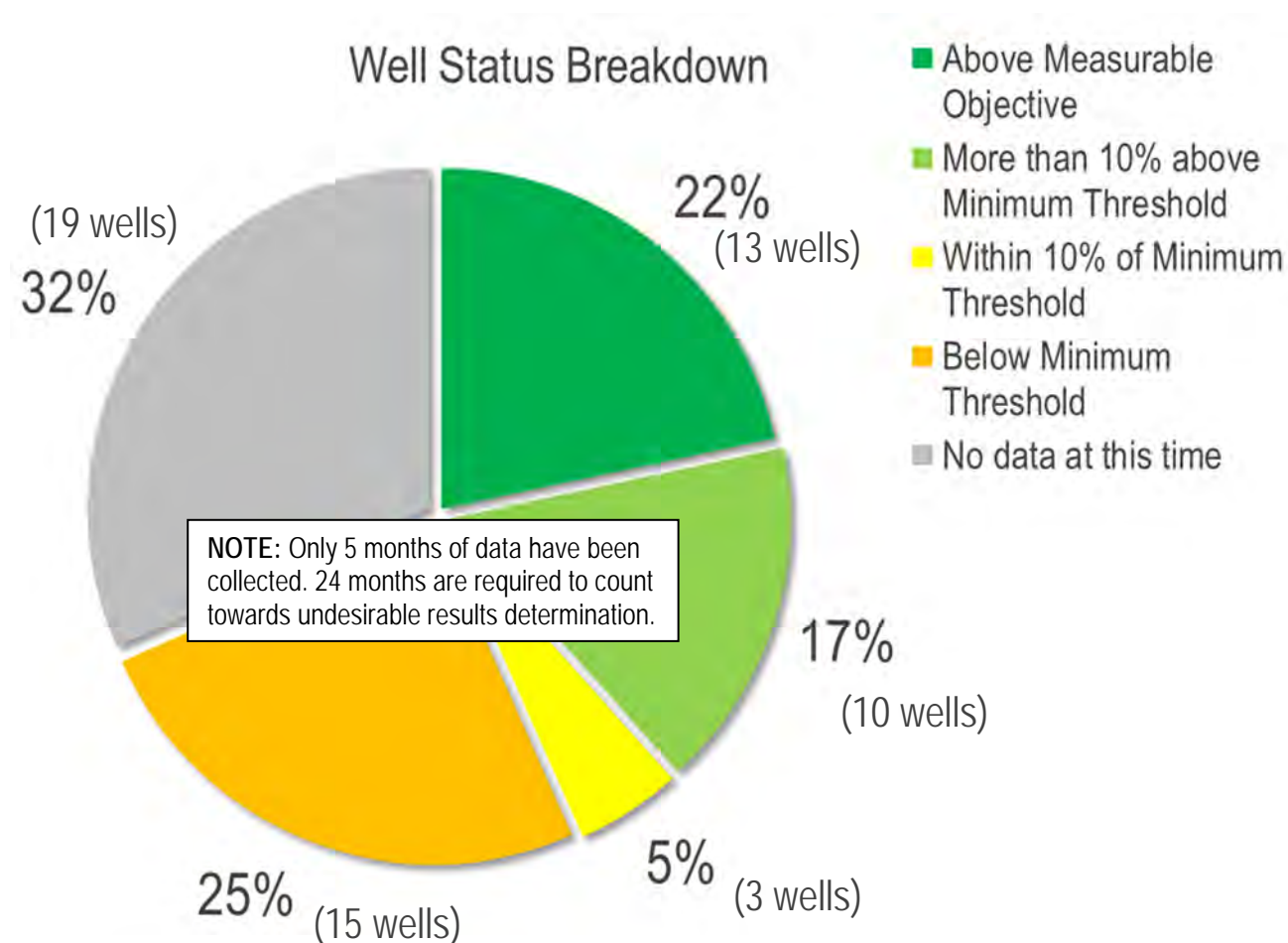
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1. INTRODUCTION

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 Groundwater Sustainability Agency, in compliance with the Sustainable Groundwater Management Act.

2. SUMMARY STATISTICS



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).

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. The change in elevation is from approximately one year previous to the most current measurement. Table 2 includes all of the wells and their current status in relation to the thresholds applied to each well, while Figure 1 shows the all wells and their statuses.

All measurements have also be 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-20	Nov-20	Dec-20	Last Year		Annual Elevation Change
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
72	Central	-	-	-	2006	10/9/2019	-
74	Central	1940	1939	1940	1955	3/18/2019	-15
77	Central	1775	1793	1819	1803	10/9/2019	16
91	Central	1817	1816	1794	1824	10/9/2019	-30
95	Central	1852	1852	1854	1872	3/22/2019	-18
96	Central	2272	2271	2272	2276	3/26/2019	-4
98	Central	-	-	-	2239	3/26/2019	-
99	Central	2213	2161	2219	2151	10/2/2019	68
102	Central	-	-	-	1805	3/18/2019	-
103	Central	1965	1960	1988	1980	10/9/2019	8
112	Central	2054	2055	-	-	-	-
114	Central	1878	1754	-	-	-	-
316	Central	1817	1811	1818	-	-	-
317	Central	1817	1811	1819	-	-	-
322	Central	2213	2158	2221	-	-	-
324	Central	2214	2174	2219	-	-	-
325	Central	2218	2197	2221	-	-	-
420	Central	1773	1792	1818	-	-	-
421	Central	1788	1796	1816	-	-	-
422	Central	-	1830	-	-	-	-

Well	Region	Oct-20	Nov-20	Dec-20	Last Year		Annual Elevation Change
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
474	Central	2196	2197	-	-	-	-
568	Central	-	1867	1868	-	-	-
604	Central	1658	1641	1646	-	-	-
608	Central	1810	1809	1788	-	-	-
609	Central	1733	1791	1802	-	-	-
610	Central	1812	1813	1820	-	-	-
612	Central	1851	1808	1800	-	-	-
613	Central	-	-	1816	-	-	-
615	Central	1842	1818	1822	-	-	-
620	Central	1815	1836	1814	-	-	-
629	Central	1864	1882	1823	-	-	-
633	Central	1807	-	1803	-	-	-
62	Eastern	2760	2764	2763	-	-	-
85	Eastern	2844	2844	2845	-	-	-
100	Eastern	2852	2852	2852	-	-	-
101	Eastern	-	-	2633	-	-	-
840	Northwestern	-	-	-	1648	12/31/2019	-
841	Northwestern	-	-	-	1689	12/31/2019	-
843	Northwestern	-	-	-	1673	12/31/2019	-
845	Northwestern	-	-	-	1654	12/31/2019	-
849	Northwestern	-	-	-	-	-	-

Well	Region	Oct-20	Nov-20	Dec-20	Last Year		Annual Elevation Change
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
2	Southeastern	3691	3695	3689	-	-	-
89	Southeastern	3433	3432	3432	-	-	-
106	Western	-	2184	2184	-	-	-
107	Western	-	2399	2399	-	-	-
108	Western	-	2498	-	-	-	-
117	Western	-	-	-	-	-	-
118	Western	-	2215	2214	2212	10/10/2019	2
123	Western	-	-	-	2158	10/10/2019	-
124	Western	-	-	-	2243	10/10/2019	-
127	Western	-	-	-	2333	10/10/2019	-
571	Western	2180	2178	2187	-	-	-
573	Western	2013	2014	-	-	-	-
830	Far-West Northwestern	-	-	1515	1514	3/26/2019	1
831	Far-West Northwestern	-	-	1505	1513	10/10/2019	-8
832	Far-West Northwestern	-	1593	1592	1592	10/9/2019	0
833	Far-West Northwestern	-	1405	-	1429	10/9/2019	-

Well	Region	Oct-20	Nov-20	Dec-20	Last Year		Annual Elevation Change
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
834	Far-West Northwestern	1467	-	1467	-	-	-
835	Far-West Northwestern	1520	-	1518	1525	10/10/2019	-7
836	Far-West Northwestern	1450	-	1448	1451	10/10/2019	-3

Table 2: Well Status Related to Thresholds

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Status	GSA Action Required?
		GWL (DTW)	Month/Year					
72	Central	-	-	169	165	124	No available data this period	No
74	Central	253	12/28/2020	256	255	243	More than 10% above Minimum Threshold	No
77	Central	467	12/28/2020	450	445	400	Below Minimum Threshold (4 months)	No
91	Central	680	12/28/2020	625	620	576	Below Minimum Threshold (4 months)	No
95	Central	595	12/28/2020	573	570	538	Below Minimum Threshold (5 months)	No
96	Central	334	12/28/2020	333	332	325	Below Minimum Threshold (1 month)	No
98	Central	-	-	450	449	439	No available data this period	No
99	Central	294	12/28/2020	311	310	300	Above Measurable Objective	No
102	Central	-	-	235	231	197	No available data this period	No
103	Central	301	12/31/2020	290	285	235	Below Minimum Threshold (5 months)	No
112	Central	-	-	87	87	85	No available data this period	No
114	Central	-	-	47	47	45	No available data this period	No
316	Central	656	12/28/2020	623	618	574	Below Minimum Threshold (4 months)	No
317	Central	655	12/28/2020	623	618	573	Below Minimum Threshold (4 months)	No
322	Central	292	12/28/2020	307	306	298	Above Measurable Objective	No
324	Central	294	12/28/2020	311	310	299	Above Measurable Objective	No
325	Central	292	12/28/2020	300	299	292	Above Measurable Objective	No
420	Central	468	12/28/2020	450	445	400	Below Minimum Threshold (4 months)	No
421	Central	470	12/28/2020	446	441	398	Below Minimum Threshold (4 months)	No
422	Central	-	-	444	439	397	No available data this period	No



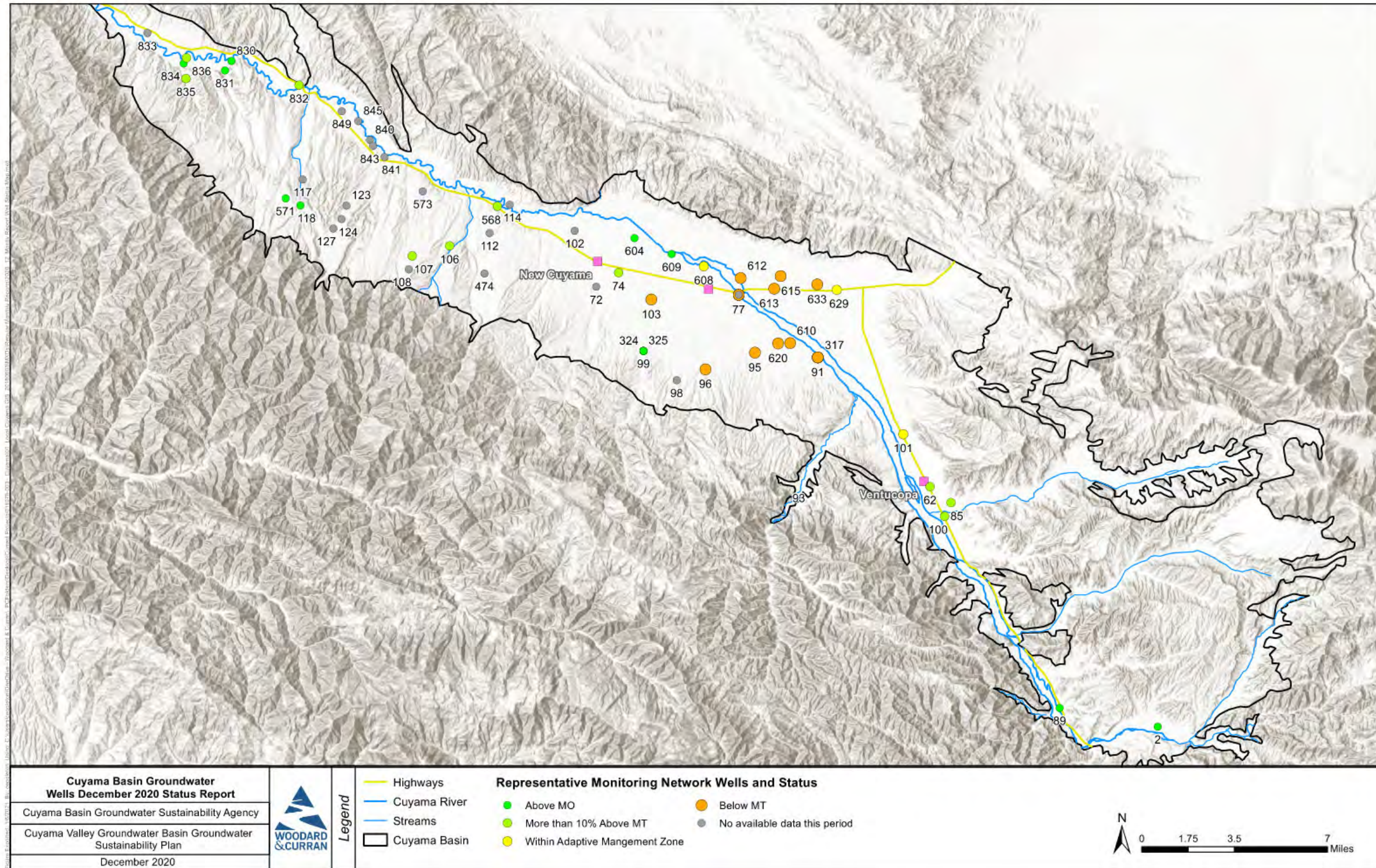
Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Status	GSA Action Required?
		GWL (DTW)	Month/Year					
474	Central	-	-	188	186	169	No available data this period	No
568	Central	37	12/29/2020	37	37	36	More than 10% above Minimum Threshold	No
604	Central	479	12/31/2020	526	522	487	Above Measurable Objective	No
608	Central	436	12/31/2020	436	433	407	Within Adaptive Management Zone	No
609	Central	365	12/31/2020	458	454	421	Above Measurable Objective	No
610	Central	622	12/31/2020	621	618	591	Below Minimum Threshold (5 months)	No
612	Central	466	12/31/2020	463	461	440	Below Minimum Threshold (1 month)	No
613	Central	514	12/28/2020	503	500	475	Below Minimum Threshold (2 months)	No
615	Central	505	12/28/2020	500	497	468	Below Minimum Threshold (1 month)	No
620	Central	618	12/31/2020	606	602	566	Below Minimum Threshold (2 months)	No
629	Central	556	12/28/2020	559	556	527	Within Adaptive Management Zone	No
633	Central	561	12/28/2020	547	542	493	Below Minimum Threshold (5 months)	No
62	Eastern	158	12/28/2020	182	178	142	More than 10% above Minimum Threshold	No
85	Eastern	202	12/28/220	233	225	147	More than 10% above Minimum Threshold	No
100	Eastern	152	12/28/2020	181	175	125	More than 10% above Minimum Threshold	No
101	Eastern	108	12/28/2020	111	108	81	Within Adaptive Management Zone	No
840	Northwestern	-	-	203	198	153	No available data this period	No
841	Northwestern	-	-	203	198	153	No available data this period	No
843	Northwestern	-	-	203	198	153	No available data this period	No
845	Northwestern	-	-	203	198	153	No available data this period	No

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Status	GSA Action Required?
		GWL (DTW)	Month/Year					
849	Northwestern	-	-	203	198	153	No available data this period	No
2	Southeastern	31	12/28/2020	72	70	55	Above Measurable Objective	No
89	Southeastern	29	12/28/2020	64	62	44	Above Measurable Objective	No
106	Western	143	12/29/2020	154	153	141	More than 10% above Minimum Threshold	No
107	Western	83	12/29/2020	91	89	72	More than 10% above Minimum Threshold	No
108	Western	-	-	165	162	136	No available data this period	No
117	Western	-	-	160	159	151	No available data this period	No
118	Western	56	12/29/2020	124	117	57	Above Measurable Objective	No
123	Western	-	-	31	29	13	No available data this period	No
124	Western	-	-	73	71	57	No available data this period	No
127	Western	-	-	42	41	32	No available data this period	No
571	Western	120	12/29/2020	144	142	121	Above Measurable Objective	No
573	Western	-	-	118	113	68	No available data this period	No
830	Far-West Northwestern	56	12/29/2020	59	59	56	Above Measurable Objective	No
831	Far-West Northwestern	52	12/29/2020	77	75	52	Above Measurable Objective	No
832	Far-West Northwestern	38	12/29/2020	45	44	30	More than 10% above Minimum Threshold	No
833	Far-West Northwestern	-	-	96	89	24	No available data this period	No

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Status	GSA Action Required?
		GWL (DTW)	Month/Year					
834	Far-West Northwestern	41	12/31/2020	84	80	42	Above Measurable Objective	No
835	Far-West Northwestern	37	12/31/2020	55	53	36	More than 10% above Minimum Threshold	No
836	Far-West Northwestern	38	12/31/2020	79	75	36	More than 10% above Minimum Threshold	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



4. HYDROGRAPHS

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

Figure 2: Southeast Region – Well 89

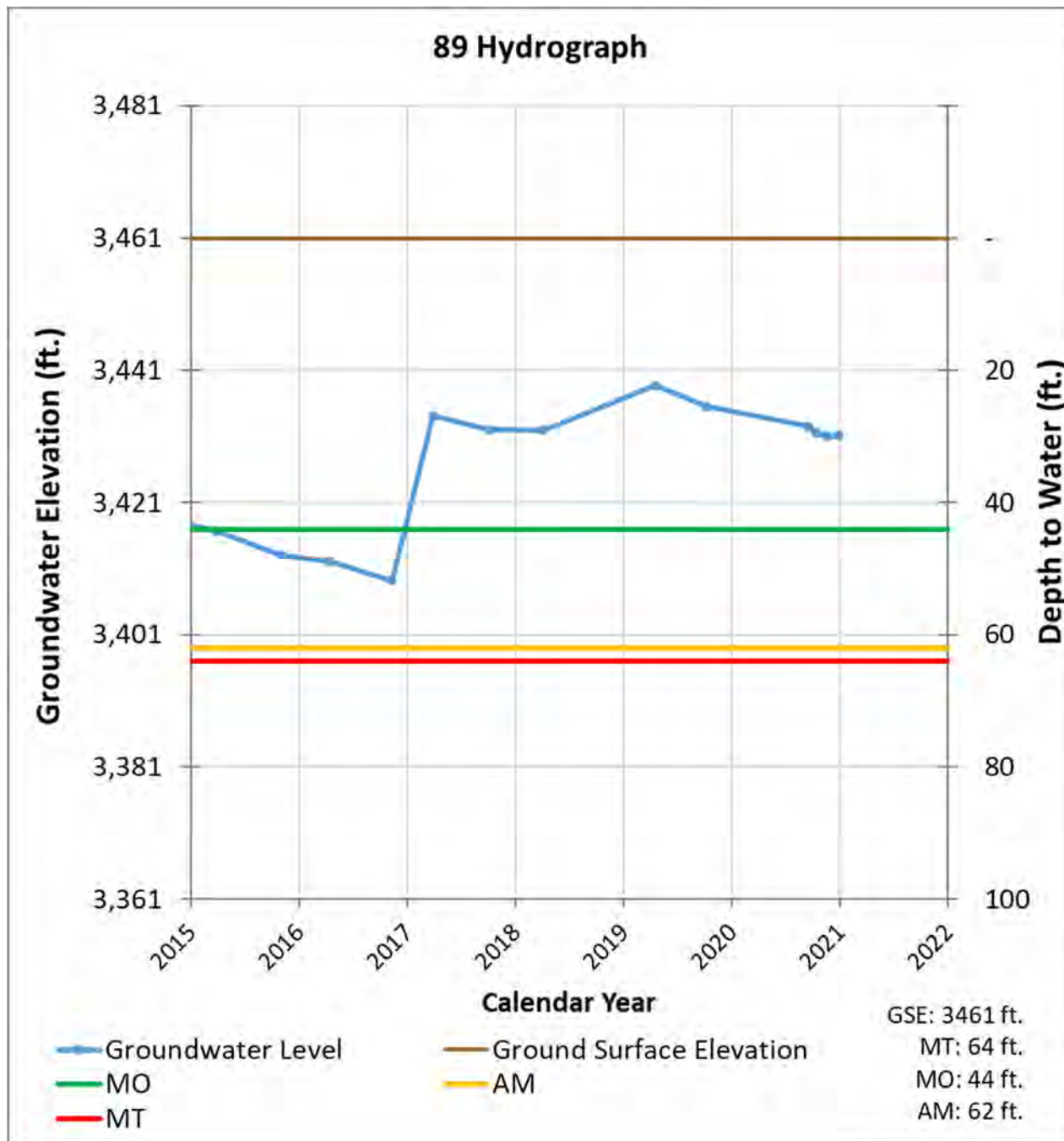


Figure 3: Eastern Region – Well 62

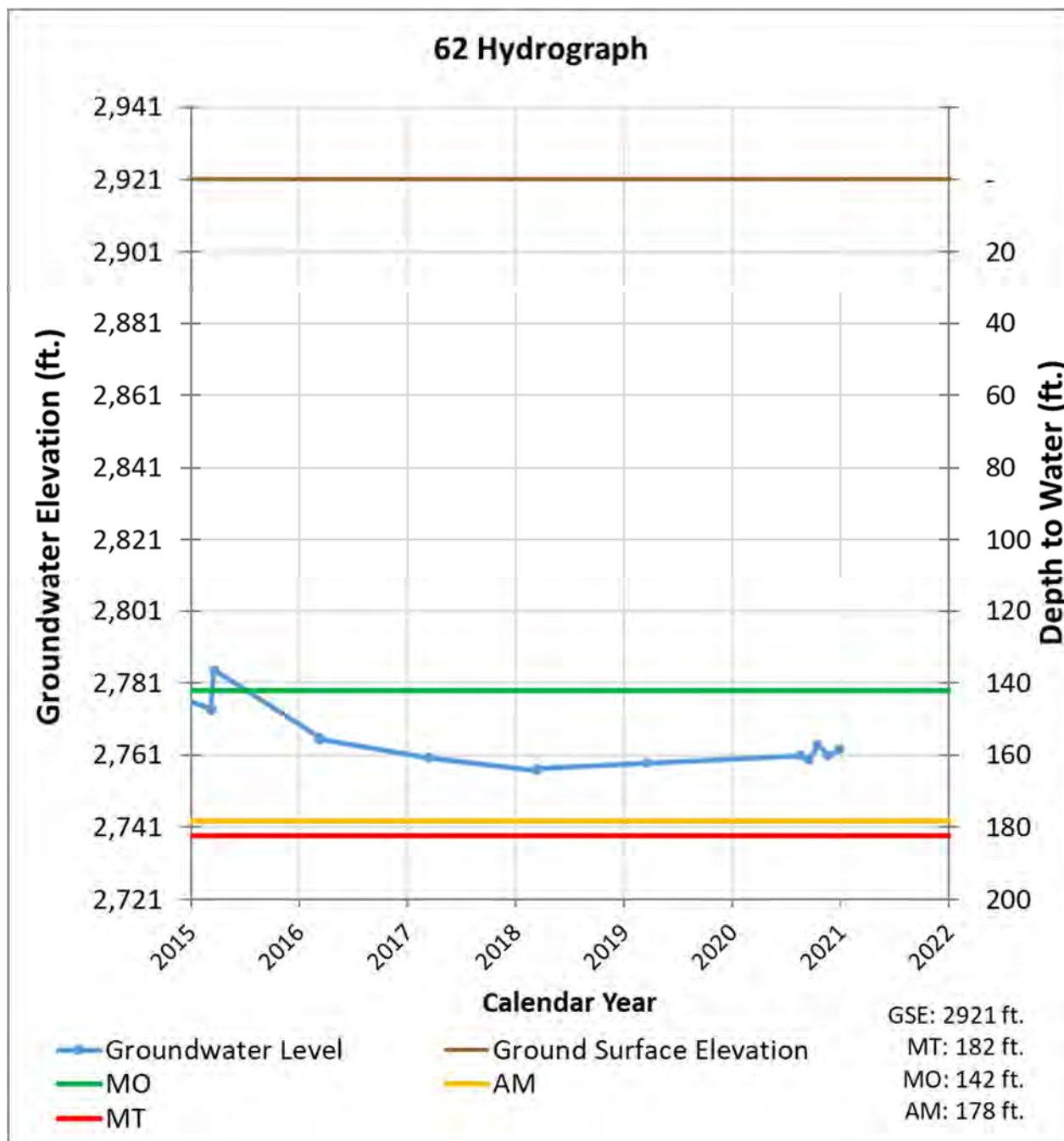


Figure 4: Central Region – Well 91

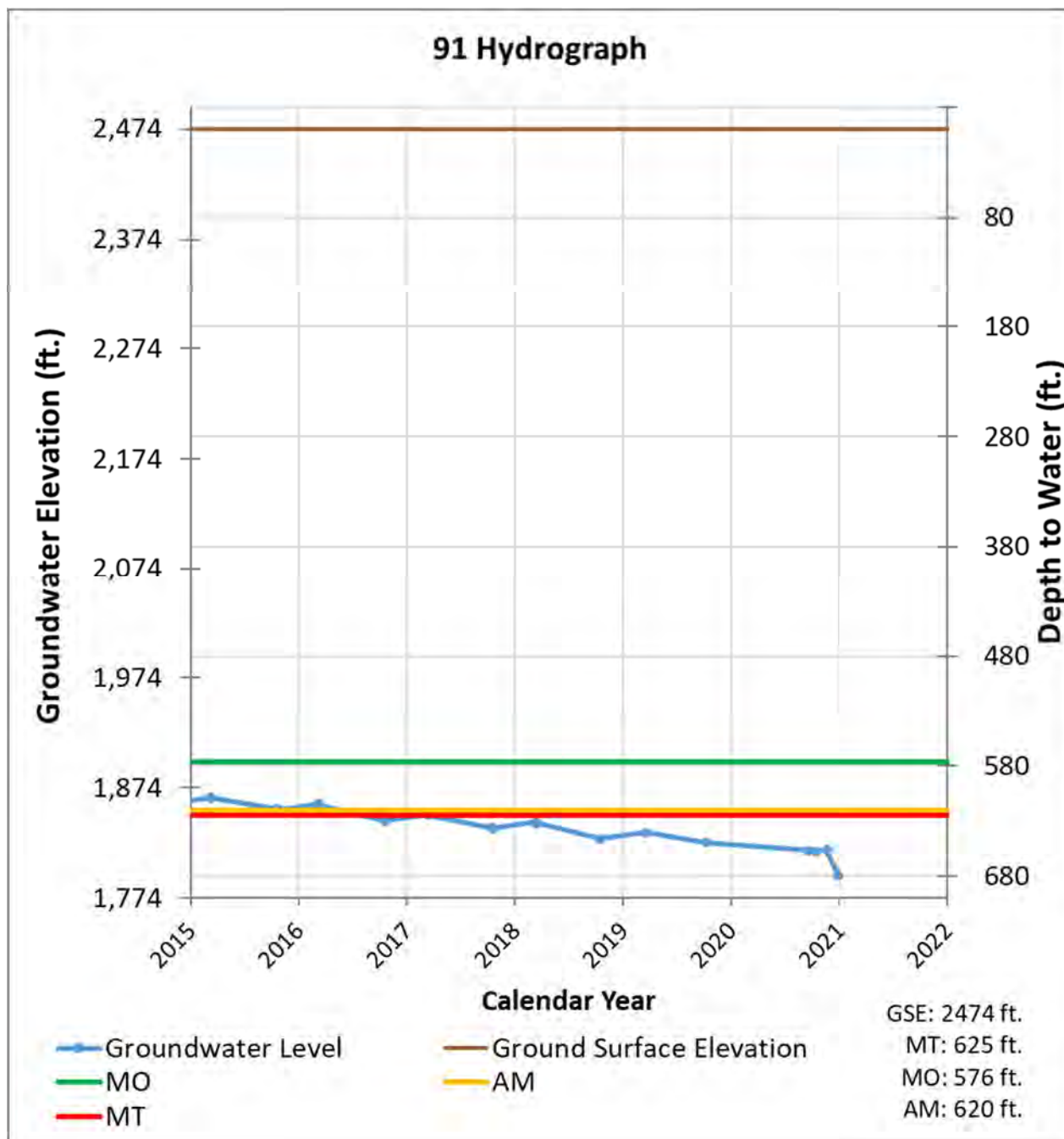


Figure 5: Central Region – Well 74

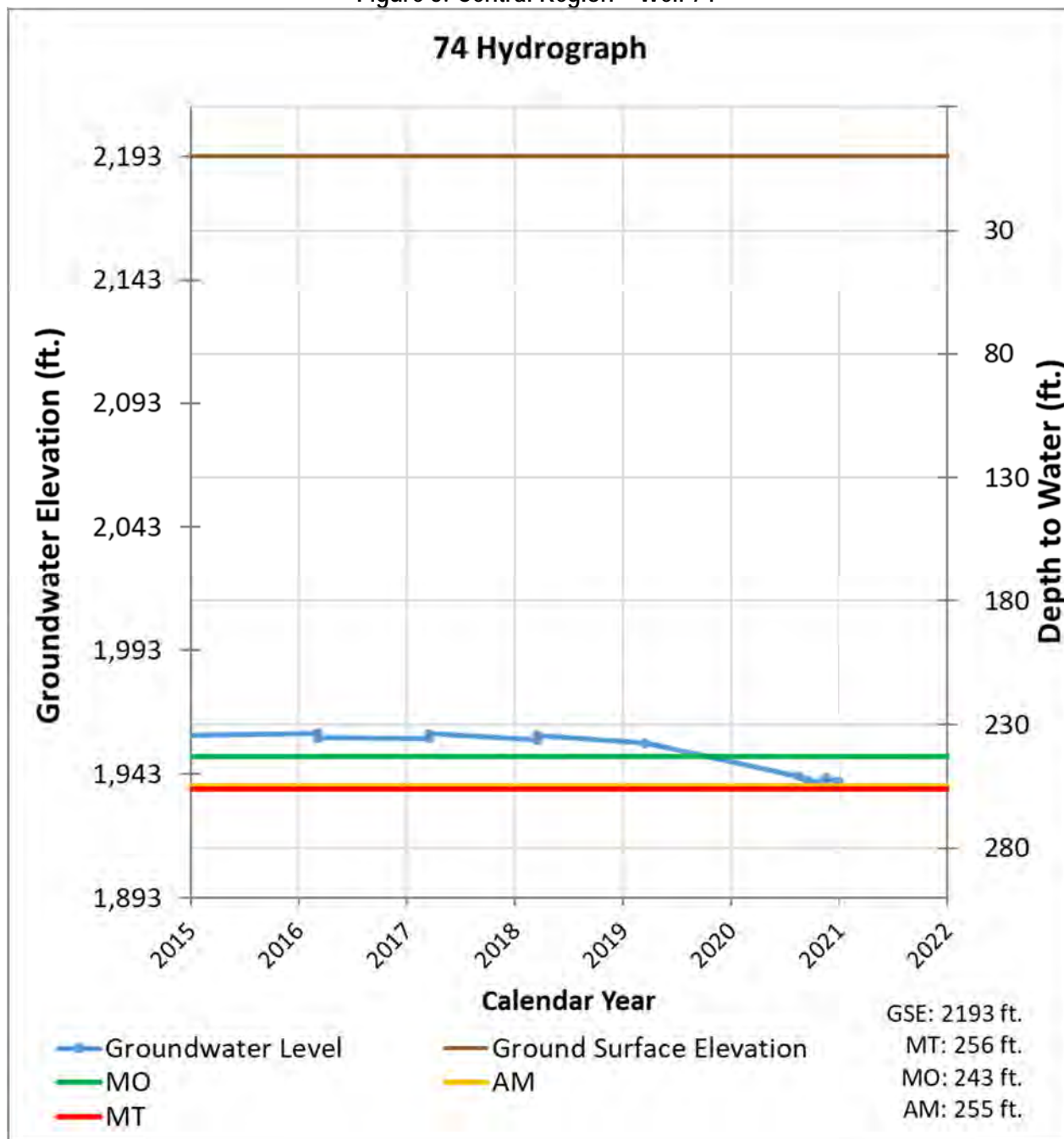


Figure 6: Western Region – Well 108

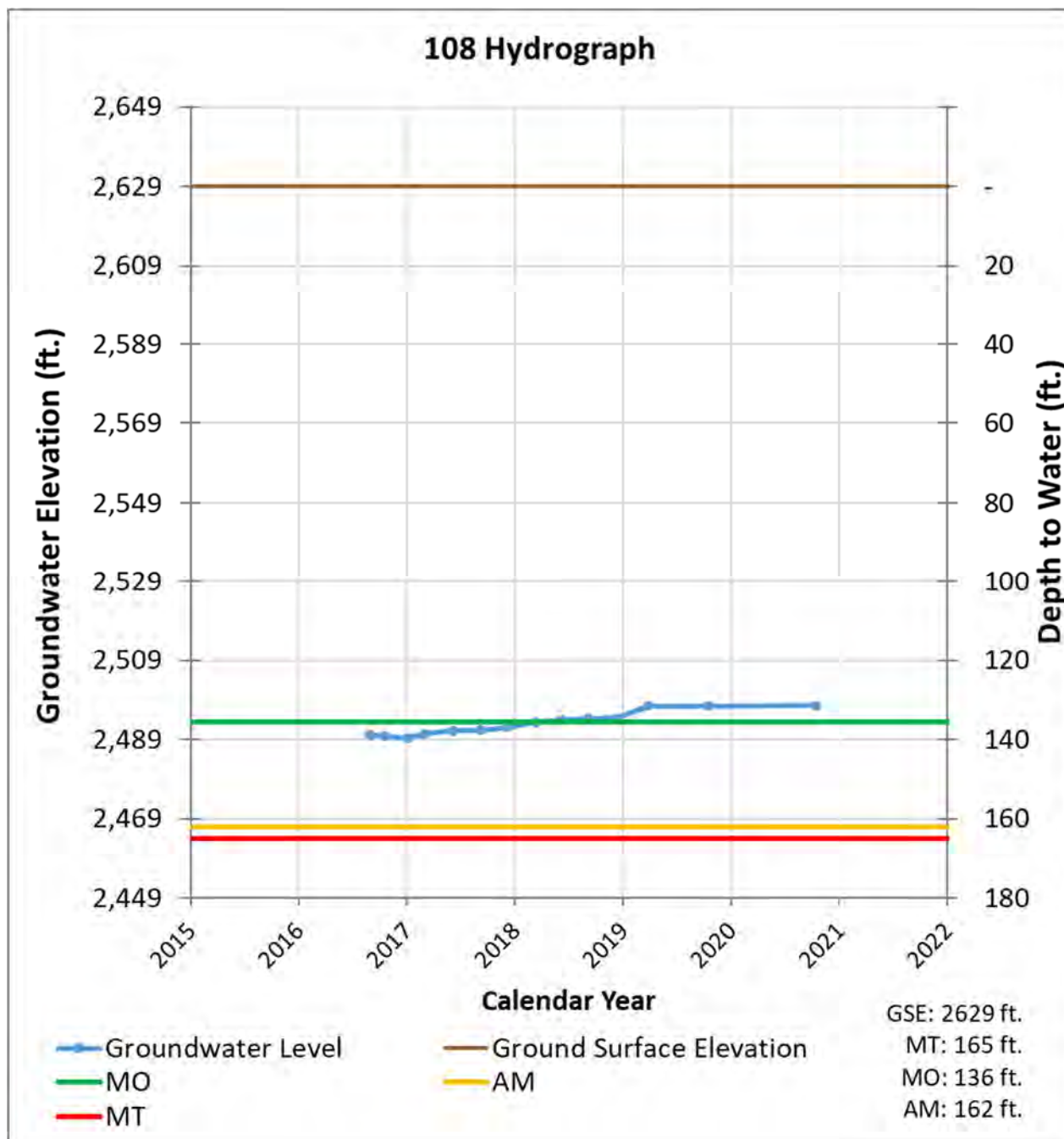
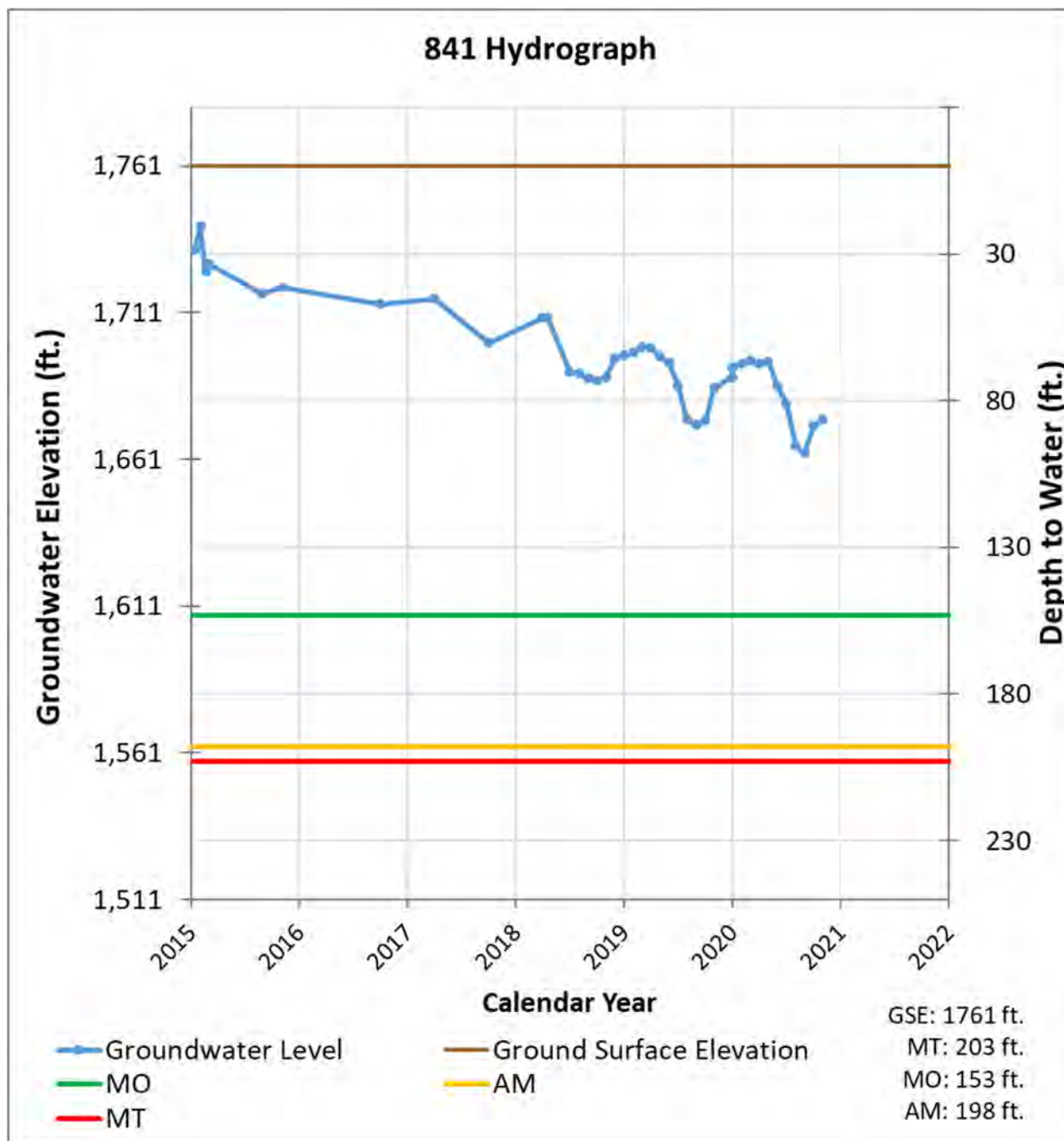


Figure 7: Northwestern Region – Well 841



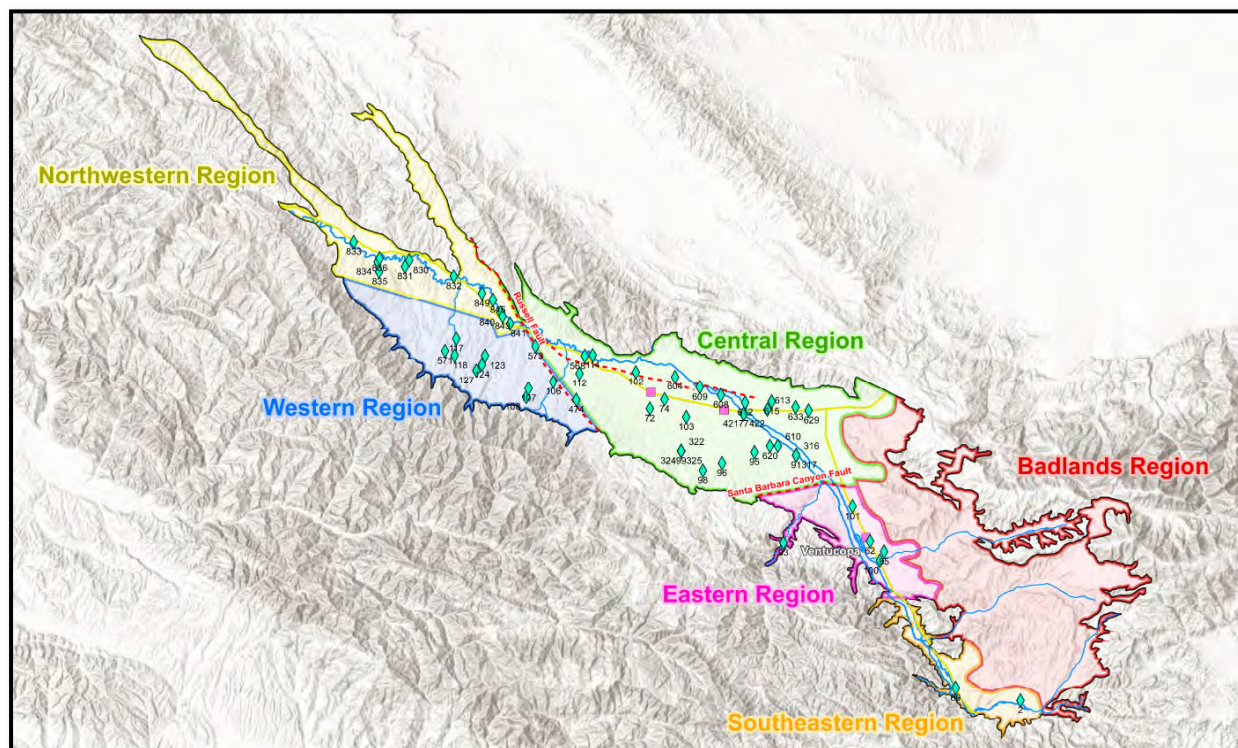


Figure 8: Threshold Regions in the Cuyama Groundwater Basin

5. MONITORING NETWORK UPDATES

As shown in the Summary Statistics Section, there are 19 wells without current measurements. These “no measurement codes” can generally be caused for three different reasons. Additionally, three wells are recommended to be removed from the monitoring network at this time as described below.

- Access agreements have not yet been established with the landowner, access has not been granted yet, or no access at time of measurement:
 - Wells 72, 98, 117, 123, 124, 127, 833, 840, 843, 849
- Well transducer data is not yet available:
 - Wells 102, 841, 845
- Measurement was not possible at the time when the field technician went to take measurements:
 - 108, 112, 114, 474, 573
- Wells that have gone dry:
 - 422



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