

GROUNDWATER CONDITIONS REPORT -CUYAMA VALLEY GROUNDWATER BASIN

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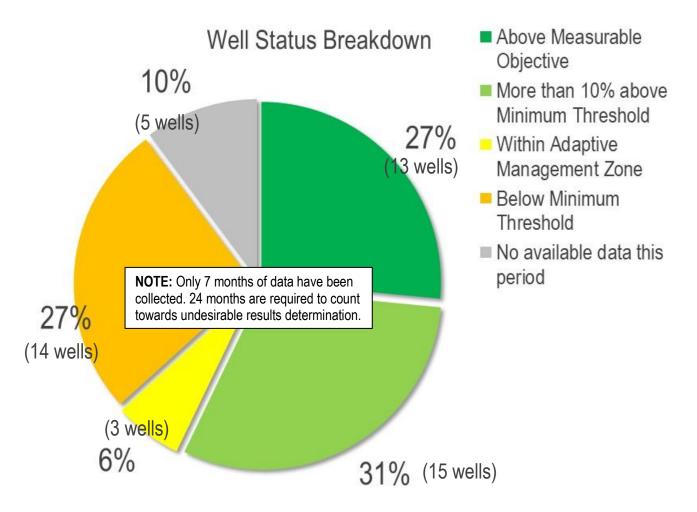
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1. INTRODUCTION

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.

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



		Dec-20	Jan-21	Feb-21	Las	st Year	Annual
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change
72	Central	-	-	2025			
74	Central	1940	1945	1946			
77	Central	1819	1822	1823			
91	Central	1794	1822	1822			
95	Central	1854	1854	1842			
96	Central	2272	2272	2272			
98	Central	-	-	-			
99	Central	2219	2222	2213			
102	Central	-	1776	1774			
103	Central	1988	1994	2003			
112	Central	-	-	2055			
114	Central	-	-	1879			
316	Central	1818	1820	1821			
317	Central	1819	1820	1822			
322	Central	2221	2222	2213			
324	Central	2219	2220	2213			
325	Central	2221	2222	2217			
420	Central	1818	1821	1821			
421	Central	1816	1819	1820			
474	Central	-	-	2204			

Table 1: Recent Groundwater Levels for Representative Monitoring Network



		Dec-20	Jan-21	Feb-21	Las	st Year	Annual
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change
568	Central	1868	1869	1869			
604	Central	1646	1654	1659			
608	Central	1788	1790	1795			
609	Central	1802	1807	1805			
610	Central	1820	1818	1823			
612	Central	1800	1801	1801			
613	Central	1816	1804	1804			
615	Central	1822	1821	1820			
629	Central	1823	1822	1823			
633	Central	1803	1801	1806			
62	Eastern	2763	2763	2764			
85	Eastern	2845	2845	2846			
100	Eastern	2852	2853	2853			
101	Eastern	2633	2634	2636			
841	Northwestern	1684	1686	1688			
845	Northwestern	1649	1650	1651			
2	Southeastern	3689	3690	3690			
89	Southeastern	3432	3431	3431			
106	Western	2184	2184	2184			
107	Western	2399	2399	2395			
117	Western	-	-	-			



		Dec-20	Jan-21	Feb-21	Las	t Year	Annual
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change
118	Western	2214	2214	2214			
124	Western	-	-	-			
571	Western	2187	2188	2188			
573	Western	-	-	2014			
830	Far-West Northwestern	1515	1515	-			
832	Far-West Northwestern	1592	1593	1591			
833	Far-West Northwestern	-	-	-			
836	Far-West Northwestern	1448	1450	1450			

Note: Previous year values and annual elevation changes will be reported after the CBGSA monitoring program has completed a full year of monitoring.



		Curre	ent Month		Within 10%				GSA
Well	Region	GWL	Month/	Minimum	Minimum	Measurable	Well	Status	Action
		(DTW)	Year	Threshold	Threshold	Objective	Depth		Required?
72	Central	146	2/17/2021	169	165	124	790	More than 10% above Minimum Threshold	No
74	Central	247	2/16/2021	256	255	243		More than 10% above Minimum Threshold	No
77	Central	463	2/16/2021	450	445	400	980	Below Minimum Threshold (6 months)	No
91	Central	652	2/25/2021	625	620	576	980	Below Minimum Threshold (6 months)	No
95	Central	607	2/16/2021	573	570	538	805	Below Minimum Threshold (7 months)	No
96	Central	334	2/16/2021	333	332	325	500	Below Minimum Threshold (3 months)	No
98	Central	-	N/A	450	449	439	750	No available data this period	No
99	Central	300	2/16/2021	311	310	300	750	Above Measurable Objective	No
102	Central	272	2/16/2021	235	231	197		Below Minimum Threshold (2 months)	No
103	Central	286	2/16/2021	290	285	235	1030	Within Adaptive Management Zone	No
112	Central	84	2/17/2021	87	87	85	441	Above Measurable Objective	No
114	Central	46	2/17/2021	47	47	45	58	More than 10% above Minimum Threshold	No
316	Central	653	2/25/2021	623	618	574	830	Below Minimum Threshold (6 months)	No
317	Central	652	2/25/2021	623	618	573	700	Below Minimum Threshold (6 months)	No
322	Central	300	2/16/2021	307	306	298	850	More than 10% above Minimum Threshold	No
324	Central	300	2/16/2021	311	310	299	560	More than 10% above Minimum Threshold	No
325	Central	296	2/17/2021	300	299	292	380	More than 10% above Minimum Threshold	No
420	Central	465	2/16/2021	450	445	400	780	Below Minimum Threshold (6 months)	No
421	Central	466	2/17/2021	446	441	398	620	Below Minimum Threshold (6 months)	No
474	Central	165	2/17/2021	188	186	169	213	Above Measurable Objective	No

Table 2: Well Status Related to Thresholds



		Curre	ent Month		Within 10%				GSA
Well	Region	GWL	Month/	Minimum	Minimum	Measurable	Well	Status	Action
		(DTW)	Year	Threshold	Threshold	Objective	Depth		Required?
568	Central	36	2/17/2021	37	37	36	188	Above Measurable Objective	No
604	Central	466	2/17/2021	526	522	487	924	Above Measurable Objective	No
608	Central	429	2/16/2021	436	433	407	745	More than 10% above Minimum Threshold	No
609	Central	362	2/17/2021	458	454	421	970	Above Measurable Objective	No
610	Central	619	2/17/2021	621	618	591	780	Within Adaptive Management Zone	No
612	Central	465	2/16/2021	463	461	440	1070	Below Minimum Threshold (3 months)	No
613	Central	526	2/17/2021	503	500	475	830	Below Minimum Threshold (4 months)	No
615	Central	507	2/16/2021	500	497	468	865	Below Minimum Threshold (3 months)	No
629	Central	556	2/16/2021	559	556	527	1000	Within Adaptive Management Zone	No
633	Central	558	2/16/2021	547	542	493	1000	Below Minimum Threshold (7 months)	No
62	Eastern	157	2/16/2021	182	178	142	212	More than 10% above Minimum Threshold	No
85	Eastern	201	2/17/2021	233	225	147	233	More than 10% above Minimum Threshold	No
100	Eastern	151	2/17/2021	181	175	125	284	More than 10% above Minimum Threshold	No
101	Eastern	105	2/17/2021	111	108	81	200	More than 10% above Minimum Threshold	No
841	Northwestern	73	2/15/2021	203	198	153	600	Above Measurable Objective	No
845	Northwestern	61	2/15/2021	203	198	153	380	Above Measurable Objective	No
2	Southeastern	30	2/17/2021	72	70	55	73	Above Measurable Objective	No
89	Southeastern	30	2/17/2021	64	62	44	125	Above Measurable Objective	No
106	Western	143	2/17/2021	154	153	141	228	More than 10% above Minimum Threshold	No
107	Western	87	2/17/2021	91	89	72	200	More than 10% above Minimum Threshold	No

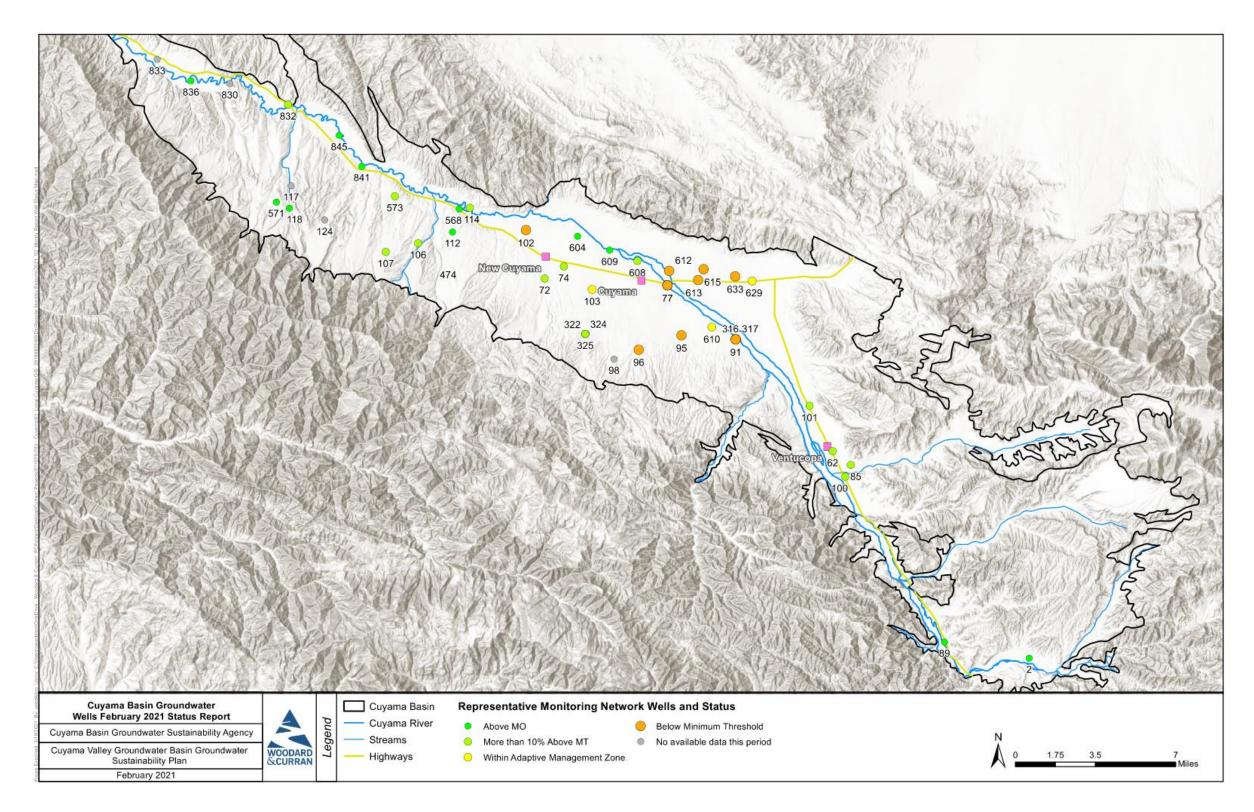


		Curre	nt Month		Within 10%				GSA
Well	Region	GWL (DTW)	Month/ Year	Minimum Threshold	Minimum Threshold	Measurable Objective	Well Depth	Status	Action Required?
117	Western	-	N/A	160	159	151	212	No available data this period	No
118	Western	56	2/17/2021	124	117	57	500	Above Measurable Objective	No
124	Western	-	N/A	73	71	57	161	No available data this period	No
571	Western	119	2/17/2021	144	142	121	280	Above Measurable Objective	No
573	Western	70	2/17/2021	118	113	68	404	More than 10% above Minimum Threshold	No
830	Far-West Northwestern	-	N/A	59	59	56	77	No available data this period	No
832	Far-West Northwestern	39	2/17/2021	45	44	30	132	More than 10% above Minimum Threshold	No
833	Far-West Northwestern	-	N/A	96	89	24	504	No available data this period	No
836	Far-West Northwestern	36	2/17/2021	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



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4. HYDROGRAPHS

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



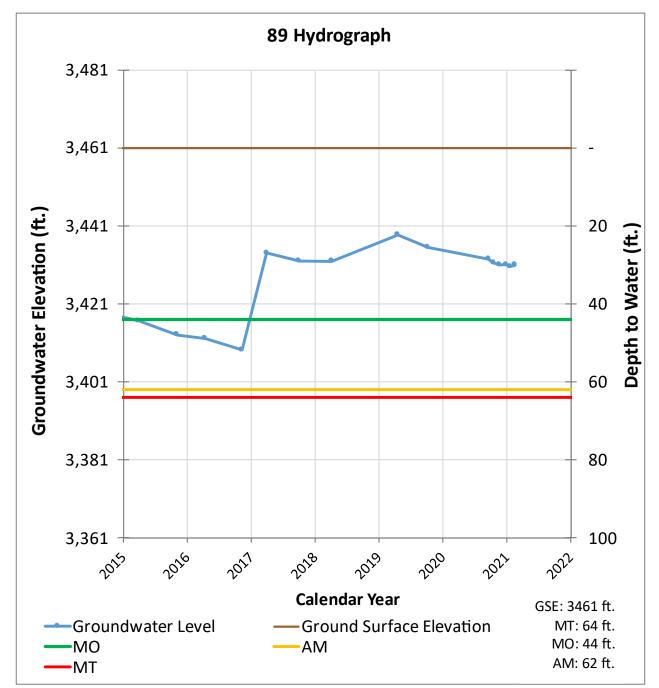
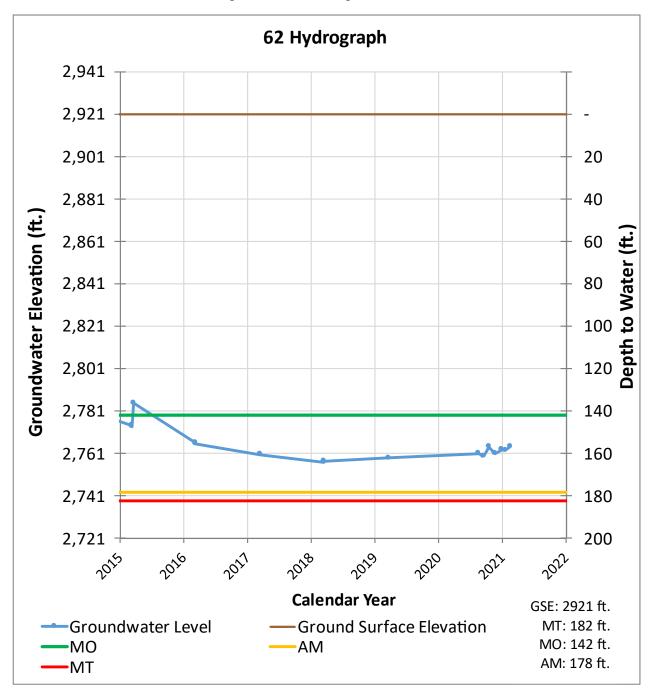


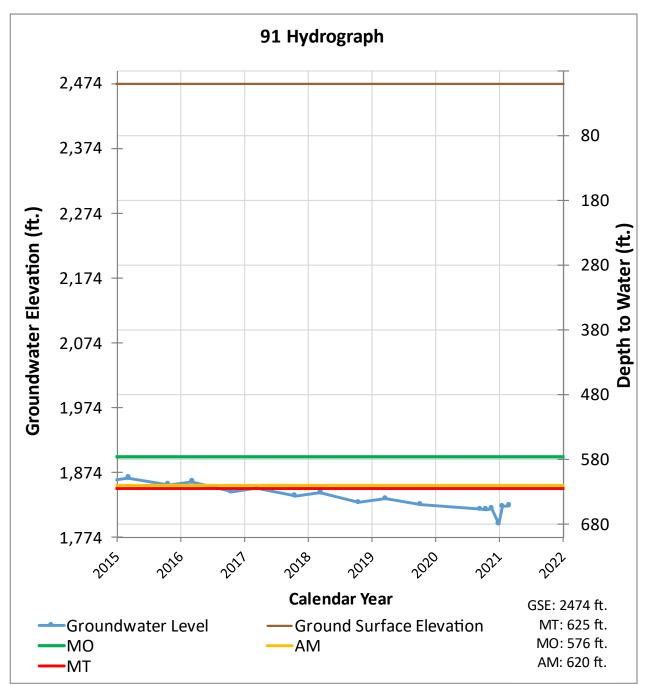


Figure 3: Eastern Region – Well 62

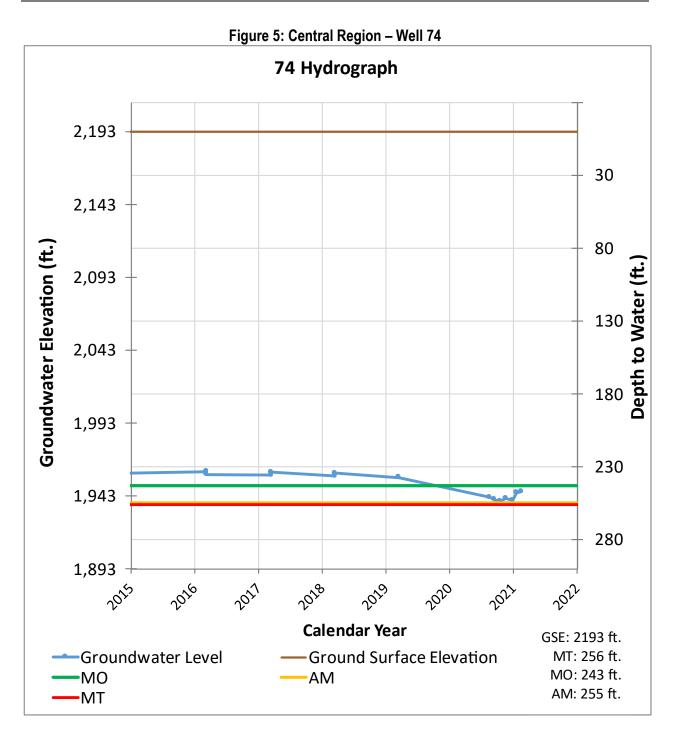




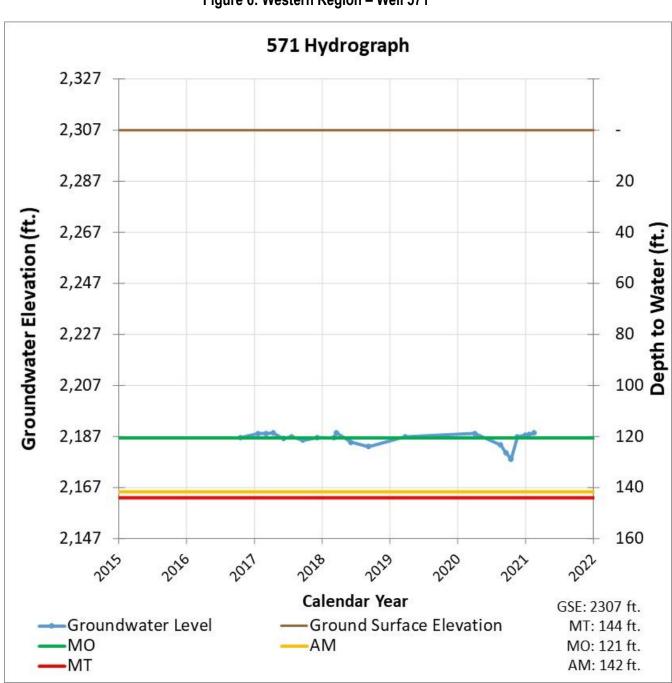














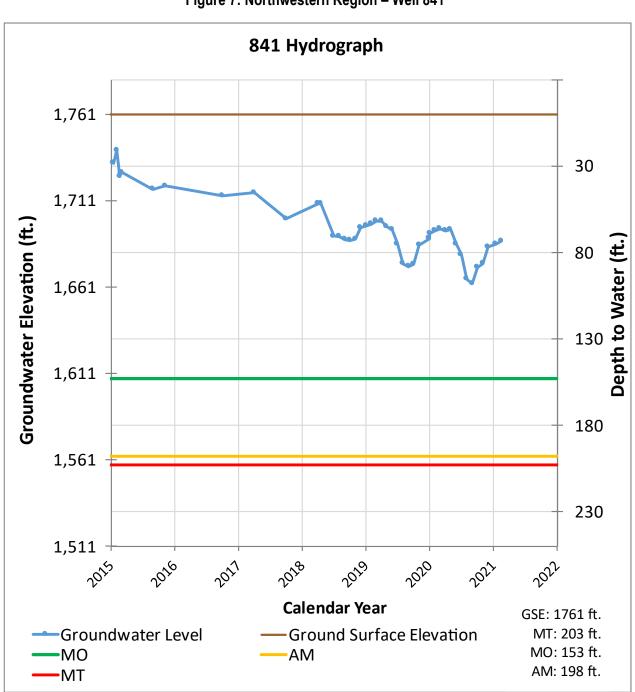


Figure 7: Northwestern Region – Well 841



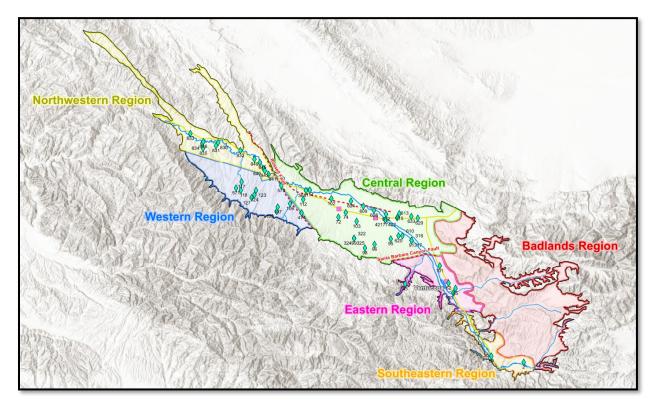


Figure 8: Threshold Regions in the Cuyama Groundwater Basin

5. MONITORING NETWORK UPDATES

Per Board direction provided on January 13, 2021, the following representative wells have been removed from the monitoring network:

• 108, 123, 127, 422, 620, 831, 834, 835, 840, 843, 849

As shown in the Summary Statistics Section, there are 5 wells without current measurements. These "no measurement codes" can have different causes 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 98, 117, 124
- Measurement was not possible at the time when the field technician went to take measurements:
 - o **830, 833**



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