

GROUNDWATER CONDITIONS REPORT – CUYAMA VALLEY GROUNDWATER BASIN

October 2023

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Cuyama Basin Groundwater Sustainability Agency



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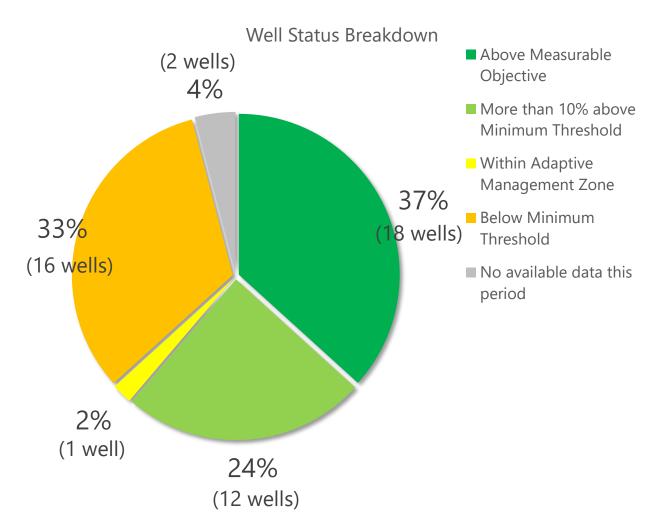
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1. INTRODUCTION

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 16 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, 30% of representative monitoring wells (i.e. 15 wells) have been below the minimum threshold for 1 or more consecutive months.

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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 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

	Apr-23 Jul-23 Oct-23 Last Year					огк Annual	
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change (ft)
72	Central	2019	2016	2017	2014	Oct-22	3
74	Central	1	1949	1940	1939	Oct-22	2
77	Central	1798	1781	1793	1779	Oct-22	14
91	Central	1810	1802	1800	1805	Oct-22	-5
95	Central	-	1837	1841	1851	Oct-22	-11
96	Central	2275	2269	2270	2269	Oct-22	1
98	Central	-	-	-	-	-	-
99	Central	2223	2181	2223	2158	Oct-22	65
102	Central	-	1598	1758	1622	Oct-22	136
103	Central	2045	2035	2044	2032	Oct-22	13
112	Central	2053	2053	2053	2053	Oct-22	0
114	Central	-	-	-	1877	Oct-22	-
316	Central	1808	1803	1799	1803	Oct-22	-4
317	Central	1	1805	1801	-	1	-
322	Central	2222	2174	2222	2156	Oct-22	66
324	Central	2220	2189	2221	2178	Oct-22	43
325	Central	2222	2202	2222	2200	Oct-22	22
420	Central	1795	1780	1792	1725	Oct-22	67
421	Central	1802	1787	1793	1787	Oct-22	6
474	Central	2202	2206	-	2203	Oct-22	-



		Apr-23	Jul-23	Oct-23	Las	t Year	Annual
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change (ft)
568	Central	1870	1869	1867	1851	Oct-22	16
604	Central	1656	1669	1684	-	1	-
608	Central	-	1799	1790	1782	Oct-22	8
609	Central	1705	1727	1725	1707	Oct-22	18
610	Central	1813	1806	1805	1808	Oct-22	-3
612	Central	1801	1779	1788	1786	Oct-22	1
613	Central	1788	1780	1801	1794	Oct-22	7
615	Central	1810	1812	1809	1814	Oct-22	-5
629	Central	1803	1845	1848	1812	Oct-22	37
633	Central	1851	1851	1798	1792	Oct-22	5
62	Eastern	2774	2783	2789	2757	Oct-22	32
85	Eastern	2844	2848	2870	2841	Oct-22	30
100	Eastern	2901	2911	2909	2846	Oct-22	63
101	Eastern	-	2634	2635	-	-	-
841	Northwestern	1685	1680	1692	1661	Oct-22	31
845	Northwestern	1647	1638	1637	1638	Oct-22	-1
2	Southeastern	3704	3702	3698	-	-	-
89	Southeastern	3428	3440	3432	3422	Oct-22	10
106	Western	2184	2184	2185	2182	Oct-22	3
107	Western	2390	2414	-	2390	Oct-22	-
117	Western	1950	1947	1946	1945	Oct-22	1



		Apr-23	Jul-23	Oct-23	Las	Annual	
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change (ft)
118	Western	2214	2216	2217	2212	Oct-22	6
124	Western	-	-	-	-	-	-
571	Western	2269	2238	2235	2182	Oct-22	53
573	Western	2015	2015	2015	2012	Oct-22	3
830	Far-West Northwestern	1516	1523	1522	1508	Oct-22	15
832	Far-West Northwestern	1596	1596	1595	1588	Oct-22	7
833	Far-West Northwestern	1426	1427	1434	-	-	-
836	Far-West Northwestern	1450	1459	1456	1447	Oct-22	9



Table 2: Well Status Related to Thresholds

		C			Within 10%	ed to Tillesin			
		Curre	ent Month	B.42	within 10%		NA/ - II		GSA
Well	Region	GWL	Date	Minimu m	Minimum	Measurable	Well	Status	Action
		(DTW)		Thresho Id	Threshold	Objective	Depth		Required?
72	Central	154	10/24/2023	169	165	124	790	More than 10% above Minimum Threshold	No
74	Central	253	10/24/2023	256	255	243		More than 10% above Minimum Threshold	No
77	Central	493	10/24/2023	450	445	400	980	Below Minimum Threshold (38 months)	No
91	Central	674	10/25/2023	625	620	576	980	Below Minimum Threshold (38 months)	No
95	Central	608	10/25/2023	573	570	538	805	Below Minimum Threshold (38 months)	No
96	Central	336	10/25/2023	333	332	325	500	Below Minimum Threshold (4 months)	No
98	Central	-		450	449	439	750	No available data since GSA monitoring began	No
99	Central	290	10/24/2023	311	310	300	750	Above Measurable Objective	No
102	Central	288	10/25/2023	235	231	197		Below Minimum Threshold (31 months)	No
103	Central	244	10/25/2023	290	285	235	1030	More than 10% above Minimum Threshold	No
112	Central	86	10/25/2023	87	87	85	441	More than 10% above Minimum Threshold	No
114	Central	-	10/25/2023	47	47	45	58	No available data this period (below MT in Oct 2022, 19 months)	No



		Curre	ent Month		Within 10%				GSA
Well	Region	GWL	Date	Minimu m	Minimum	Measurable	Well	Status	Action
		(DTW)		Thresho Id	Threshold	Objective	Depth		Required?
316	Central	675	10/25/2023	623	618	574	830	Below Minimum Threshold (38 months)	No
317	Central	673	10/25/2023	623	618	573	700	Below Minimum Threshold (38 months)	No
322	Central	291	10/24/2023	307	306	298	850	Above Measurable Objective	No
324	Central	292	10/24/2023	311	310	299	560	Above Measurable Objective	No
325	Central	291	10/24/2023	300	299	292	380	Above Measurable Objective	No
420	Central	494	10/24/2023	450	445	400	780	Below Minimum Threshold (38 months)	No
421	Central	493	10/24/2023	446	441	398	620	Below Minimum Threshold (38 months)	No
474	Central	1	10/25/2023	188	186	169	213	No data available this period (Above Measurable Objective in July 2023)	No
568	Central	37	10/25/2023	37	37	36	188	Below Minimum Threshold (1 month)	No
604	Central	440	10/24/2023	526	522	487	924	Above Measurable Objective	No
608	Central	433	10/24/2023	436	433	407	745	Within Adaptive Management Zone	No
609	Central	442	10/24/2023	458	454	421	970	More than 10% above Minimum Threshold	No
610	Central	637	10/25/2023	621	618	591	780	Below Minimum Threshold (30 months)	No
612	Central	479	10/24/2023	463	461	440	1070	Below Minimum Threshold (22 months)	No



		Curre	ent Month		Within 10%				GSA
Well	Region	GWL	Date	Minimu m	Minimum	Measurable	Well	Status	Action
		(DTW)		Thresho Id	Threshold	Objective	Depth		Required?
613	Central	530	10/24/2023	503	500	475	830	Below Minimum Threshold (36 months)	No
615	Central	518	10/24/2023	500	497	468	865	Below Minimum Threshold (35 months)	No
629	Central	530	10/24/2023	559	556	527	1000	More than 10% above Minimum Threshold	No
633	Central	566	10/24/2023	547	542	493	1000	Below Minimum Threshold 1 month)	No
62	Eastern	132	10/24/2023	182	178	142	212	Above Measurable Objective	No
85	Eastern	177	10/24/2023	233	225	147	233	More than 10% above Minimum Threshold	No
100	Eastern	95	10/24/2023	181	175	125	284	Above Measurable Objective	No
101	Eastern	106	10/24/2023	111	108	81	200	More than 10% above Minimum Threshold	No
841	Northwestern	69	10/24/2023	203	198	153	600	Above Measurable Objective	No
845	Northwestern	74	10/24/2023	203	198	153	380	Above Measurable Objective	No
2	Southeastern	22	10/24/2023	72	70	55	73	Above Measurable Objective	No
89	Southeastern	29	10/24/2023	64	62	44	125	Above Measurable Objective	No
106	Western	142	10/25/2023	154	153	141	228	More than 10% above Minimum Threshold	No
107	Western	-	10/25/2023	91	89	72	200	No data available this period (Above Measurable Objective in July 2023)	No



		Curre	ent Month		Within 10%				GSA
Well	Region	GWL	Date	Minimu m	Minimum	Measurable	Well	Status	Action
		(DTW)		Thresho Id	Threshold	Objective	Depth		Required?
117	Western	152	10/25/2023	160	159	151	212	More than 10% above Minimum Threshold	No
118	Western	53	10/25/2023	124	117	57	500	Above Measurable Objective	No
124	Western	-		73	71	57	161	No available data since GSA monitoring began	No
571	Western	72	10/25/2023	144	142	121	280	Above Measurable Objective	No
573	Western	69	10/25/2023	118	113	68	404	More than 10% above Minimum Threshold	No
830	Far-West Northwestern	49	10/25/2023	59	59	56	77	Above Measurable Objective	No
832	Far-West Northwestern	35	10/24/2023	45	44	30	132	More than 10% above Minimum Threshold	No
833	Far-West Northwestern	23	10/24/2023	96	89	24	504	Above Measurable Objective	No
836	Far-West Northwestern	30	10/24/2023	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.



Representative TDS Monitoring Network Wells and Status October 2023 Highways Above Measurable Objective Regular Reporting Cuyama River Below Minimum Threshold **Status Report** Streams/Creeks More than 10% above Minimum Threshold Cuyama Valley Within Adaptive Management Zone Groundwater Basin No available data this period Map Created: December 2023 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.

Any reliance upon the map or data contained herein shall be at the users' sole risk.

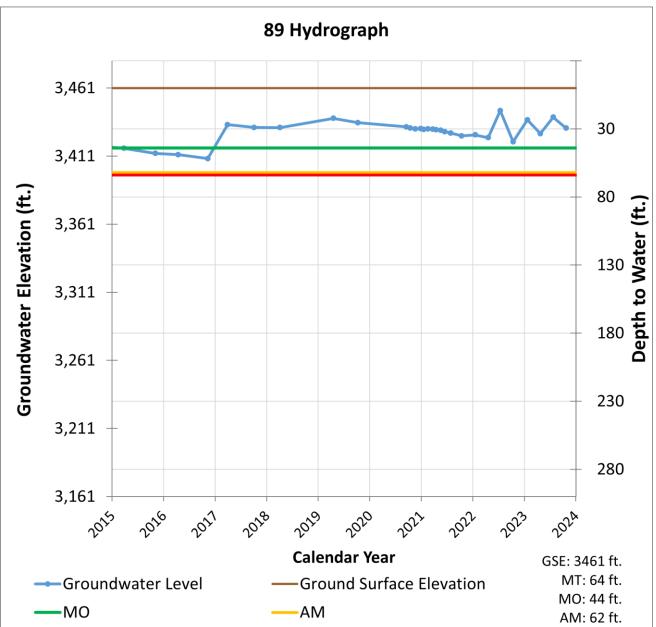
Figure 1: Groundwater Level Representative Wells and Status in October 2023



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





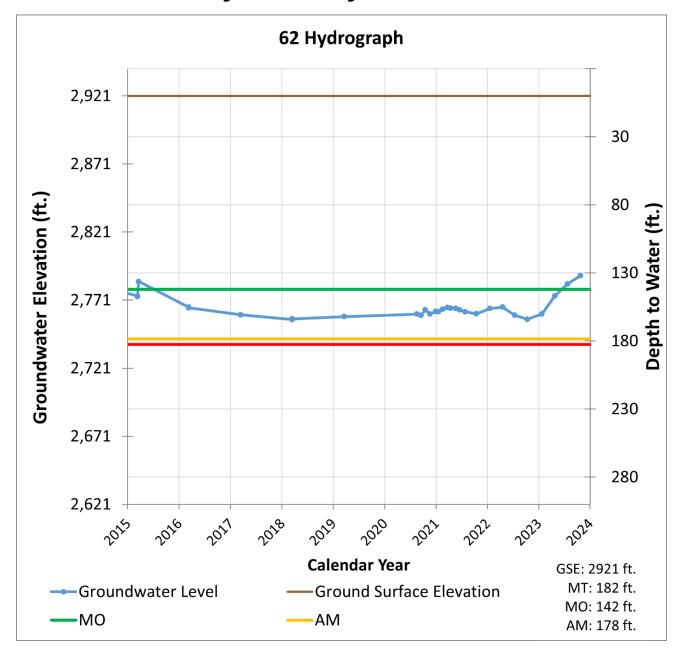


Figure 3: Eastern Region – Well 62



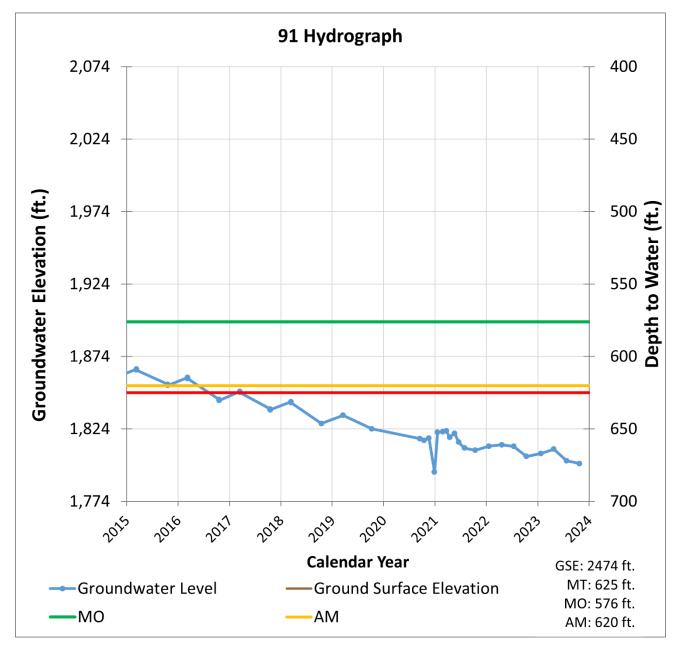


Figure 4: Central Region – Well 91



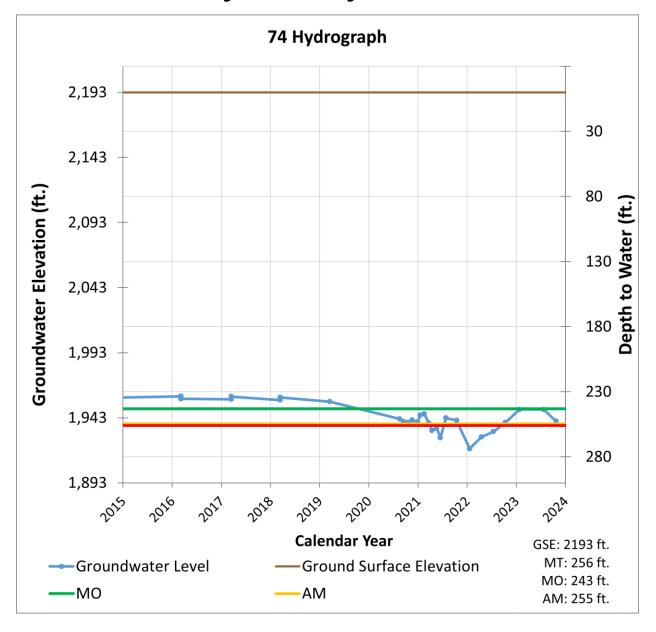


Figure 5: Central Region – Well 74



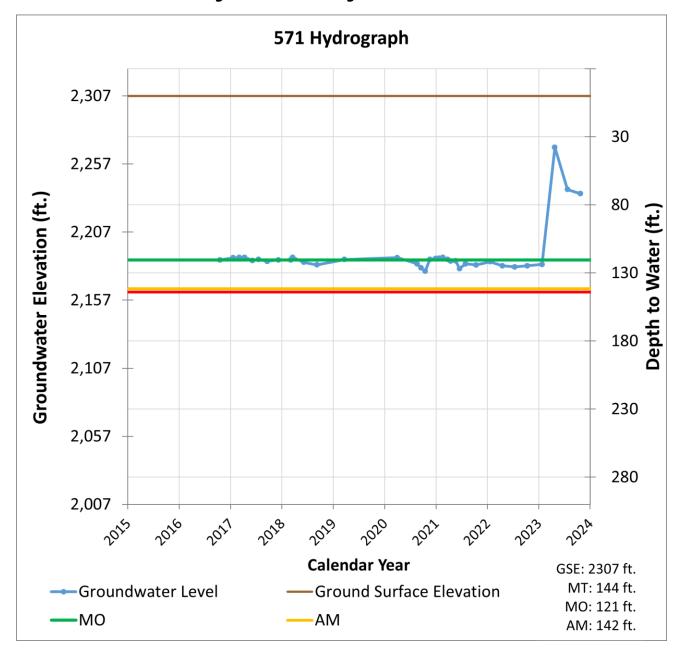


Figure 6: Western Region - Well 571



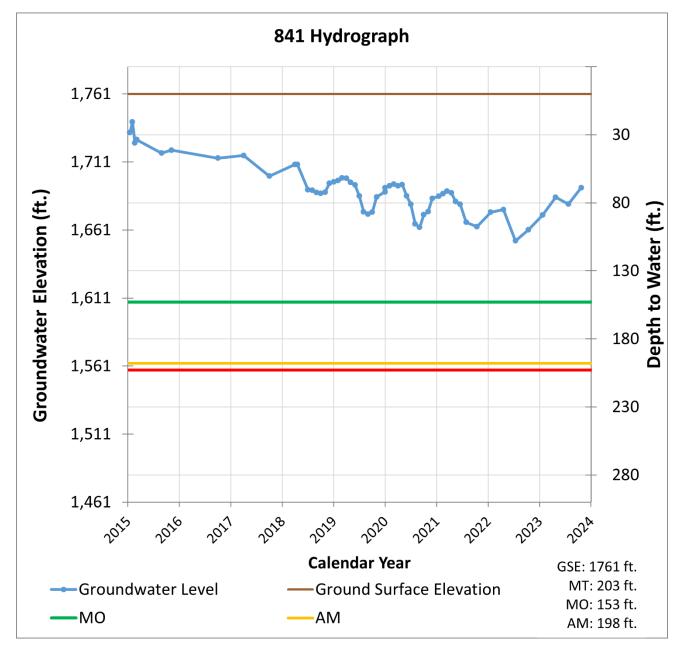


Figure 7: Northwestern Region – Well 841



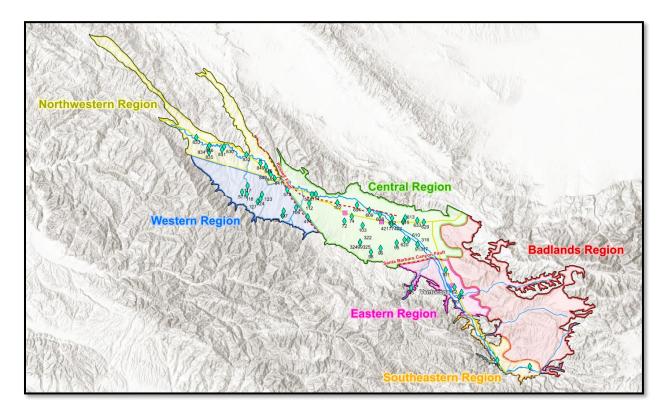


Figure 8: Threshold Regions in the Cuyama Groundwater Basin

5. MONITORING NETWORK UPDATES

As shown in Table 2, there are 5 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:
 - o Wells 98, 124
- Measurement was not possible at the time when the field technician went to take measurements:
 - o Wells 107, 114, 474



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