



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

February-March 2021

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**Cuyama Valley
Groundwater
Sustainability Agency**

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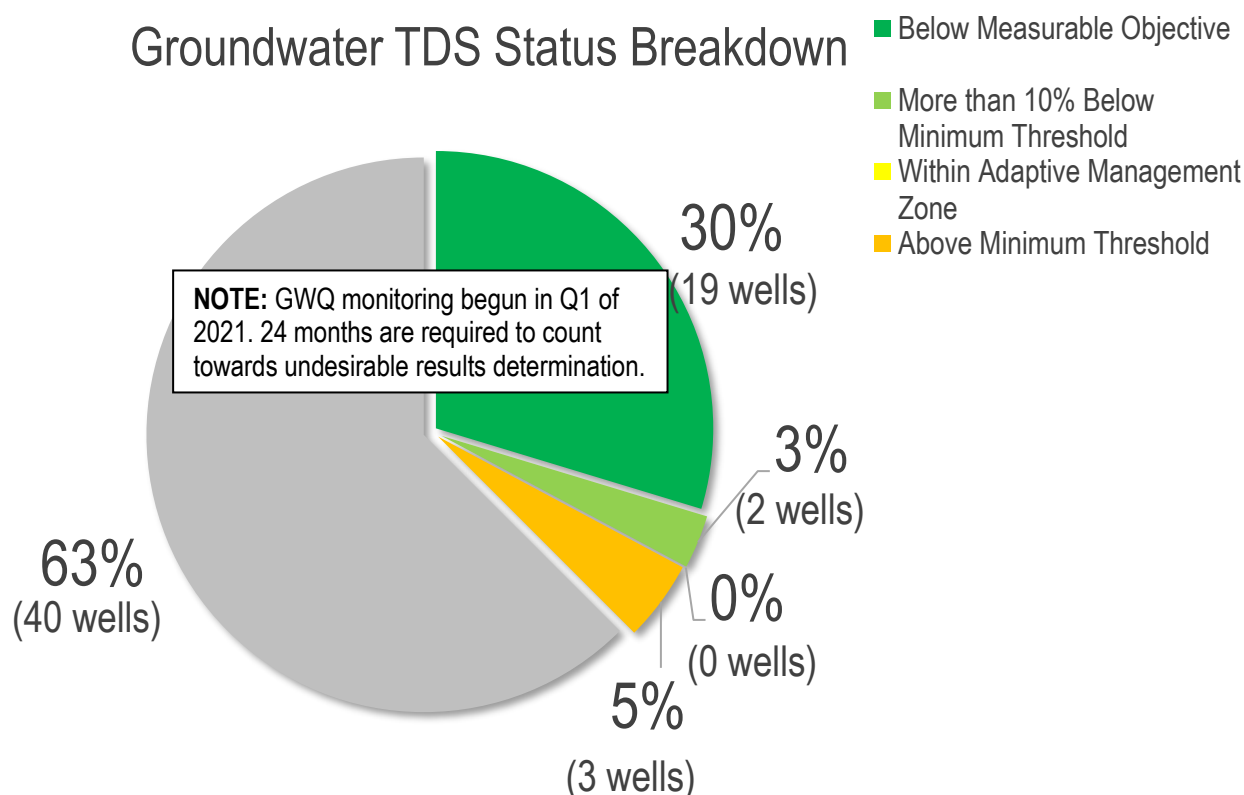
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1. INTRODUCTION

This report is intended to provide an update on the current groundwater quality as total dissolved solids (TDS) conditions in the Cuyama Valley Groundwater Basin. TDS measurements were taken during February and March, 2021. 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 degraded water quality occurs, “when 30 percent of representative monitoring points... fall below their minimum groundwater elevation threshold for two consecutive years.” (Cuyama GSP, pg. 3-4).

3. CURRENT CONDITIONS

Table 1 includes the most recent TDS measurements taken in the Cuyama Basin from representative wells included in the Cuyama GSP Groundwater Quality Monitoring Network, which were taken during February and March, 2021. Per the plan described in the GSP, it is the intention of the GSA to take TDS measurements once per 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 have also be incorporated into the Cuyama DMS, which may be accessed at <https://opti.woodardcurran.com/cuyama/login.php>.

Table 1: Recent Total Dissolved Solids Measurements for Representative Monitoring Network

Well	Region	N/A	N/A	Q1, 2021
		GWQ TDS, mg/L	GWQ TDS, mg/L	GWQ TDS, mg/L
61	Southeastern			-
72	Central			559
73	Central			-
74	Central			1260
76	Central			-
77	Central			1070
79	Central			1790
81	Central			-
83	Eastern			1120
85	Eastern			-
86	Eastern			-
87	Badlands			-
88	Badlands			330
90	Central			-
91	Central			-
94	Central			964
95	Central			1290
96	Central			1210
98	Central			-
99	Central			1010
101	Eastern			-
102	Central			905
130	Southeastern			-
131	Eastern			-
157	Southeastern			1360
196	Eastern			-
204	Badlands			826
226	Eastern			-
227	Eastern			-
242	Eastern			826

Well	Region	N/A	N/A	Q1, 2021
		GWQ TDS, mg/L	GWQ TDS, mg/L	GWQ TDS, mg/L
269	Eastern			-
309	Central			-
316	Central			-
317	Central			692
318	Central			-
322	Central			1120
324	Central			488
325	Central			746
400	Central			1350
420	Central			-
421	Central			797
422	Central			-
424	Central			1270
467	Central			1140
568	Central			872
702	Southeastern			-
703	Northwestern			-
710	Eastern			-
711	Central			872
712	Central			-
713	Central			-
721	Central			-
758	Badlands			-
840	Northwestern			-
841	Northwestern			-
842	Northwestern			-
843	Northwestern			-
844	Northwestern			-
845	Northwestern			-
846	Northwestern			-
847	Northwestern			-

Well	Region	N/A	N/A	Q1, 2021
		GWQ TDS, mg/L	GWQ TDS, mg/L	GWQ TDS, mg/L
848	Northwestern			-
849	Northwestern			-
850	Northwestern			-

Note: Previous year values and annual changes in TDS will be reported after the CBGSA monitoring program has completed a second round of monitoring in the next fiscal year.

Table 2: Well Status Related to Thresholds

Well	Region	Current		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Status	GSA Action Required?
		TDS (mg/L)	Date					
61	Southeastern	-	-	615	612	585	No available data this period	No
72	Central	559	2/25/2021	1023	1020	996	Below Measurable Objective	No
73	Central	-	-	856	851	805	No available data this period	No
74	Central	1260	2/25/2021	1833	1800	1500	Below Measurable Objective	No
76	Central			2307	2226	1500	No available data this period	No
77	Central	1070	2/16/2021	1592	1583	1500	Below Measurable Objective	No
79	Central	1790	3/17/2021	2320	2238	1500	More than 10% Below Minimum Threshold	No
81	Central	-	-	2788	2659	1500	No available data this period	No
83	Eastern	1120	3/17/2021	1726	1703	1500	Below Measurable Objective	No
85	Eastern	-	-	1391	1314	618	No available data this period	No
86	Eastern	-	-	975	974	969	No available data this period	No
87	Badlands	-	-	1165	1157	1090	No available data this period	No
88	Badlands	330	2/25/2021	302	302	302	Above Minimum Threshold	No
90	Central	-	-	1593	1584	1500	No available data this period	No
91	Central	-	-	1487	1479	1410	No available data this period	No
94	Central	964	3/17/2021	1245	1226	1050	Below Measurable Objective	No
95	Central	1290	2/15/2021	1866	1829	1500	Below Measurable Objective	No
96	Central	1210	2/25/2021	1632	1619	1500	Below Measurable Objective	No
98	Central	-	-	2400	2310	1500	No available data this period	No
99	Central	1010	2/16/2021	1562	1555	1490	Below Measurable Objective	No

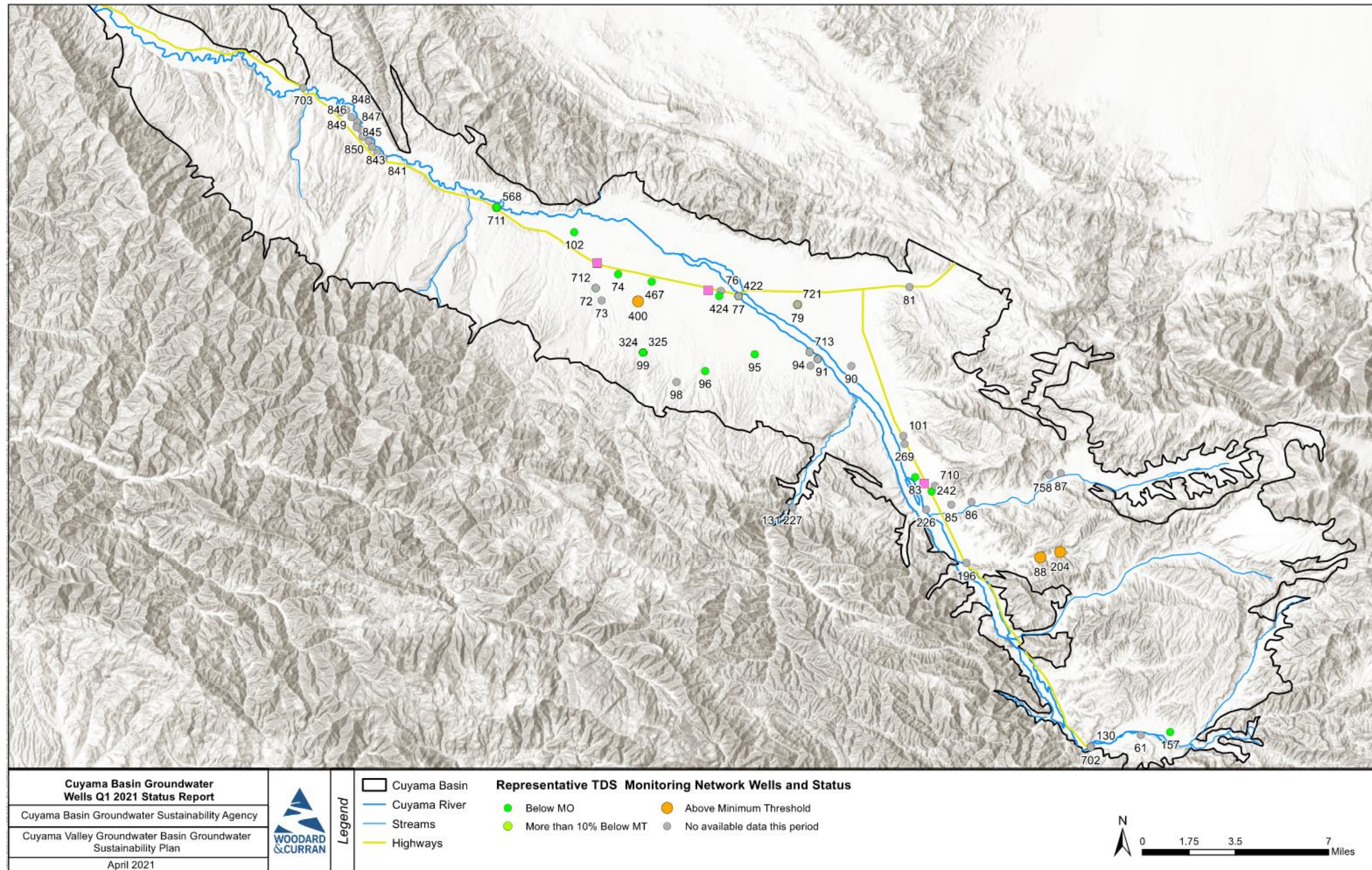
Well	Region	Current		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Status	GSA Action Required?
		TDS (mg/L)	Date					
101	Eastern	-	-	1693	1674	1500	No available data this period	No
102	Central	905	2/25/2021	2351	2266	1500	Below Measurable Objective	No
130	Southeastern	-	-	1855	1820	1500	No available data this period	No
131	Eastern	-	-	1982	1934	1500	No available data this period	No
157	Southeastern	1360	3/17/2021	2360	2274	1500	Below Measurable Objective	No
196	Eastern	-	-	904	898	851	No available data this period	No
204	Badlands	826	2/26/2021	269	267	253	Above Minimum Threshold	No
226	Eastern	-	-	1844	1810	1500	No available data this period	No
227	Eastern	-	-	2230	2157	1500	No available data this period	No
242	Eastern	826	2/26/2021	1518	1513	1470	Below Measurable Objective	No
269	Eastern	-	-	1702	1682	1500	No available data this period	No
309	Central	-	-	1509	1499	1410	No available data this period	No
316	Central	-	-	1468	1459	1380	No available data this period	No
317	Central	692	2/25/2021	1337	1329	1260	Below Measurable Objective	No
318	Central	-	-	1152	1145	1080	No available data this period	No
322	Central	1120	2/16/2021	1386	1382	1350	Below Measurable Objective	No
324	Central	488	2/25/2021	777	774	746	Below Measurable Objective	No
325	Central	746	2/25/2021	1569	1559	1470	Below Measurable Objective	No
400	Central	1350	3/17/2021	976	970	918	Above Minimum Threshold	No
420	Central	-	-	1490	1484	1430	No available data this period	No

Well	Region	Current		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Status	GSA Action Required?
		TDS (mg/L)	Date					
421	Central	797	2/25/2021	1616	1604	1500	Below Measurable Objective	No
422	Central	-	-	1942	1898	1500	No available data this period	No
424	Central	1270	2/25/2021	1588	1579	1500	Below Measurable Objective	No
467	Central	1140	3/17/2021	1764	1738	1500	Below Measurable Objective	No
568	Central	872	2/15/2021	1191	1159	871	More than 10% Below Minimum Threshold	No
702	Southeastern	-	-	2074	1878	110	No available data this period	No
703	Northwestern	-	-	4097	3727	400	No available data this period	No
710	Eastern	-	-	1040	1040	1040	No available data this period	No
711	Central	872	2/15/2021	928	928	928	Below Measurable Objective	No
712	Central	-	-	978	977	977	No available data this period	No
713	Central	-	-	1200	1200	1200	No available data this period	No
721	Central	-	-	2170	2103	1500	No available data this period	No
758	Badlands	-	-	954	949	900	No available data this period	No
840	Northwestern	-	-	559	559	559	No available data this period	No
841	Northwestern	-	-	561	561	561	No available data this period	No
842	Northwestern	-	-	547	547	547	No available data this period	No
843	Northwestern	-	-	569	569	569	No available data this period	No
844	Northwestern	-	-	481	481	481	No available data this period	No
845	Northwestern	-	-	1250	1250	1250	No available data this period	No
846	Northwestern	-	-	918	918	918	No available data this period	No

Well	Region	Current		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Status	GSA Action Required?
		TDS (mg/L)	Date					
847	Northwestern	-	-	480	480	480	No available data this period	No
848	Northwestern	-	-	674	674	674	No available data this period	No
849	Northwestern	-	-	1780	1752	1500	No available data this period	No
850	Northwestern	-	-	472	472	472	No available data this period	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 Quality Representative Wells and Status



4. WATER QUALITY TIME SERIES FIGURES

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

Figure 2: Southeast Region – Well 157

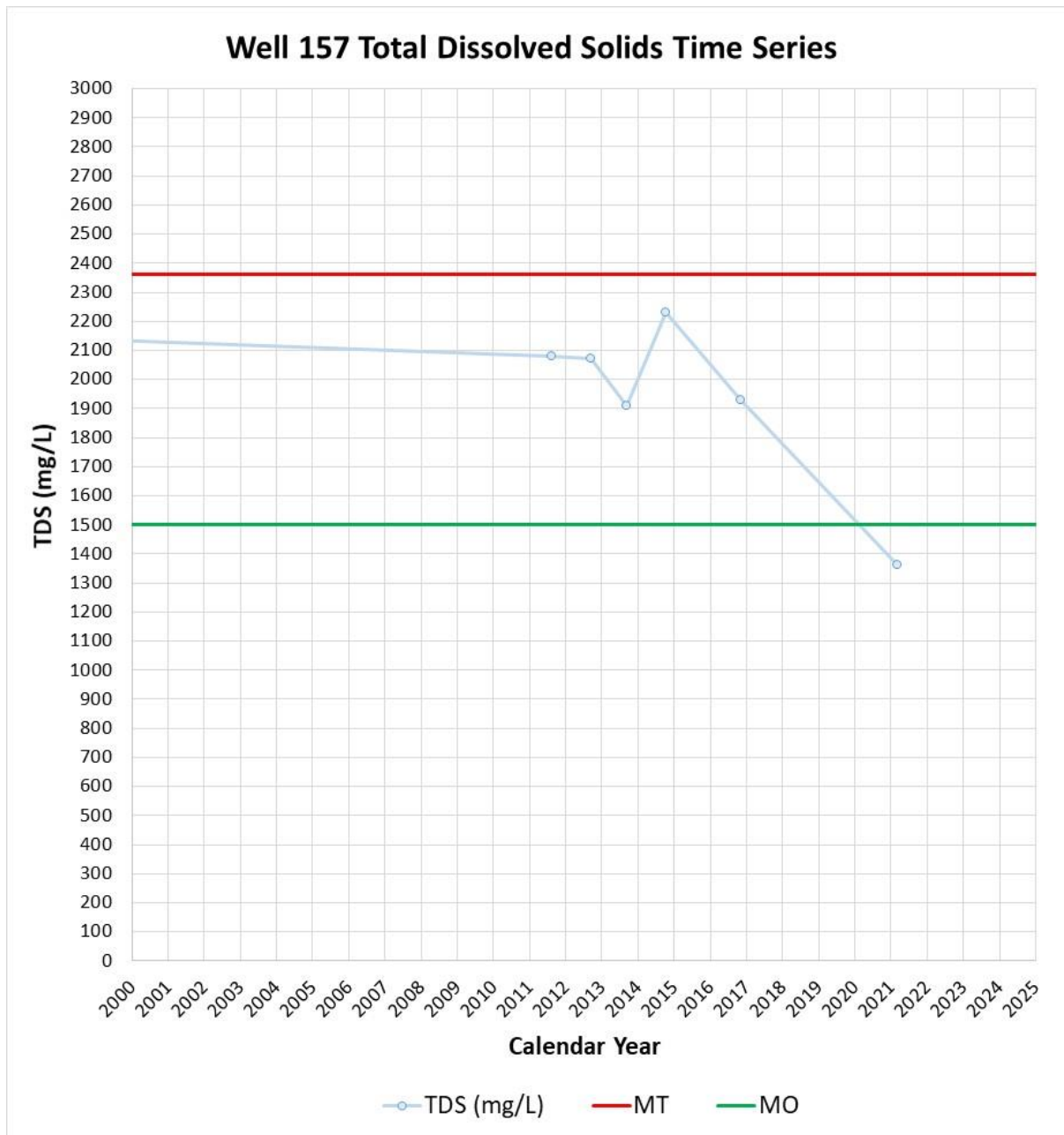


Figure 3: Eastern Region – Well 83

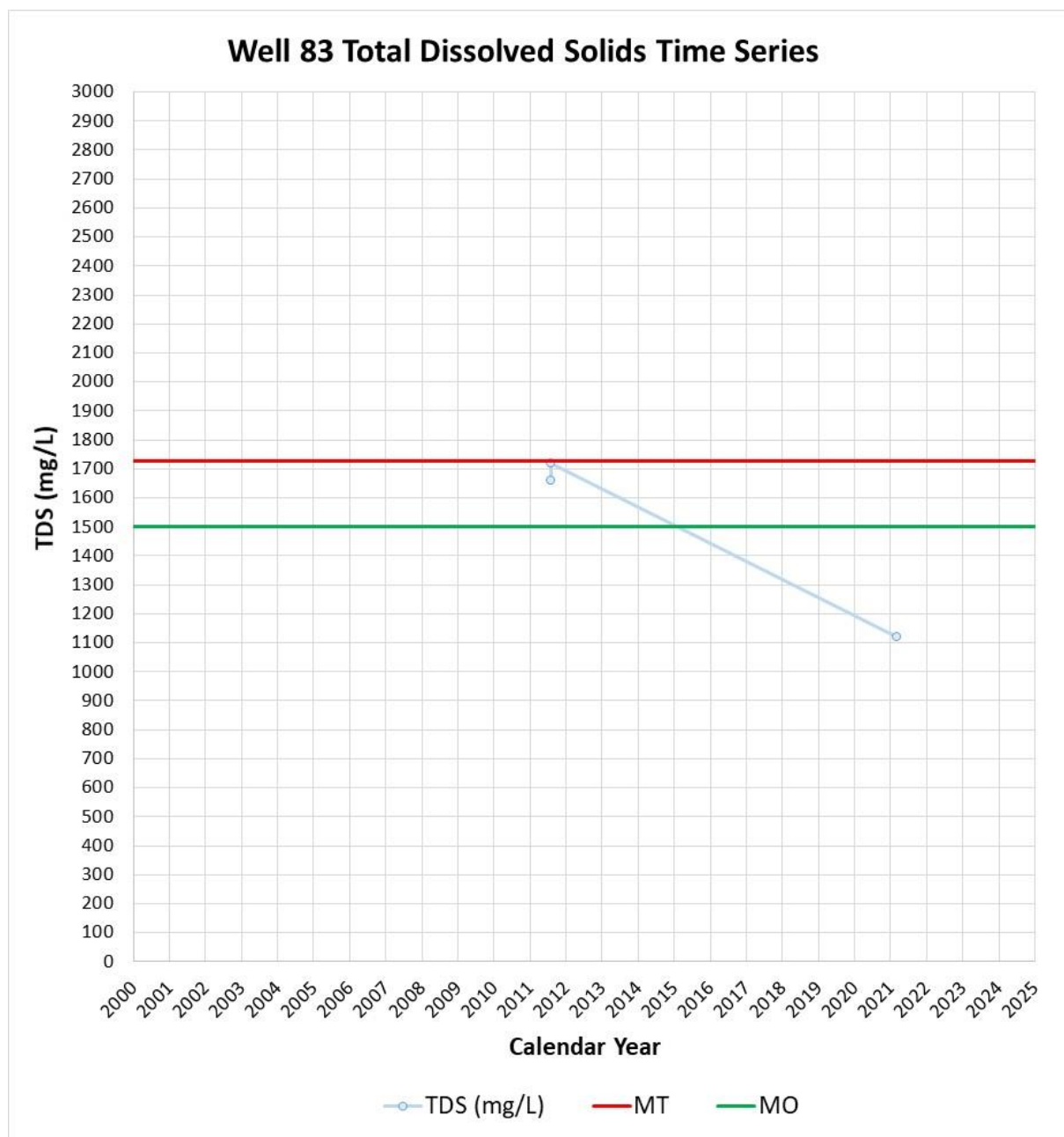


Figure 4: Central Region – Well 467

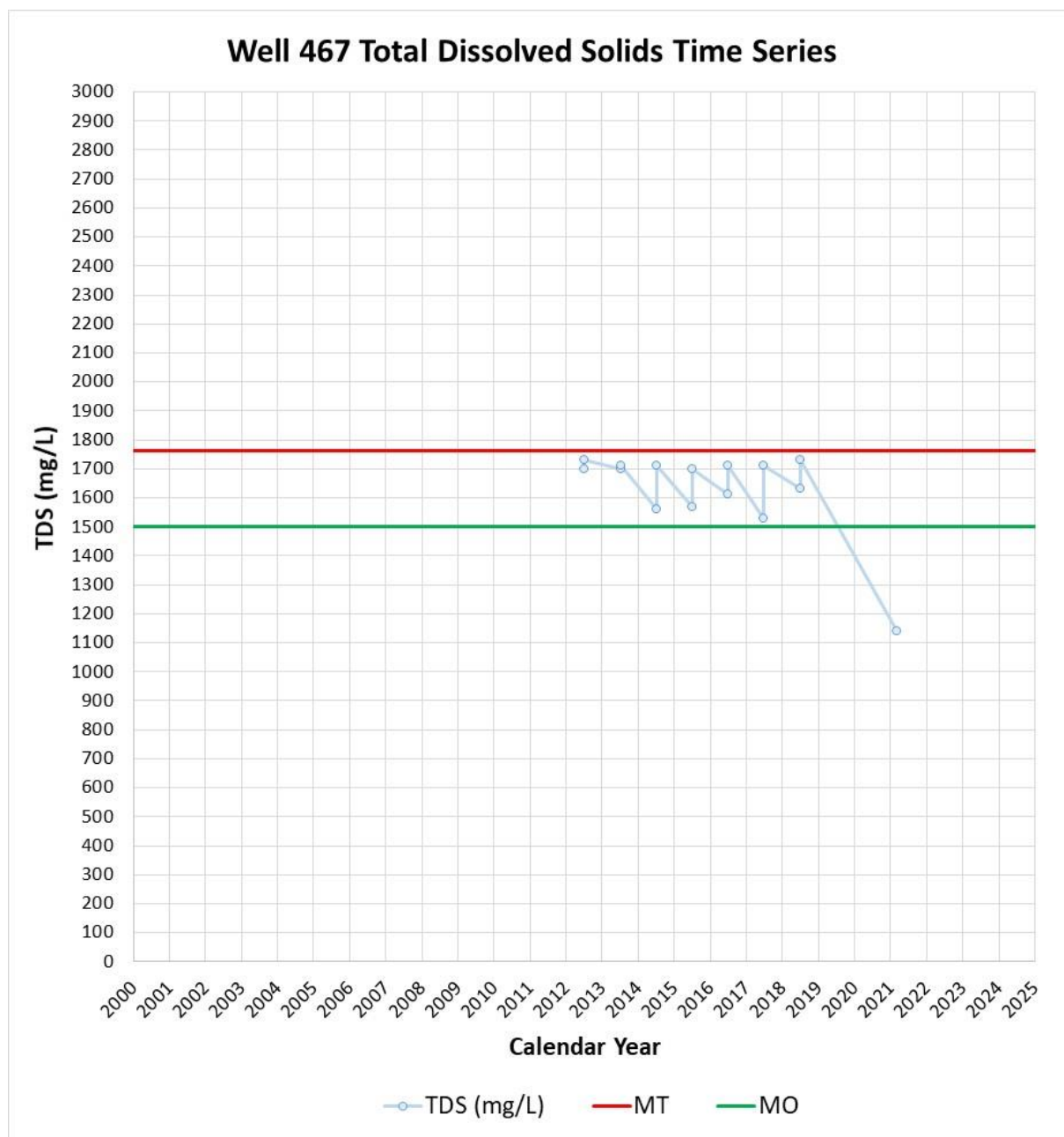


Figure 5: Central Region – Well 400

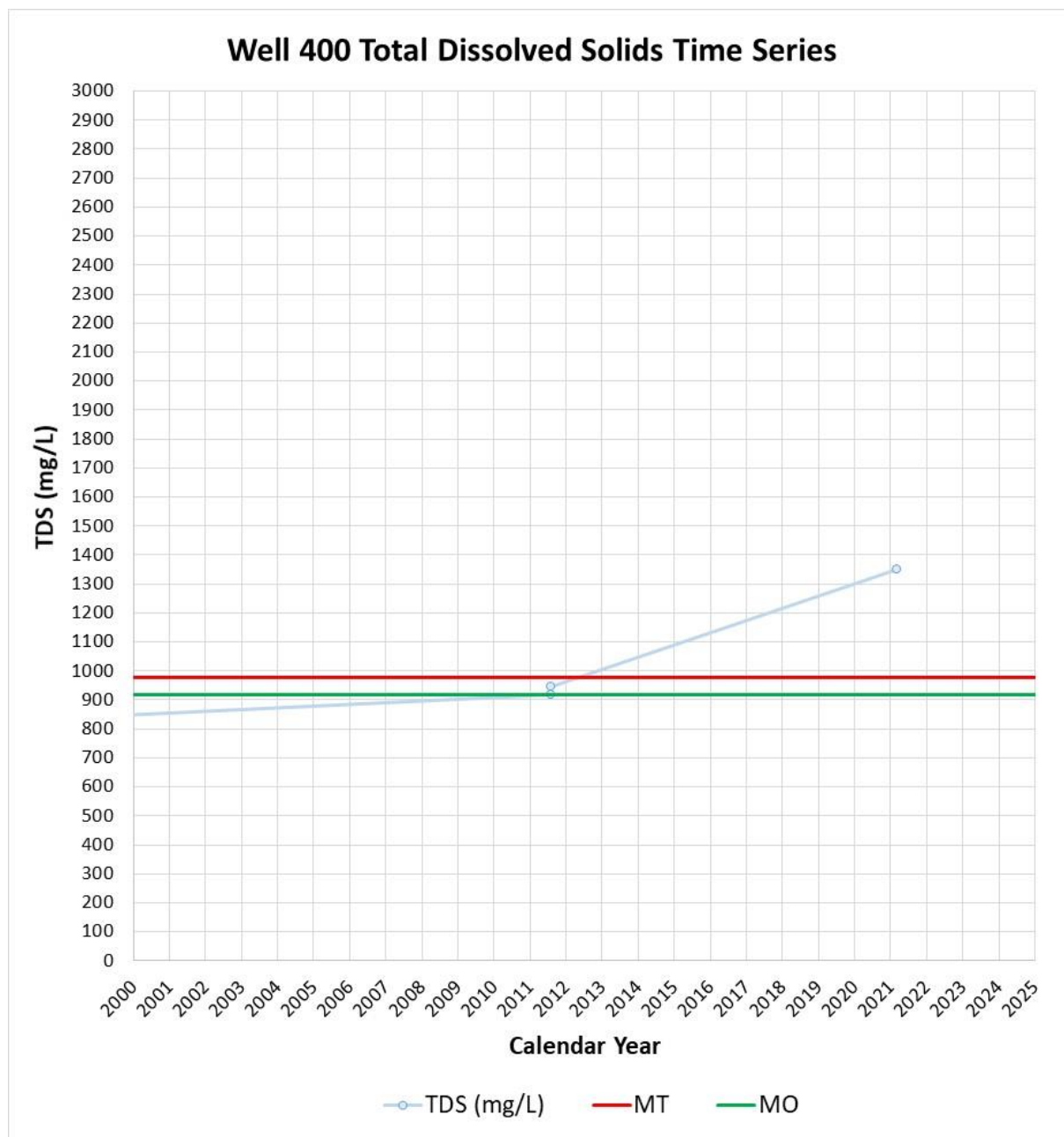


Figure 6: Western Region – Well TBD

No data from this Threshold Region at this time.

Figure 7: Northwestern Region – Well TBD

No data from this Threshold Region at this time.

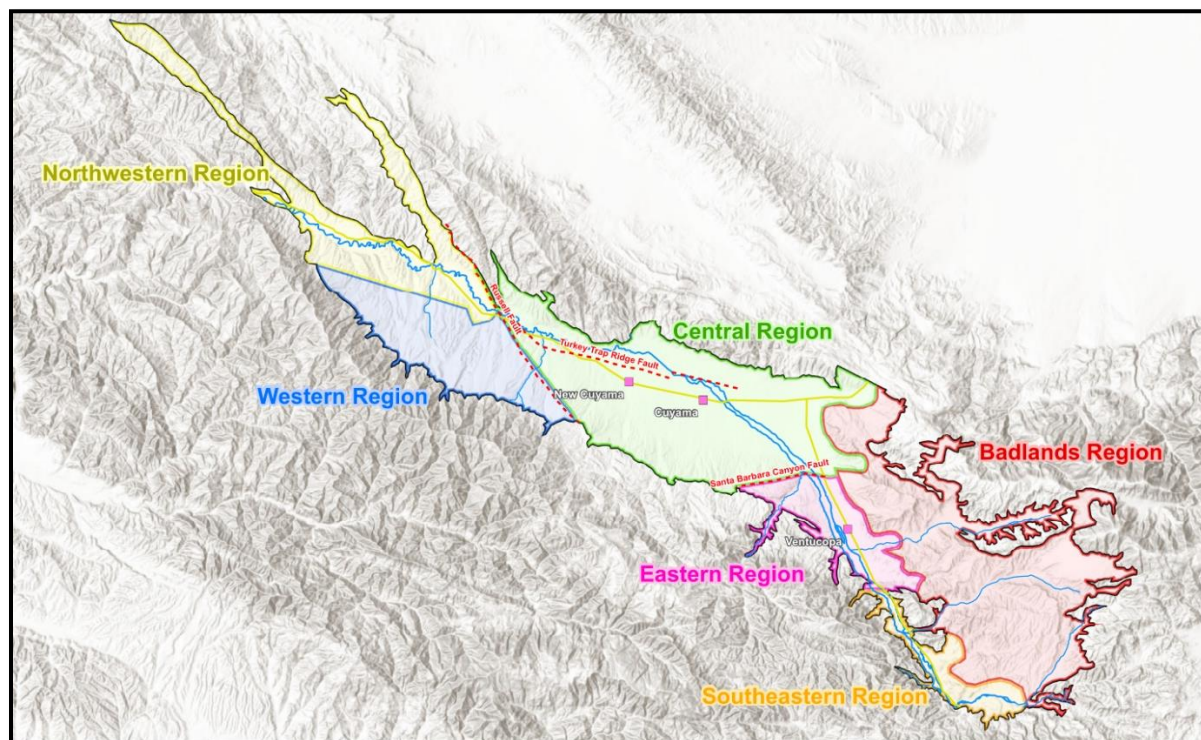


Figure 8: Threshold Regions in the Cuyama Groundwater Basin

5. MONITORING NETWORK UPDATES

As shown in the Summary Statistics Section, there are 40 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 61, 73, 76, 81, 85, 86, 87, 90, 98, 101, 130, 131, 196, 226, 227, 269, 309, 702, 703, 710, 712, 713, 721, 758, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850
- Transducer data is not currently available:
 - Wells 91, 316, 420
- The well has gone dry:
 - Well 318, 422



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