



6 TABLES OF MONITORING PROGRAM SUMMARIES AND TRENDS

Table 6-1: Prior Five Years of Results of the Groundwater Quality Monitoring Program in the Management Area

Management Zone	Year	No. of Wells	TDS (mg/L)		NO ₃ -N (mg/L)	
			Max	Min	Max	Min
Lakeview	2016	27	3,300	310	18.0	< 0.1
	2017	24	3,000	270	14.0	< 0.1
	2018	28	2,730	268	20.3	< 0.4
	2019	26	4,200	288	23	< 0.2
	2020	26	3,000	239	19.6	< 0.2
Perris North	2016	15	2,100	230	53.0	< 0.1
	2017	12	1,900	330	20.0	< 0.1
	2018	17	2,160	352	42.6	< 0.4
	2019	14	1,970	328	40	0.23
	2020	10	1,650	394	25.1	< 0.4
Perris South	2016	37	13,000	390	35.0	< 0.1
	2017	45	12,000	420	27.0	< 0.1
	2018	45	11,700	446	12	< 0.4
	2019	47	28,000	560	13	< 0.2
	2020	49	16,900	390	20.6	< 0.2
San Jacinto Lower Pressure	2016	6	3,100	350	8.0	< 0.1
	2017	4	1,600	350	8.1	< 0.1
	2018	6	920	384	9.4	< 0.4
	2019	3	1,000	360	8.2	< 0.2
	2020	3	1,810	376	10.2	< 0.4
Menifee	2016	6	2,300	890	9.8	2.0
	2017	2	1,200	150	4.0	< 0.1
	2018	5	2,950	900	8.5	0.7
	2019	6	2,800	930	8.5	3.7
	2020	5	3,180	860	2.9	8.8
Hemet South (partial)	2016	4	720	510	16.0	11.0
	2017	2	550	590	12.0	12.0
	2018	4	918	700	26.7	19.0
	2019	2	1,100	950	31	31
	2020	2	702	652	14.2	13

Note: The same wells were not necessarily sampled each year, which may cause fluctuations in high and low values. It should also be noted that water quality and the character of groundwater are determined by a number of factors including: mineral content of sediments; recharge and drainage patterns; historic land use practices; and screening intervals and depths of wells sampled, to name a few.

Table 6-2: Historical Results of the Groundwater Level Monitoring Program in the Management Area

Number of Wells Measured														
Management Zone	Lakeview		Perris North		Perris South		San Jacinto Lower Pressure		Menifee		Hemet South (partial)		Totals	
Year	Spr.	Fall	Spr.	Fall	Spr.	Fall	Spr.	Fall	Spr.	Fall	Spr.	Fall	Spr.	Fall
2016	24	27	26	24	55	56	21	19	15	15	4	4	145	145
2017	28	29	25	24	60	60	21	21	13	11	4	3	151	148
2018	27	25	25	27	59	59	21	21	13	12	4	3	149	147
2019	23	23	24	23	55	54	18	14	12	11	4	3	136	128
2020	24	25	25	22	58	54	14	20	13	12	4	2	138	135
Maximum and Minimum Depth To Water (feet)														
Management Zone	Lakeview		Perris North		Perris South		San Jacinto Lower Pressure		Menifee		Hemet South (partial)		Totals	
Year	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
2016	87.5	234.2	14.2	206.7	4.6	90.9	22.1	259.1	81.2	126.9	61.1	90.3	4.6	259.1
2017	89.7	232.4	11.1	186.4	1.7	193.0	13.1	257.6	79.1	127.2	55.6	63.4	1.7	257.6
2018	89.4	229.1	14.5	180.0	2.9	202.8	18.5	255.8	76.9	115.3	51.2	58.5	2.9	255.8
2019	93.0	224.6	14.4	85.4	1.8	91	65.6	252.4	72.9	109	47.6	56.9	1.8	252.4
2020	90.5	223.5	10.3	85.3	3.1	97	66.4	252.2	68.7	102.1	45.1	54.4	3.1	252.2

Note: The above figures represent the number of wells actually sampled or measured rather than the number of wells participating in the program. Not all participating wells could be sampled or measured each year due to flooding, access, or other constraints.

Table 6-3: Historical Results of the Wells Monitored for Groundwater Extraction in the Management Area

Year	Method of Determining Groundwater Extraction			
	Number of Meters Read by EMWD	Number of Meters Read by Other Agencies & Reported to EMWD	Number of Wells with Extraction Estimated by EMWD	Total Wells
2016	38	4	14	56
2017	38	4	14	56
2018	39	4	14	57
2019	40	4	14	58
2020	43	4	12	59

Table 6-4: Historical Results of the Groundwater Extraction Monitoring Program in the Management Area

Management Zone Year	Groundwater Extraction (AF)						Total
	Lakeview	Perris North	Perris South	San Jacinto Lower Pressure	Menifee	Hemet South (partial)	
2016	5,572	5,466	7,813	1,301	4,024	265	24,441
2017	5,562	3,941	6,890	1,090	4,244	112	21,839
2018	5,398	4,406	6,765	1,088	4,155	1	21,813
2019	5,143	2,347	7,687	651	3,894	4	19,726
2020	3,620	3,358	8,221	179	4,457	23	19,858

Table 6-5: Historical Results of the San Jacinto Watershed Groundwater Recordation Program in the Management Area

Management Zone Year	Groundwater Extraction (AF)						
	Lakeview	Perris North	Perris South	San Jacinto Lower Pressure	Menifee	Hemet South (partial)	Total
2015	2,951	5,668	9,445	271	1,825	350	20,510
2016	2,438	5,066	7,628	550	3,038	272	18,992
2017	1,966	2,908	6,735	540	3,179	120	15,448
2018	1,621	4,006	5,884	538	9,558	8	21,615
2019	3,888	1,323	7,502	251	4,297	0	17,260

Table 6-6: Historical Results of the Recycled Water Monitoring in the Management Area

Management Zone Year	Recycled Water Use (AF)						
	Lakeview	Perris North	Perris South	San Jacinto Lower Pressure	Menifee	Hemet South (partial)	Total
2016	3,880	1,164	5,354	7,584	662	405	19,049
2017	2,858	1,218	4,818	7,866	1,178	305	18,243
2018	3,402	1,311	4,109	8,133	950	289	18,194
2019	3,489	1,296	3,573	6,694	592	249	15,893
2020	4,696	1,028	3,723	5,953	779	262	16,441

Table 6-7: Historical Results of the Precipitation Monitoring Program in the Management Area

Precipitation (inches)					
Station	Lakeview*	Lake Perris	Moreno Valley East*	Sun City	Winchester
Long-term Average	1910-2012	1989-2020	2001-2020	1989-2020	1989-2020
	11.65	9.43	11.45	10.33	10.28
2016	-	8.01	11.26	8.46	8.89
2017	-	6.90	8.91	8.42	7.76
2018	-	5.61	8.63	6.34	6.78
2019	-	14.07	16.59	15.20	15.18
2020	-	9.41	9.74	9.57	10.58

*Data does not represent 31-year mean precipitation for long-term average

Table 6-8: Historical Results of the Inactive Well Capping/Sealing Program in the Management Area

Management Zone	Inactive Well Capping/Sealing						Totals
	Lakeview	Perris North	Perris South	San Jacinto Lower Pressure	Menifee	Hemet South (partial)	
Year							
2016	0	0	0	0	0	0	0
2017	1	0	0	0	0	0	1
2018	1	0	0	0	0	0	1
2019	2	0	0	0	0	0	2
2020	0	1	6	1	0	0	8
2000-2020	11	10	32	11	11	0	75

Table 6-9: Historical Results of the County Well Permits in the Management Area

Permit Type Year	Well Permits in the Management Area by Type and Year						Totals
	Domestic/ Individual Community Wells	Agricultural Wells	Monitoring Wells	Cathodic Protection Wells	Well Abandonment	Well Evaluation or Other	
2016	4	2	18	1	139	0	164
2017	4	0	19	2	35	0	60
2018	6	1	62	4	1	0	74
2019	2	4	11	4	7	2	30
2020	6	2	4	4	7	1	24

Table 6-10: 2020 Monthly Groundwater Production in the Management Area

Month	Box Springs	EMWD	NWC	City of Perris Water	Private	Total
January	8	846	28	41	173	1,095
February	6	682	28	47	170	933
March	12	894	34	37	278	1,256
April	20	1,154	31	41	410	1,656
May	27	1,287	66	66	616	2,062
June	35	974	61	57	761	1,888
July	39	1,183	84	77	912	2,294
August	33	1,233	74	81	934	2,355
September	27	1,053	83	74	768	2,005
October	27	1,027	49	68	672	1,842
November	15	903	40	54	353	1,364
December	10	731	38	54	275	1,107
Total	260	11,967	614	696	6,321	19,858

Note: Monthly groundwater production rounded to the nearest whole number.