

McMullen Valley Basin - Index-Well Hydrology Data

updated 1-27-2024 J. Daly

Index	Well #	Location	Notes	Depth to Water, feet										Change in Depth to Water													
				2023	2021	2019	2017	2015	2013	2011	2009					2023	2021	2019	2017	2015	2013	2011					
500248	3.5 mi ESE of Aguila	Stable / Dropping slowly		703.7	694.0	688.6	688.1	684.3	687.3	678.2	672.5					-9.7	-5.4	-0.5	-3.8	3.0	-9.1	-5.7					
546173	WSW of Aguila (Gladden)	Dropping very slowly		552.0	553.2	549.1	547.1	545.4	545.4	541.5	538.4	11/2022 data			1.2	-4.1	-2.0	-1.7	0.0	-3.9	-3.1						
604129	In Aguila	Stable / Rising		564.9	579.2	579.1	577.6	578.1	578.6	577.5	568.4				14.3	-0.1	-1.5	0.5	0.5	-1.1	-9.1						
604150	6 mi W. of Aguila	Large fluctuations		381.9	381.1	377.3	382.6	372.0	384.6	362.1	361.8				-0.8	-3.8	5.3	-10.6	12.6	-22.5	-0.3						
612679	S of Pete Rd @ 527th Ave	Relatively stable		652.4	650.0	648.2	646.1	644.8	643.4	640.3	641.0				-2.4	-1.8	-2.1	-1.3	-1.4	-3.1	0.7						
614493	Jackrabbit Wash	Stock tank, stable		258.0	258.2	258.4	258.2	258.1	258.8	259.5	259.4				0.2	0.2	-0.2	0.6	0.7	0.7	-0.1						
614563	12 mi ENE of Aguila	Stable / Rising		405.9	410.9	411.1	411.1	411.3			411.5	12/2022 data			5.0	0.2	0.0	0.2		0.0	0.1						
614567	NW of Aguila	Relatively stable		563.8	561.5	560.0	557.7	546.7	552.7	550.5	549.9				-2.3	-1.5	-2.3	-11.0	6.0	-2.2	-0.6						
640729	N of Aguila	Pumping 2015 - 2018		571.8	569.5		574.2	565.0	556.2	559.3	558.5				-2.3			-9.2	-8.8	-8.8							
647309	9 mi E of Aguila, Hwy 60	Relatively stable		490.3	488.9	491.3	490.1	487.9	487.8	492.9	490.5				-1.4	2.4	-1.2	-2.2	-0.1	5.1	-2.4						
807721	5 mi ENE of Aguila	Dropping slowly (b4 '21)		645.3	650.9	639.6	636.9	634.2	631.5	629.6	627.6				5.6	-11.3	-2.7	-2.7	-2.7	-1.9	-2.0						
															AVGs >	0.7	-2.5	-0.7	-3.7	1.0	-4.3	-2.3					
Notes:																											
Some residents have been concerned about water-levels, These are the index wells in our area that I'm tracking now, in order to see the effects of the farm pumping in this area.																											
Normally, well sweeps in this area (measurement of depth to water) are done near the end of the year.																											
Two of the wells are not measured every year, hence the missing data. The 640729 readings for 2012/13 look like possible errors.																											
Some wells are in use, most are not. But all are utilized to measure depth to the aquifer level in that area. That's why they are called "Index Wells".																											
The McMullen Valley Basin stretches from just east of Forepaugh to just west of Salome.																											
In 2004, the aquifer was estimated to contain approx 15.1 million acre-feet, with an annual recharge of ~1000 acre-feet.																											
The recent estimates of annual water usage (done by the USGS) in the McMullen Valley has been: Agricultural: 47,000 a-f, Domestic: 300 a-f. Updated @ 5-yr intervals, next is in 2020.																											
I have added individual well history / comments on page 2.																											
Note >	In 2021, I changed to readings every two years, due to lack of space on the spreadsheet (plus, water-depths have been more stable lately). Previous yearly data is archived on sheet 3.																										

McMullen Valley Basin - Index Well Data As of 1-22-2020 J. Daly

Index	Well #	Location	Notes	Depth to Water, feet												Change in Depth to Water										
				2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
	500248	3.5 mi ESE of Aguila	Stable / Dropping slowly	688.6	690.6	688.1	686.8	684.3	679.4	687.3	676.6	678.2	671.5	672.5	668.2	2.0	-2.5	-1.3	-2.5	-4.9	7.9	-10.7	1.6	-6.7	1.0	-4.3
	546173	WSW of Aguila (Gladden)	Dropping very slowly	549.1	548.3	547.1	546.2	545.4	555.3	545.4	543.3	541.5	538.3	538.4	538.1	-0.8	-1.2	-0.9	-0.8	9.9	-9.9	-2.1	-1.8	-3.2	0.1	-0.3
	604129	In Aguila	Stable / Rising	579.1	575.8	577.6	574.4	578.1	574.1	578.6	573.9	577.5	566.5	568.4	567.0	-3.3	1.8	-3.2	3.7	-4.0	4.5	-4.7	3.6	-11.0	1.9	-1.4
	604136	4 mi W. of Aguila	Stable (sporadic data)				483.5			482.6								-0.9								
	604150	6 mi W. of Aguila	Large fluctuations	377.3	378.0	382.6	376.5	372.0	379.4	384.6	374.0	362.1	360.9	361.8	360.9	0.7	4.6	-6.1	-4.5	7.4	5.2	-10.6	-11.9	-1.2	0.9	-0.9
	612679	S of Pete Rd @ 527th Ave	Relatively stable	648.2	646.3	646.1	644.9	644.8	644.4	643.4	642.8	640.3	638.8	641.0	645.2	-1.9	-0.2	-1.2	-0.1	-0.4	-1.0	-0.6	-2.5	-1.5	2.2	4.2
	614493	Jackrabbit Wash	Stock tank, stable	258.4	258.3	258.2	no data	258.1	258.5	258.8	258.9	259.5	259.2	259.4	259.9	-0.1	-0.1	-0.1		0.4	0.3	0.1	0.6	-0.3	0.2	0.5
	614563	12 mi ENE of Aguila	Stable / Rising	411.1	410.9	411.1	409.7	411.3	411.1				411.0	411.5	417.8	-0.2	0.2	-1.4	1.6	-0.2	0.1				0.5	6.3
	614567	NW of Aguila	Relatively stable	560.0	559.0	557.7	557.2	546.7	551.9	552.7	552.5	550.5	549.7	549.9	548.3	-1.0	-1.3	-0.5	-10.5	5.2	0.8	-0.2	-2.0	-0.8	0.2	-1.6
	640729	N of Aguila	Pumping 2015 - 2018			574.2	577.4	565.0		556.2	496.1	559.3	559.2	558.5	563.7			3.2	-12.4	-8.8		-60.1	63.2	-0.1	-0.7	5.2
	647309	9 mi E of Aguila, Hwy 60	Relatively stable	491.3	487.8	490.1	487.9	487.9	488.2	487.8	487.2	492.9	492.6	490.5	487.9	-3.5	2.3	-2.2	0.0	0.3	-0.4	-0.6	5.7	-0.3	-2.1	-2.6
	807721	5 mi ENE of Aguila	Dropping very slowly	639.6	637.6	636.9	635.1	634.2	632.9	631.5	630.7	629.6	628.7	627.6	626.0	-2.0	-0.7	-1.8	-0.9	-1.3	-1.4	-0.8	-1.1	-0.9	-1.1	-1.6

AVGs > -1.0 0.3 -1.4 -2.5 0.3 0.6 -9.0 5.5 -2.6 0.3 0.3

Notes:

In 2021, I changed to readings every two years, due to lack of space on the spreadsheet (plus, well depths have been more stable lately). Previous yearly data is archived here. 2016 well measurement dates: Oct - Jan

The 640729 readings for 2012/13 look like possible errors. 2017 well measurement dates: Oct 23-30

2018 well measurement dates: Oct 15-29

Old hydrology data - See Sheet 1 for current data

2019 well measurement dates: Oct 28-30

Updated 1/22/20