Monitoring Compliance with Interim Decadal Desired Future Conditions

October 5, 2026

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Questions I hope to answer…

- What is a Desired Future Condition (DFC)?
- What is an Interim Decadal DFC?
- Do we have Interim Decadal DFCs?
- Why/How are we watching these?
- How are we doing?

Desired Future Conditions - Proposed in 2026

Aquifer	Average Aquifer Drawdown (feet)	Period Over Which Drawdown is Defined
Gulf Coast	44	January 2000 to December 2080
Yegua-Jackson	83	January 2010 to December 2080
Sparta	57	January 2011 to December 2080
Queen City	96	January 2011 to December 2080
Carrizo	140	January 2011 to December 2080

Per Title 31, Part 10, §356.10 (11), desired future condition is defined as the "desired, quantified condition of groundwater resources (such as water levels, spring flows, or volumes) within a groundwater management area at one or more specified future times as defined by district representatives within a groundwater management area as part of the joint planning process."

Interim Decadal What?

- 89th Legislature
- HB2078 "Relating to the joint planning of desired future conditions in groundwater management areas"
- Section 2 of the bill (now law) amended 36.108(d-1a)(2) of the Texas Water Code.

Language!

- “identify interim values of the desired future conditions adopted under Subdivision (1) for the time periods not to exceed 10 years solely to assist the districts in monitoring interim progress in achieving the desired future conditions adopted for the approximately 50-year planning period.”

- Interim. Decadal. DFCs.

Interim Decadal DFCs by Aquifer

Aquifer	2030	2040	2050	2060	2070	2080*
Gulf Coast	20	20	25	35	40	44
Yegua-Jackson	15	30	45	60	75	83
Sparta	10	20	30	43	50	57
Queen City	15	30	45	60	75	96
Carrizo	140	140	140	140	140	140

Values are in feet of drawdown.

* = current proposed DFC

Caveats

- Our DFCs are defined, in part, as the *average* drawdown across the aquifer.
  - One area could have more, another less, and it would/could/should average out
- This method is one way to approach this determination, but not the only one.

Gulf Coast Aquifer

Fayette County Water Level Trend Analysis in Gulf Coast Aquifer 2000 to 2080

Well Number	Well Name	2000 Water Depth (feet)	2002 Water Depth (feet)	2003 Water Depth (feet)	2007 Water Depth (feet)	2008 Water Depth (feet)	2009 Water Depth (feet)	2011 Water Depth (feet)	2013 Water Depth (feet)	2017 Water Depth (feet)	2018 Water Depth (feet)	2019 Water Depth (feet)	2021 Water Depth (feet)	2022 Water Depth (feet)	2023 Water Depth (feet)	2025 Water Depth (feet)	Projected 2030 Water Depth (feet)	2030 Depth Change (feet)	Projected 2040 Water Depth (feet)	2040 Depth Change (feet)	Projected 2050 Water Depth (feet)	2050 Depth Change (feet)	Projected 2060 Water Depth (feet)	2060 Depth Change (feet)	Projected 2070 Water Depth (feet)	2070 Depth Change (feet)	Projected 2080 Water Depth (feet)	2080 Depth Change (feet)
59-51-802	Schneider Unused Well	18.2															23	4.8	24	5.8	25.5	7.3	26.5	8.3	28	9.8	30	11.8
59-51-806	Ullrich Domestic Well	41.9															49	7.1	51	9.1	52	10.1	54	12.1	56	14.1	58	16.1
FC-000064	Fayette WSC Walhalla East Public Supply Well			174.2													190	15.8	194	19.8	200	25.8	205	30.8	210	35.8	215	40.8
66-02-402	G&G Metals Domestic Well	18.3															27	8.7	31	12.7	34	15.7	37	18.7	41	22.7	44	25.7
FC-013758	Sacks Domestic Well		55														36	-19	30	-25	21	-34	16	-39	8	-47	0	-55
FC-008084	Reynolds Domestic Well			66													52	-14	44	-22	38	-28	32	-34	24	-42	18	-48
FC-000268	Fayette WSC Swiss Alp Public Supply Well			203													205	2	205	2	205	2	205	2	205	2	205	2
66-03-806	Koch Domestic Well	38.2															43	4.8	45	6.8	46	7.8	48	9.8	49	10.8	51	12.8
66-09-707	Guentert Domestic Well	83															130	47	144	61	162	79	178	95	195	112	210	127
66-17-807	St. John's Church Domestic Well	104.4															124	19.6	130	25.6	136	31.6	144	39.6	150	45.6	156	51.6
67-24-509	Flatonia #10 Public Supply Well	15															36	21	44	29	52	37	59	44	66	51	74	59
FC-015234	Olsen Domestic Well					61.0											62	1.0	62.5	1.5	63	2	63.5	2.5	64	3	64.5	3.5
FC-018317	Hranicky Domestic Well								87								106	19	118	31	129	42	140	53	151	64	162	75
FC-018344	Geosouthern O&G Supply Well (Well 103)												69.5				80	10.5	92	22.5	105	35.5	118	48.5	130	60.5	142	72.5
FC-020544	Herman Domestic Well					121											143	22	152	31	162	41	172	51	181	60	191	70
FC-021524	Hays Domestic Well								48								42.5	-5.5	39.5	-8.5	36	-12	33	-15	30.5	-17.5	27	-21
FC-021768	Cypress E&P Corp Supply Well (Well 101)												47				64	17	80	33	96	49	112	65	130	83	144	97
FC-022726	Geosouthern O&G Supply Well (Well 109)													38			54	16	74	36	94	56	113	75	132	94	152	114
FC-022744	Geosouthern O&G Supply Well (Well 105)													64			68.5	4.5	68	4	68	4	67.5	3.5	67.5	3.5	67.5	3.5
FC-021331	Enervest Operating (Well 118)														79		90	11	105	26	122	43	138	59	154	75	169	90
FC-022556	Geo Southern Operating (Well 113)														121.6		126	4.4	136	14.4	145	23.4	154	32.4	163	41.4	172	50.4
FC-022649	Magnolia O&G (Well 116)														162		152	-10	141	-21	131	-31	120	-42	110	-52	99	-63
FC-012529	Magnolia O&G (Well 117)														108		120	12	136	28	155	47	172	64	190	82	206	98
FC-022056	ROCC Operating (Well 120)															80	88	8	95	15	102	22	109	29	116	36	123	43
																	Average change in water depth:	9		14		20		26		31		37
							DFC Goal = No more than 44 feet of drawdown by 2080									Interim DFC:	20		20		25		35		40		44	

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Gulf Coast Aquifer

2022 Water Depth (feet)	2023 Water Depth (feet)	2025 Water Depth (feet)	Projected 2030 Water Depth (feet)	2030 Depth Change (feet)	Projected 2040 Water Depth (feet)	2040 Depth Change (feet)	Projected 2050 Water Depth (feet)	2050 Depth Change (feet)	Projected 2060 Water Depth (feet)	2060 Depth Change (feet)	Projected 2070 Water Depth (feet)	2070 Depth Change (feet)	Projected 2080 Water Depth (feet)	2080 Depth Change (feet)
			23	4.8	24	5.8	25.5	7.3	26.5	8.3	28	9.8	30	11.8
			49	7.1	51	9.1	52	10.1	54	12.1	56	14.1	58	16.1
			190	15.8	194	19.8	200	25.8	205	30.8	210	35.8	215	40.8
			27	8.7	31	12.7	34	15.7	37	18.7	41	22.7	44	25.7
			36	-19	30	-25	21	-34	16	-39	8	-47	0	-55
			52	-14	44	-22	38	-28	32	-34	24	-42	18	-48
			205	2	205	2	205	2	205	2	205	2	205	2
			43	4.8	45	6.8	46	7.8	48	9.8	49	10.8	51	12.8
			130	47	144	61	162	79	178	95	195	112	210	127
			124	19.6	130	25.6	136	31.6	144	39.6	150	45.6	156	51.6
			36	21	44	29	52	37	59	44	66	51	74	59
			62	1.0	62.5	1.5	63	2	63.5	2.5	64	3	64.5	3.5
			106	19	118	31	129	42	140	53	151	64	162	75
			80	10.5	92	22.5	105	35.5	118	48.5	130	60.5	142	72.5
			143	22	152	31	162	41	172	51	181	60	191	70
			42.5	-5.5	39.5	-8.5	36	-12	33	-15	30.5	-17.5	27	-21
			64	17	80	33	96	49	112	65	130	83	144	97
38			54	16	74	36	94	56	113	75	132	94	152	114
64			68.5	4.5	68	4	68	4	67.5	3.5	67.5	3.5	67.5	3.5
	79		90	11	105	26	122	43	138	59	154	75	169	90
	121.6		126	4.4	136	14.4	145	23.4	154	32.4	163	41.4	172	50.4
	162		152	-10	141	-21	131	-31	120	-42	110	-52	99	-63
	108		120	12	136	28	155	47	172	64	190	82	206	98
		80	88	8	95	15	102	22	109	29	116	36	123	43
			Average change in water depth:	9		14		20		26		31		37
		Interim DFC:	20		20		25		35		40		44	

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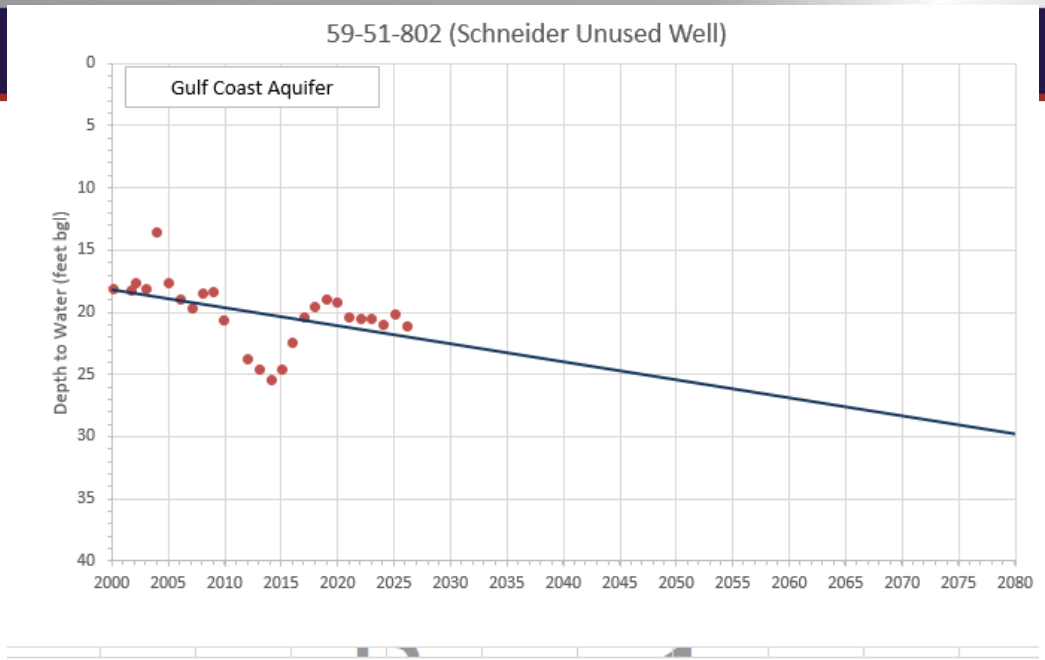
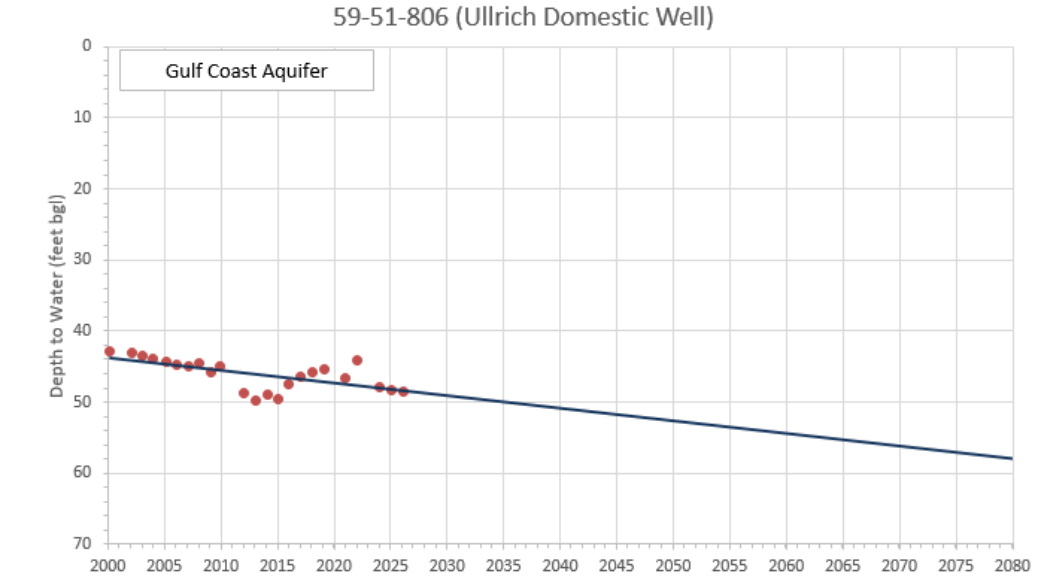
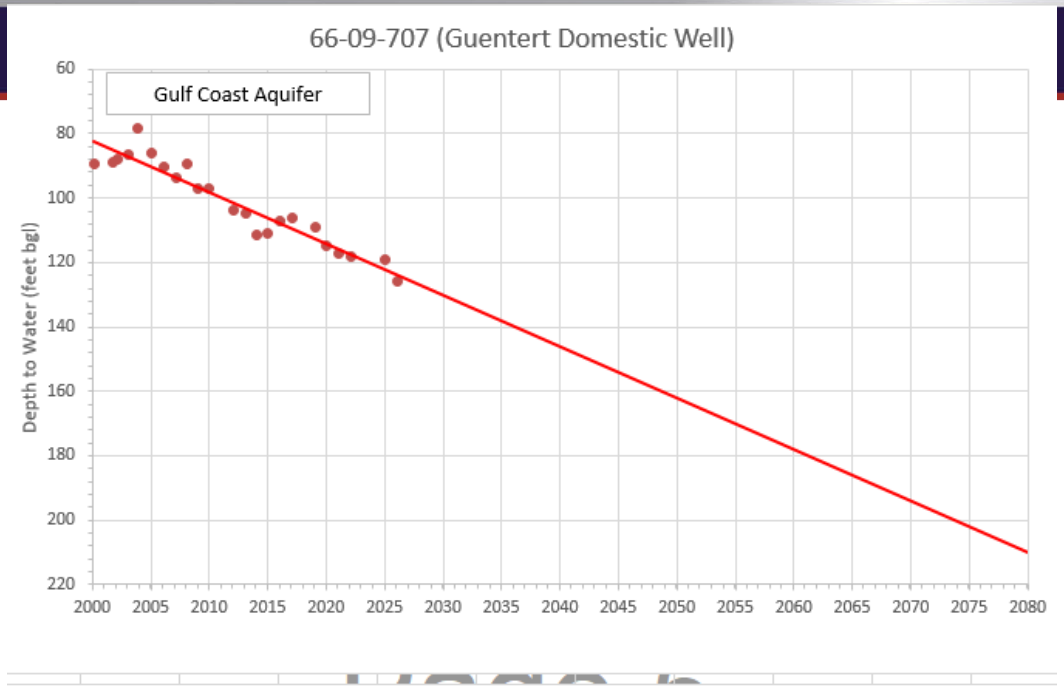
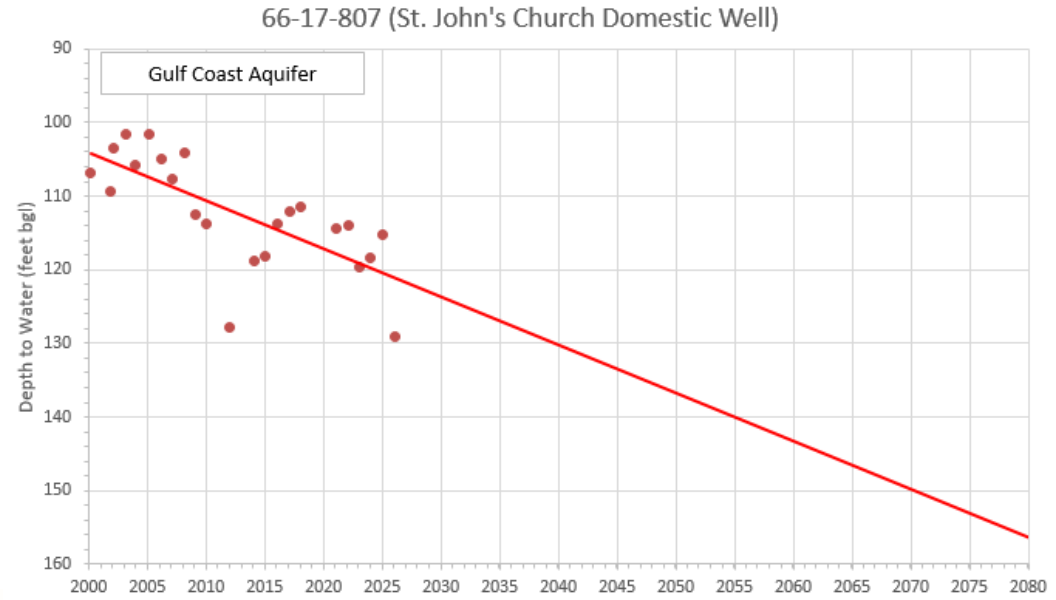

59-51-802 (Schneider Unused Well)
Gulf Coast Aquifer
Depth to Water (feet bgl)
0
5
10
15
20
25
30
35
40
2000
2005
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080


59-51-806 (Ullrich Domestic Well)
Gulf Coast Aquifer
Depth to Water (feet bgl)
0
10
20
30
40
50
60
70
2000
2005
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080


66-09-707 (Guentert Domestic Well)
Gulf Coast Aquifer
Depth to Water (feet bgl)
60
80
100
120
140
160
180
200
220
2000
2005
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080


66-17-807 (St. John's Church Domestic Well)
Gulf Coast Aquifer
Depth to Water (feet bgl)
90
100
110
120
130
140
150
160
2000
2005
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080

Yegua-Jackson Aquifer

Fayette County Water Level Trend Analysis in Yegua-Jackson 2010 to 2080																								
Well Number	Well Name	Notes	2010 Water Depth (feet)	2011 Water Depth (feet)	2012 Water Depth (feet)	2018 Water Depth (feet)	2019 Water Depth (feet)	2020 Water Depth (feet)	2021 Water Depth (feet)	2022 Water Depth (feet)	2023 Water Depth (feet)	Projected 2030 Water Depth (feet)	2030 Depth Change (feet)	Projected 2040 Water Depth (feet)	2040 Depth Change (feet)	Projected 2050 Water Depth (feet)	2050 Depth Change (feet)	Projected 2060 Water Depth (feet)	2060 Depth Change (feet)	Projected 2070 Water Depth (feet)	2070 Depth Change (feet)	Projected 2080 Water Depth (feet)	2080 Depth Change (feet)
FC-022599	Fayette WSC New Rutersville Public Supply Well							175				210	35	245	70	280	105	310	135	345	170	380	205
59-50-902	TWDB Stuermer Ranch Unused Well				79.8							77	-2.8	76	-3.8	75	-4.8	74	-5.8	73	-6.8	71.5	-8.3
59-57-701	TWDB Roche Unused Well				60.0							58	-2	57	-3	55.5	-4.5	54.5	-5.5	53.5	-6.5	52.5	-7.5
59-57-906	TWDB Kanz Domestic Well				33							29	-4	26	-7	24	-9	22	-11	19	-14	17	-16
FC-013536	City of Schulenburg #8				232.3							242	9.7	249	16.7	255	22.7	262	29.7	268	35.7	273	40.7
67-16-704	National/Charcoal Lane Unused Well				41.3							41	-0.3	41	-0.3	41	-0.3	41	-0.3	41	-0.3	41.0	-0.3
FC-008544	Eno Well 102								29			36	7	43	14	50.5	21.5	58	29	66	37	73	44
FC-014879	Ineos USA O&G (Eno Well 104)								192.5			199	6.5	207	14.5	215	22.5	224	31.5	231	38.5	239.0	46.5
FC-022742	Magnolia O&G (Eno Well 107)									118.5		119	0.5	121.5	3	123	4.5	125	6.5	126.5	8	128.5	10.0
FC-022745	ROCC Operating (Eno Well 108)	Seven data points 2022 to 2026								86		112	26	142	56	172	86	202	116	232	146	262	176
FC-000163	Fayette WSC Old Rutersville Public Supply Well	Plugged and abandoned	156									270	114	320	164	380	224	430	274	490	334	545	389
66-01-935	La Grange Public Supply Well	Six data points 2019 to 2025					66.2					76	9.8	84	17.8	91	24.8	99	32.8	106	39.8	113.0	46.8
59-58-301	TWDB Hickey Unused Well			88.8								93	4.2	95.5	6.7	97	8.2	100	11.2	102	13.2	104.5	15.7
FC-001296	Eno Well 119										50.3	62	11.7	81	30.7	99	48.7	118	67.7	136	85.7	153	102.7
FC-020995	Enervest Operating (Eno Well 111)										133	132	-1	131.5	-1.5	131	-2	130	-3	129.5	-3.5	128.5	-4.5
FC-021201	Enervest Operating (Eno Well 112)										114.2	106	-8.2	94	-20.2	82	-32.2	70	-44.2	58	-56.2	46	-68.2
FC-022459	Geosouthern O&G (Eno Well 114)										156	174	18	19	-137	220	64	246	90	269	113	291	135
FC-019039	Magnolia O&G (Eno Well 115)										117	126	9	140	23	153	36	167	50	180	63	193	76
FC-020426	Thomas and Barbara Solis										95.2	98	2.8	103	7.8	108.5	13.3	114	18.8	119	23.8	124	28.8
	DFC Goal = no more than 83 feet of drawdown by 2080											Average change in water depth:	12		13		33		43		54		64
											Interim DFC:	15		30		45		60		75		83	

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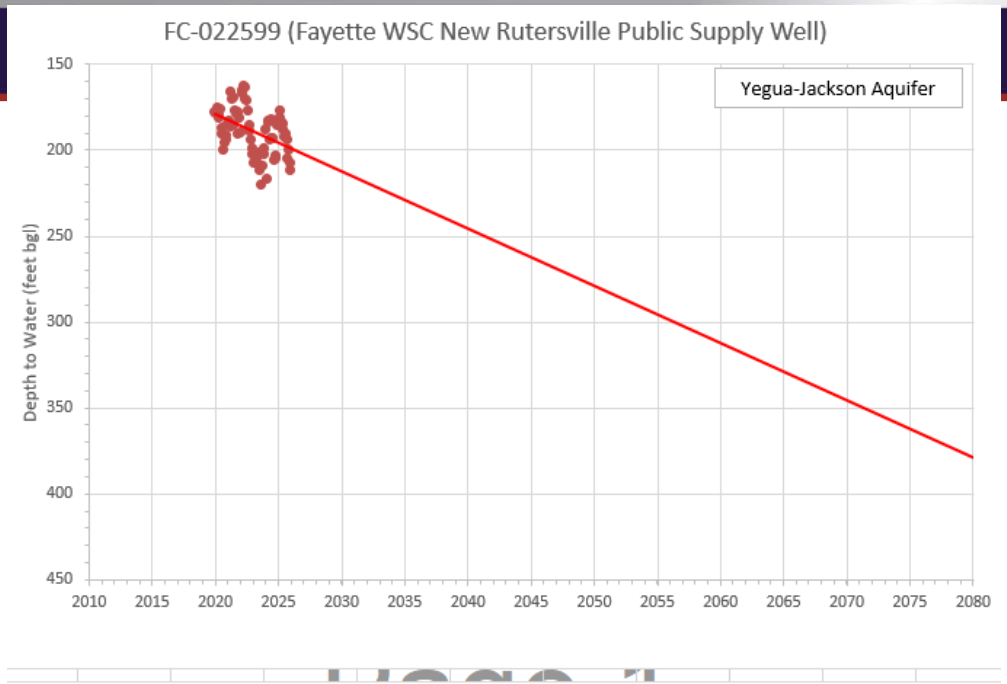
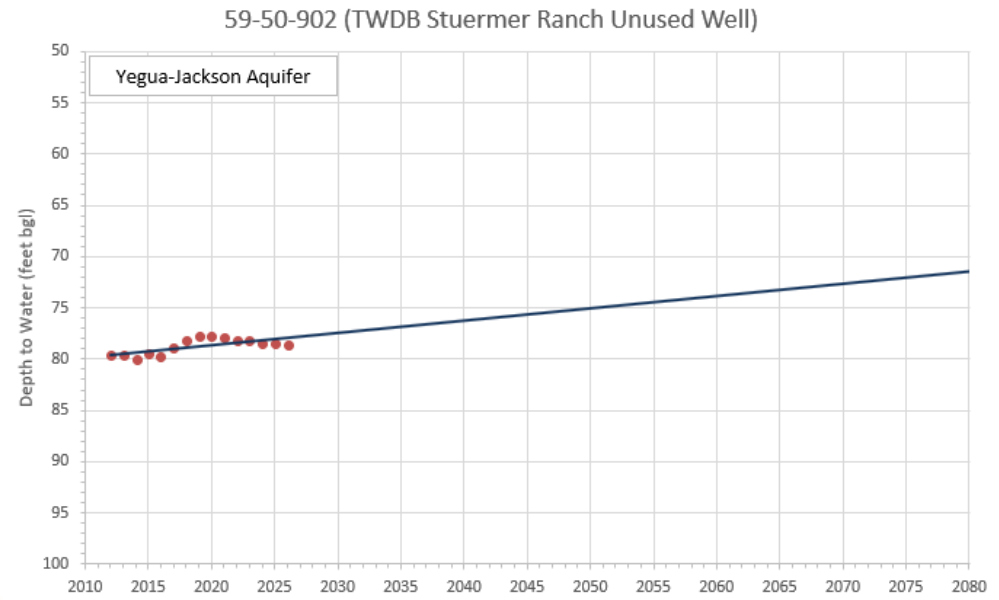
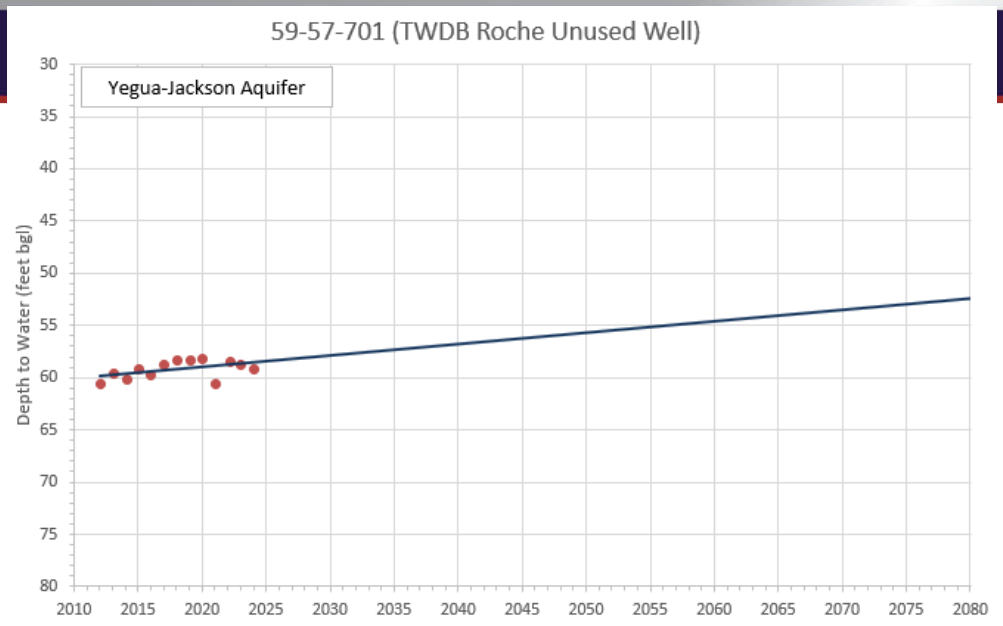
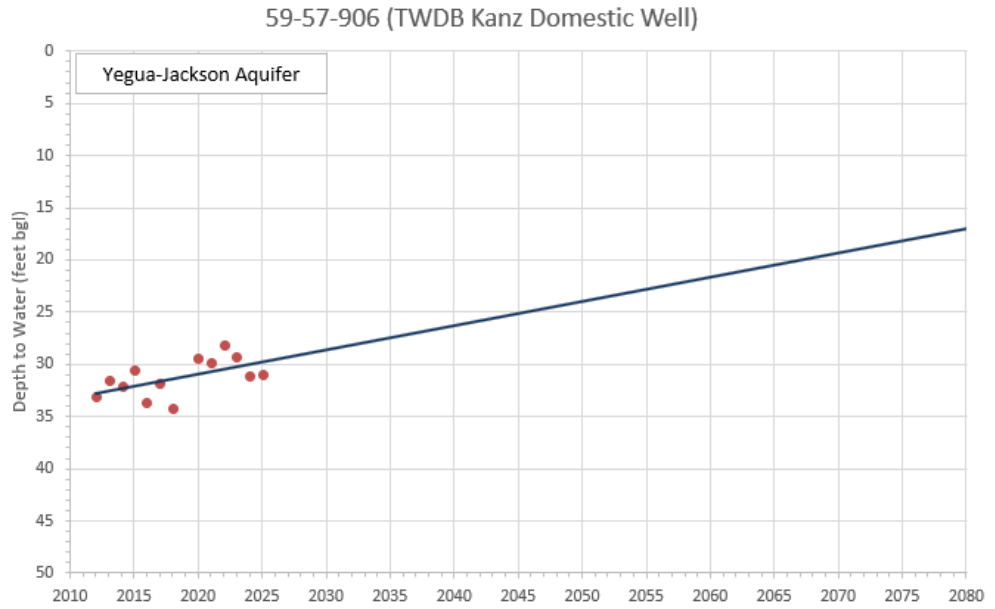
Yegua-Jackson Aquifer

2021 Water Depth (feet)	2022 Water Depth (feet)	2023 Water Depth (feet)	Projected 2030 Water Depth (feet)	2030 Depth Change (feet)	Projected 2040 Water Depth (feet)	2040 Depth Change (feet)	Projected 2050 Water Depth (feet)	2050 Depth Change (feet)	Projected 2060 Water Depth (feet)	2060 Depth Change (feet)	Projected 2070 Water Depth (feet)	2070 Depth Change (feet)	Projected 2080 Water Depth (feet)	2080 Depth Change (feet)
			210	35	245	70	280	105	310	135	345	170	380	205
			77	-2.8	76	-3.8	75	-4.8	74	-5.8	73	-6.8	71.5	-8.3
			58	-2	57	-3	55.5	-4.5	54.5	-5.5	53.5	-6.5	52.5	-7.5
			29	-4	26	-7	24	-9	22	-11	19	-14	17	-16
			242	9.7	249	16.7	255	22.7	262	29.7	268	35.7	273	40.7
			41	-0.3	41	-0.3	41	-0.3	41	-0.3	41	-0.3	41.0	-0.3
29			36	7	43	14	50.5	21.5	58	29	66	37	73	44
192.5			199	6.5	207	14.5	215	22.5	224	31.5	231	38.5	239.0	46.5
	118.5		119	0.5	121.5	3	123	4.5	125	6.5	126.5	8	128.5	10.0
	86		112	26	142	56	172	86	202	116	232	146	262	176
			270	114	320	164	380	224	430	274	490	334	545	389
			76	9.8	84	17.8	91	24.8	99	32.8	106	39.8	113.0	46.8
			93	4.2	95.5	6.7	97	8.2	100	11.2	102	13.2	104.5	15.7
		50.3	62	11.7	81	30.7	99	48.7	118	67.7	136	85.7	153	102.7
		133	132	-1	131.5	-1.5	131	-2	130	-3	129.5	-3.5	128.5	-4.5
		114.2	106	-8.2	94	-20.2	82	-32.2	70	-44.2	58	-56.2	46	-68.2
		156	174	18	19	-137	220	64	246	90	269	113	291	135
		117	126	9	140	23	153	36	167	50	180	63	193	76
		95.2	98	2.8	103	7.8	108.5	13.3	114	18.8	119	23.8	124	28.8
			Average change in water depth:	12		13		33		43		54		64
		Interim DFC:	15		30		45		60		75		83	


FC-022599 (Fayette WSC New Rutersville Public Supply Well)
Yegua-Jackson Aquifer
Depth to Water (feet bgl)
150
200
250
300
350
400
450
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080


59-50-902 (TWDB Stuermer Ranch Unused Well)
Yegua-Jackson Aquifer
Depth to Water (feet bgl)
50
55
60
65
70
75
80
85
90
95
100
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080


59-57-701 (TWDB Roche Unused Well)
Yegua-Jackson Aquifer
Depth to Water (feet bgl)
30
35
40
45
50
55
60
65
70
75
80
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080

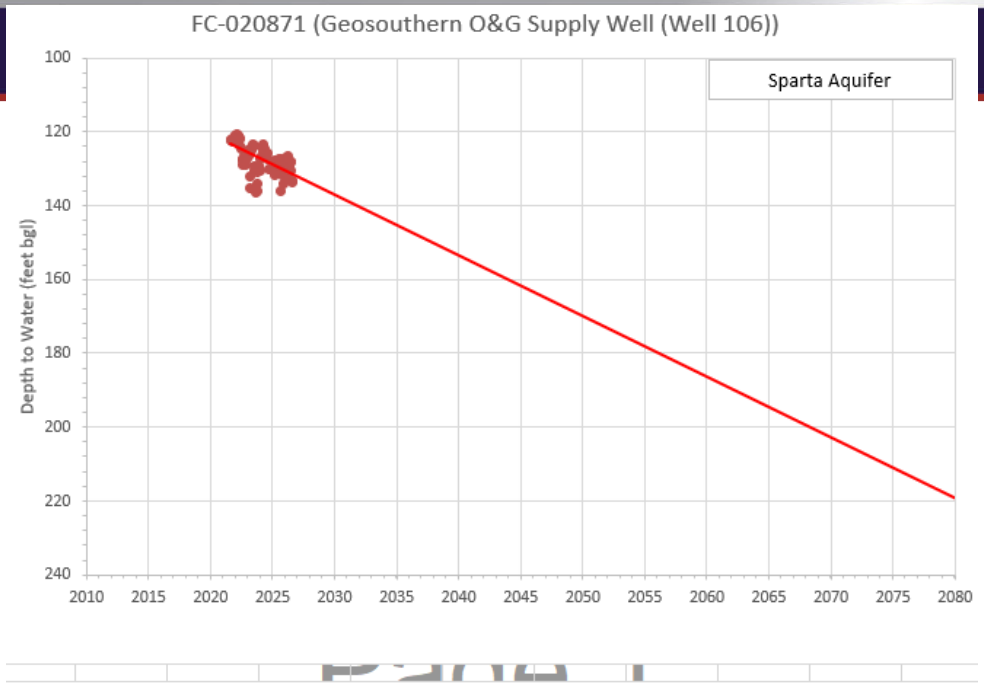

59-57-906 (TWDB Kanz Domestic Well)
Yegua-Jackson Aquifer
Depth to Water (feet bgl)
0
5
10
15
20
25
30
35
40
45
50
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080

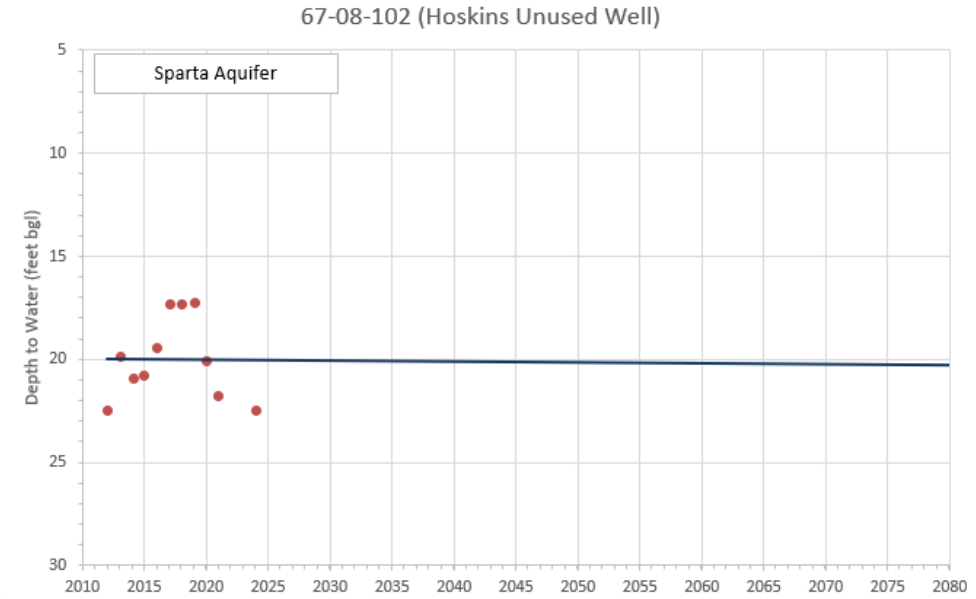
Sparta Aquifer

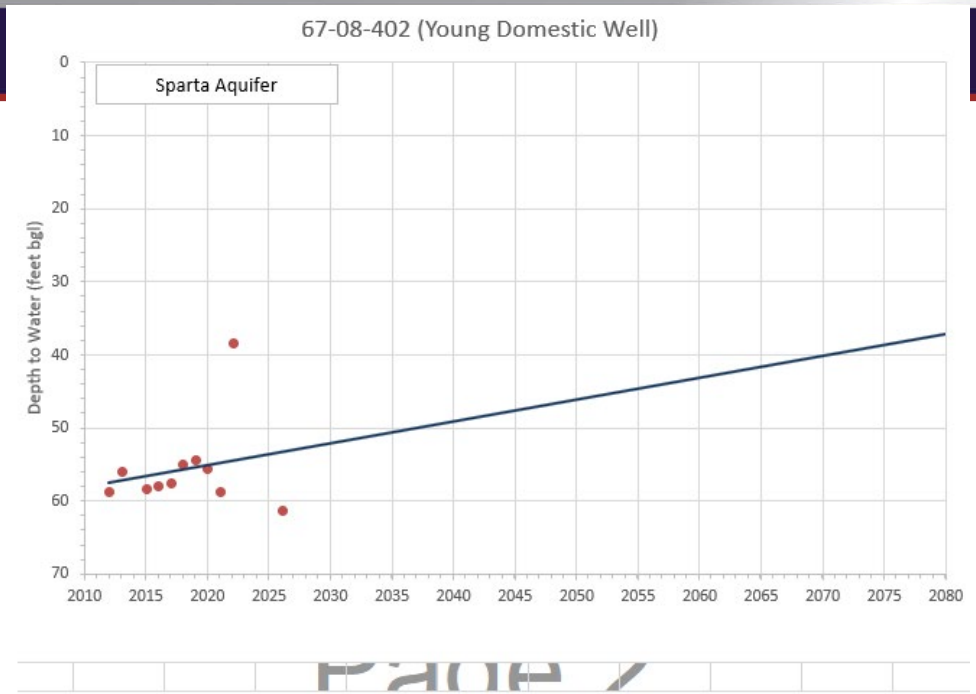
Fayette County Water Level Trend Analysis in Sparta 2011 to 2080																				
Well Number	Well Name	Notes	2011 Water Depth (feet)	2012 Water Depth (feet)	2015 Water Depth (feet)	2022 Water Depth (feet)	Projected 2030 Water Depth (feet)	2030 Depth Change (feet)	Projected 2040 Water Depth (feet)	2040 Depth Change (feet)	Projected 2050 Water Depth (feet)	2050 Depth Change (feet)	Projected 2060 Water Depth (feet)	2060 Depth Change (feet)	Projected 2070 Water Depth (feet)	2070 Depth Change (feet)	Projected 2080 Water Depth (feet)	2080 Depth Change (feet)
FC-020871	Geosouthern O&G Supply Well (Well 106)					122	138	16	152	30	170	48	186	64	202	80	219	97
67-08-102	Hoskins Unused Well	11 data points 2012 to 2024		22.51			20	-2.51	20	-2.51	20	-2.51	20.25	-2.26	20.25	-2.26	20.5	-2.0
67-08-402	Young Domestic Well	10 data points 2012 to 2022		58.75			52	-6.75	49	-9.75	46	-12.75	43	-15.75	40	-18.75	37	-21.75
67-15-403	Davis Domestic Well	13 data points 2012 to 2025; becomes artesian at surface		79.85			56	-23.85	42	-37.85	26	-53.85	9.5	-70.35	-8	-87.85	-24	-103.85
FC-022069	Frazier Exploration (Well 110)				35.6		26	-9.6	27	-8.6	29	-6.6	31	-4.6	32	-3.6	34.0	-1.6
		DFC Goal = No more than 57 feet of drawdown by 2080					Average change in water depth:	-5		-6		-6		-6		-6		-6
						Interim DFC:	10		20		30		43		50		57	

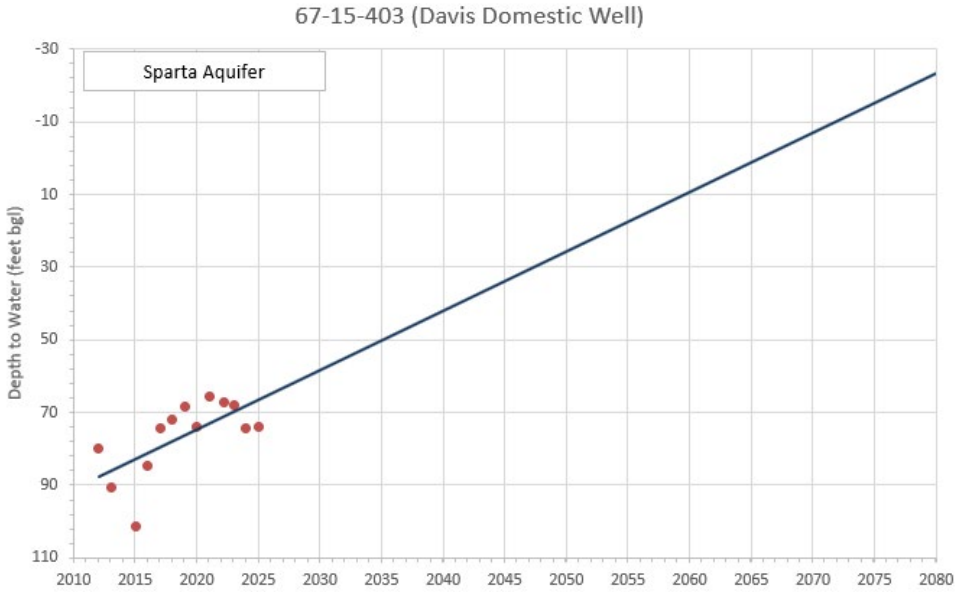
Sparta Aquifer

2012 Water Depth (feet)	2015 Water Depth (feet)	2022 Water Depth (feet)	Projected 2030 Water Depth (feet)	2030 Depth Change (feet)	Projected 2040 Water Depth (feet)	2040 Depth Change (feet)	Projected 2050 Water Depth (feet)	2050 Depth Change (feet)	Projected 2060 Water Depth (feet)	2060 Depth Change (feet)	Projected 2070 Water Depth (feet)	2070 Depth Change (feet)	Projected 2080 Water Depth (feet)	2080 Depth Change (feet)
		122	138	16	152	30	170	48	186	64	202	80	219	97
22.51			20	-2.51	20	-2.51	20	-2.51	20.25	-2.26	20.25	-2.26	20.5	-2.0
58.75			52	-6.75	49	-9.75	46	-12.75	43	-15.75	40	-18.75	37	-21.75
79.85			56	-23.85	42	-37.85	26	-53.85	9.5	-70.35	-8	-87.85	-24	-103.85
	35.6		26	-9.6	27	-8.6	29	-6.6	31	-4.6	32	-3.6	34.0	-1.6
			Average change in water depth:	-5		-6		-6		-6		-6		-6
		Interim DFC:	10		20		30		43		50		57	


FC-020871 (Geosouthern O&G Supply Well (Well 106))
Sparta Aquifer
Depth to Water (feet bgl)
100
120
140
160
180
200
220
240
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080


67-08-102 (Hoskins Unused Well)
Sparta Aquifer
Depth to Water (feet bgl)
5
10
15
20
25
30
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080


67-08-402 (Young Domestic Well)
Sparta Aquifer
Depth to Water (feet bgl)
0
10
20
30
40
50
60
70
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080

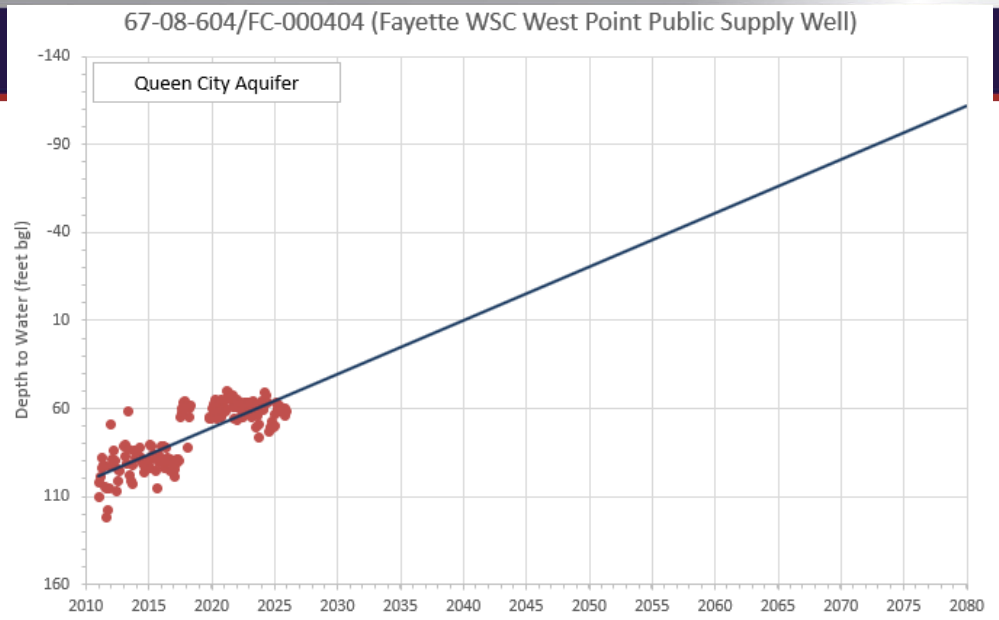

67-15-403 (Davis Domestic Well)
Sparta Aquifer
Depth to Water (feet bgl)
-30
-10
10
30
50
70
90
110
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080

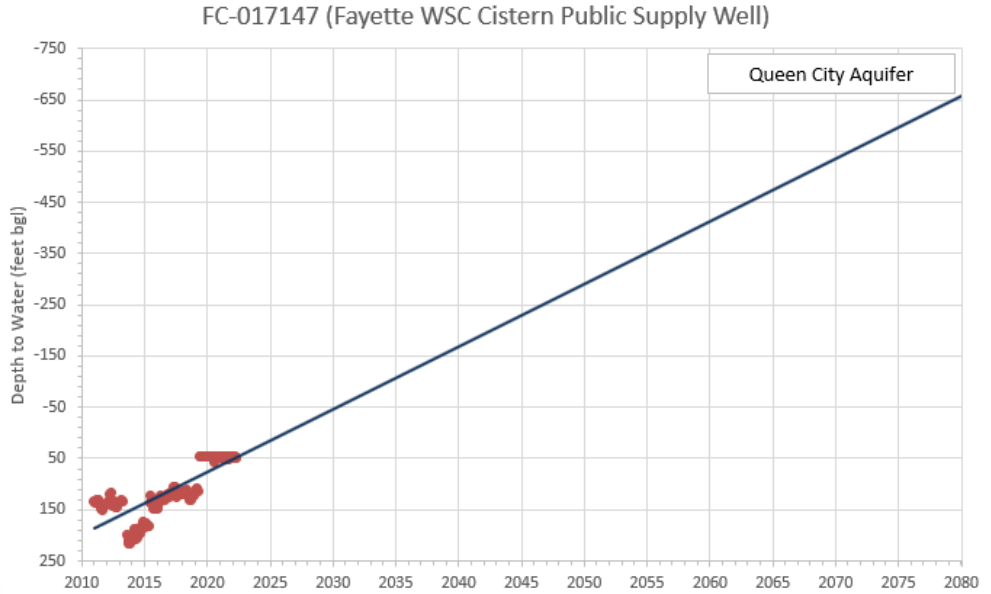
Queen City Aquifer

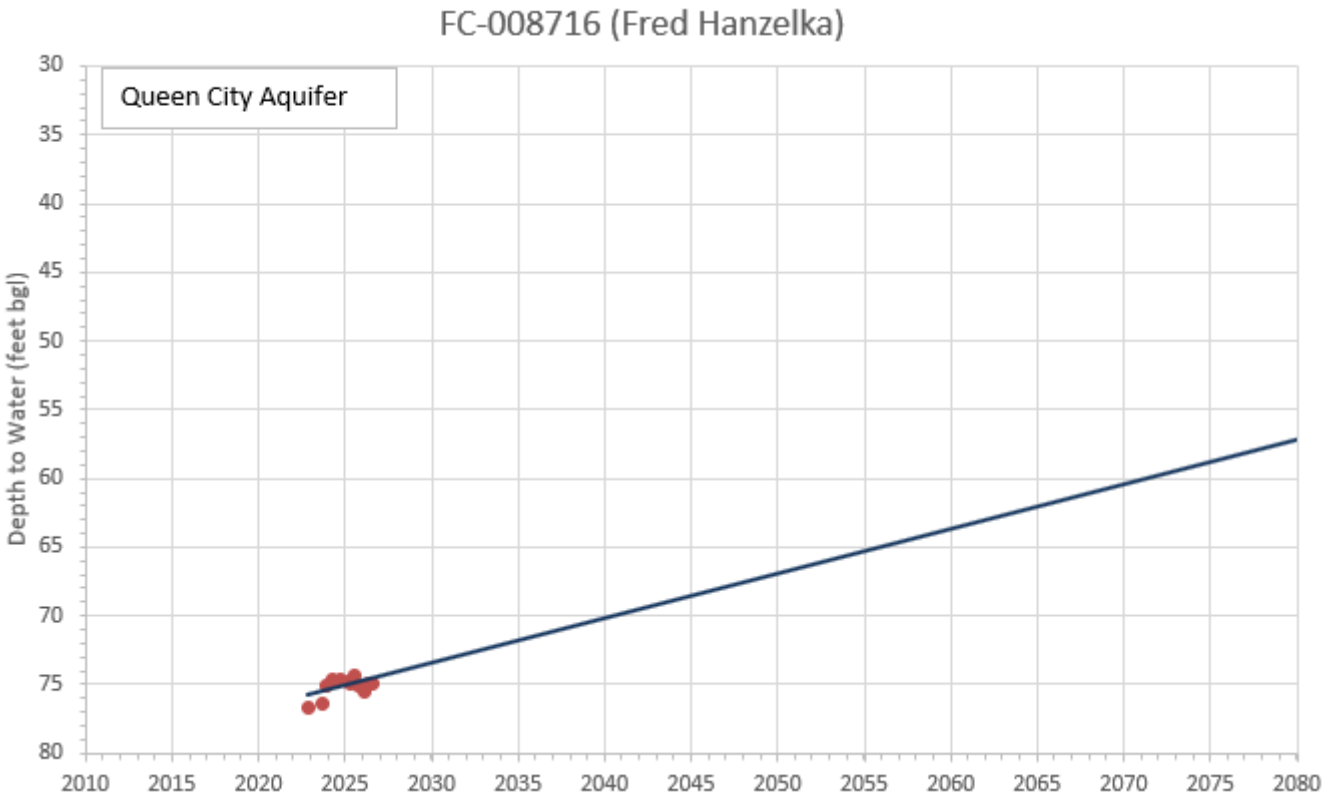
Fayette County Water Level Trend Analysis in Queen City 2011 to 2080																		
Well Number	Well Name	Notes	2011 Water Depth (feet)	2023 Water Depth (feet)	Projected 2030 Water Depth (feet)	2030 Depth Change (feet)	Projected 2040 Water Depth (feet)	2040 Depth Change (feet)	Projected 2050 Water Depth (feet)	2050 Depth Change (feet)	Projected 2060 Water Depth (feet)	2060 Depth Change (feet)	Projected 2070 Water Depth (feet)	2070 Depth Change (feet)	Projected 2080 Water Depth (feet)	2080 Depth Change (feet)
67-08-604 / FC-000404	Fayette WSC West Point Public Supply Well	Artesian in 2041	88.4		40	-48.4	10	-78.4	-20	-108.4	-50	-138.4	-80	-168.4	-110	-198.4
FC-017147	Fayette WSC Cistern Public Water Supply Well	Artesian in 2026	188		-49	-237	-170	-358	-290	-478	-420	-608	-530	-718	-655	-843.0
FC-008716	Fred Hanzelka			76	73	-3	70.5	-5.5	67	-9	64	-12	60.5	-15.5	57	-19
	DFC Goal = No more than 96 feet of drawdown by 2080				Average change in water depth:	-96		-147		-198		-253		-301		-353
				Interim DFC:	15		30		45		60		75		96	

Queen City Aquifer

2011 Water Depth (feet)	2023 Water Depth (feet)	Projected 2030 Water Depth (feet)	2030 Depth Change (feet)	Projected 2040 Water Depth (feet)	2040 Depth Change (feet)	Projected 2050 Water Depth (feet)	2050 Depth Change (feet)	Projected 2060 Water Depth (feet)	2060 Depth Change (feet)	Projected 2070 Water Depth (feet)	2070 Depth Change (feet)	Projected 2080 Water Depth (feet)	2080 Depth Change (feet)
88.4		40	-48.4	10	-78.4	-20	-108.4	-50	-138.4	-80	-168.4	-110	-198.4
188		-49	-237	-170	-358	-290	-478	-420	-608	-530	-718	-655	-843.0
	76	73	-3	70.5	-5.5	67	-9	64	-12	60.5	-15.5	57	-19
		Average change in water depth:	-96		-147		-198		-253		-301		-353
	Interim DFC:	15		30		45		60		75		96	


67-08-604/FC-000404 (Fayette WSC West Point Public Supply Well)
Queen City Aquifer
Depth to Water (feet bgl)
-140
-90
-40
10
60
110
160
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080


FC-017147 (Fayette WSC Cistern Public Supply Well)
Queen City Aquifer
Depth to Water (feet bgl)
-750
-650
-550
-450
-350
-250
-150
-50
50
150
250
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080

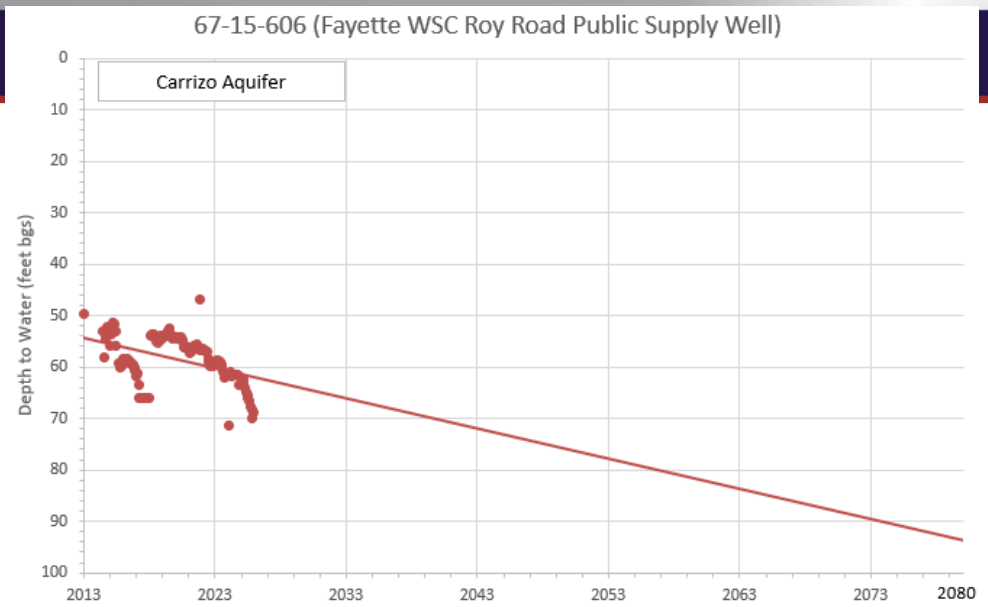

FC-008716 (Fred Hanzelka)
Queen City Aquifer
Depth to Water (feet bgl)
30
35
40
45
50
55
60
65
70
75
80
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080

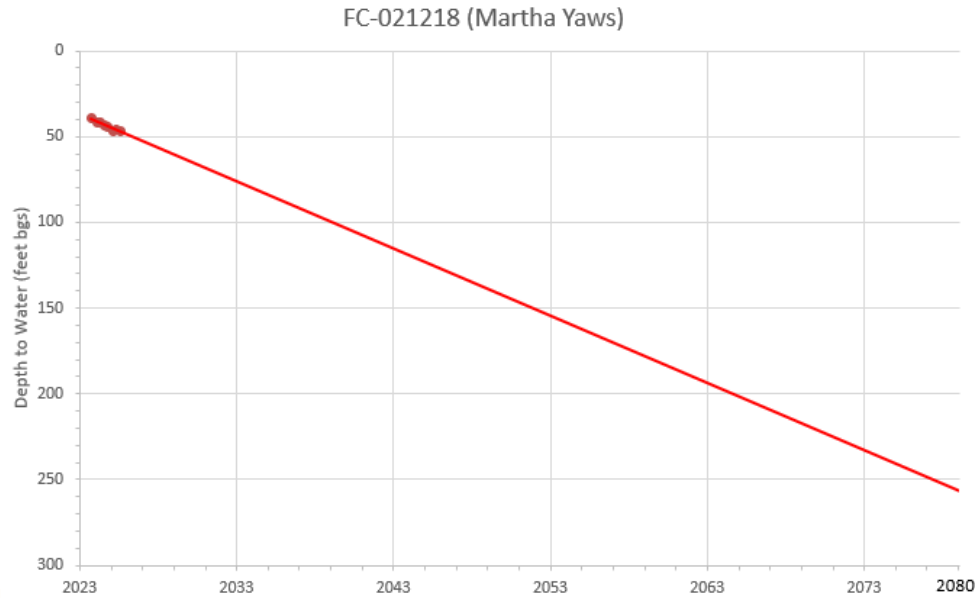
Carrizo Aquifer

Fayette County Water Level Trend Analysis in Carrizo 2011 to 2080																	
Well Number	Well Name	Notes	2013 Water Depth (feet)	2024 Water Depth (feet)	Projected 2030 Water Depth (feet)	2030 Depth Change (feet)	Projected 2040 Water Depth (feet)	2040 Depth Change (feet)	Projected 2050 Water Depth (feet)	2050 Depth Change (feet)	Projected 2060 Water Depth (feet)	2060 Depth Change (feet)	Projected 2070 Water Depth (feet)	2070 Depth Change (feet)	Projected 2080 Water Depth (feet)	2080 Depth Change (feet)
67-15-606	Fayette WSC Roy Road Public Supply Well		55.5		64	8.5	70	14.5	76	20.5	82	26.5	88	32.5	93	37.5
FC-021218	Martha Yaws	3 data points 2024 through 2025		40	60	20	102	62	140	100	180	140	220	180	260	220
	DFC Goal = No more than 140 feet of drawdown by 2080				Average change in water depth:	14		38		60		83		106		129
				Interim DFC:	140		140		140		140		140		140.0	

Carrizo Aquifer

2013 Water Depth (feet)	2024 Water Depth (feet)	Projected 2030 Water Depth (feet)	2030 Depth Change (feet)	Projected 2040 Water Depth (feet)	2040 Depth Change (feet)	Projected 2050 Water Depth (feet)	2050 Depth Change (feet)	Projected 2060 Water Depth (feet)	2060 Depth Change (feet)	Projected 2070 Water Depth (feet)	2070 Depth Change (feet)	Projected 2080 Water Depth (feet)	2080 Depth Change (feet)
55.5		64	8.5	70	14.5	76	20.5	82	26.5	88	32.5	93	37.5
	40	60	20	102	62	140	100	180	140	220	180	260	220
		Average change in water depth:	14		38		60		83		106		129
	Interim DFC:	140		140		140		140		140		140.0	


67-15-606 (Fayette WSC Roy Road Public Supply Well)
Carrizo Aquifer
Depth to Water (feet bgs)
0
10
20
30
40
50
60
70
80
90
100
2013
2023
2033
2043
2053
2063
2073
2080


FC-021218 (Martha Yaws)
Depth to Water (feet bgs)
0
50
100
150
200
250
300
2023
2033
2043
2053
2063
2073
2080

Other methods of interpretation

- Look at rate-of-change by well and averaged by aquifer on a year-by-year basis
- Look at shorter term trends on current hydrographs

Recall our Proposed DFCs

Aquifer	Average Aquifer Drawdown (feet)	Period Over Which Drawdown is Defined
Gulf Coast	44	January 2000 to December 2080
Yegua-Jackson	83	January 2010 to December 2080
Sparta	57	January 2011 to December 2080
Queen City	96	January 2011 to December 2080
Carrizo	140	January 2011 to December 2080

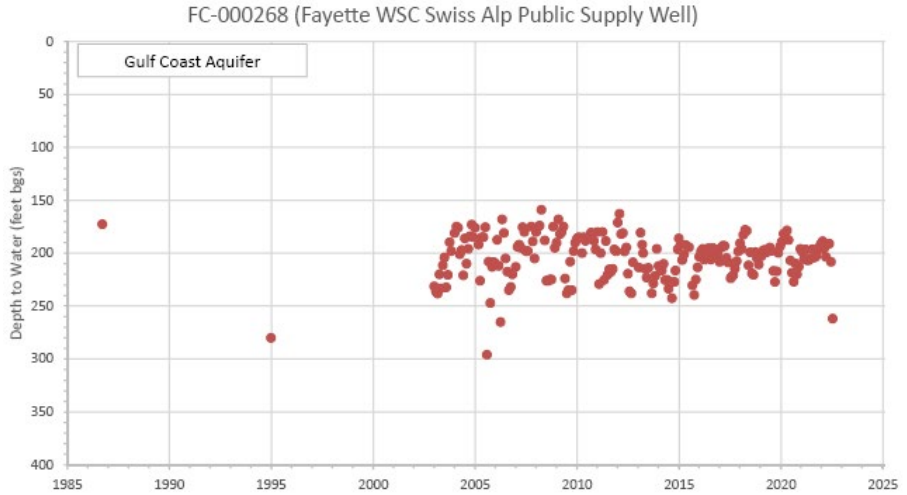
Rate-of-change by well - Sparta Aquifer

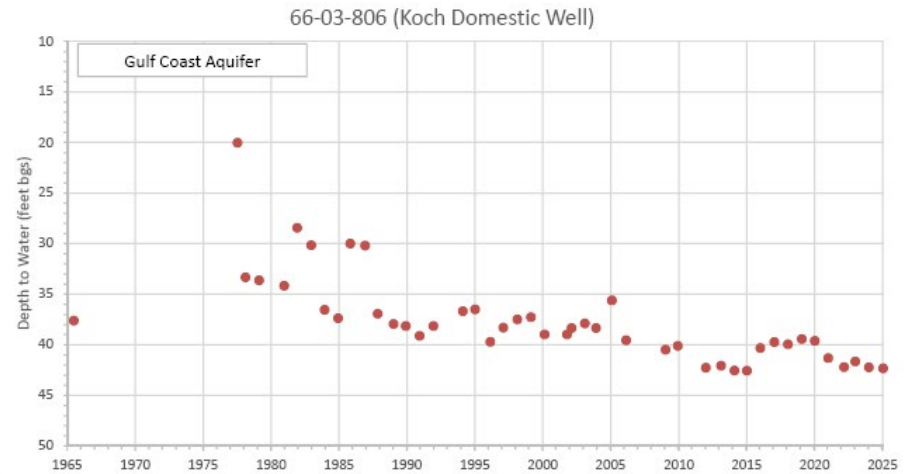
Year	Water Level (feet bgs)	Change from Prior Measurement (feet)	Change from Initial Water Level (feet)	Average Annual Change from Initial Water Level (feet)
67-15-403 (TWDB Davis Domestic Well)				
2012	79.85	NA	NA	NA
2013	90.72	-10.87	-10.87	-10.87
2015	101.42	-10.70	-21.57	-7.19
2016	84.71	16.71	-4.86	-1.22
2017	74.20	10.51	5.65	1.13
2018	72.05	2.15	7.80	1.30
2019	68.21	3.84	11.64	1.66
2020	74.05	-5.84	5.80	0.73
2021	65.54	8.51	14.31	1.59
2022	67.10	-1.56	12.75	1.28
2023	68.07	-0.97	11.78	1.07
2024	74.44	-6.37	5.41	0.45
2025	74.04	0.40	5.81	0.45
FC-18936 (Rosenthal Livestock Well)				
2018	113.50	NA	NA	NA
2019	113.15	0.35	0.35	0.35
FC-20871 (Eno Well 106)				
2021	119.33	NA	NA	NA
2022	117.95	1.38	1.38	1.38
2023	123.82	-5.87	-4.49	-2.25
2024	127.43	-3.61	-8.10	-2.70
2025	125.26	2.17	-5.93	-1.48
FC-22069 (Eno Well 110)				
2014	35.60	NA	NA	NA
2022	24.41	11.19	11.19	1.40
2023	25.33	-0.92	10.27	1.14
2024	23.46	1.87	12.14	1.21
2025	23.90	-0.44	11.70	1.06

Average Water Level Changes - Gulf Coast Aquifer

Year	Average Total Change (feet)	Average Annual Change (ft/yr)
2001	-0.83	-0.8
2002	1.62	0.8
2003	2.89	1.0
2004	9.01	6.5
2005	9.81	4.1
2006	4.09	1.2
2007	3.66	0.9
2008	8.66	1.4
2009	3.93	1.8
2010	9.40	3.0
2011	10.57	1.3
2012	-1.84	-0.2
2013	-0.58	0.0
2014	-7.68	-1.2
2015	-0.63	-0.1
2016	-0.84	0.0
2017	-0.02	0.0
2018	-3.89	-0.4
2019	-6.65	-1.0
2020	0.27	0.0
2021	1.07	0.2
2022	-0.83	0.1
2023	-1.21	-0.3
2024	-4.57	-0.3
2025	-6.41	-0.5

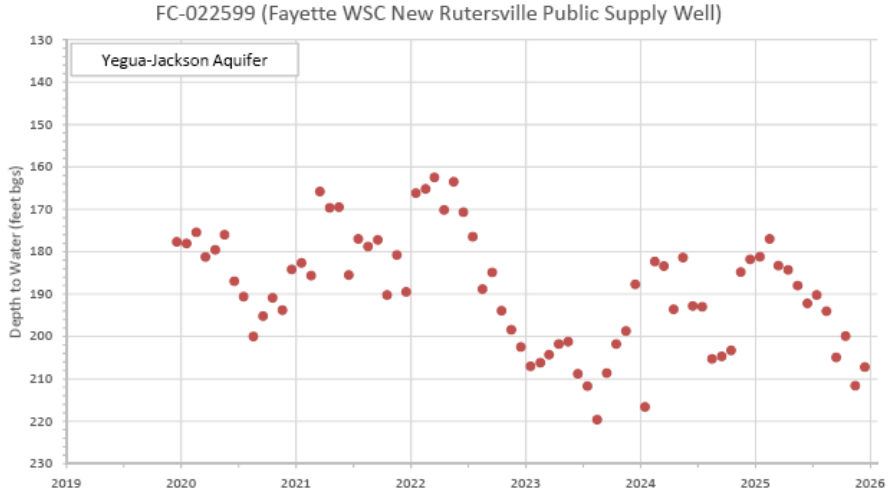
Selected Hydrographs - Gulf Coast Aquifer

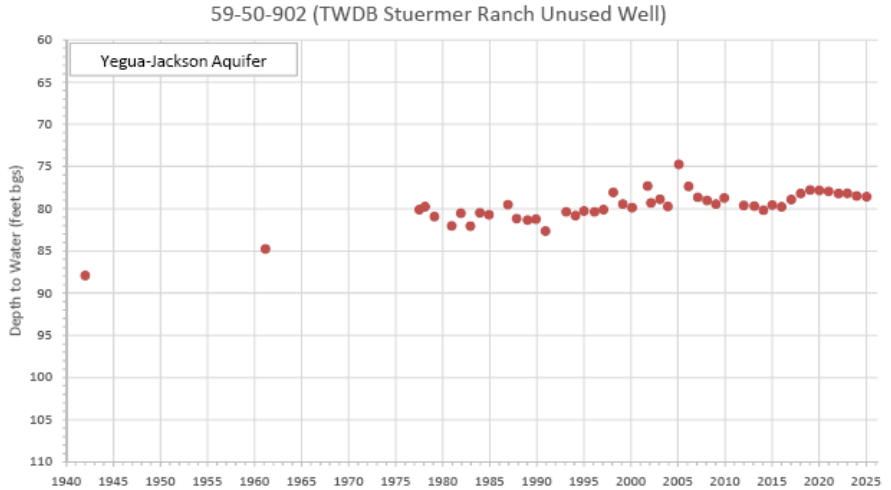




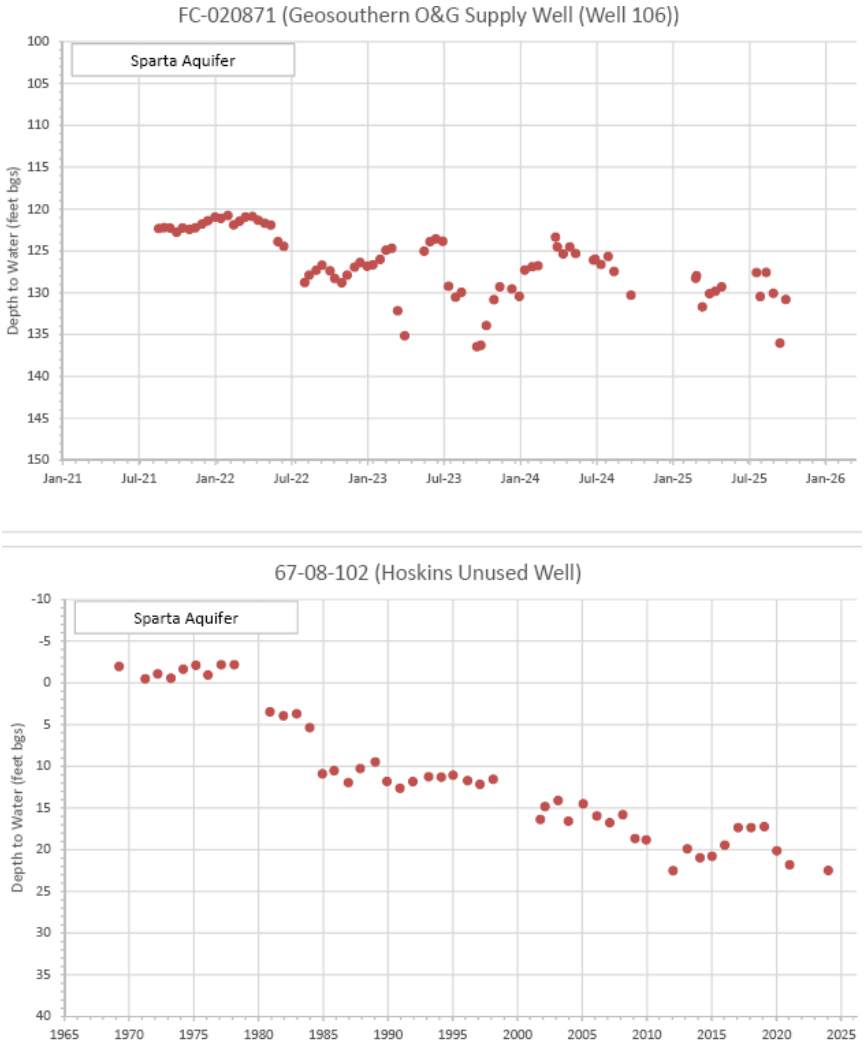
DBS&A
a Geo-Logic Company

Selected Hydrographs - Yegua-Jackson Aquifer





Selected Hydrographs - Sparta Aquifer



In conclusion…

- There are multiple ways to look at DFC and interim decadal DFC compliance
- The District appears to be on track not to exceed the current proposed DFCs
- Need to watch the Gulf Coast Aquifer
- Need more data in the Sparta, Queen City, and Carrizo aquifers

Any questions?