SIMSBORO AQUIFER WATER DEFENSE FUND [SAWDF]

APRIL 20, 2021



- Good science
- Quantifiable input gives predictable output
- Starting point to examine unreasonable impacts

GAM 2020

Using the GAM to reverse-engineer DFCs that ONLY accommodate permits is NOT 'best available science.'



Table 1- Desired Future Conditions

Aquifer	County	District-wide DFC in 2070 (Average drawdown in feet)	DFC in 2070 (County-wide average drawdown in feet)
Sparta	Bastrop Lee	5	-9 10
Queen City	Bastrop Lee	15	16 16
Carrizo	Bastrop Lee	62	74 64
Calvert Bluff	Bastrop Lee	100	81 142
Simsboro	Bastrop Lee	240	174 350
Hooper	Bastrop Lee	165	153 225

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Current DFC in New GAM

Lost Pines- S-3

	Current DFC (feet)	Current MAG in 2070	S-3 Drawdown in 2070 (feet)	S-3 Pumpage in 2070 (acre-feet)
Sparta	5	2,393	11	2,710
Queen City	15	1,315	14	1,744
Carrizo	62	12,052	73	10,837
Calvert Bluff	100	3,984	81	4,047
Simsboro	240	30,303	161	71,295
Hooper	165	1,255	88	2,732

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County-wide average hides unreasonable impact



You have the data - don't be afraid to look

District W	Usage	WellReport	Depth of W	Location D	County	Top of Scr	Ex	CarrizoF3	msl_depth	Max Pump depth	Head_2030	Lowest Water Level	Available Drawdown
	Domestic	188035	405	5	Lee			1	-5	95	216	195	21
59-25-8-0008	Domestic		410	CR 413, Tanglewood	Lee County		Yes	1	-26	74	216.7	174	43
	Domestic	257449	460	0	Lee			1	-20	80	225	180	45
	Domestic	209882	445	5	Lee			1	-28	72	219	172	47
59-41-5-0003	Domestic	S	440	Hwy 21 Past 290, CR 454	Lee County	2	Yes	1	-50	50	216.2	150	66
	Domestic	6419	420	D	Lee			1	-49	51	225	151	74
59-33-2-0011	Domestic		420	Lexington	Lee County		Yes	1	-56	44	225.4	144	81
59-33-1-0021	Domestic	1	480	1613 CR 411	Lee County		Yes	1	-67	33	225.4	133	92
59-33-2-0020	Domestic	539063	480	1842 CR 414	Lee County		Yes	1	-116	-16	181.9	84	98
	Domestic	413912	505	5	Lee			1	-69	31	235	131	104
59-33-2-0019	Domestic		454	1914 CR 411	Lee County		Yes	1	-87	13	219.6	113	107
	Domestic	554012	500	0	Lee			1	-67	33	245	133	112
59-25-8-0016	Livestock		460	2338 Cr 412	Lee County	3	Yes	1	-73	27	243.8	127	117
58-40-9-0016	Domestic		481	7152 FM 1624	Lee County		Yes	1	-51	49	268.9	149	120
	Domestic	407535	520	0	Lee			1	-103	-3	240	97	143
	Domestic	1550	505	5	Lee			1	-121	-21	225	79	146
	Domestic	193168	460	D	Lee			1	-129	-29	243	71	172
59-33-6-0019	Domestic	479293	640	1137 PR 4054	Lee County		Yes	1	-230	-130	148.7	-30	179
	Domestic	276114	500	0	Lee			1	-113	-13	268	87	181
59-25-8-0009	Domestic		530	2530 CR 412	Lee County	5	Yes	1	-143	-43	241.9	57	185
59-33-5-0010	Livestock	5432849	665	51157 CR 407	Lee County	515	Yes	1	-209	-109	183.6	-9	193
	Domestic	182972	620	D	Lee			1	-216	-116	180	-16	196
	Domestic	193145	640	D	Lee			1	-197	-97	200	3	197
	Domestic	461760	660	D	Lee			1	-247	-147	180	-47	227
59-40-5-0001	Domestic		685	2417 E FM 696 Lexington, TX	Lee County		Yes	1	-232	-132	205.5	-32	238
	Domestic	559707	600	0	Lee			1	-196	-96	250	4	246
58-48-4-0013	Domestic	478499	530	1597 CR 331	Lee County	3	Yes	1	-58	42	388.7	142	247
	Domestic	491220	665	5	Lee			1	-255	-155	200	-55	255
58-48-1-0018	Domestic		155	5CR A	Lee County	5	Yes	1	334	234	389.7	134	256
59-33-7-0009	Domestic		772	23088 CR 408	Lee County		Yes	1	-300	-200	195.4	-100	295
58-56-6-0002	Livestock		260	XXXXCR 403 & PR 4033	Lee County		Yes	1	216	116	313	16	297
58-38-9-0015	Domestic	0	270	XXXXWillow Creek Dr.	Lee County		Yes	1	206	106	313	6	307
58-39-4-0019	Domestic		270	XXXXDeerwood	Lee County		Yes	1	206	106	313	6	307
58-39-5-0010	Domestic		270	XXXXCR 312	Lee County		Yes	1	206	106	313	6	307
59-57-1-0006	Domestic		270	XXXXFM 448	Lee County	2	Yes	1	206	106	313	6	307
59-33-7-0014	Domestic	491220	665	57825 Hwy 77	Lee County		Yes	1	-261	-161	248	-61	309
58-40-8-0011	Livestock		275	XXXXFM1624	Lee County		Yes	1	201	101	313	1	312
1	Domestic	36316	304	1	Lee			1	198	98	313	-2	315
58-39-7-0028	Livestock		280	XXXXFM619	Lee County		Yes	1	196	96	313	-4	317



LPGCD Carrizo Exempt Wells								
	Total	GAM 2020	Po drill	Mitigate				
	[calculated]	[S-3]	Re-unit					
Lee County	90	73 ft	6	73				

Unreasonable impact on exempt domestic/livestock/irrigation wells 80% exempt wells mitigated/7% failed

"must provide a balance between the highest practicable level of groundwater production and the conservation, preservation, protection, recharging, and prevention of waste of groundwater and control of subsidence in the management area."



- Proposed DFCs are 'reverse engineered' with a method that only accommodates permit holders.
- County-wide average drawdown obscures the real-world impact of permits.

GMA-12 DFC PUBLIC COMMENT PERIOD

• Publish Proposed S-12 DFCs for what they are,

"what-if" of 100% permit production.

 Publish, by decade, contour maps showing S-12 drawdown in each aquifer/formation and plotted exempt wells.

- After Public Comment period, allow Districts to modify the proposed DFCs beyond the agreed 10% with
 - Supporting explanatory document, and/or
 - Best, planned pumping amounts.

- Management Plan for each District should include on-going assessment of impacts on exempt wells:
 - Water levels
 - Mitigation
 - Socio-economic

- Develop a new methodology for proposed DFCs
 - Evaluate and incorporate 'sustainable' groundwater production for each aquifer/formation
 - Only use the GAM to EVALUATE DFCs [not calculate]