

**Lost Pines GCD
Information Packet
For GMA 12
--Groundwater Demands--**

June 6, 2014

Table 1. Total water demand (most recent demand estimates from the TWDB with updates from Lost Pines GCD)

Total Water Demand- Bastrop County (acre-feet/year)						
CATEGORY	2020	2030	2040	2050	2060	2070
IRRIGATION	4,000	4,000	4,000	4,000	4,000	4,000
LIVESTOCK	1,522	1,522	1,522	1,522	1,522	1,522
MANUFACTURING	194	227	262	295	319	345
MINING	2,884	6,813	7,498	8,263	9,085	9,996
MUNICIPAL	15,732	20,149	26,036	34,163	45,264	60,058
STEAM ELECTRIC POWER	14,000	16,720	16,720	16,720	16,720	16,720

Total Water Demand- Lee County (acre-feet/year)						
CATEGORY	2020	2030	2040	2050	2060	2070
IRRIGATION	1,500	1,500	1,500	1,500	1,500	1,500
LIVESTOCK	1,935	1,935	1,935	1,935	1,935	1,935
MANUFACTURING	13	14	15	16	17	18
MINING	3,180	7,289	7,767	8,304	8,904	9,631
MUNICIPAL	2,979	3,258	3,410	3,458	3,499	3,525
STEAM ELECTRIC POWER	0	0	0	0	0	0

Table 2. Estimated percent of total water demand met with groundwater (based on historic water use data with updates by Lost Pines GCD)

Percent of Demand Met with Groundwater			
	Bastrop	Lee	Notes
IRRIGATION	100%	100%	
LIVESTOCK	20%	30%	
MANUFACTURING	75%	0%	
MINING	100%	100%	
MUNICIPAL	100%	100%	
STEAM ELECTRIC POWER	0%	0%	Bastrop County will use 5,000 afy for steam-electric power per LCRA permits

Table 3. Estimated groundwater demand (acre-feet/year).

Projected Groundwater Demand- Bastrop County (acre-feet/year)						
CATEGORY	2020	2030	2040	2050	2060	2070
IRRIGATION	4,000	4,000	4,000	4,000	4,000	4,000
LIVESTOCK	304	304	304	304	304	304
MANUFACTURING	146	170	197	221	239	259
MINING	2,884	6,813	7,498	8,263	9,085	9,996
MUNICIPAL	15,732	20,149	26,036	34,163	45,264	60,058
STEAM ELECTRIC POWER	5,000	5,000	5,000	5,000	5,000	5,000

Projected Groundwater Demand- Lee County (acre-feet/year)						
CATEGORY	2020	2030	2040	2050	2060	2070
IRRIGATION	1,500	1,500	1,500	1,500	1,500	1,500
LIVESTOCK	387	387	387	387	387	387
MANUFACTURING	10	11	11	12	13	14
MINING	3,180	7,289	7,767	8,304	8,904	9,631
MUNICIPAL	2,979	3,258	3,410	3,458	3,499	3,525
STEAM ELECTRIC POWER	0	0	0	0	0	0

Table 4. Percent of groundwater demand met by aquifer.

Estimated groundwater use by aquifer- Bastrop County							
CATEGORY	AQUIFER	2020	2030	2040	2050	2060	2070
IRRIGATION	Sparta	15%	15%	15%	15%	15%	15%
IRRIGATION	Queen City	15%	15%	15%	15%	15%	15%
IRRIGATION	Carrizo	20%	20%	20%	20%	20%	20%
IRRIGATION	Calvert Bluff	20%	20%	20%	20%	20%	20%
IRRIGATION	Simsboro	20%	20%	20%	20%	20%	20%
IRRIGATION	Hooper	10%	10%	10%	10%	10%	10%
LIVESTOCK	Sparta	15%	15%	15%	15%	15%	15%
LIVESTOCK	Queen City	15%	15%	15%	15%	15%	15%
LIVESTOCK	Carrizo	20%	20%	20%	20%	20%	20%
LIVESTOCK	Calvert Bluff	20%	20%	20%	20%	20%	20%
LIVESTOCK	Simsboro	20%	20%	20%	20%	20%	20%
LIVESTOCK	Hooper	10%	10%	10%	10%	10%	10%
MANUFACTURING	Simsboro	100%	100%	100%	100%	100%	100%
MINING	Simsboro	100%	100%	100%	100%	100%	100%
MUNICIPAL	Alluvium	10%	8%	6%	4%	4%	4%
MUNICIPAL	Sparta	2%	2%	2%	2%	2%	2%
MUNICIPAL	Queen City	2%	2%	2%	2%	2%	2%
MUNICIPAL	Carrizo	10%	10%	10%	10%	10%	10%
MUNICIPAL	Calvert Bluff	6%	6%	6%	6%	6%	6%
MUNICIPAL	Simsboro	70%	72%	74%	76%	76%	76%
MUNICIPAL	Hooper	0%	0%	0%	0%	0%	0%
STEAM ELECTRIC	Simsboro	100%	100%	100%	100%	100%	100%

Table 4 (continued). Percent of groundwater demand met by aquifer.

Estimated groundwater use by aquifer- Lee County							
CATEGORY	AQUIFER	2020	2030	2040	2050	2060	2070
IRRIGATION	Sparta	25%	25%	25%	25%	25%	25%
IRRIGATION	Queen City	28%	28%	28%	28%	28%	28%
IRRIGATION	Carrizo	15%	15%	15%	15%	15%	15%
IRRIGATION	Calvert Bluff	20%	20%	20%	20%	20%	20%
IRRIGATION	Simsboro	10%	10%	10%	10%	10%	10%
IRRIGATION	Hooper	2%	2%	2%	2%	2%	2%
LIVESTOCK	Sparta	25%	25%	25%	25%	25%	25%
LIVESTOCK	Queen City	28%	28%	28%	28%	28%	28%
LIVESTOCK	Carrizo	15%	15%	15%	15%	15%	15%
LIVESTOCK	Calvert Bluff	20%	20%	20%	20%	20%	20%
LIVESTOCK	Simsboro	10%	10%	10%	10%	10%	10%
LIVESTOCK	Hooper	2%	2%	2%	2%	2%	2%
MANUFACTURING	Simsboro	100%	100%	100%	100%	100%	100%
MINING	Simsboro	100%	100%	100%	100%	100%	100%
MUNICIPAL	Alluvium	0%	0%	0%	0%	0%	0%
MUNICIPAL	Sparta	5%	5%	5%	5%	5%	5%
MUNICIPAL	Queen City	5%	5%	5%	5%	5%	5%
MUNICIPAL	Carrizo	58%	58%	58%	58%	58%	58%
MUNICIPAL	Calvert Bluff	2%	2%	2%	2%	2%	2%
MUNICIPAL	Simsboro	30%	30%	30%	30%	30%	30%
MUNICIPAL	Hooper	0%	0%	0%	0%	0%	0%
STEAM ELECTRIC	Simsboro	100%	100%	100%	100%	100%	100%

Table 5. Estimated groundwater demand met by aquifer (acre-feet/year).

Projected Groundwater Demand By Aquifer- Bastrop County (acre-feet/year)							
CATEGORY	AQUIFER	2020	2030	2040	2050	2060	2070
IRRIGATION	Sparta	600	600	600	600	600	600
IRRIGATION	Queen City	600	600	600	600	600	600
IRRIGATION	Carrizo	800	800	800	800	800	800
IRRIGATION	Calvert Bluff	800	800	800	800	800	800
IRRIGATION	Simsboro	800	800	800	800	800	800
IRRIGATION	Hooper	400	400	400	400	400	400
LIVESTOCK	Sparta	46	46	46	46	46	46
LIVESTOCK	Queen City	46	46	46	46	46	46
LIVESTOCK	Carrizo	61	61	61	61	61	61
LIVESTOCK	Calvert Bluff	61	61	61	61	61	61
LIVESTOCK	Simsboro	61	61	61	61	61	61
LIVESTOCK	Hooper	30	30	30	30	30	30
MANUFACTURING	Simsboro	146	170	197	221	239	259
MINING	Simsboro	2,884	6,813	7,498	8,263	9,085	9,996
MUNICIPAL	Alluvium	1,573	1,612	1,562	1,367	1,811	2,402
MUNICIPAL	Sparta	315	403	521	683	905	1,201
MUNICIPAL	Queen City	315	403	521	683	905	1,201
MUNICIPAL	Carrizo	1,573	2,015	2,604	3,416	4,526	6,006
MUNICIPAL	Calvert Bluff	944	1,209	1,562	2,050	2,716	3,603
MUNICIPAL	Simsboro	11,012	14,104	18,225	23,914	31,685	42,041
MUNICIPAL	Hooper	0	0	0	0	0	0
STEAM ELECTRIC POWER	Simsboro	5,000	5,000	5,000	5,000	5,000	5,000

Table 5 (continued). Estimated groundwater demand met by aquifer (acre-feet/year).

Projected Groundwater Demand by Aquifer- Lee County (acre-feet/year)							
CATEGORY	AQUIFER	2020	2030	2040	2050	2060	2070
IRRIGATION	Sparta	375	375	375	375	375	375
IRRIGATION	Queen City	420	420	420	420	420	420
IRRIGATION	Carrizo	225	225	225	225	225	225
IRRIGATION	Calvert Bluff	300	300	300	300	300	300
IRRIGATION	Simsboro	150	150	150	150	150	150
IRRIGATION	Hooper	30	30	30	30	30	30
LIVESTOCK	Sparta	97	97	97	97	97	97
LIVESTOCK	Queen City	108	108	108	108	108	108
LIVESTOCK	Carrizo	58	58	58	58	58	58
LIVESTOCK	Calvert Bluff	77	77	77	77	77	77
LIVESTOCK	Simsboro	39	39	39	39	39	39
LIVESTOCK	Hooper	8	8	8	8	8	8
MANUFACTURING	Simsboro	10	11	11	12	13	14
MINING	Simsboro	3,180	7,289	7,767	8,304	8,904	9,631
MUNICIPAL	Alluvium	0	0	0	0	0	0
MUNICIPAL	Sparta	149	163	171	173	175	176
MUNICIPAL	Queen City	149	163	171	173	175	176
MUNICIPAL	Carrizo	1,728	1,890	1,978	2,006	2,029	2,045
MUNICIPAL	Calvert Bluff	60	65	68	69	70	71
MUNICIPAL	Simsboro	894	977	1,023	1,037	1,050	1,058
MUNICIPAL	Hooper	0	0	0	0	0	0
STEAM ELECTRIC POWER	Simsboro	0	0	0	0	0	0

Table 6. Estimated total groundwater demand by aquifer (acre-feet/year).

Groundwater Demand by Aquifer- Bastrop County (ac-ft/yr)						
AQUIFER	2020	2030	2040	2050	2060	2070
Alluvium	1,573	1,612	1,562	1,367	1,811	2,402
Sparta	960	1,049	1,166	1,329	1,551	1,847
Queen City	960	1,049	1,166	1,329	1,551	1,847
Carrizo	2,434	2,876	3,464	4,277	5,387	6,867
Calvert Bluff	1,805	2,070	2,423	2,911	3,577	4,464
Simsboro	19,903	26,948	31,781	38,259	46,870	58,156
Hooper	430	430	430	430	430	430

Groundwater Demand by Aquifer- Lee County (ac-ft/yr)						
AQUIFER	2020	2030	2040	2050	2060	2070
Alluvium	0	0	0	0	0	0
Sparta	621	635	642	645	647	648
Queen City	677	691	699	701	703	705
Carrizo	2,011	2,173	2,261	2,289	2,312	2,328
Calvert Bluff	437	443	446	447	447	448
Simsboro	4,272	8,466	8,990	9,542	10,155	10,891
Hooper	38	38	38	38	38	38