

**Fayette County 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 Fayette County GCD)

Total Water Demand (acre-feet/year)						
CATEGORY	2020	2030	2040	2050	2060	2070
IRRIGATION	623	583	545	511	480	453
LIVESTOCK	2,397	2,397	2,397	2,397	2,397	2,397
MANUFACTURING	358	395	431	462	501	543
MINING	2,526	2,032	1,465	918	359	350
MUNICIPAL	4,079	4,511	4,792	5,046	5,274	5,455
STEAM ELECTRIC POWER	35,702	35,702	37,802	44,102	48,602	53,402

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

Percent of Demand Met with Groundwater	
CATEGORY	Fayette
IRRIGATION	100%
LIVESTOCK	20%
MANUFACTURING	75%
MINING	100%
MUNICIPAL	100%
STEAM ELECTRIC POWER	0%

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

Estimated Groundwater Demand (acre-feet/year)						
CATEGORY	2020	2030	2040	2050	2060	2070
IRRIGATION	561	525	491	460	432	408
LIVESTOCK	1,199	1,199	1,199	1,199	1,199	1,199
MANUFACTURING	125	138	151	162	175	190
MINING	632	508	366	230	90	88
MUNICIPAL	4,079	4,511	4,792	5,046	5,274	5,455
STEAM ELECTRIC POWER	0	0	0	0	0	0

Table 4. Percent of groundwater demand met by aquifer.

Estimated groundwater use by aquifer							
CATEGORY	AQUIFER	2020	2030	2040	2050	2060	2070
IRRIGATION	Alluvium	5%	5%	5%	5%	5%	5%
IRRIGATION	Evangeline	5%	5%	5%	5%	5%	5%
IRRIGATION	Burkeville	5%	5%	5%	5%	5%	5%
IRRIGATION	Jasper	32%	32%	32%	32%	32%	32%
IRRIGATION	Yegua-Jackson	45%	45%	45%	45%	45%	45%
IRRIGATION	Sparta	3%	3%	3%	3%	3%	3%
IRRIGATION	Queen City	1%	1%	1%	1%	1%	1%
IRRIGATION	Carrizo	3%	3%	3%	3%	3%	3%
IRRIGATION	Calvert Bluff	0%	0%	0%	0%	0%	0%
IRRIGATION	Other	1%	1%	1%	1%	1%	1%
LIVESTOCK	Alluvium	8%	8%	8%	8%	8%	8%
LIVESTOCK	Evangeline	8%	8%	8%	8%	8%	8%
LIVESTOCK	Burkeville	14%	14%	14%	14%	14%	14%
LIVESTOCK	Jasper	35%	35%	35%	35%	35%	35%
LIVESTOCK	Yegua-Jackson	30%	30%	30%	30%	30%	30%
LIVESTOCK	Sparta	2%	2%	2%	2%	2%	2%
LIVESTOCK	Queen City	1%	1%	1%	1%	1%	1%
LIVESTOCK	Carrizo	0%	0%	0%	0%	0%	0%
LIVESTOCK	Calvert Bluff	0%	0%	0%	0%	0%	0%
LIVESTOCK	Other	2%	2%	2%	2%	2%	2%
MANUFACTURING	Alluvium	5%	5%	5%	5%	5%	5%
MANUFACTURING	Evangeline	4%	4%	4%	4%	4%	4%
MANUFACTURING	Burkeville	6%	6%	6%	6%	6%	6%
MANUFACTURING	Jasper	36%	36%	36%	36%	36%	36%
MANUFACTURING	Yegua-Jackson	46%	46%	46%	46%	46%	46%
MANUFACTURING	Sparta	3%	3%	3%	3%	3%	3%
MANUFACTURING	Queen City	0%	0%	0%	0%	0%	0%
MANUFACTURING	Carrizo	0%	0%	0%	0%	0%	0%
MANUFACTURING	Calvert Bluff	0%	0%	0%	0%	0%	0%
MANUFACTURING	Other	0%	0%	0%	0%	0%	0%

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

Estimated groundwater use by aquifer							
CATEGORY	AQUIFER	2020	2030	2040	2050	2060	2070
MINING	Alluvium	1%	1%	1%	1%	1%	1%
MINING	Evangeline	4%	4%	4%	4%	4%	4%
MINING	Burkeville	6%	6%	6%	6%	6%	6%
MINING	Jasper	15%	15%	15%	15%	15%	15%
MINING	Yegua-Jackson	64%	64%	64%	64%	64%	64%
MINING	Sparta	4%	4%	4%	4%	4%	4%
MINING	Queen City	1%	1%	1%	1%	1%	1%
MINING	Carrizo	1%	1%	1%	1%	1%	1%
MINING	Calvert Bluff	0%	0%	0%	0%	0%	0%
MINING	Other	4%	4%	4%	4%	4%	4%
MUNICIPAL	Alluvium	1%	1%	1%	1%	1%	1%
MUNICIPAL	Evangeline	2%	2%	2%	2%	2%	2%
MUNICIPAL	Burkeville	3%	3%	3%	3%	3%	3%
MUNICIPAL	Jasper	24%	24%	24%	24%	24%	24%
MUNICIPAL	Yegua-Jackson	22%	22%	22%	22%	22%	22%
MUNICIPAL	Sparta	1%	1%	1%	1%	1%	1%
MUNICIPAL	Queen City	7%	7%	7%	7%	7%	7%
MUNICIPAL	Carrizo	18%	18%	18%	18%	18%	18%
MUNICIPAL	Calvert Bluff	0%	0%	0%	0%	0%	0%
MUNICIPAL	Other	22%	22%	22%	22%	22%	22%
STEAM ELECTRIC POWER	Evangeline	0%	0%	0%	0%	0%	0%
STEAM ELECTRIC POWER	Burkeville	0%	0%	0%	0%	0%	0%
STEAM ELECTRIC POWER	Jasper	0%	0%	0%	0%	0%	0%
STEAM ELECTRIC POWER	Yegua-Jackson	0%	0%	0%	0%	0%	0%
STEAM ELECTRIC POWER	Sparta	0%	0%	0%	0%	0%	0%
STEAM ELECTRIC POWER	Queen City	0%	0%	0%	0%	0%	0%
STEAM ELECTRIC POWER	Carrizo	0%	0%	0%	0%	0%	0%
STEAM ELECTRIC POWER	Calvert Bluff	0%	0%	0%	0%	0%	0%
STEAM ELECTRIC POWER	Other	0%	0%	0%	0%	0%	0%

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

Projected Groundwater Demand By Aquifer (acre-feet/year)							
CATEGORY	AQUIFER	2020	2030	2040	2050	2060	2070
IRRIGATION	Alluvium	28	26	25	23	22	20
IRRIGATION	Evangeline	28	26	25	23	22	20
IRRIGATION	Burkeville	28	26	25	23	22	20
IRRIGATION	Jasper	179	168	157	147	138	130
IRRIGATION	Yegua-Jackson	252	236	221	207	194	183
IRRIGATION	Sparta	17	16	15	14	13	12
IRRIGATION	Queen City	6	5	5	5	4	4
IRRIGATION	Carrizo	17	16	15	14	13	12
IRRIGATION	Calvert Bluff	0	0	0	0	0	0
IRRIGATION	Other	6	5	5	5	4	4
LIVESTOCK	Alluvium	96	96	96	96	96	96
LIVESTOCK	Evangeline	96	96	96	96	96	96
LIVESTOCK	Burkeville	168	168	168	168	168	168
LIVESTOCK	Jasper	419	419	419	419	419	419
LIVESTOCK	Yegua-Jackson	360	360	360	360	360	360
LIVESTOCK	Sparta	24	24	24	24	24	24
LIVESTOCK	Queen City	12	12	12	12	12	12
LIVESTOCK	Carrizo	0	0	0	0	0	0
LIVESTOCK	Calvert Bluff	0	0	0	0	0	0
LIVESTOCK	Other	24	24	24	24	24	24
MANUFACTURING	Alluvium	6	7	8	8	9	10
MANUFACTURING	Evangeline	5	6	6	6	7	8
MANUFACTURING	Burkeville	8	8	9	10	11	11
MANUFACTURING	Jasper	45	50	54	58	63	68
MANUFACTURING	Yegua-Jackson	58	64	69	74	81	87
MANUFACTURING	Sparta	4	4	5	5	5	6
MANUFACTURING	Queen City	0	0	0	0	0	0
MANUFACTURING	Carrizo	0	0	0	0	0	0
MANUFACTURING	Calvert Bluff	0	0	0	0	0	0
MANUFACTURING	Other	0	0	0	0	0	0

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

Projected Groundwater Demand By Aquifer (acre-feet/year)							
CATEGORY	AQUIFER	2020	2030	2040	2050	2060	2070
MINING	Alluvium	6	5	4	2	1	1
MINING	Evangeline	25	20	15	9	4	4
MINING	Burkeville	38	30	22	14	5	5
MINING	Jasper	95	76	55	34	13	13
MINING	Yegua-Jackson	404	325	234	147	57	56
MINING	Sparta	25	20	15	9	4	4
MINING	Queen City	6	5	4	2	1	1
MINING	Carrizo	6	5	4	2	1	1
MINING	Calvert Bluff	0	0	0	0	0	0
MINING	Other	25	20	15	9	4	4
MUNICIPAL	Alluvium	41	45	48	50	53	55
MUNICIPAL	Evangeline	82	90	96	101	105	109
MUNICIPAL	Burkeville	122	135	144	151	158	164
MUNICIPAL	Jasper	979	1,083	1,150	1,211	1,266	1,309
MUNICIPAL	Yegua-Jackson	897	992	1,054	1,110	1,160	1,200
MUNICIPAL	Sparta	41	45	48	50	53	55
MUNICIPAL	Queen City	286	316	335	353	369	382
MUNICIPAL	Carrizo	734	812	863	908	949	982
MUNICIPAL	Calvert Bluff	0	0	0	0	0	0
MUNICIPAL	Other	897	992	1,054	1,110	1,160	1,200

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

Groundwater Demand by Aquifer (ac-ft/yr)						
AQUIFER	2020	2030	2040	2050	2060	2070
Alluvium	177	179	180	180	180	181
Sparta	111	109	106	102	99	100
Queen City	309	338	356	372	386	399
Carrizo	757	833	881	924	963	995
Calvert Bluff	0	0	0	0	0	0
Jasper	1,718	1,796	1,836	1,870	1,900	1,941
Evangeline	236	238	237	235	234	236
Burkeville	364	368	367	366	364	368
Yegua-Jackson	1,971	1,977	1,938	1,898	1,852	1,887
Other	952	1,042	1,098	1,148	1,192	1,232