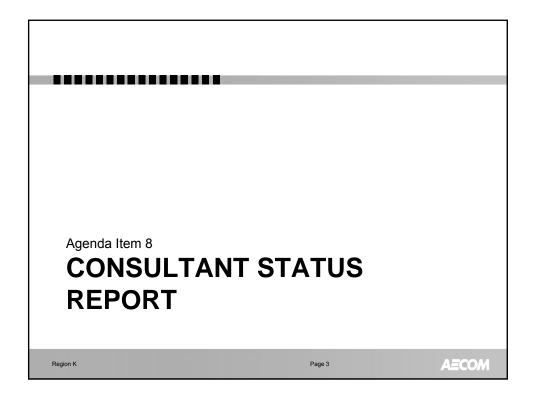


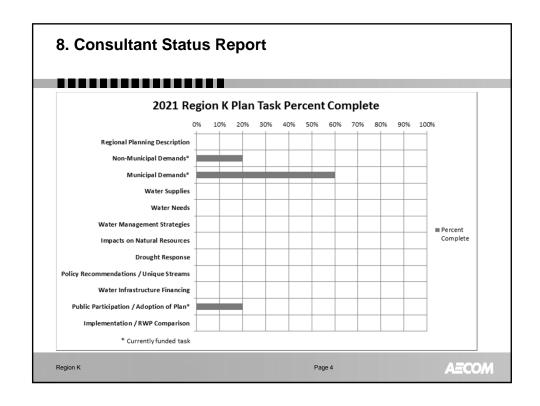
#### **Agenda**

#### -----

- 1. Call to Order
- 2. Welcome and Introductions
- 3. Public Comments on Agenda Items 8, 9, 10
- 4. Attendance Report
- 5. Consent Agenda
- 6. Texas Water Development Board
- 7. Discussion of bills passed in 85<sup>th</sup> Legislature affecting regional water planning
- 8. Consultant Status Report

Region K Page 2





#### 8. Consultant Status Report Effort since last meeting (April 26<sup>th</sup>)

..............

- ▼ Population and Municipal Demand Projections
  - Followed up by email with Water User Groups (WUGs) that had not responded by May 1<sup>st</sup>.
  - Coordinated with TWDB staff on potential additional WUGs, and on questions related to feedback from WUGs related to population and demand projections.
  - Received historical population, water use, and gallons per capita daily (GPCD) estimate data (2010-2015) for all utility WUGs from TWDB. Began reviewing relative to revision requests.
- ▼ Non-Municipal Demand Projections
  - Received draft projections and supporting data from TWDB on June 2<sup>nd</sup> and began reviewing.

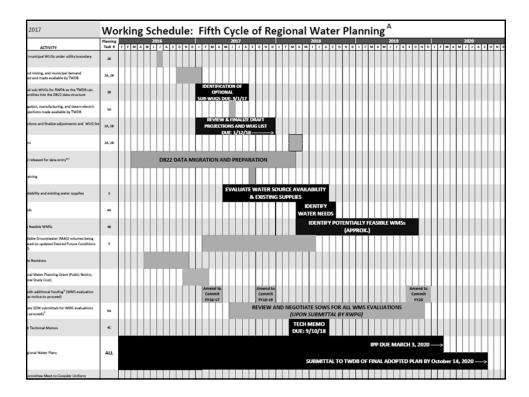
Region K Page 5

#### 8. Consultant Status Report Other Items to Note

............

- ▼ Executive Committee held a meeting on June 13<sup>th</sup> to discuss notice postings and meeting locations for all future Region K committee meetings.
- ▼ TWDB hosted a RWPG Chairs' Conference Call on June 28th.
- ▼ TWDB staff will be taking the Creedmoor-Maha WSC amendment to the 2016 Region K Water Plan to the TWDB Board for approval on July 20<sup>th</sup>.
- ▼ TWDB has released a new updated planning cycle timeline.

Region K Page 6



#### 8. Consultant Status Report Upcoming effort

#### ------------

- ▼ Path forward: Working with the Population and Demand Committee to review and develop any recommended population, municipal demand, or non-municipal demand revisions to bring to the planning group for consideration.
- ▼ Currently, we have two more Region K meetings on our regular schedule before the revision requests are due. (October, January)
- ▼ Start making updates to Chapter 2 of 2021 Plan, as able.
- ▼ Amend contract to begin working on additional tasks.

Region K Page 8 AECOM

7/12/17 4

......

Agenda Item 9

# UPDATE ON DRAFT POPULATION AND MUNICIPAL DEMANDS

Region K Page 9

9. Update on Draft Population and Municipal Demand Projections

- ▼ Providing update on population and municipal demand projection topics that were discussed at the April 26<sup>th</sup> meeting.
- ▼ Requesting action item for decision on sub-WUG and Collective Reporting Units (CRUs).
- ▼ No municipal revisions to consider today. Future meeting(s).

Region K Page 10

7/12/17 5

- ▼ Update on WUG feedback on draft municipal projections
  - -61 out of 114 have responded (54%)
    - 37 are not requesting any changes
    - 4 have changes that mainly affect another region
    - 5 are still considering

-------------

• 15 are requesting changes affecting our region

New since last meeting:

- · Dripping Springs WSC
- · Lago Vista
- Leander
- · Pflugerville
- · Sunset Valley
- · Travis County WCID Point Venture
- · Wells Branch MUD

Region K Page 11

#### 9. Update on Draft Population and Municipal Demand Projections

- ▼ At April 26<sup>th</sup> meeting, RWPG discussed adding a sub-WUG and two Collective Reporting Units (CRU) to the list of WUGs.
- ▼ Rough Hollow in Travis County CRU
  - The Pop & Demand Committee recommends combining Travis County MUD 11, MUD 12, and MUD 13 into a Collective Reporting Unit called "Rough Hollow in Travis County CRU".
  - Collective Reporting Unit Group of retail public utilities that have a common association and are requested by RWPGs, treated similarly to WUGs. TWDB will develop projections for these CRUs.
  - TWDB staff have done research to develop draft population and demand projections using 2016 water use surveys submitted by the MUDs.

				Population							Demands (Ac-Ft/Yr)					
County	Basin	WUG- Name	BASE GPCD	2020	2030	2040	2050	2060	2070	2020	2030	2040	2050	2060	2070	
Travis	Colorado	Rough Hollow in Travis County CRU	190	2,767	5,698	5,698	5,698	5,698	5,698	589	1,213	1,213	1,213	1,213	1,213	
F	Region K							F	Page 12				A	≡co.	М	

#### Sweetwater CRU

-------------

- The Pop & Demand Committee supports combining Lazy Nine MUD
   1A, 1B, and 1E in Travis County into a Collective Reporting Unit (CRU) described as "Sweetwater CRU".
- TWDB staff have been trying to develop draft population and demand projections.
  - Concerns that none of the identified MUDs show up in TCEQ Drinking Water Watch as community systems; no PWS IDs; have not yet submitted water use survey data.
  - Using water conservation plan and utility profile information, along with information from the developer, the following initial draft projections were developed:

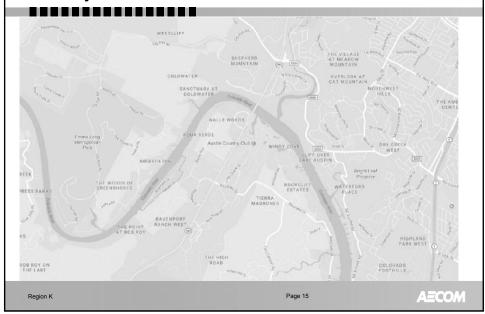
				Population							Demands (Ac-Ft/Yr)				
County	Basin	WUG- Name	BASE GPCD	2020	2030	2040	2050	2060	2070	2020	2030	2040	2050	2060	2070
Travis	Colorado	Sweetwater CRU	132	2,760	5,832	5,832	5,832	5,832	5,832	408	862	862	862	862	862
F	Region K							F	Page 13				A	≣CO.	М

#### 9. Update on Draft Population and Municipal Demand Projections

#### ▼ Aqua Texas – Rivercrest (sub-WUG)

- This private utility did not meet TWDB criteria (each water system owned by the private utility must provide the 100 acre-feet or more for municipal use). While Rivercrest uses more than 100 acre-feet, other water systems owned by Aqua Texas do not.
- They have requested to be planned for as a WUG. Region K can include this water system as a sub-WUG.
- This sub-WUG would be pulled out of Travis County-Other.
- Region K would need to delineate the sub-WUG boundary, and develop the population and demand projections ourselves.
- Sub-WUGs may not appear on the 2022 Interactive State Water Plan, but can be included similarly to WUGs in rest of planning efforts.

Region K Page 14



### 9. Update on Draft Population and Municipal Demand Projections

- ▼ Benefit of listing Collective Reporting Units (CRUs) and sub-WUGs:
  - Pulls population and demands out of County-Other so that they can be individually planned for.
- ▼ Concerns:
  - May have trouble balancing population in Travis County.
  - Additional planning effort required for each new WUG.

#### ▼ POSSIBLE ACTION ITEM:

 Region K approves requesting TWDB to include "Rough Hollow in Travis County CRU" and "Sweetwater CRU" as Collective Reporting Units, and "Aqua Texas - Rivercrest" as a sub-WUG, in Region K for the 2021 planning cycle.

Region K Page 16

#### ▼ Municipal Revisions

..............

- The Population and Demand Committee has not met since the April 26<sup>th</sup> Region K meeting, so no recommendations to bring you today.
- TWDB has pushed back the submittal deadline until January 12, 2018.
- The Texas Demographic Center will be releasing new county population projections this month. May aid Region K with Travis County population balancing.
- TWDB staff released the historical population, water use, and GPCD estimate data (2010-2015) for all utility WUGs listed in the draft projections on June 30<sup>th</sup>. May aid in supporting some of the requested revisions.
- Focus on making and balancing revisions for request to TWDB. Will work with Pop & Demand Committee. Limiting effort to follow up with WUGs that have not yet responded.

Region K Page 17

-----

Agenda Item 10

## PRESENTATION OF DRAFT NON-MUNICIPAL DEMANDS

Region K Page 18

-------------

- ▼ Presentation of Draft Non-Municipal Demand Projections no action needed today.
- ▼ TWDB provided draft projections for irrigation, livestock, manufacturing, and steam-electric water demands on June 2, 2017.
- ▼ TWDB also provided some additional data related to mining water use in the same email.
- ▼ Draft projections are based on methodologies developed last year for and by TWDB.
- ▼ Region K discussed the finalized methodologies at the April 26<sup>th</sup> RWPG meeting.

Region K Page 19

#### 10. Presentation of Draft Non-Municipal Demand Projections

- ▼ Draft Irrigation Water Demand Projections
- ▼ Methodology:
  - Baseline: Average historical water use over the 5-year period (2010 2014), constant between 2020 and 2070.

			His	torical Use E		2010-2014	2010-2015		
Region	County	2010	2011	2012	2013	2014	2015	Average	Average
K	BASTROP	7,049	5,061	3,781	3,064	2,444	3,204	4,280	4,101
K	BLANCO	369	357	2,150	1,825	1,932	1,339	1,327	1,329
K	BURNET	1,500	1,075	1,841	1,477	1,595	2,020	1,498	1,585
K	COLORADO	150,038	214,548	87,518	82,916	83,390	68,956	123,682	114,561
K	FAYETTE	325	1,655	1,167	494	499	472	828	769
K	GILLESPIE	1,461	3,465	2,280	2,278	2,429	2,564	2,383	2,413
K	HAYS	510	687	593	357	479	433	525	510
K	LLANO	335	2,420	921	714	601	599	998	932
K	MATAGORDA	161,116	243,000	47,983	58,303	37,122	43,251	109,505	98,463
K	MILLS	4,233	5,498	5,218	4,238	4,529	5,934	4,743	4,942
K	SAN SABA	5,691	7,900	7,494	6,933	7,975	7,012	7,199	7,168
K	TRAVIS	3,725	5,880	4,526	6,497	9,424	11,327	6,010	6,897
K	WHARTON	166,632	267,611	99,034	104,039	100,401	80,361	147,543	136,346
K	WILLIAMSON	0	0	0	0	0	0	0	0
	Region Total	502,984	759,157	264,506	273,135	252,820	227,472	410,520	380,012

Region K Page 20

▼ Draft Irrigation Water Demand Projections for 2021 Plan in AFY, compared to 2017 SWP Projections:

				2017 SWP		2021 RWP Dr	aft Projections		
Region	County	2020	2030	2040	2050	2060	2070	2020	2070
K	BASTROP	852	742	649	565	492	443	4,280	4,280
K	BLANCO	256	240	225	217	213	204	1,327	1,327
K	BURNET	1,504	1,504	1,504	1,504	1,504	1,504	1,498	1,498
K	COLORADO	165,846	161,385	157,044	152,819	148,709	144,708	123,682	123,682
K	FAYETTE	623	583	545	511	480	453	828	828
K	GILLESPIE	2,058	2,031	2,003	1,978	1,953	1,928	2,383	2,383
K	HAYS	107	107	107	107	107	107	525	525
K	LLANO	1,936	1,902	1,870	1,840	1,810	1,781	998	998
K	MATAGORDA	209,087	203,382	197,830	192,428	187,171	182,055	109,505	109,505
K	MILLS	3,074	3,008	2,943	2,879	2,817	2,759	4,743	4,743
K	SAN SABA	5,539	5,361	5,188	5,018	4,856	4,709	7,199	7,199
K	TRAVIS	4,322	3,975	3,657	3,364	3,097	2,885	6,010	6,010
K	WHARTON	212,229	206,520	200,965	195,559	190,298	185,179	147,543	147,543
K	WILLIAMSON	0	0	0	0	0	0	0	0
	Region Total	607,433	590,740	574,530	558,789	543,507	528,715	410,521	410,521

Region K Page 21

### 10. Presentation of Draft Non-Municipal Demand Projections

- ▼ Draft Manufacturing Water Demand Projections
- ▼ Methodology:
  - 2020 projections highest water use from 2010-2014; 2030 projections use TWC employee growth projections; keep 2030-2070 constant

			His		2010-2014	2010-2015			
Region	County	2010	2011	2012	2013	2014	2015	Peak	Peak
K	BASTROP	79	104	82	83	93	98	104	104
K	BLANCO	0	0	0	0	0	0	0	0
K	BURNET	230	251	171	157	145	138	251	251
K	COLORADO	844	849	960	769	520	532	960	960
K	FAYETTE	187	285	280	254	325	363	325	363
K	GILLESPIE	6	14	14	21	19	19	21	21
K	HAYS	109	120	149	130	149	134	149	149
K	LLANO	3	3	3	3	3	3	3	3
K	MATAGORDA	3,505	4,199	3,791	3,966	3,904	3,953	4,199	4,199
K	MILLS	2	1	2	2	2	2	2	2
K	SAN SABA	5	5	10	4	5	5	10	10
K	TRAVIS	9,436	10,198	11,193	11,597	10,917	11,801	11,597	11,801
K	WHARTÓN	148	150	148	156	151	49	156	156
K	WILLIAMSON	8	3	4	4	18	10	18	18
	Region Total	14,562	16,182	16,807	17,146	16,251	17,107	17,795	18,037

Region K Page 22

▼ Draft Manufacturing Water Demand Projections for 2021 Plan in AFY, compared to 2017 SWP Projections:

				2017 SWP		2021 RW	P Draft Pro	ojections		
Region	County	2020	2030	2040	2050	2060	2070	2020	2030	2070
K	BASTROP	194	227	262	295	319	345	104	119	119
K	BLANCO	20	20	20	20	20	20	0	0	0
K	BURNET	1,109	1,248	1,384	1,502	1,636	1,782	251	299	299
K	COLORADO	383	409	433	453	489	528	960	1,132	1,132
K	FAYETTE	358	395	431	462	501	543	325	363	363
K	GILLESPIE	1,049	1,102	1,151	1,192	1,276	1,366	21	25	25
K	HAYS	347	398	449	495	537	583	149	174	174
K	LLANO	3	3	3	3	3	3	3	4	4
K	MATAGORDA	16,253	16,991	17,686	18,259	19,267	20,342	4,199	4,916	4,916
K	MILLS	2	2	2	2	2	2	2	2	2
K	SAN SABA	8	8	8	8	8	8	10	12	12
K	TRAVIS	35,790	48,710	63,858	72,991	81,781	91,630	11,597	13,085	13,085
K	WHARTON	503	537	572	601	648	699	156	171	171
K	WILLIAMSON	0	0	0	0	0	0	3	4	4
	Region Total	56,019	70,050	86,259	96,283	106,487	117,851	17,780	20,306	20,306

Region K Page 23

### 10. Presentation of Draft Non-Municipal Demand Projections

▼ Draft Steam-Electric Water Demand Projections

▼ Methodology:

 2020 projections - highest water use from 2010-2014 plus planned new facilities and minus scheduled retiring facilities; keep 2020-2070 constant

			His	torical Use E		2010-2014	New			
Region	County	2010	2011	2012	2013	2014	2015	Peak	(+)	Total
K	BASTROP	3,491	7,646	6,426	5,549	6,789	7,764	7,646	2,642	10,288
K	BLANCO	0	0	0	0	0	0	0		0
K	BURNET	0	0	0	0	0	0	0		0
K	COLORADO	0	0	0	0	0	0	0	4,971	4,971
K	FAYETTE	19,205	49,211	15,102	22,291	14,553	9,338	49,211		49,211
K	GILLESPIE	0	0	0	0	0	0	0		0
K	HAYS	0	0	0	1,187	978	1,949	1,187		1,187
K	LLANO	2	2	2	1	6	10	6		6
K	MATAGORDA	44,314	3,389	80,536	45,132	37,051	67,454	80,536		80,536
K	MILLS	0	0	0	0	0	0	0		0
K	SAN SABA	0	0	0	0	0	0	0		0
K	TRAVIS	3,001	10,089	4,931	4,277	3,794	2,321	10,089	164	10,253
K	WHARTON	0	0	0	0	1	3	1	5,464	5,465
K	WILLIAMSON	0	0	0	0	0	0	0		0
	Region Total	70,013	70,337	106,997	78,437	63,172	88,839	148,676	13,241	161,917

Region K Page 24 AECOM

▼ Draft Steam-Electric Water Demand Projections for 2021 Plan in AFY, compared to 2017 SWP Projections:

				2017 SWP		2021 RWP Dra	ft Projections		
Region	County	2020	2030	2040	2050	2060	2070	2020	2070
K	BASTROP	14,000	16,720	16,720	16,720	16,720	16,720	10,288	10,288
K	BLANCO	0	0	0	0	0	0	0	0
K	BURNET	0	0	0	0	0	0	0	0
K	COLORADO	0	0	0	0	0	0	4,971	4,971
K	FAYETTE	35,702	35,702	37,802	44,102	48,602	53,402	49,211	49,211
K	GILLESPIE	0	0	0	0	0	0	0	0
K	HAYS	0	0	0	0	0	0	1,187	1,187
K	LLANO	2,500	2,500	2,500	2,500	2,500	2,500	6	6
K	MATAGORDA	105,000	105,000	105,000	105,000	105,000	105,000	80,536	80,536
K	MILLS	0	0	0	0	0	0	0	0
K	SAN SABA	0	0	0	0	0	0	0	0
K	TRAVIS	18,500	22,500	22,500	23,500	24,500	26,500	10,253	10,253
K	WHARTON	2,751	2,813	2,888	2,980	3,091	3,197	5,465	5,465
K	WILLIAMSON	0	0	0	0	0	0	0	0
	Region Total	178,453	185,235	187,410	194,802	200,413	207,319	161,917	161,917

Page 25

**AECOM** 

10. Presentation of Draft Non-Municipal Demand

Projections

..............

▼ Draft Livestock Water Demand Projections

▼ Methodology:

Region K

- 2020 projections - average water use from 2010-2014; keep 2020-2070 constant

				2010-2014				
Region	County	2010	2011	2012	2013	2014	2015	Average
K	BASTROP	1,307	1,302	1,074	961	1,031	1,050	1,135
K	BLANCO	386	386	317	278	289	295	331
K	BURNET	5,682	1,170	579	499	523	609	1,691
K	COLORADO	1,488	1,457	1,259	1,077	1,097	1,113	1,276
K	FAYETTE	2,004	1,861	1,670	1,447	1,650	1,752	1,726
K	GILLESPIE	1,791	1,844	868	762	796	809	1,212
K	HAYS	19	19	14	16	17	17	17
K	LLANO	619	614	497	581	589	607	580
K	MATAGORDA	1,197	1,173	973	990	1,044	969	1,075
K	MILLS	1,037	1,078	710	736	753	773	863
K	SAN SABA	866	865	740	702	723	735	779
K	TRAVIS	625	634	497	479	398	405	527
K	WHARTON	894	872	741	736	716	678	792
K	WILLIAMSON	0	0	0	0	0	0	(
	Region Total	17,915	13,275	9,939	9,264	9,626	9,812	12,004

Region K Page 26

..............

▼ Draft Livestock Water Demand Projections for 2021 Plan in AFY, compared to 2017 SWP Projections:

				2017 SWP		2021 RWP Dra	aft Projections		
Region	County	2020	2030	2040	2050	2060	2070	2020	2070
K	BASTROP	1,522	1,522	1,522	1,522	1,522	1,522	1,135	1,135
K	BLANCO	564	564	564	564	564	564	331	331
K	BURNET	835	835	835	835	835	835	1,691	1,691
K	COLORADO	1,590	1,590	1,590	1,590	1,590	1,590	1,276	1,276
K	FAYETTE	2,397	2,397	2,397	2,397	2,397	2,397	1,726	1,726
K	GILLESPIE	1,062	1,062	1,062	1,062	1,062	1,062	1,212	1,212
K	HAYS	220	220	220	220	220	220	17	17
K	LLANO	751	751	751	751	751	751	580	580
K	MATAGORDA	1,503	1,503	1,503	1,503	1,503	1,503	1,075	1,075
K	MILLS	944	944	944	944	944	944	863	863
K	SAN SABA	1,191	1,191	1,191	1,191	1,191	1,191	779	779
K	TRAVIS	704	704	704	704	704	704	527	527
K	WHARTON	728	728	728	728	728	728	792	792
K	WILLIAMSON	1	1	1	1	1	1	0	0
	Region Total	14,012	14,012	14,012	14,012	14,012	14,012	12,004	12,004

Region K Page 27

### 10. Presentation of Draft Non-Municipal Demand Projections

- ▼ TWDB provided updated information that may be helpful to regions for Mining Water Demand Projections
- ▼ Historical water use estimates broken down into fresh, reuse, and brackish groundwater

		Fre	Fresh (Groundwater + Surface water)							Rei	ıse					Brac	kish		
Region	County	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
K	BASTROP	2,178	2,157	45	44	37	44	-	-	-		1		-	-	-	-	-	-
K	BLANCO	-						-	-		-	-		-	-	-	-	-	-
K	BURNET	3,550	3,226	33	16	42	45	4	3	2	2	7	6	-	-	-	-	-	-
K	COLORADO	4,163	3,182	3,916	4,206	4,009	4,009	-	-	-	-	-	-	-	-	-	-	-	-
K	FAYETTE	124	229	107	194	512	216		-		-	-		-	-	25	49	128	53
K	GILLESPIE	3	4	5	9	12	5	-	-	-	-	-	-	-	-	-	-	-	-
K	HAYS	1,023	975	493	374	373	300	-	-		-	-		-	-	-	-	-	-
K	LLANO	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-	-
K	MATAGORDA	67	49		8	6,224	6,225		-		-	-		-	-	-	-	-	-
K	MILLS	-						-	-		-	-		-	-	-	-	-	-
K	SAN SABA	814	777	13	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
K	TRAVIS	3,025	2,521	111		-			-	-	-	-		-	-	-	-	-	-
K	WHARTON	58	42	-		1	2	-	-		-	-		-	-	-	-	-	-
K	WILLIAMSON	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
K	WILLIAMSON	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	_

Region K Page 28

▼ Reminder that mining demand totals by county have not changed from the 2017 State Water Plan:

		wug	Water Demands	Water Demands	Water Demands	Water Demands	Water Demands	Water Demands
RWPG	County	Name	2020	2030	2040	2050	2060	2070
K	BASTROP	MINING	2,884	6,813	7,498	8,263	9,085	9,996
K	BLANCO	MINING	5	5	5	5	5	5
K	BURNET	MINING	4,490	5,412	6,379	7,255	8,263	9,412
K	COLORADO	MINING	5,325	5,378	5,433	5,487	5,542	5,597
K	FAYETTE	MINING	2,526	2,032	1,465	918	359	350
K	GILLESPIE	MINING	4	4	4	4	4	4
K	HAYS	MINING	845	1,075	1,361	1,445	1,654	1,893
K	LLANO	MINING	3	3	3	3	3	3
K	MATAGORDA	MINING	96	100	75	55	35	22
K	MILLS	MINING	4	4	4	4	4	4
K	SAN SABA	MINING	1,088	1,093	944	900	864	838
K	TRAVIS	MINING	3,502	4,108	4,762	5,374	6,046	6,817
K	WHARTON	MINING	71	74	55	41	26	17
K	WILLIAMSON	MINING	5	3	3	3	3	3
К	TOTAL	MINING	20,848	26,104	27,991	29,757	31,893	34,961

Region K Page 29

#### Agenda

------

.............

- 11. Agenda items for next meeting
- 12. New / Other Business
- 13. Public Comments
- 14. Adjourn

Region K Page 30