Clearwater
Underground Water Conservation District

Every drop counts!

Annual Report
Fiscal Year 2008

Stream Flow Gauges in Salado Creek

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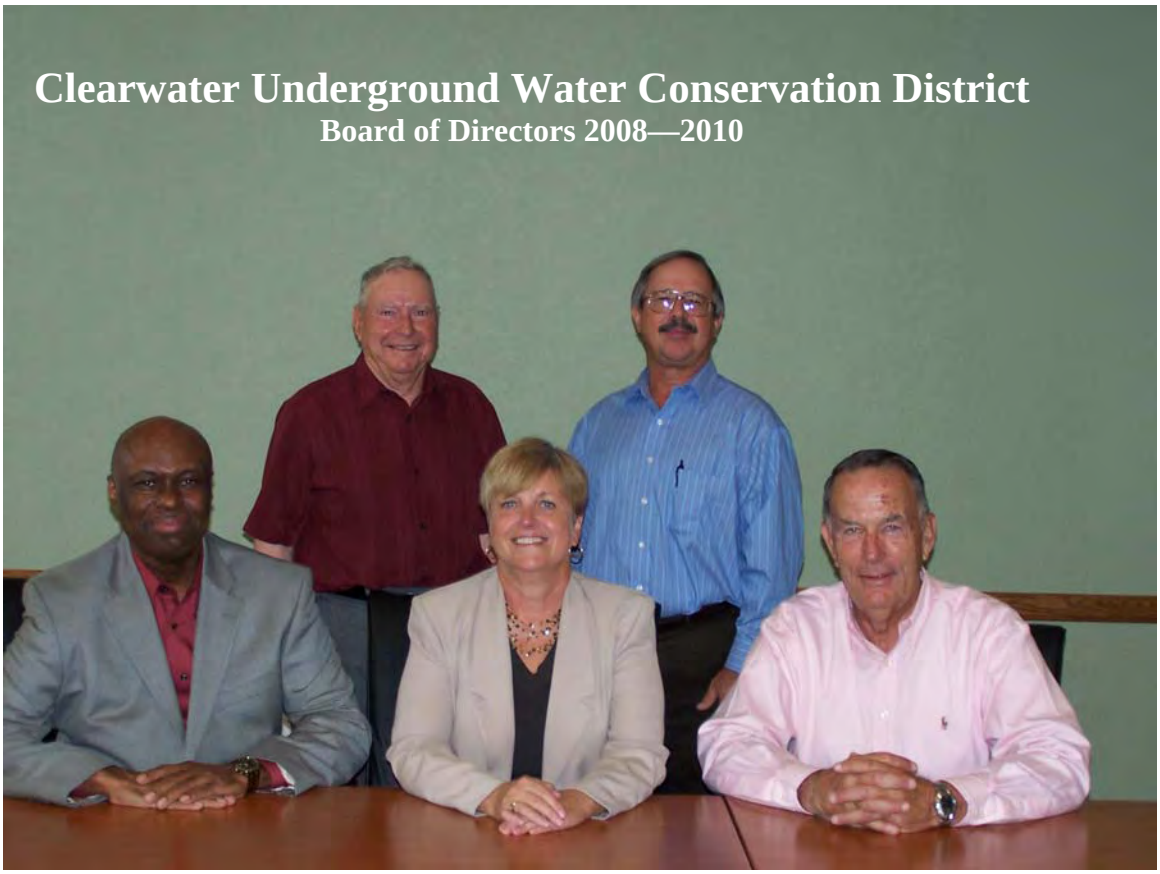
7. Appendix

Clearwater Underground Water Conservation District
Annual Report—Fiscal Year 2008

The Annual Report for Fiscal Year 2008 (FY08) was approved by the Directors of the Clearwater Underground Water Conservation District (CUWCD or District) on July 23, 2009. This report summarizes the activities and accomplishments of the District during FY08 focusing on management plan requirements, miscellaneous activities, and administrative tasks. Most activities are based on the District's fiscal year; however, information dealing with well registration, permitting, and production are based on the 2008 calendar year.



Horace Grace	Wallace Biskup	Judy Parker	Leland Gersbach	John Mayer
Precinct 2	Precinct 3	Precinct 4	Precinct 1	At-Large

District Mission Statement

Develop and Implement an efficient, economical and environmentally sound groundwater management program to protect and enhance the water resources of the District.

1. INTRODUCTION

The Clearwater Underground Water Conservation District was created by the State legislature in 1989 to manage the groundwater resources of Bell County. The District was approved by the voters of Bell County in August 1999 and opened its doors for business in February 2002. Groundwater resources in Bell County include the following:

- Edwards BFZ
- Trinity
- Others:
    - Alluvium
    - Austin Chalk
    - Buda
    - Edwards Equivalent
    - Kemp
    - Lake Waco
    - Ozan
    - Pecan Gap

Clearwater's fiscal year runs from October 1st through September 30th. This report summarizes the accomplishments and activities of the District during FY08; however, registration, permitting, and production figures are provided for the calendar year 2008.

During FY08, the District's stream flow gauges in Salado Creek became functional, the strategic plan and management study were completed, and a drought management plan for the Edwards BFZ aquifer was begun. Joint planning efforts with other groundwater conservation districts within Groundwater Management Area 8 continued, and desired future conditions were established for all of the major and minor aquifers in this boundary. These activities and others are discussed in this report.

The information in this report is presented in three categories as follows:

- Management Plan Requirements
- Miscellaneous Activities
- Administrative Tasks

Management Plan requirements include the required tasks and activities identified in the District's Management Plan. Miscellaneous activities include other activities and programs that have been an integral part of the District but are not required by the Management Plan. Administrative tasks include the activities necessary for a groundwater district to function effectively.

2. MANAGEMENT PLAN REQUIREMENTS

The District Management Plan identifies the goals and objectives of the District and provides performance standards and tracking methods to measure the District's effectiveness in meeting these goals. The District goals are mandated by Texas Water Code Chapter 36, Section 36.1071. Although all groundwater conservation districts are subject to these goals, each district chooses how to best implement the goals within their district by establishing their own objectives and performance standards. The District goals are as follows:

- Providing the most efficient use of groundwater;
- Controlling and preventing waste of groundwater;
- Addressing conjunctive surface water management issues;
- Addressing natural resource issues which impact the use and availability of groundwater, and which are impacted by the use of groundwater;
- Addressing drought conditions;
- Addressing conservation, recharge enhancement, rainwater harvesting, precipitation enhancement, or brush control where appropriate and cost-effective; and
- Addressing in a quantitative manner the desired future conditions of the groundwater resources.

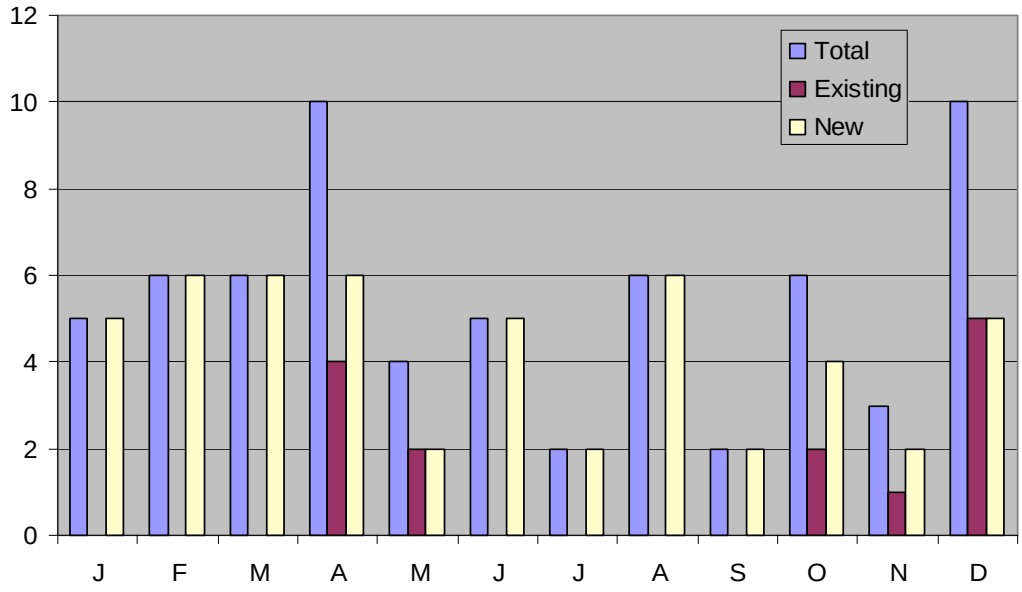
The following is a summary of the District's activities related to these goals.

A. PROVIDING THE MOST EFFICIENT USE OF GROUNDWATER

Objectives A.1 and A.2: Registration & Permitting of Wells.

The registration and permitting of wells is an ongoing process. During calendar year 2008, 65 wells were registered, and ten of these wells were non-exempt. The tables below summarize the well registration and permitting activity through December 31, 2008.

Well Registration by Month--2008



Well Registration Summary
2002 through 2008

Period	Exempt Wells		Non-Exempt Wells*				Total
	Grandfathered	New	Grandfathered	New	New I	New II	
2002	3520	76	50	0	0	0	**3646**
2003	379	80	4	2	0	0	**465**
2004	18	82	15	1	1	1	**118**
2005	22	91	13	-	1	3	**130**
2006	16	80	5	0	0	3	**104**
2007	22	52	4	-	6	2	**86**
Jan	0	5	0	-	0	0	**5**
Feb	0	6	0	-	0	0	**6**
Mar	0	5	0	-	0	1	**6**
Apr	4	6	0	-	0	0	**10**
May	2	1	0	-	0	1	**4**
Jun	0	4	0	-	0	1	**5**
Jul	0	2	0	-	0	0	**2**
Aug	0	6	0	-	0	0	**6**
Sep	0	2	0	-	0	0	**2**
Oct	0	1	2	-	2	1	**6**
Nov	2	1	0	-	0	0	**3**
Dec	3	5	2	-	0	0	**10**
2008 Total	**11**	**44**	**4**	**-**	**2**	**4**	**65**
Grand Total	**3,988**	**505**	**95**	**3**	**10**	**13**	**4,614**

*Effective March 1, 2004, the District began designating new non-exempt wells as either Classification 1 or Classification 2 as follows:

Classification 1:

a. A well used for domestic purposes or for watering livestock or poultry;
b. drilled, equipped or completed so it is incapable of producing more than 25,000 gpd (17 gpm); and
c. located on a tract of land less than 10 acres in size, created after March 1, 2004.

Classification 2:

a. A well used for purposes other than domestic, livestock or poultry, regardless of production; or
b. a well drilled, equipped or completed so it is capable of producing more than 25,000 gpd (17 gpm), regardless of the use.

Well registration totals overtime may no longer accurately reflect the number of wells actually drilled into the ground. This is because some of the registered wells are never drilled or have been plugged. Additionally, some exempt wells may be converted to a non-exempt well at a later date. The table below shows a more accurate reflection of the number of wells on the ground.

Well Registration Adjustment Table

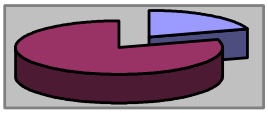
Type of Adjustment	Exempt Wells		Non-Exempt Wells				
	Grandfathered	New	Grandfathered	New	New I	New II	Accumulative Total
2008 Total	3988	505	95	3	10	13	4614
Exempt to Non-Exempt Status[1]	-7	-7	+11	0	0	+3	0
Never Drilled[2]	0	-8	0	0	0	-2	-10
Plugged[3]	-51	-8	-4	0	0	0	-63
Total	**3930**	**482**	**102**	**3**	**10**	**14**	**4541**

Adjustments made in 2008

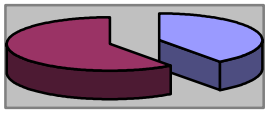
[1] E-03-408P to N2-08-007G,
[2] E-07-075P, E-08-034P, E-08-036P, N2-05-001P
[3] E-03-0190G, E-02-3245G, E-08-032G,

As we have seen in recent years, registration figures for 2008 show that the majority of exempt wells registered are new wells. With regard to non-exempt wells, 2008 was similar to 2007 in that the majority of wells registered were new wells.

Exempt Well Registration-2008



Non-Exempt Well Registration-2008



The Table below summarizes the non-exempt wells that were registered during 2008 and the corresponding permits that were issued where applicable.

Non-Exempt Wells Registered/Permitted During Calendar Year 2008

File No.	Well Owner/ Land Owner	Ac-ft/ Year	Aquifer	Use	Permit Type
N1-08-001P	Conway	1.59	Trinity (Lower)	Domestic	Drilling & Operating
N1-08-002P	Heffington	0.11	Trinity (Middle)	Domestic—Landscape Irrig.	Drilling & Operating
N2-08-001P	Kirby Stone	10.53	Trinity (Middle)	Quarry Operation	Drilling & Operating
N2-08-002P	Salado ISD	21.41	Trinity (Middle)	Irrigation	Drilling & Operating
N2-08-003G	City of Harker Heights	1.16	Trinity (Lower)	Recreational	Operating
N2-08-004P	Dunnahoo	1.10	Edwards BFZ	Irrigation	Drilling & Operating
N2-08-005G	Golden	1.30	Edwards Equivalent	Biodiesel Operation	Operating
*N2-08-006P	Moffat WSC	55.24	Trinity (Lower)	Public Supply	Drilling
N2-08-007G	Trio Investments	0.18	Edwards Equivalent	Office and Livestock	Operating
N2-08-008G	Salado Cemetery	n/a	Edwards BFZ	Monitoring	n/a
N-03-005P	Jarrell-Schwertner WSC PD#8	153.00	Edwards BFZ	Public Supply	Operating

*Application was received in 2008; application incomplete and on hold.

During 2008, five entities in Bell County transported groundwater outside the District. A total of 12.97 ac-ft from the Edwards BFZ aquifer was transported and 32.46 ac-ft from the Trinity aquifer was transported. This is slightly up from the previous year which saw 12.03 ac-ft transported from the Edwards BFZ and 31.78 ac-ft transported from the Trinity. The District is allowed by state law to charge a transport fee of $0.025/$1,000 gallons transported. This generated total revenue of $370.08 for 2008. A summary of transport activity for 2008 is shown in the following chart.

Summary of Groundwater Transport for 2008

Entity (Water Supply Corp.)	Well Number	Aquifer	Destination (County)	Gallons	Transport Fee
Jarrell Schwertner	N-02-042G	Edwards BFZ	Williamson	4,226,300	$105.66
Bell-Milam-Falls	N-02-038G & N-02-046G	Trinity (Hosston)	Falls, Milam, Williamson	9,096,300	$227.41
Little Elm Valley	N-02-039G	Trinity (Hosston)	Falls	740,000	$18.50
East Bell	N-02-034G	Trinity (Hosston)	Falls	528,700	$13.22
Oenaville & Belfalls	N-02-017G	Trinity (Hosston)	Falls	211,486	$5.29
Total				**14,802,786**	**$370.08**

Objective A.3: Maintain a Groundwater Database.

The District's database is continually updated as new information is acquired.

1. Groundwater Production:

During 2008, the District continued collecting data from non-exempt wells. Monthly production reports are required by the 10th day of the following month for all wells with operating permits. The tables below show the total permitted amount for the non-exempt wells and their total production. In 2008, actual water production figures were significantly lower than the amount permitted. Part of this is due to the issuance of Historic and Existing Use Permits (HEUP). The HEUPs are issued for the full permit amount, regardless of whether the permittee will be using this amount during the year.

2008 Permitted Volume for Non-Exempt Wells

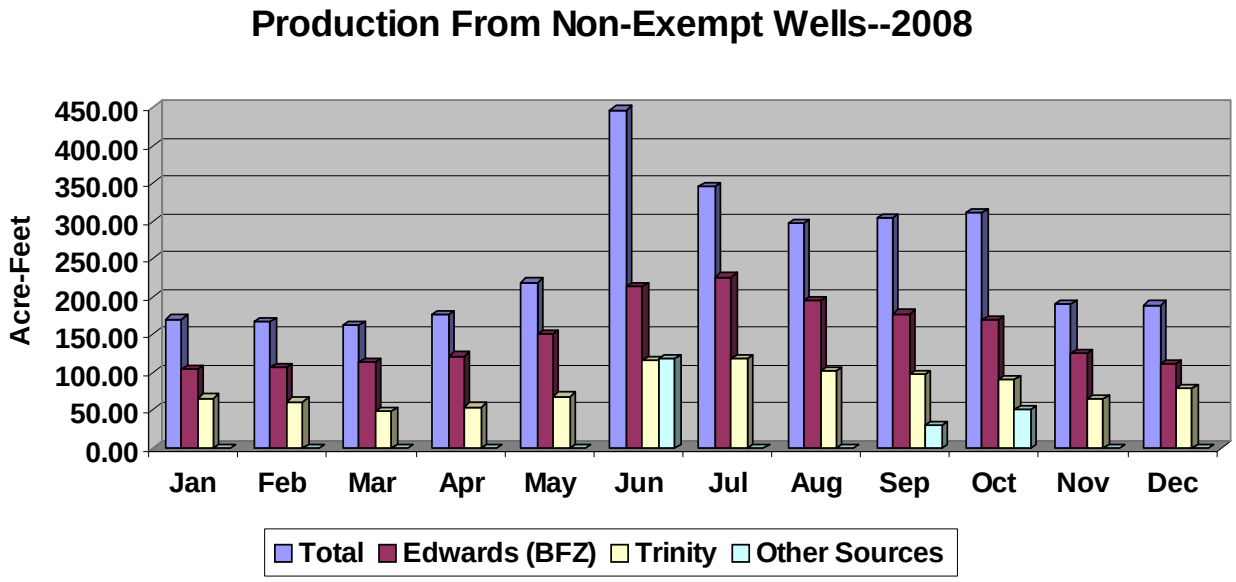
Edwards BFZ:	2,589.21 ac-ft (41 wells)
Trinity:	1,899.51 ac-ft (40 wells)
Other Aquifers:	311.58 ac-ft (14 wells)
TOTAL:	**4,800.30 ac-ft (95 wells)**

2008 Annual Production from Non-Exempt Wells

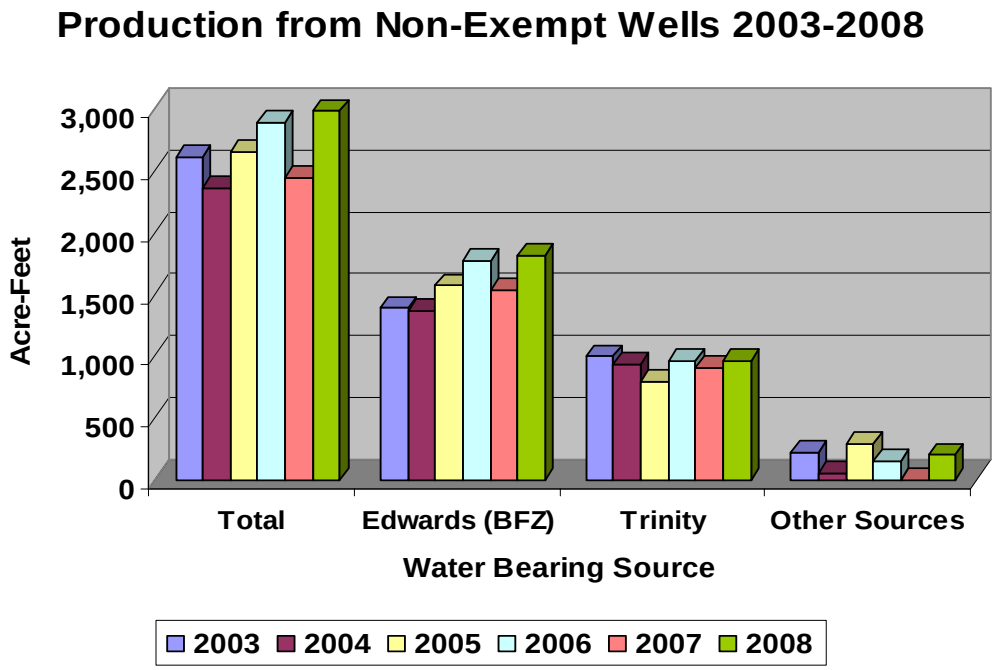
Edwards BFZ:	1,815.19 ac-ft (39 wells)
Trinity:	964.09 ac-ft (35 wells)
Other Aquifers:	199.86 ac-ft (11 wells)
TOTAL:	**2,979.14 ac-ft (85 wells)**

The following chart shows 2008 production by month and aquifer. Production was at its highest level during the month of June with a monthly withdrawal of 447 ac-ft. This is up considerably from the previous year which saw a peak in production of 280 ac-ft during the month of August. Throughout the year, withdrawals from the Edwards BFZ were consistently higher than from the Trinity aquifer. Production from Other source

aquifers was minimal throughout the year except for the month of June when it slightly exceeded the monthly production for the Trinity aquifer.

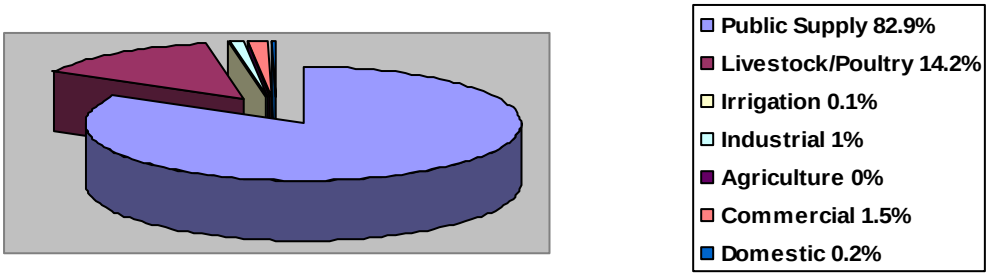


In the following graph, production from 2008 (85 wells) is shown compared to production in years 2003 through 2007. Production in 2008 was up from the previous year likely due to dry conditions experienced during 2008 as opposed to the abundant rainfall received during 2007.

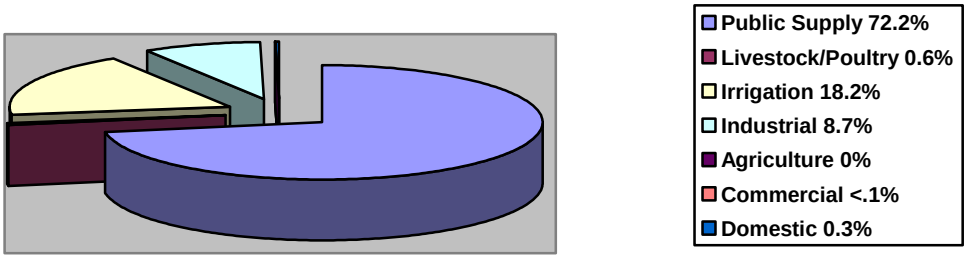


The following pie charts show how the groundwater from the different aquifers was used during 2008. In the Edwards BFZ and Trinity aquifers, water produced from non-exempt wells is used primarily for public supply purposes (82.9% and 72.2% respectively), while water produced from non-exempt wells in other formations was used primarily for agricultural use.

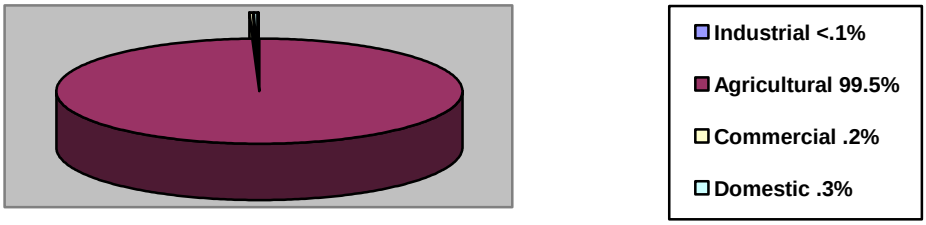
2008 Use of Groundwater
By Non-Exempt Wells –Edwards BFZ Aquifer



2008 Use of Groundwater
By Non-Exempt Wells—Trinity Aquifer



2008 Use of Groundwater
By Non-Exempt Wells—Other Groundwater Sources



Each year, TCB, Inc. evaluates the exempt wells that have been registered and determines the aquifer from which they are producing and provides an estimate of their total annual production. The results are shown below for exempt wells registered through December 31, 2008.

***Summary of Exempt Well Production**

Aquifer	No. of Wells	Estimated Use Acre-feet/Year
Edwards BFZ	654	436
Trinity	1,835	1,223
Other Aquifers	1,908	1,272
TOTAL	**4,397**	**2,931**

**Calculations for exempt well production excluded 59 wells that were plugged, 15 wells that were monitor wells, and 3 wells that were not drilled.*

Combining the production from the non-exempt wells with the estimated production from the exempt wells, the following production figures result:

Production Summary for All Wells

Aquifer	Non-Exempt Well Production (Ac-Ft/Year)	% of Total	Estimated Exempt Well Production (Ac-Ft/Year)	% of Total	Total Production (Ac-Ft/Year)
Edwards (BFZ)	1,815	81%	436	19%	**2,251**
Trinity	964	44%	1,223	56%	**2,187**
Other Aquifers	200	14%	1,272	86%	**1,472**
TOTAL	**2,979**	**50%**	**2,931**	**50%**	**5,910**

The chart above shows that overall, exempt wells account for 50% of all the groundwater produced in Bell County. In the Trinity, 56% of production is attributed to exempt wells; however, in the Edwards BFZ, exempt wells only account for 19% of groundwater production, with the vast majority coming from non-exempt wells. During 2008, 86% of

the production from wells producing from other groundwater sources is attributed to exempt wells.

2. Aquifer Monitoring:

The Texas Water Development Board (TWDB) typically measures water levels in selected wells in January each year. During FY08, TWDB measured water levels in eight wells in Bell County. Clearwater measures water levels in selected wells twice annually (January and July) and supplements the TWDB well data by taking July water level measurements for six of the eight TWDB wells. Clearwater staff agreed to take over the January measurements for these six wells beginning in January 2009.

Comparing the water level measurements taken by the District with those taken by the TWDB is sometimes difficult due to differences in measurement procedures and equipment. The District primarily uses an e-line; an airline is used if the well is equipped with one. Large producers are asked to turn the pump off at least one hour prior to the measurement to allow the aquifer levels time to stabilize. The TWDB typically uses a steel tape or an airline and does not request the pump to be turned off.

The following tables provide a summary of the monitoring data. Numbers in red were taken by the TWDB, whereas numbers in blue were taken by the District. Refer to Appendix A for a map of the aquifer monitoring sites. **NOTE: Larger numbers represent greater depth necessary to reach the surface of the aquifer, i.e. a decline in the aquifer level.**

Edwards BFZ Aquifer

Water Level Measurements

Depth Below Land Surface in Feet

Well Number	Date of Measurement												
	Other	Jan-Mar 03	Jul-03	Jan-Feb 04	Jul-04	Jan-05	Jul-05	Jan-Feb 06	Jul-06	Jan-Feb 07	Jul-07	Jan-08	Jul-08
58-04-627 (Salado ISD)	--	39.8	42.6	41.42	39.54	39.05	43.42	43.34	43.58	40.84	36.17	41.92	43.59
58-04-502 (Salado ISD)	(1985) 50.5	48.7	56.14	49.17	48.58	47.16	51.83	51.79	52.08	49.5	44.83	49.83	52.16
58-04-602 (Salado WSC)	(1981) 29.27	63.2	38.17[1]	29.5[1]	32.71[1]	27.17[1]	36.00[1]	36.5[1]	41.84[1]	27.55[1]	21.50[1]	31.42[1]	40.17[1]
58-13-502 (City of Bartlett)	--	--	--	--	--	42.62	40.13	50.29	52.29[1]	60.79[1]	49.45[1]	46.62[1]	46.46[1]
58-04-623 (Foster Stgch)	(1993) 85.39	85	89.58[1]	89.69	82.79[1]	86.3	87.17[1]	83.00[1]	95.25[1]	80.30	72.34	86.51[4]	72.34[1]
58-04-628 (Cemetery)[2]		--	--	--	--	--	--	--	--	--	--	--	--
58-04-702 (TxDOT)[2]	(1980) 71	78.25	71.96	72.72	71.84	72.2	72.17	72.83	72.73[3]	72.08[3]	69.87[3]	72.07[3]	69.82[3]
58-04-816 (TxDOT)[2]		--	--	--	--	--	--	--	--	--	--	--	124.80[3]
58-04-801 (Norwood)	(1966) 134.93	144.15	137.42	141.34	141.25	134.1	137.58	140.25	140.5	137.7	133.08	135.70	138.91

[1] Pump turned off at least 1-2 hours prior to measurement TWDB measurement CUWCD measurement

[2] Continuous monitor equipment installed during 2006 (data available: http://hyper20.twdb.state.tx.us/twdbwells/twdbwells.html)

[3] Average reading from continuous monitor site on date of water level measurements (Jan-08 average for January 28th 2008)

[4] Pump in use less than one hour prior to measurement

Trinity Aquifer

Water Level Measurements

Depth Below Land Surface in Feet

Well Number	Date of Measurement												
	Other	Jan-Mar 03	Jul-03	Jan-Mar 04	Jul-04	Jan-05	Jul-05	Jan-Feb 06	Jul-06	Jan-Feb 07	Jul-07	Jan-08	Jul-08
E-02-721G (McCallum #1)	--	--	--	--	--	--	--	--	--	145.5	132.42	135.67	153.00
E-02-722G (McCallum #2)	--	--	--	--	--	--	--	--	--	145.00	131.92	135.17	152.25
E-02-804G (Dobson)	--	--	--	--	--	--	--	--	--	335.75	324.50	328.71	338.92
E-02-1137G (Stephenson/Bowen)	--	--	--	--	311.42	not taken	not taken	335.73[2]	342.66[2]	363.45[2]	--	--	--
E-08-005P (Stephenson)	--	--	--	--	--	--	--	--	--	--	--	--	--
E-02-1299G (Mayer)	--	--	--	182.1	189	180.38	201.72	200.62[2]	227.18[2]	183.29[2]	217.94[2]	204.08[2]	229.49[2]
N2-05-008G (River Ridge Ranch East Dam Well)	--	--	--	--	--	--	--	--	--	164.58	138.50	144.87	181.00
E-06-063P (Texas Veterans Land Board)	--	--	--	--	--	--	--	--	--	375.25	379.58	382.50	442.33
E-03-444P (Purnell)	--	--	--	--	--	--	--	--	--	411.92	400.58	411.58	434.42
E-05-083P (Murphy)	--	--	--	--	--	--	--	--	--	282.63	288.42	291.92	334.42
N2-07-003G (Killeen Crushed Stone)	--	--	--	--	--	--	--	--	--	--	--	344.42	376.17
40-53-102 (USCOE- Leona Park)	(1993) 55.14	68.35	70.42	71.28	71.92	72.6	73.33	74.16	74.5	75.35	--	76.55	77.66
58-05-901 (City of Holland)	(1995) +1.2 (flowing)	23.7	25.3	26.19	28.21	29.9	31.84	25.96	28.3	26.1	27.04	28.80	30.79
40-45-701 (USCOE-Winkler Park)	--	bad reading	--	bad reading	326.09	bad rding	--	333.29	335.54	bad reading	--	--	344.63
40-53-406 (Moffat WSC)	(1967) 243.55	335	417.83[1]	336	416.06[1]	340	not avail.	not avail.	not avail.	333	381.26	332.00	358.16
40-63-501 (East Bell WSC)	(1962) +13.5 (flowing)	--	--	--	--	--	--	--	130[3]	155[3]	150[3]	125.00	
N2-05-010G (River Ridge Ranch Common Park)	--	--	--	--	--	--	--	--	--	266.88	256.25	261.92	280.17

[1] Pump turned off at least 1-2 hours prior to measurement

[2] Method of measurement was airline

[3] Measurement was reported by East Bell WSC

TWDB measurement

CUWCD measurement

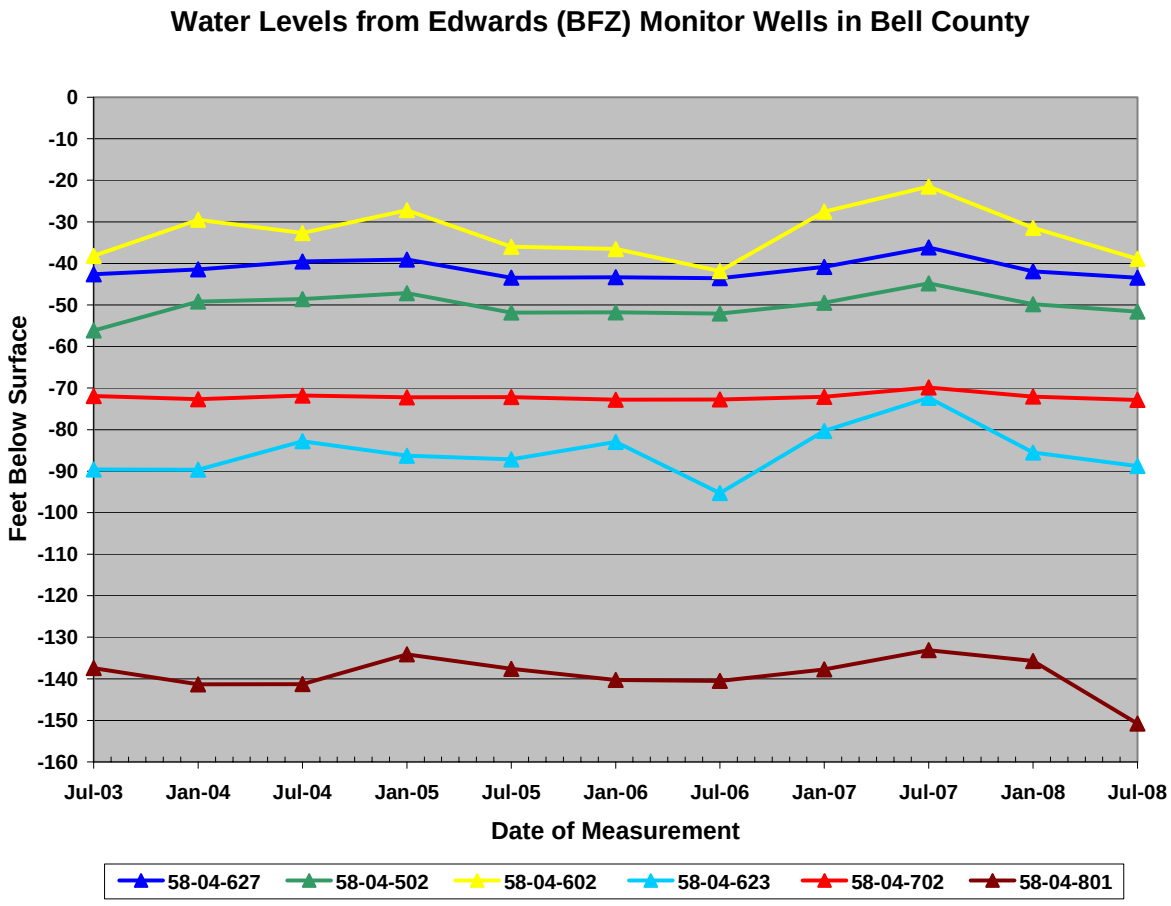
Upper Trinity (Glen Rose)

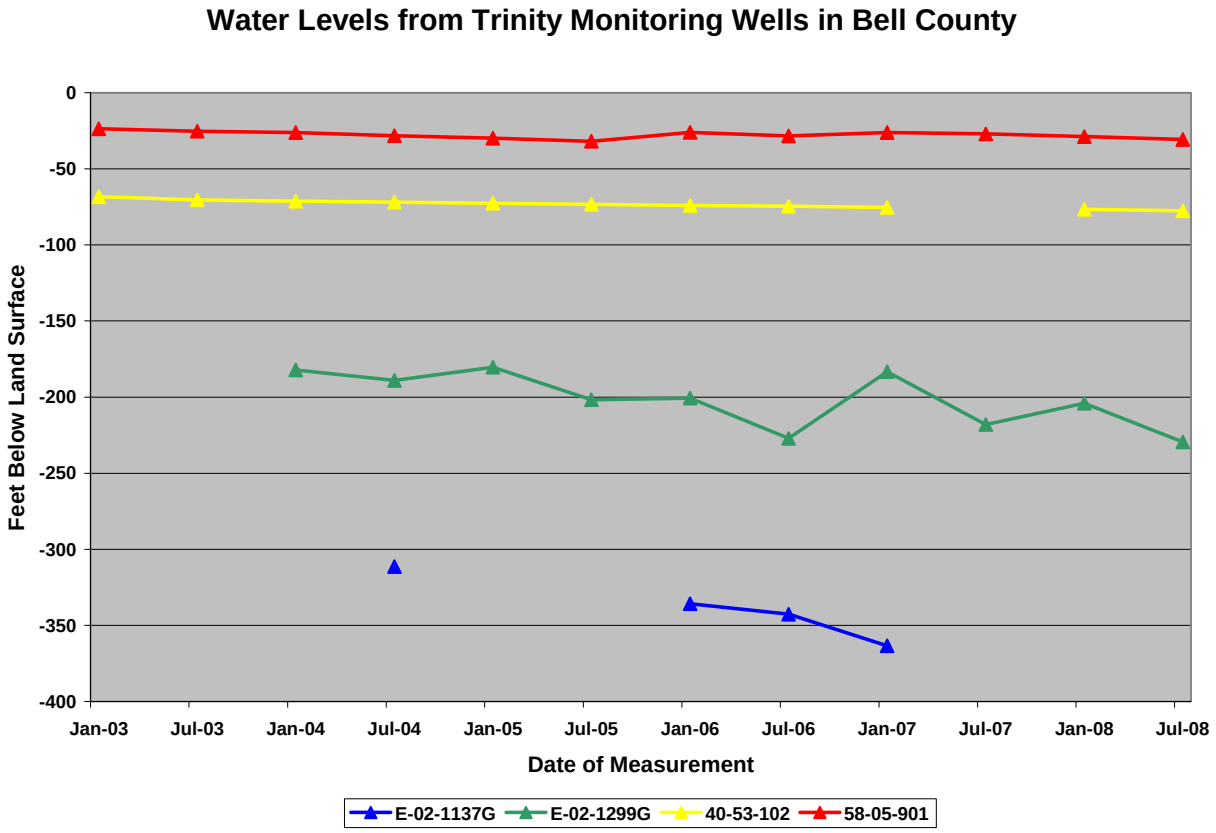
Middle Trinity (Hensell)

Lower Trinity (Hoston)

As noted before, the wells in the Edwards BFZ aquifer seem to fluctuate from year to year reflecting recent rainfall trends. Year 2008 was a much drier than 2007, and most measurements show lower water levels for 2008. With regard to the Trinity, there continues to be concern that the aquifer levels are declining. Although many of the wells do not have historic data to use for comparison, the measurements shown in the previous table do generally show a pattern of decline over the past 10 years. Because some of the wells that are measured are pumped, measurements taken may not reflect static water levels. As more measurements are taken during the coming years, the results should be more conclusive regarding the status of the aquifers.

The data for some of the TWDB well sites and a few of the sites measured by the District for both the Edwards BFZ and Trinity aquifers are shown in the following charts.





The District continues to search for additional well sites to expand its monitoring system. In addition to the eight TWDB monitor wells, during FY08 the District monitored 14 other wells. The District has been working with the TWDB and the Texas Department of Transportation (TxDOT) to install a continuous monitoring system in selected Edwards BFZ wells to monitor aquifer conditions. One site was equipped during 2006 and a second was equipped in the spring of 2008.

Staff has been looking for suitable wells for continuous monitoring of the Trinity aquifer. During FY08 the Board agreed to drill a well for monitoring purposes in each layer of the Trinity. Two sites were selected—two wells on City of Copperas Cove property with one well in the middle Trinity and one in the lower Trinity, and one well in the upper Trinity on Central Texas College property.

Objective A.4: Education—Water Cycle and Aquifer Status

The District's Management Plan requires the dissemination of educational information regarding the water cycle and the status of the aquifers through at least two outreach methods/activities. During FY08, the District satisfied this requirement as follows:

Water Cycle:

1) The District published a newspaper article in April 2008 that included a summary and graphic of the water cycle. This article was published in the following newspapers:

Killeen Daily Herald:	April 20, 2008
Temple Daily Telegram:	April 20, 2008
Salado Village Voice:	April 17, 2008

2) Splash Activity Books are geared toward 3rd grade level students and focus on the water cycle as well as water awareness and water conservation. FY08 was the second year the District distributed the Splash Activity Book. This book is published by the American Water Works Association. During the spring of 2008, orders were taken for 1,580 students in the Killeen, Belton and Troy school districts and included distribution to 60 home school students by the Lake Stillhouse Hollow Cleanwater Steering Committee. The Splash books were delivered to the schools in August and September of 2008. A list of participating schools is provided in Appendix B, Activity Reports.

Aquifer Status:

1) The District publishes information on the status of Bell County's aquifers on the District's website. For FY08, this information included water level measurements for eight Edwards BFZ wells and fifteen Trinity wells. This information is continually updated as new measurements and wells are added.

2) The District published its annual newsletter in September 2008 that included a table summarizing the change in aquifer levels for one Edwards BFZ well and one Trinity well.

B. CONTROLLING AND PREVENTING WASTE OF GROUNDWATER

Objective: Water Quality Protection.

The District's Management Plan requires the dissemination of educational information on eliminating and reducing the wasteful use of groundwater. It focuses on water quality protection through at least two outreach methods/activities. During FY08, the District satisfied this requirement as follows:

1) Well Plugging Demonstration

The District sponsored a well plugging demonstration on June 10, 2008. The Texas AgriLife Extension and the City of Belton were partners with the District in this event. The demonstration well was a drilled well located in Chisholm Trail Park in northwest Belton along Dunns Canyon Road.

The demonstration showed the proper way to plug a drilled well and emphasized the importance of plugging abandoned wells to prevent groundwater contamination.

2) Classroom Presentations

Clearwater staff conducted several classroom presentations during the year that included a segment on non-point source pollution. The presentation consisted of a powerpoint presentation and a groundwater model to demonstrate groundwater basics and the impact of non-point source pollution on both groundwater and surface water. Presentations were given to Leon Heights Elementary (Belton ISD), East Ward Elementary (Killeen ISD) and Montague Village Elementary (Killeen ISD). In addition, students from Nolanville Elementary (Killeen ISD) attended a field day event at Parrie Haynes Ranch where Clearwater was one of the presenters demonstrating the collection and testing of water quality samples from the Lampasas River and the Trinity aquifer. Refer to Appendix B for a complete list of items distributed during these events.

C. ADDRESSING CONJUNCTIVE SURFACE WATER MANAGEMENT ISSUES

Objective: Participate in Regional Water Planning Process.

The District's Management Plan requires participation in the regional planning process by attending a minimum of two meetings of the Brazos G Regional Water Planning Group per fiscal year. During FY08, the District satisfied this requirement as follows:

Five regular Region G meetings were held during FY08—October 24, 2007; February 27, 2008; April 29, 2008; June 4, 2008; and July 9, 2008. District staff attended each of these meetings. Meeting agendas are shown in Appendix C.

D. ADDRESSING NATURAL RESOURCE ISSUES WHICH IMPACT THE USE AND AVAILABILITY OF GROUNDWATER, AND WHICH ARE IMPACTED BY THE USE OF GROUNDWATER

Objective: Monitor Water Quality.

The District's Management Plan requires monitoring of water quality by obtaining and testing water samples from at least six wells within the District. The District has an in-house water quality lab and offers free testing service to registered well owners. Testing parameters include coliform bacteria; alkalinity; conductivity/total dissolved solids; fluoride; hardness; nitrate; nitrite; pH; phosphate; and sulfate. During FY08, the District satisfied this requirement as follows:

Wells Tested		Date	Formation
E-02-032G	(2 samples)	07/29/08	Edwards BFZ
E-02-107G		10/03/07	Edwards BFZ
E-02-144G		01/15/08	Austin Chalk
E-02-313G		06/10/08	Edwards BFZ
E-02-425G	(3 samples)	10/09/07	Middle Trinity
E-02-670G		10/03/07	Upper Trinity
"		12/04/07	"

Wells Tested		Date	Formation
E-02-1153P		07/01/08	Upper Trinity
E-02-1205G		10/04/07	Edwards BFZ
"		01/15/08	"
E-02-3574G		12/18/07	Austin Chalk
E-03-009G		10/09/07	Lower Trinity
E-05-075P		10/03/07	Middle Trinity
E-06-047P		02/13/08	Middle Trinity
"		02/26/08	"
E-07-049G		10/09/07	Edwards BFZ
E-08-001P		02/26/08	Alluvium
E-08-003P	(2 samples)	01/29/08	Lower Trinity
"	(2 samples)	02/12/08	"
"	(2 samples	05/20/08	"
N2-05-003P		06/24/08	Middle Trinity

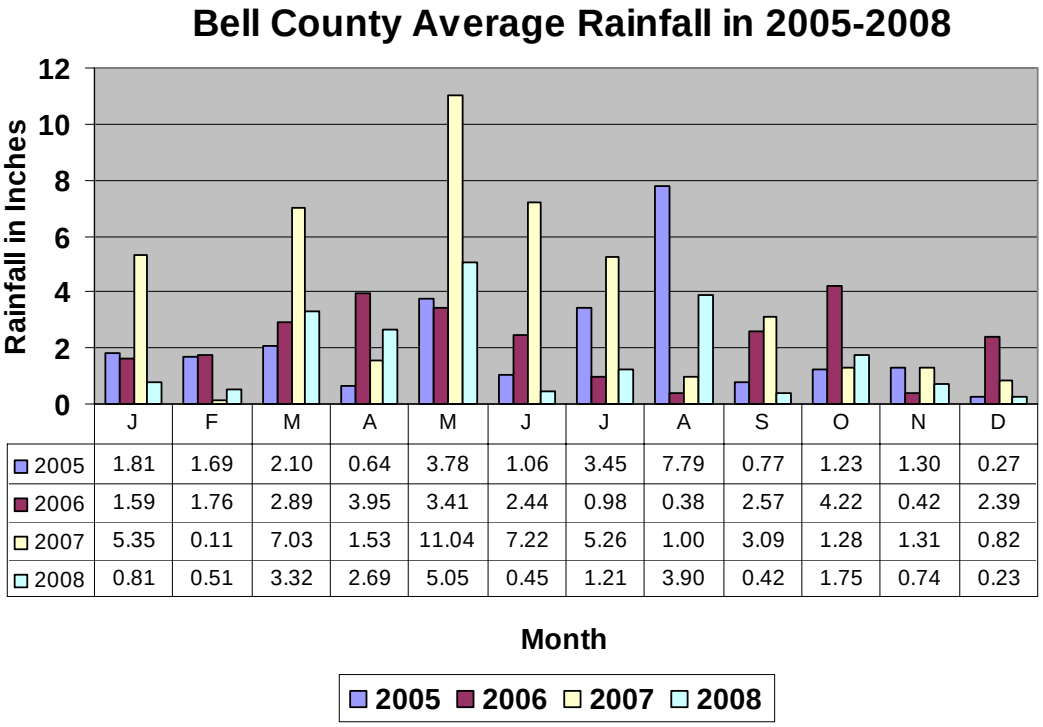
Staff conducted 27 testing events that included 16 different wells. Of these wells, one was an Alluvium well, two were Austin Chalk, five were Edwards BFZ, two Upper Trinity, four Middle Trinity, and two Lower Trinity. In addition, seven tests were conducted on water samples that were not from water wells. A summary of the well testing results and a location map of the well sites are shown in Appendix D.

E. ADDRESSING DROUGHT CONDITIONS

Objective E.1: Palmer Drought Severity Index Map and Drought Preparedness Council Situation Report.

As required by the District's Management Plan, each month staff downloads updated data from the Palmer Drought Severity Index (PDSI) map and checks for updates to the Drought Preparedness Council Situation Report (Situation Report) that is posted on the Texas Water Information Network website. This information is presented to the Board and is included in Appendix E. During 2008, the Palmer Drought index ranged from Moderate Drought to Moderately Wet. The index reached the highest reading for the region for the year at Moderately Wet by May 2008. The index reading reduced to the lowest category reading of the year of Moderate Drought by July. Conditions then stabilized for a "Near Normal" category level through December 2008.

During FY08, the District continued to monitor rainfall that was recorded or observed by Doppler radar by the National Weather Service (NWS) and the National Oceanic and Atmospheric Administration. Each month, the District downloaded the GIS files that contain the rainfall data. The data is mapped and provided for the public over the District's website and at Board meetings. This information will be used in conjunction with Salado Spring flow data for implementation of a Drought Contingency Plan. The chart below shows the average total rainfall in Bell County by month. The average is generated from the 206 data points that are spaced approximately 2.5 miles apart.



	J	F	M	A	M	J	J	A	S	O	N	D
2005	1.81	1.69	2.10	0.64	3.78	1.06	3.45	7.79	0.77	1.23	1.30	0.27
2006	1.59	1.76	2.89	3.95	3.41	2.44	0.98	0.38	2.57	4.22	0.42	2.39
2007	5.35	0.11	7.03	1.53	11.04	7.22	5.26	1.00	3.09	1.28	1.31	0.82
2008	0.81	0.51	3.32	2.69	5.05	0.45	1.21	3.90	0.42	1.75	0.74	0.23

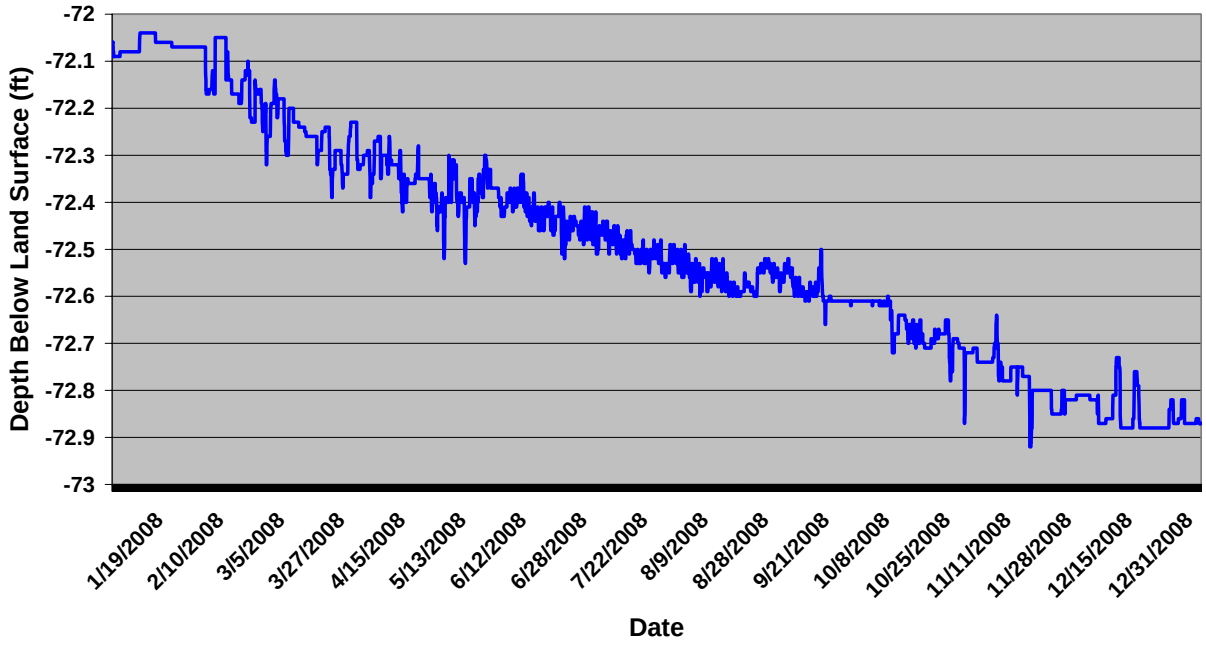
The total average rainfall in Bell County for 2008 was 21.08 inches. This represented a drastic decrease to the total amount received in 2007 at 45.04 inches. However, total average rainfall for Bell County for 2008 was only a slight decrease when compared to the total average rainfall for years 2006 at 27 inches and 2005 at 25.89 inches. During 2008, rainfall was focused mainly from March through May with the addition of August. The remaining months recorded considerably less rainfall ranging from 0.23 inches to 1.75 inches for 2008. Bell County progressed from a moderate drought to a moderately wet rating and then fluctuated back to near normal rating in 2008 according to the Palmer Drought index. Appendix F contains a map of the yearly rainfall totals for the 202 data points.

Objective E.2: TWDB Continuous Monitoring Wells.

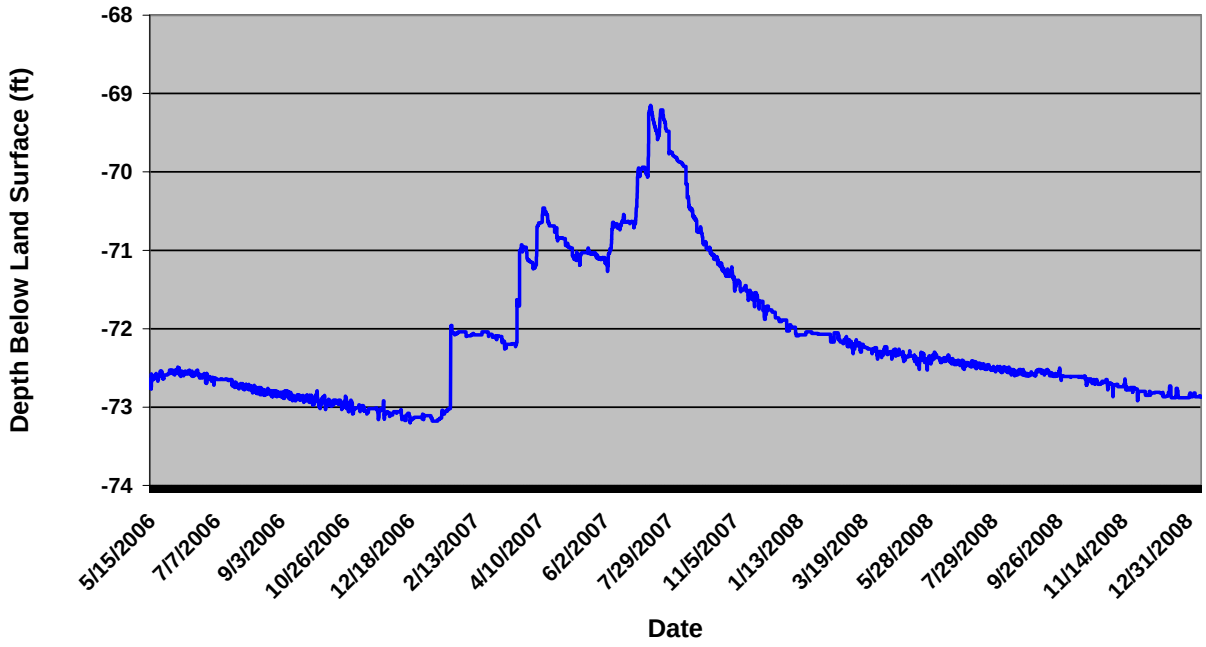
The District's Management Plan requires monitoring of drought conditions by reviewing data from the TWDB monitor wells in Bell County that are equipped with a continuous monitoring system. During FY08, TWDB installed continuous monitoring equipment in State Well No. 58-04-816 drilled in the Edwards BFZ aquifer along the southbound lanes of I35 at the Salado rest stop. Monitoring of this well began on May 6, 2008. This brought the number of continuous monitoring wells to two with the first well being State Well No. 58-04-702 drilled in the Edwards BFZ aquifer on FM 2843 near the Hidden Springs Subdivision. Monitoring of that well began May 4, 2006.

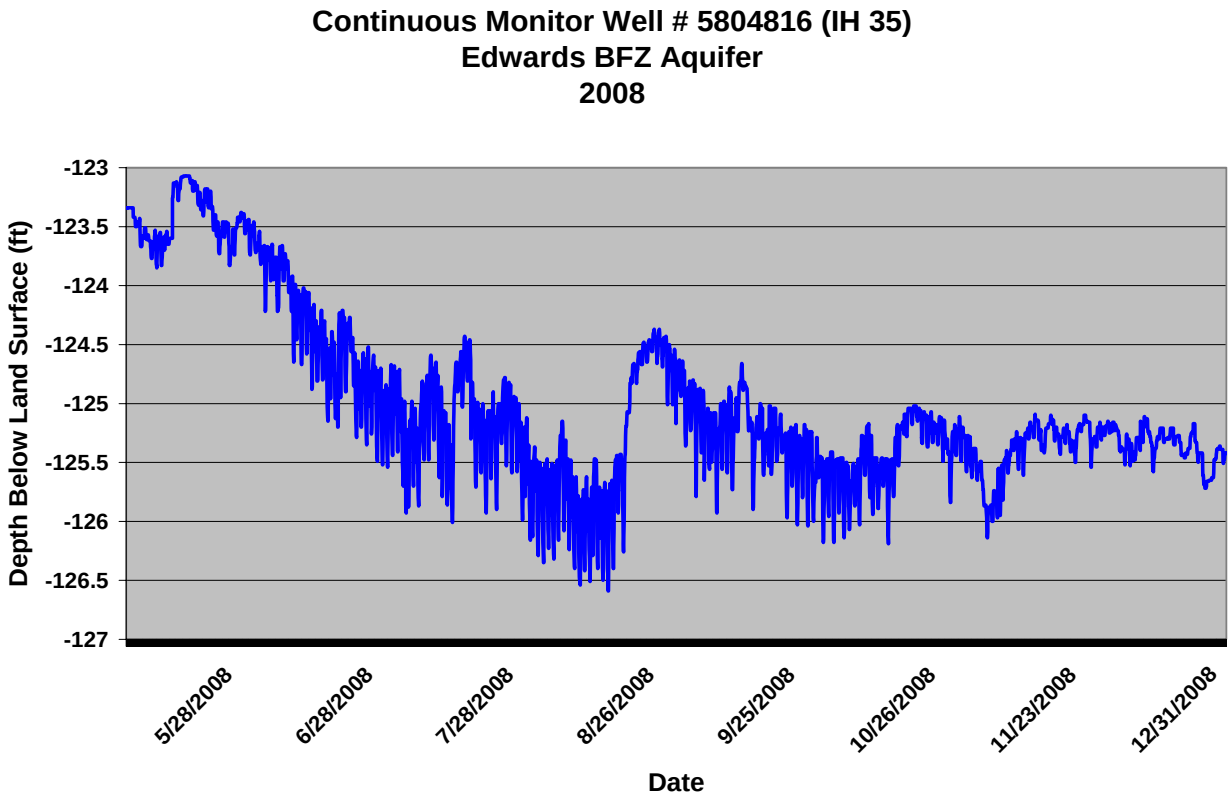
The graphs below show the data collected by the continuous monitor site located on FM 2843 west of I35 during calendar year 2008 and since May 4, 2006. Measurements are collected every hour. The readings show an overall decrease in 2008. Water level readings ranged from -72.04 ft. on January 8, 2008 to -72.92 ft. on November 14, 2008 representing a 0.88 foot decrease in water level during this period. The average reading during this time was -72.49 ft. The graph going back to 2006 reflects a noticeable increase in water levels during mid-2007 which correlates with the near record rainfall received during that time period.

Continuous Monitor Well # 5804702 (FM 2843)
Edwards BFZ Aquifer
2008



Continuous Monitor Well # 5804702 (FM 2843)
Edwards BFZ Aquifer
March 4, 2006 through December 31, 2008





The graph above shows the data collected by the continuous monitor site located along the southbound lanes of I35 at the Salado rest stop during calendar year 2008. Collection of measurements began on May 6, 2008 at 15:00 and has continued every hour since then. The readings show an overall decrease in 2008. Water level readings ranged from -123.07 ft. on May 18, 2008 to -126.59 ft. on August 15, 2008 representing a 3.52 foot decrease in water level during this period. The average reading during this time was -124.99 ft.

F. ADDRESSING CONSERVATION RECHARGE ENHANCEMENT, RAINWATER HARVESTING, PRECIPITATION ENHANCEMENT, OR BRUSH CONTROL, WHERE APPROPRIATE AND COST-EFFECTIVE

Objective F1: Promote Conservation.

The District's Management Plan requires promotion of conservation by one outreach method/activity. During FY08, the District satisfied this requirement by conducting an essay and poster contest on water conservation. This contest was conducted during the fall of 2007 and was open to all 5th grade students in Bell County. The theme of the contest was *Water is Life—Conserve Water, Conserve Life*. Winners received savings bonds in the amount of $100 (3rd place) $250 (2nd place) and $500 (1st place). A total of 92 entries were received. A copy of the flyer announcing this contest is located in Appendix G.

Essay Winners:
1st Logan Crawford
2nd Kylee Ecker
3rd Chelsea Hayes &
Lauren Lum

Poster Winners:
1st Kendall Kozeny
2nd Emma Reeves
3rd Allie Maedgen

Objective F2: Promote Rainwater Harvesting.

The District's Management Plan requires promotion of rainwater harvesting by posting information on the District website. The District satisfied this requirement by including a segment on rainwater harvesting on its website under the Education menu tab along with a link to the Texas AgriLife Extension website and their Rainwater Harvesting Manual. Also included are links to Rainwater Harvesting Contacts and Suppliers and to the Texas AgriLife Extension manual on Rainwater Harvesting Landscape Methods. A copy of the posted information is included under Appendix H.

Objective F3: Provide Information on Recharge Enhancement and Brush Control.

The District's Management Plan requires promotion of conservation by providing information relating to recharge enhancement and brush control on the District website. The District satisfied this requirement by including a segment on recharge enhancement and brush control on its website under the Education menu tab. For additional information on recharge enhancement and brush control, links to the Texas State Soil and Water Conservation website, the Leon River Restoration Project website, and the Texas Cooperative Extension website are provided. Also included is a link to the Brush Management Fact Sheet produced by Environmental Defense. A copy of the posted information is included under Appendix I.

G. ADDRESSING IN A QUANTITATIVE MANNER THE DESIRED FUTURE CONDITIONS OF THE GROUNDWATER RESOURCES

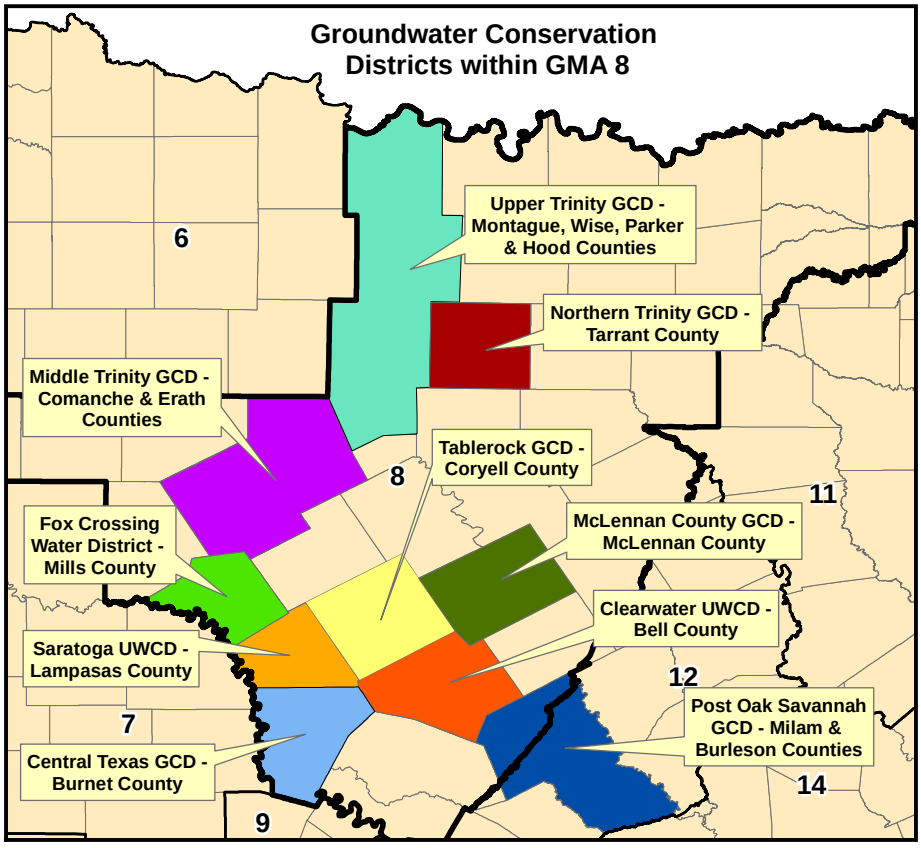
Clearwater has been working toward this management goal since November 2005 when the first meeting of Groundwater Management Area 8 (GMA 8) was held. Desired future conditions (DFC) for the Edwards BFZ and Trinity aquifers were set by GMA 8 during FY08. The resulting managed available groundwater (MAG) figure for the Edwards was finalized in September 2008; however, the MAG for the Trinity was not finalized until FY09 (March 2009). The MAG figures are being used by the District and will be included in the next revision of the District management plan.

GMA 8 includes 45 counties extending from Travis County northward to the Oklahoma border (see map below). During FY08, Clearwater continued acting as the fiscal agent/administrator for GMA8 coordinating with nine other groundwater conservation districts to define the DFCs of the aquifers. Clearwater serves as the point of contact in coordinating with AECOM, Inc. and other outside agencies, maintains the GMA 8 website, and coordinates the committee meetings. Clearwater's GMA 8 representative frequently chairs the committee meetings and keeps the committee focused on set deadlines.

During FY08, GMA 8 held meetings on November 27, 2007; December 17, 2007; May 19, 2008; and September 17, 2008. DFCs were adopted at the December, May, and September meetings as follows:

December 17, 2007—Edwards BFZ, Woodbine, Brazos River Alluvium, Blossom, and Nacatoch;
May 19, 2008 —Ellenburger-San Saba, Hickory, and Marble Falls;
September 17, 2008—Trinity.

The TWDB prepares the MAGs based on the DFC statements and the forwards these figures to the Regional Water Planning Groups. During FY08 the only MAG developed was for the Edwards BFZ aquifer which was finalized in September 2008.



3. MISCELLANEOUS ACTIVITIES

In addition to the Management Plan requirements, Clearwater is involved in several miscellaneous activities as follows:

A. Trinity Aquifer Study in Southern Bell County
B. Monitor Wells
C. Drought Management Plan
D. Salado Creek Stream Flow Gauging Program
E. Subdivision Groundwater Availability Report Review
F. Non-Exempt Well Meter Program
G. Water Quality Protection Grant Program
H. Abandoned Wells
I. Bell County Water Symposium
J. Newsletter
K. Major Rivers Water Education Program
L. Book Cover Distribution
M. Literature Packet Distribution
N. Water Conservation Kits
O. Presentations and Outreach
P. Public Advisory Committee
Q. Internet Site
R. Resource Library

These activities are discussed in more detail below.

A. TRINITY AQUIFER STUDY IN SOUTHERN BELL COUNTY

In 2003, the District contracted with TCB, Inc. to conduct a study of the Trinity aquifer in southern Bell County due to the increase in residential development and the use of individual wells for water service. The study was to determine the hydrogeologic properties of the aquifer in this area and the volume of water in storage. The study evolved from its original scope to include calculation of the volume of groundwater stored in the three aquifer subdivisions (upper, middle, and lower) within the study area as well as outside the study area to include the entire county.

In addition, it was recommended that geophysical logs of wells be conducted in southwestern Bell County to help determine where the Trinity layers are located and the thickness of the layers. This information will enhance the Trinity Study and clarify some of the discrepancies identified in the study. The Clearwater Board authorized up to four geophysical logs. The logs will be completed as opportunity allows when new wells are drilled to the lower Trinity. One log was completed in FY07 (Miller) and one in FY08 (Texas Veterans Land Board). A draft report has been presented to staff and the report is expected to be finalized in FY09.

B. MONITOR WELLS

The need to establish monitor wells/index wells for the District Management Plan and Drought Management Plan was discussed with the Board. The Board concurred that it may be necessary to drill monitoring wells in the Trinity aquifer and directed staff to research appropriate locations. During FY08, staff worked with TCB, Inc. to identify possible locations and met with the appropriate landowners. Agreements were worked out with Central Texas College to drill one well in the Upper Trinity aquifer, and with the City of Copperas Cove to drill two wells—one in the Middle Trinity and one in the Lower Trinity. Agreements were finalized and recorded in December 2008.

In May 2008, an additional Edwards BFZ well was identified and equipped with a continuous monitoring system. Another well was equipped in December 2008 bringing the total of monitoring wells in the Edwards BFZ aquifer to three.

C. DROUGHT MANAGEMENT PLAN

During FY08, the Board contracted with TCB, Inc. to begin development of a drought management plan for the Edwards BFZ aquifer. The plan was put on hold until actual data from the monitoring wells and stream flow gauges could be collected and analyzed to compare with the model data. The Board directed staff to collect the data and revisit the plan on a quarterly basis. Development of the plan has resumed and carried on into FY09.

D. SALADO CREEK STREAM FLOW GAUGING PROGRAM

The District began collecting data from the Salado Creek stream flow gauges during FY08. Communication issues were resolved and water level data collected on a regular basis. Stream flow was measured at two cross sections in May and August for use in developing a program to convert the changes in water level depths to spring flow. Data from this program will be used to support the District's Management Plan availability figures for the Edwards BFZ aquifer and will be used in the development of the District's Drought Management Plan.

Measurement of stream flow in Salado Creek at lower gauge site in June 2008.

E. SUBDIVISION GROUNDWATER AVAILABILITY REPORT REVIEW

The District continues to coordinate with the county commissioners and staff to ensure new subdivisions have an adequate source of water supply. The District's goal is to inform developers and potential purchasers of the groundwater resources in Bell County. No new subdivisions requiring a groundwater availability report were presented to the District during FY08.

F. NON-EXEMPT WELL METER PROGRAM

As part of the FY08 budget, the Board approved $1,000 toward purchasing meters for those non-exempt wells that were "grandfathered" and do not have a meter. Many of these well owners are estimating production, whereas a meter would ensure accurate reporting. There were two participants in this program during FY08—Live Oak Baptist Church (1" meter) and Killeen Crushed Stone (4" meter).

G. WATER QUALITY PROTECTION GRANT PROGRAM

The District's Water Quality Protection Grant Program provides financial assistance to local governmental entities and other non-profit entities that provide public drinking water. The funds are to be used to implement measures or recommendations that protect water quality. The District did not receive any grant applications during FY08.

H. ABANDONED WELLS

The District continues to coordinate with the Texas Department of Licensing and Regulation (TDLR) to identify and investigate reports of abandoned wells. After initial investigation, staff refers abandoned wells to TDLR for further investigation, determination of corrective action, and enforcement. The District did not refer any abandoned wells to TDLR during FY08.

The District continues to work with the Bell County Public Health District for assistance in locating abandoned wells when septic systems are inspected. The District promotes the plugging of abandoned wells by distributing educational information at various conferences and events and hosting well plugging demonstrations with the Texas AgriLife Extension. According to records from the Texas Department of Licensing and Regulation, during FY08 a total of 46 wells were plugged in Bell County—5 water wells and 41 monitor wells.

I. BELL COUNTY WATER SYMPOSIUM

During FY08, Clearwater sponsored its seventh annual water symposium on November 8, 2007 at the Central Texas Council of Governments Building. The District partnered with the Texas AgriLife Extension and was able to provide Continuing Education Units for Private and

Commercial Pesticide Applicators. State Representative Jimmie Don Aycock was the keynote speaker providing a legislative update. Topics presented at the symposium included information about the District and an update on groundwater studies; water planning in Texas; water regulations and trends in Texas; health of watersheds in Bell County; water conservation through brush control; water wise landscape design; rainwater harvesting for homeowners; and vermiculture composting.

Bell County Annual Water Symposium, November 8, 2007

The District set up a display and distributed water conservation kits as well as other information on water conservation and the status of the aquifers. Approximately 70 people attended the symposium. Refer to Appendix J for an agenda of the meeting. Appendix B contains the Activity Report that lists the items distributed during this event.

J. NEWSLETTER


THE CLEARWATER SOURCE

MAY 2008 CLEARWATER ELECTION CANCELLED

The District published its fifth annual newsletter—*The Clearwater Source*—during the latter part of FY08. The newsletter was mailed in September to all registered well owners. Newsletter articles included updates of the May 2008 election; the GMA 8 joint planning process; well registration and production; District activities; data on rainfall, lake levels, and aquifer levels; a special insert on water conservation; and the president's message on aquifer recharge.

K. MAJOR RIVERS WATER EDUCATION PROGRAM

Each year the District sponsors the Major Rivers Water Education Program. This program is geared toward 4th and 5th grade students. During the spring of 2008, orders were taken for 1,879 students and 58 teachers in the Killeen and Temple school districts. The Major Rivers Program material was delivered to the schools in September 2008. A list of participating schools is provided in Appendix B, Activity Reports.

L. BOOK COVER DISTRIBUTION

The District again participated in purchasing book covers during FY08 for all middle and high school students in Bell County with distribution to occur during the 2008/2009 school year. The book covers provide information on water conservation and a brief overview of the District, including its goals and objectives. A total of 31,000 book covers were distributed to the students at the start of the school year during August and September 2008. The book covers distributed are shown in Appendix K.

M. LITERATURE PACKET DISTRIBUTION

The District compiles literature packets containing a variety of information on water conservation, the water cycle, and water quality. The packets are distributed to Bell County schools—one per campus—for each fall semester. Packets are usually distributed during the month of September; however, during the Fall 2007 cycle, packets went out in December 2007, and then again in September 2008 for the Fall 2008 cycle. This resulted in two packet distributions for FY08. Distribution generally includes approximately 105 packets. A list of schools and the items distributed are found in Appendix B, Activity Reports.

N. WATER CONSERVATION KITS

To promote public awareness and encourage water conservation, the District distributes water conservation kits at special events. The water conservation kits include the following items: faucet aerator; one touch on/off tap saver; 7 spray water saving hose nozzle; toilet leak detector dye tablets; shower flow meter bag; and lawn and garden rain gauge. These items were available for distribution at the following events: Annual Bell County Water Symposium (11-08-07); Annual Crops Clinic (1-22-08); and Fort Hood Earth Day Events (4-22-08). Refer to Appendix B for the Activity Report that lists the items distributed at these events.

O. PRESENTATIONS AND OUTREACH

Clearwater continues to promote public awareness of the District and our water resources and water conservation. Board members and staff have spoken to several groups and schools throughout the year and have attended various events and provided information for distribution regarding the District, groundwater resources, water cycle, water quality protection, and water conservation as identified below. (See Appendix B for the Activity Report that lists the material distributed.)

Presentations	Date	# Distributed
4th & 5th Grade—Leon Heights Elementary—Belton ISD	01-18-08	480
5th Grade—Parrie Haynes—Nolanville Elementary (Killeen ISD)	02-29-08	675
Fort Hood Earth Day presentations (Killeen ISD)	04-22-08	750
3rd - 5th Grade—East Ward Elementary (Killeen ISD)	04-22-08	2,088
5th Grade—Montague Village Elementary (Killeen ISD)	05-01-08	560

TX AgriLife Extension Jr. Master Gardener Training	07-25-08	60
TOTAL		**4,613**

Other Events	**Date**	**# Distributed**
Bell County Water Symposium, Bell Co. Expo	11-08-07	941
Annual Crops Clinic, Bell Co. Expo	01-22-08	848
Essay/Poster Contest Participants	02-08-08	552
Fort Hood Earth Day public event	04-22-08	2,817
TOTAL		**5,158**

Clearwater presentation to Nolanville Elementary students during the Parrie Haynes Ranch field day events 2-29-08.

P. PUBLIC ADVISORY COMMITTEE

The Public Advisory Committee (PAC) meets on an as-needed basis. The PAC did not meet during FY08. The PAC members during FY08 are as follows:

Vince Cortese	-	Precinct 1
Rosann Feagin	-	Precinct 2
Marvin Green, PAC Chair	-	Precinct 3
Henry Bunke	-	Precinct 4
David Cole	-	At-Large

Throughout FY08, PAC members have regularly attended the Clearwater Board meetings, providing representation at eight of the 12 regular monthly Board meetings. The PAC has provided valuable comments to the Board members at these meetings. The Board continues to value the input from the PAC and will assign tasks to them as needed.

A vacancy occurred in Precinct 2 during the spring of 2008. The vacancy was not filled until FY09.

Y. INTERNET SITE

The District's web site (www.clearwaterdistrict.org) continues to grow since it was first developed in the spring of 2001. The web site contains general information about the District and Board of Directors; calendar of events; press releases; meeting agendas; District Management Plan; District Rules; links to water-related sites; District forms; an overview of the District including a summary of activities; aquifer data; and educational information including data on water use and water conservation tips.

Records indicate that the top pages accessed during 2007 were the Overview of Bell County Aquifers; Major Rivers Program press release; District Mission Statement; Water Use Information; and District Rules. Information will be added to the web site during the next year as needed.

Z. RESOURCE LIBRARY

The District maintains a resource library to help promote public education and conservation of our water resources. The resource library consists of videotapes and literature focusing on the water cycle, groundwater, water conservation, and other water-related issues. This information is designed for age groups from pre-K to college level. The information in the Clearwater library is available for use by the public. A listing of the library material is shown in Appendix L.

4. ADMINISTRATIVE TASKS

Major administrative tasks and activities during FY08 include the following:

A. Contracts:
- Central Texas Council of Governments
- TCB/AECOM, Inc.
- Legal Services
  - (1) Naman, Howell, Smith & Lee
  - (2) Lloyd, Gosselink, Blevins, Rochelle & Townsend, P.C.

B. Financial Items:
- Budget and Tax Rate
- Financial Audit

C. Miscellaneous Policies:
- Strategic Plan/Management Study
- Proposed Revision to Travel & Subsistence Policy
- Misclassified Wells
- Quarry Registration/Permitting

D. Board of Directors:
- May 2008 Election
- District Officers
- Meetings

E. District Rules:
- Newspaper Notification Requirements Clarified
- Protection of Edwards Aquifer Recharge Zone
- Aquifer Co-Mingling Rules
- Permit Fees

F. Management Plan

A detailed discussion of each of these activities follows below.

A. CONTRACTS

1. Central Texas Council of Governments

The District renewed its contract with the Central Texas Council of Governments (CTCOG) for administrative and planning services for a two year period from October 1, 2007 through September 30, 2009. Although the contract is for a two year term, consideration for renewal occurs on an annual basis. This contract includes the use of CTCOG staff, equipment, and facilities. The District originally contracted

with CTCOG for administrative and planning services in March 2000. This contract continues to be beneficial for both parties.

To ensure prudent use of taxpayer dollars, the Clearwater Board contracted with Pennington Performance Group to conduct a study to determine whether management by CTCOG is still cost-effective for the District or if the District should consider becoming a "stand-alone" entity. This management study was done in conjunction with the development of a strategic plan. Both of these are discussed in Section C (Miscellaneous Policies).

2. TCB/AECOM, Inc.

The District initiated a contract with TCB, Inc. in March 2001 for technical consulting services and has continued a contractual relationship over the years. TCB, Inc. has now become AECOM, Inc. Services for FY08 included the following:

- Technical review of proposed rule amendments;
- Technical review of drilling permits, operating permits, and permit amendments;
- Designation of aquifers for exempt wells and estimate of production;
- Salado Creek stream flow gauge installation, equipment calibration, and programming for spring flow data;
- Technical review of geophysical logs for Lower Trinity aquifer;
- Review of data relating to desired future conditions for the Edwards BFZ and Trinity aquifers;
- Consultation regarding the Edwards BFZ recharge and transition zones;
- Technical assistance in developing various aspects of a draft Drought Management Plan for the Edwards BFZ aquifer;
- Consultation regarding appropriate sites for monitoring water levels in the Edwards BFZ and Trinity aquifers;
- Finalization of GAM report for Northern Trinity aquifer.

Several of the items above are discussed in more detail throughout this report.

3. Legal Services

The District requests legal consulting services on an as-needed basis and utilizes two law firms. Naman, Howell, Smith & Lee for general consultation, and Lloyd, Gosselink, Blevins, Rochelle & Townsend, P.C. (LGBRT) for consultation regarding water-related issues. LGBRT was the District's primary advisor during FY08 which included the following issues:

- Newspaper notice requirements for various applicants and review of agendas; application of revised rules to current permit holders seeking new operating permit (Jarrell Schwertner Water Supply Corporation (WSC) and East Bell WSC); groundwater transport issues; well spacing issues; well completion and spacing draft rules (co-mingling); use of preliminary plat in determining exempt vs. nonexempt status;

- Protection of Edwards BFZ aquifer recharge zone; jurisdiction question regarding alteration to Salado Springs; issues regarding desired future conditions for the Edwards BFZ and Trinity aquifers;

- Election issues including pre-clearance of polling locations from the U.S. Department of Justice; moving of election date; review of Texas Water Code Chapters 36, 49, 50 and 51 and impact to District;

- Public Information Act; contracting with staff member's spouse; review of monitoring well agreement; travel policy review; tax-code exemption—goods in transit.

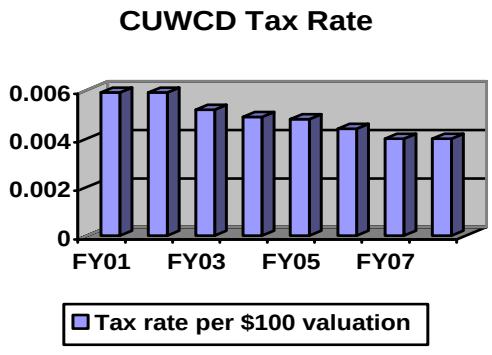
B. FINANCIAL ITEMS

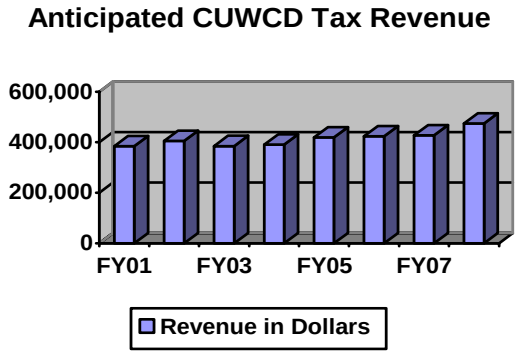
1. Budget and Tax Rate

The District held several workshops to develop an operating budget for the upcoming fiscal year and to set the corresponding ad valorem tax rate. The District has consistently lowered or kept the same tax rate since it began assessing taxes. The adopted tax rate for FY08 was $0.0040/$100 valuation, the same rate as the previous fiscal year. The approved budget for FY08 totaled $510,005 with $475,005 anticipated revenue from taxes.

Total revenue (including interest and collected fees) collected during FY08 was lower than anticipated at $491,458 ($18,547 less). Nevertheless, expenditures for FY08 totaled $436,191--$73,814 under budget. The excess funds ($55,267) are placed in the District's reserve account, which now totals $548,656.

The approved budget for FY08, along with the ending schedule of revenues and expenditures for FY08, is attached as Appendix M. Appendix M also includes a pie-chart that breaks down expenditures by category. The figures shown in the final report include a $493,389 reserve balance or carry over from years prior to FY08.





2. Financial Audit

An annual audit of the District's finances is required by Chapter 36.153 of the Texas Water Code. Clearwater's audit occurs in conjunction with CTCOG's audit. The fiscal year for CTCOG runs from July 1st through June 30th. Patillo, Brown & Hill, LLP conducted the CTCOG audit for both FY07 and FY08, with Clearwater as a part of the CTCOG audit. There were no findings to report for the FY07 audit; the FY08 audit is underway.

C. MISCELLANEOUS POLICIES

1. STRATEGIC PLAN/MANAGEMENT PLAN STUDY

During FY08, the Board contracted with Pennington Performance Group to develop a Strategic Plan and Management Study for the District. The strategic plan prioritized the District's activities by identifying A, B, and C Level Objectives as subsequent Goals under each Objective. A summary of the Strategic Plan Objectives and Goals is included in Appendix N.

With regard to the Management Study, the findings reflected that a break from CTCOG may result in higher costs to the District initially when considering "start-up" expenses, but these would likely decline over the years and savings may occur depending upon how the office was staffed and the resulting salaries and benefits. The recommendation from the consultant at this time was 1) maintain the current relationship with CTCOG; 2) discuss ways to improve service while lowering costs; and 3) conduct more detailed study of anticipated expenses related to a break from CTCOG and work out issues relating to staff, benefits, and building needs and begin to set aside funds to cover start-up expenses.

2. Proposed Revision to Travel and Subsistence Policy

During the latter part of FY08, the District began looking at the Travel and Subsistence Policy to address reimbursement for director travel between the director's residence and the District office or other meeting location. No action was taken during FY08.

3. MISCLASSIFIED WELLS

During the early part of FY08, the District finished reclassifying seven wells that had been misclassified as exempt. The application fee was waived and the District paid the costs associated with public notification. The seven wells are now classified as non-exempt and are providing monthly production reports.

4. QUARRY REGISTRATION/PERMITTING

During FY08, Clearwater continued working with area quarry/rock crushing operations to ensure appropriate permits were obtained if using groundwater. RLF Salado Quarries and Apache Stone were both issued permits in FY08.

D. BOARD OF DIRECTORS

1. May 2008 Election

The District's five directors serve four year terms that are staggered with elections held every two years. Elections are held in May in even numbered years. Precincts 1 and 3 were due for election in May 2008. Incumbent Directors Leland Gersbach and Wallace Biskup ran unopposed. As a result, the Board issued an order canceling the election and declared Directors Gersbach and Biskup as elected. These Directors will serve until May 2012.

This was the first year that the District was responsible for running its own election. In previous years, the County Clerk's office ran the election for Clearwater. The complexities and expenses of running an election, even if cancelled, raised the question as to whether the District should consider moving its election date to November so the County Clerk's office would run the election in conjunction with other County elections. The Board proposed legislation to do so in FY09.

2. District Officers

District Officers for FY08 were designated at the last meeting of FY07. The FY08 officers are identified below, along with the office they held and precinct they represent.

Horace Grace, President (Precinct 2)

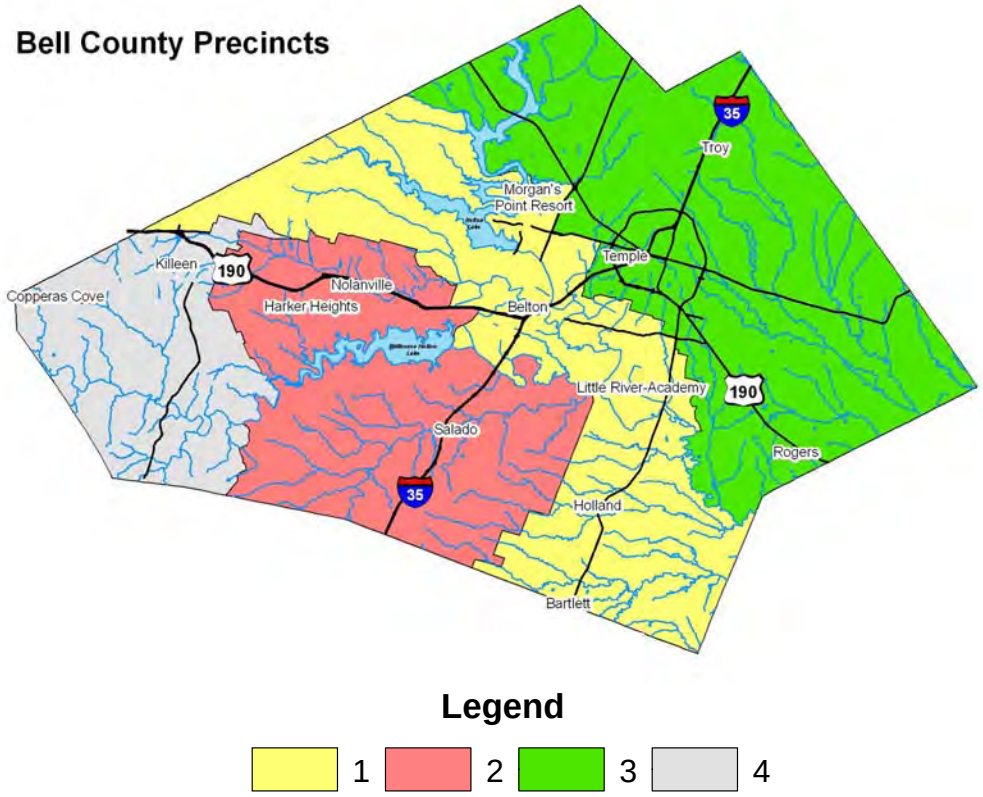
Wallace Biskup, Vice President (Precinct 3)

Judy Parker, Secretary (Precinct 4)

Leland Gersbach, Director (Precinct 1)

John Mayer, Director (At-Large)

Below is a map of the Bell County Commissioner Precincts which also serves as the precinct boundaries for the District.



3. Meetings

During FY08, the Board of Directors held 13 Board meetings and eight workshops. The workshops included discussion of the following: Meeting with representatives from Tablerock Groundwater Conservation District (Coryell County) to discuss Clearwater activities and groundwater conservation districts in general; Strategic Plan and Management Study; Edwards BFZ aquifer drought management plan; election issues; budget; FY07 annual report; fall water symposium; and District newsletter. Board meetings are typically held on the third Tuesday of each month.

E. DISTRICT RULES

The Clearwater Board discussed potential amendments to the District rules during FY08; however, no revisions were adopted. These, along with policy clarification, are summarized below:

1. Newspaper Notification Requirements Clarified

Staff asked for clarification of District Rule 8.9.1.b regarding newspaper notification of permit application, the question being which newspapers are considered acceptable. It was determined that the District would follow the two-prong test (objective and subjective components) outlined by the Texas Attorney General.

2. Protection of Edwards BFZ Aquifer Recharge Zone

During FY08, the Board began discussions about protecting the Edwards BFZ aquifer recharge zone. This involved looking at the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Rules. Bell County is the only county with the Edwards BFZ aquifer that has not adopted these rules. The discussions continued into FY09 with the Board considering conducting studies and holding stakeholders meetings to determine the direction the District should take.

3. Aquifer Comingling Rules

When drilling through one formation to reach a lower one, there is the risk that water from the two aquifers could comingle and result in loss of water or deterioration of the water quality for one of the aquifers. To address this issue, Staff proposed rules that would support existing TDLR (Texas Department of Licensing and Regulation) rules and go a step farther. The proposed rules would more clearly specify when special completions measures are needed, clarify the completions standards, and require a geophysical log in some instances. This item was tabled in FY08 to allow staff time to acquire feedback from local well drillers and pump installers.

4. Permit Fees

Technical review of permit applications may be costly depending upon the issues involved. The application fee for permits is $125 of which $100 is refunded after the process is completed. The cost for the technical review is essentially borne by the District. During FY08, the Board asked staff to review the fee structure and compare with other groundwater districts. This item was tabled in FY08.

F. MANAGEMENT PLAN

No changes were made to the District's Management Plan during FY08. The District continued to work with other groundwater conservation districts in Groundwater Management Area 8 to develop desired future conditions (DFC) for the Trinity and Edwards BFZ aquifers. DFCs were adopted for both aquifers during FY08. The resulting managed available groundwater (MAG) was determined and finalized by the Texas Water Development Board for the Edwards BFZ aquifer in September 2008. The Trinity MAG was not finalized until FY09. The MAG figures will be included in the District Management Plan when the next update occurs (2011).

Groundwater districts may be audited by the State every seven years to determine if the District is actively engaged in achieving the objectives of its management plan. The Clearwater District has not yet been audited. A detailed discussion of the District's Management Plan activities based on the 2006 approved Plan is included in an earlier section of this report.

5. SUMMARY

During FY08, the District continued to acquire data for use in managing Bell County's groundwater resources. Data from the stream flow gauge sites in Salado Creek was collected and converted to spring discharge from the Edwards BFZ aquifer. A second continuous monitoring well was equipped in the Edwards aquifer as well.

The District agreed to drill a monitoring well in each formation of the Trinity aquifer and began researching potential sites. A geophysical log of the lower Trinity (Hosston) was conducted during FY08, the second of four logs authorized by the District to supplement data for the "Trinity Study for Western Bell County." As noted in previous years, this study has been completed (final report forthcoming); however, some discrepancies were identified. The data from the logs will be used to address these discrepancies. This data will also assist in determining whether it is appropriate to manage the Trinity aquifer by layer.

Data acquisition also included ongoing projects like the aquifer monitoring program and monthly production reports from non-exempt wells, as well as estimates of exempt well use which are updated biannually.

During FY08, the District continued development of a drought management plan for the Edwards BFZ aquifer. Discussion to protect the Edwards BFZ recharge zone began during FY08 and continued on into FY09. A strategic plan was conducted during FY08 to identify and prioritize goals and objectives. A management study was also conducted as part of the strategic plan to analyze the relationship between Clearwater and CTCOG.

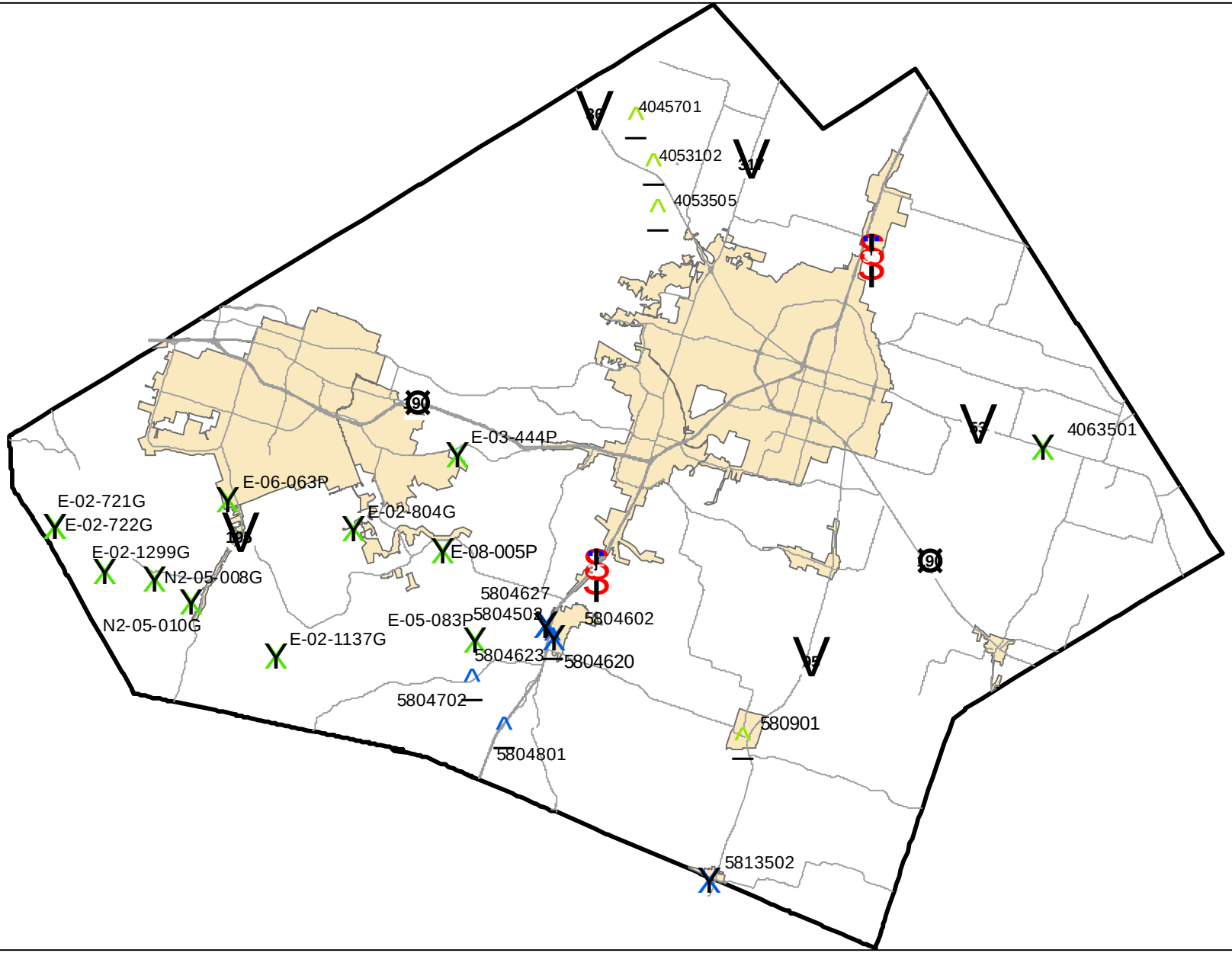
Clearwater continued its participation in GMA 8. During FY08, the goal of setting desired future conditions for the nine major and minor aquifers in the GMA 8 boundary was completed. Managed available groundwater figures for one of the aquifers (Edwards BFZ) were finalized during FY08.

Public education and service continue to be a major focus of the District during FY08. District staff visited several schools giving presentations focusing on Bell County's aquifers, water conservation, and non-point source pollution. In addition, numerous presentations were given to various schools attending the Earth Day events held on Fort Hood**.** The District's Earth Day participation and annual water symposium continue to be major outreach opportunities.

During FY09, the District will continue to acquire data on the aquifers and will collect data from the Salado Creek Stream Flow Gauging Program to monitor Salado Springs. This data will be considered as the District continues developing a drought management plan for the Edwards BFZ aquifer. The District will also continue discussions about protecting the Edwards BFZ recharge zone. Additional monitoring sites for both the Edwards BFZ and the Trinity aquifers will be sought after and three monitoring wells drilled in the Trinity aquifer in western Bell County for use as index wells. As additional data is collected, the District will determine whether management of the Trinity aquifer by layer is the appropriate course to follow.

Appendix A

Aquifer Monitor Sites



Clearwater Underground Water Conservation District
2180 N. Main St., PO Box 729
Belton, TX 76504
July 21, 2008

3 1.5 0 3 6 9 12 Miles

®

Legend

- Clearwater_Edwards
- Clearwater_Trinity
- TWDB_Edwards
- TWDB_Trinity

Appendix B

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff & Directors

Activity: Bell County Water Symposium

Date(s): 11-08-07

Location: CTCOG Building

Information Distributed and Quantity: See attached.

Notes: Approximately 80 people attended the event.

Item	Quantity
CUWCD	
CUWCD Brochure folder	17
CUWCD Fall 2006 Newsletter	15
Use Water Wisely Wheels	48
Cups	75
Rulers	53
Pencils	46
Ink Pens	75
Frisbees	50
Spray Bottles—Indoor Use	47
Spray Bottles—Outdoor Use	48
Balloons	12
Calendars	15
Texas Alliance of Groundwater Districts	
TAGD Brochure	4
Groundwater Foundation	
Groundwater Basics brochure	12
Bookmark—The Water Cycle	27
Bookmark—Top 10 Ways to Protect and Conserve Groundwater	21
Texas Groundwater Protection Committee	
Landowners Guide to Plugging Abandoned Wells	9
TWDB	
Being Water Wise Outdoors Brochure	17
Being Water Smart Indoors Brochure	13
Texas Lawn Watering Guide	17
Water Smart.org	
Water Smart "bill stuffers" indoors	7
Water Smart "bill stuffers" outdoors	10
Miscellaneous	
Auto Not Pollute Slide Card	5
Water Conservation Sticker Sheets	17
Water Conservation Items:	
Faucet Aerator	50
One Touch On/Off Tap Saver	50
Shower Flow Meter Bag	31
Toilet Leak Detector Dye Tablets	50
7 Spray Water Saving Hose Nozzle	50
Lawn & Garden Rain Gauge	50
TOTAL	**941**

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff

Activity: December 2007 water conservation literature packet mailout

Date(s): 1-08-2008

Location: 115 school campuses in Bell County (19 private schools and 96 public schools)

Information Distributed and Quantity: 115 literature packets--See attached

Notes:

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT
DECEMBER 2007 LITERATURE PACKET

Clearwater Underground Water Conservation District
Clearwater Underground Water Conservation District Resource Library
Groundwater Production
Water Use Information

Texas Water Development Board
Groundwater Conservation Districts
Major Aquifers of Texas
Minor Aquifers of Texas
Major River Basins in Texas
Regional Water Planning Groups

The Ground Water Foundation
What is Groundwater?
Groundwater Vocabulary
Sources of Groundwater Contamination
Groundwater and the Water Cycle
Groundwater Protection: Kid Style!
Easy Ways to Conserve Water
The Groundwater Gazette Issue 3: Groundwater Conservation

Roaring Fork Conservancy
Water Conservation
Water Conservation Inventory Form

Mansfield Middle School
What is Compost?
Amazing but True Composting Facts
Test Your Compost Knowledge

Regional Water Providers Consortium
Compost and Water Conservation

The US Composting Council
Benefits of Using Compost

Washington State University
Composting with Redworms

Activities

Groundwater Activity: Edible Earth Parfaits	(The Groundwater Foundation)
Groundwater Activity: How Wet is Our Planet	(The Groundwater Foundation)
Groundwater Activity: The Filter Challenge	(The Groundwater Foundation)
Water Cycle Crossword	(The Groundwater Foundation)
Water Cycle Fill In	(The Groundwater Foundation)
Groundwater Word Search	(The Groundwater Foundation)

Private School Distribution

Temple Christian Adacemy
5105 West Adams Ave.
Temple, TX 76502

Dr. Ardelle Hamilton, Principal
St. Mary's School
1019 S. 7th Street
Temple, TX 76504

Central Texas Christian School
4141 W. FM 93
Temple, TX 76504

Holy Trinity Catholic School
418 N. 11th Street
Temple, TX 76501

Immanuel Lutheran School
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Harker Heights, TX 76548

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Harker Heights, TX 76548

Sherry O'Donnell
Killeen Montessori School
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Harker Heights, TX 76548

Memorial Christian Academy
4001 Trimmier Road
Killeen, TX 76542

Richard Milburn Academy
1001 E. Veterans' Memorial Blvd.
Killeen, TX 76541

Tovas/Temple Education Center
1401 East Ave. B
Temple, TX 76501

Tabernacle Baptist School
6601 S. Fort Hood Street
Killeen, TX 76542

Grace Lutheran School
902 North 10th Street
Killeen, TX 76541

Becky Kirkland, Principal
St. Joseph Catholic School
2901 E. Rancier Ave.
Killeen, TX 76543

Destiny High School
1001 East Veterans' Memorial Blvd.
Killeen, TX 76541

Grace Christian Academy
1401 Elms Road
Killeen, TX 76542

Killeen Adventist Junior Academy
3412 Lake Road
Killeen, TX 76543

New Beginnings Christian Academy
3621 East Veterans' Memorial Blvd.
Killeen, TX 76543

Faith Christian Academy
PO Box 3807
Temple, TX 76505

Pamela Tidwell
Lighthouse Christian Academy
2904 Trimmier Road, Suite 3
Killeen, TX 76542

Public School Distribution

Randy Hendricks, Superintendent (3)
Academy Independent School District
704 E. Main Street
Little River, TX 76554-9801

Dr. Vivian Baker (12)
Belton Independent School District
616 East 6th Ave.
Belton, TX 76513

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Temple, TX 76504

Kerry Hansen, Superintendent (3)
Troy Independent School District
P.O. Box 409
Troy, TX 76579-0409

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff

Activity: Classroom presentations

Date(s)/Location: 01-18-08 Leon Heights Elementary School (Belton ISD), 4th & 5th grade students

Information Distributed and Quantity: 80 of the following: TWDB Shower Flow bags; TWDB dillo dollar water conservation tips; CUWCD rulers; CUWCD info cards; CUWCD activity cards; and CUWCD frisbees.

Notes: Presentation included powerpoint and water model.

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff & Directors

Activity: Annual Crops Clinic

Date(s): 01-22-08

Location: Bell County Expo Center

Information Distributed and Quantity: See attached.

Notes: Approximately 350 people attended the event.

Item	Quantity
CUWCD	
CUWCD Brochure folder	6
CUWCD Fall 2006 Newsletter	5
Use Water Wisely Wheels	28
Cups	79
Rulers	91
Pencils	56
Ink Pens	100
Frisbees	50
Spray Bottles—Indoor Use	45
Spray Bottles—Outdoor Use	45
Calendars	7
Texas Alliance of Groundwater Districts	
TAGD Brochure	2
Groundwater Foundation	
Groundwater Basics brochure	7
Bookmark—The Water Cycle	9
Bookmark—Top 10 Ways to Protect and Conserve Groundwater	8
Texas Groundwater Protection Committee	
Plugging Abandoned Water Wells Brochure	6
TWDB	
Being Water Wise Outdoors Brochure	5
Being Water Smart Indoors Brochure	3
Texas Lawn Watering Guide	10
Water Smart.org	
Water Smart "bill stuffers" indoors	2
Water Smart "bill stuffers" outdoors	14
Miscellaneous	
Auto Not Pollute Slide Card	2
Water Conservation Sticker Sheets	15
Water Conservation Items:	
Faucet Aerator	50
One Touch On/Off Tap Saver	50
Shower Flow Meter Bag	13
Toilet Leak Detector Dye Tablets	40
7 Spray Water Saving Hose Nozzle	50
Lawn & Garden Rain Gauge	50
TOTAL	**848**

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff

Activity: Field Day Presentations

Date(s)/Location: 02-29-08 Parrie Haynes Ranch—Nolanville Elementary School (KISD) 5th grade students

Information Distributed and Quantity: 135 of the following: TWDB Shower Flow bags; CUWCD rulers; CUWCD Pencils; Groundwater Foundation Bookmark—Water Cycle; Groundwater Foundation Bookmark—Ways to Protect Groundwater.

Notes: Presentation included water testing of Lampasas River and Trinity aquifer sample. Test kits were provided by teachers via a grant.

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff

Activity: Essay/poster contest participants

Date(s)/Location: 02-08-08

Information Distributed and Quantity: 92 of the following: TWDB Shower Flow bags; CUWCD Use Water Wisely Wheels; CUWCD activity cards; CUWCD pencils; CUWCD rulers; CUWCD frisbees

Notes:

Clearwater FY08 Essay and Poster Contest
Participant Summary

92 entries: 55 posters and 37 essays (87 students)

Troy ISD			
Troy Elementary	55 Students	50 posters	7 essays
Killeen ISD			
Nolanville Elementary	23 Students	0 posters	23 essays
Timber Ridge Elementary	1 Student	1 poster	1 essay
Belton ISD			
Sparta Elementary	1 Student	0 poster	1 essay
Tyler Elementary	1 Student	1 poster	1 essay
Holland ISD			
Holland Elementary	6 Students	3 posters	4 essays
TOTAL	**87 Students**	**55 posters**	**37 essays**

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff

Activity: Fort Hood Earth Day Public Event

Date(s)/Location: 04-22-08

Information Distributed and Quantity: See attached.

Notes:

Item	Quantity
CUWCD	
Brochure folder	23
Fall 2007Newsletter	6
Use Water Wisely Wheels	34
Cups	100
Rulers	100
Pencils	100
Ink Pens	100
Frisbees	70
Calendars	50
Groundwater Foundation	
Groundwater Basics brochure	7
Bookmark—The Water Cycle	29
Bookmark—Top 10 Ways to Protect and Conserve Groundwater	29
TWDB	
Being Water Wise Outdoors Brochure	8
Being Water Smart Indoors Brochure	11
Texas Lawn Watering Guide	9
Miscellaneous	
Water Conservation Sticker Sheets	30
Auto Not Pollute Slide Cards	10
Earth Friendly Recipes Indoor Spray Bottle	19
Earth Friendly Recipes Outdoor Spray Bottle	24
Plugging Abandoned Water Wells Brochure	7
Water Conservation Kit Items:	
Faucet Aerator	50
One Touch On/Off Tap Saver	50
TWDB Shower Flow Meter Bag	31
Toilet Leak Detector Dye Tablets	50
7 Spray Water Saving Hose Nozzle	50
Lawn & Garden Rain Gauge	50
Pre-Assembled Packet for School Children	
TWDB Shower Flow Meter Bag	354
CUWCD Use Water Wisely Wheel	354
CUWCD Activity Card	354
CUWCD Pencil	354
CUWCD Balloon	354
TOTAL	**2,817**

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff

Activity: Fort Hood Earth Day School Presentations

Date(s)/Location: 04-22-08 Fort Hood Stadium

Information Distributed and Quantity: 150 of the following: TWDB Shower Flow bags; CUWCD Use Water Wisely Wheels, CUWCD activity cards; CUWCD pencils; CUWCD balloons.

Notes: Approximately 7 presentations were given and included an overview of aquifers, groundwater protection and water conservation.

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff

Activity: Classroom Presentations

Date(s)/Location: 04-22-08 East Ward Elementary School, Killeen ISD

Information Distributed and Quantity: 232 the following: TWDB Shower Flow bags; CUWCD Use Water Wisely Wheels, CUWCD activity cards; CUWCD rulers; CUWCD frisbees; CUWCD Info Card; The Groundwater Foundation Bookmarks—The Water Cycle; The Groundwater Foundation Bookmarks—Top 10 Ways; Water Conservation Sticker Sheets.

Notes: Presentation included powerpoint and groundwater model.

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff

Activity: Classroom Presentations

Date(s)/Location: 05-01-08 Montague Village Elementary School, Killeen ISD

Information Distributed and Quantity: 80 the following: TWDB Shower Flow bags; CUWCD Use Water Wisely Wheels, CUWCD activity cards; CUWCD Info Card; The Groundwater Foundation Bookmarks—The Water Cycle; The Groundwater Foundation Bookmarks—Top 10 Ways; Water Conservation Sticker Sheets.

Notes: Presentation included powerpoint and groundwater model.

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Judy Parker

Activity: AgriLife Extension Teachers Jr. Master Gardener Training Program

Presentation to teachers

Date(s)/Location: 7-25-08 AgriLife Extension Office, Belton

Information Distributed and Quantity: 30 the following: CUWCD brochure folder, CUWCD resource library list; CUWCD Fall 2007 newsletters; edible aquifer recipe; USGS Water Science for Schools webpage.

Notes:

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff

Activity: September 2008 water conservation literature packet mailout

Date(s): 9-09-2008

Location: 115 school campuses in Bell County (19 private schools and 96 public schools)

Information Distributed and Quantity: 115 literature packets--See attached

Notes:

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT
SEPTEMBER 2008 LITERATURE PACKET

Clearwater Underground Water Conservation District
Clearwater Underground Water Conservation District Resource Library
Groundwater Production
Water Use Information

Texas Water Development Board
Groundwater Conservation Districts
Major Aquifers of Texas
Minor Aquifers of Texas
Major River Basins in Texas
Regional Water Planning Groups
Rainwater Harvesting—Frequently Asked Questions
Brochure—Water Conserving Tips
Brochure—Conserving Water Indoors
Brochure—Conserving Water Outdoors
Texas Lawn Watering Guide

The Groundwater Foundation
What is Groundwater?
Wells and How They Work
Sources of Groundwater Contamination
The Groundwater Gazette—Issue 2: Groundwater Contamination
Kids Can Protect Groundwater Too
Be Water Wise All Week

Natural Resources Conservation Service
Water Conservation in the Yard
Composting

Washington State University—Whatcom County Extension
Compost Fundamentals

Texas Cooperative Extension
Rainfall Harvesting

Activities
Groundwater Uses Coloring Page
Edible Earth Parfaits
Water Word Scramble
Matching Game—How Much Water?
Water Cycle—Is There Water in the Air?
Water Filter
Groundwater Quiz
The Water Cycle Bookmark
Top 10 Ways to Protect and Conserve Groundwater Bookmark

Public School Distribution

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Harker Heights, TX 76548

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Tabernacle Baptist School
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Killeen, TX 76541

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Killeen, TX 76543

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Killeen, TX 76541

Grace Christian Academy
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Killeen, TX 76542

Killeen Adventist Junior Academy
3412 Lake Road
Killeen, TX 76543

New Beginnings Christian Academy
3621 East Veterans' Memorial Blvd.
Killeen, TX 76543

Faith Christian Academy
PO Box 3807
Temple, TX 76505

Pamela Tidwell
Lighthouse Christian Academy
2904 Trimmier Road, Suite 3
Killeen, TX 76542

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff

Activity: Major Rivers Water Education Program Distribution

Date(s): September 2008

Location: Bell County Schools

Information Distributed and Quantity: see attached.

Notes: Staff contacted Bell County schools and took orders in the spring. Each teacher kit includes 30 student workbooks. Teacher guides include 30 student workbooks and an updated teacher handout.

Major Rivers Orders for Fall 2008
Bell County

School	Grade	Students	Teacher Kits	Teacher Guides	Student Workbooks	Home Leaflets	Electronic Guides
Killeen ISD							
Audie Murphy Middle	6	250	3	0	7	15	0
West Ward Elementary	4th and 5th	120	7	0	0	0	0
Meadows Elementary	4th and 5th	400	10	0	0	0	10
Reeces Creek Elementary	1st—5th	125	5	0	0	0	0
Nolanville Elementary	5th	150	7	0	0	0	0
Saegert Elementary	4th	175	1	0	0	0	8
Temple ISD							
Carter Elementary	4th	45	0	4	0	28	0
Hector P. Garcia Elem.	4th	91	3	2	0	22	0
Jefferson Elementary	4th	78	0	3	0	0	0
Kennedy-Powell Elem.	4th	95	0	3	0	0	0
Meridith-Dunbar Elem.	4th	62	2	0	0	0	0
Raye-Allen Elem.	4th	71	0	2	0	0	0
Scott Elementary	4th	61	0	3	0	0	0
Thornton Elementary	4th	89	3	0	0	0	0
Western Hills Elem.	4th	89	4	0	0	0	0
TOTAL		**1,901**	**45**	**17**	**7**	**65**	**18**

Each teacher packet serves 30 students. Each additional student packet serves 30 students.

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Activity Report

CUWCD Representative: Staff

Activity: Splash Activity Book Distribution

Date(s): September 2008

Location: Bell County Schools—3rd Grade

Information Distributed and Quantity: see attached.

Notes: Staff contacted Bell County schools and took orders in the spring.

SPLASH SCHOOLS

Mollie McBroom
Reeces Creek Elementary
400 W. Stan Schlueter Loop
Killeen, TX 76542
254-501-2171
800 books

Sandra Velo
Miller Heights Elementary
1110 Fairway Drive
Belton, TX 76513
254-215-3300
K-2nd
300 books

Julie Hagey
Fowler Elementary
1020 Trimmier Road
Killeen, TX 76541
254-501-1760
K-3rd
275 books

Fara Bolin
Troy Elementary
808 East Austin Ave.
Troy, TX 76579
254-938-2503
3rd
20 books

Cynthia Potvin
Venable Village Elementary
60160 Venable Road
Ft. Hood, TX 76544
254-501-1980
4th & 5th
125 books

Home Schools
LSHCSC
Kenneth Schoen
1 – 3 Grade
60 books

Total: 1,580

420 Extra copies

TOTAL = 2,000 Splash Books

Appendix C

NOTICE OF OPEN MEETING

BRAZOS G REGIONAL WATER PLANNING GROUP
10:00 a.m., Wednesday, October 24, 2007
Brazos River Authority Central Office
4600 Cobbs Drive, Waco, Texas 76710

AGENDA

1. **CALL MEETING TO ORDER**
2. **INVOCATION**
3. **NOTICE OF MEETING**
4. **ATTENDANCE AND ANNOUNCEMENTS**
5. **PUBLIC INPUT - Public questions and comments on agenda items or water planning issues** ***(limited to 5 minutes each; public must fill out a 'Request to Speak' form prior to the discussion of the agenda item)***
6. **PROGRAM**
   - 6.1. **Report from Texas Parks and Wildlife Department staff regarding department activities**
   - 6.2. **Report from Texas Water Development Board staff on water planning issues**
   - 6.3. **FEATURED EDUCATIONAL BRIEFING:**

     "Water Rights Permitting Process"
     Presented by
     Monica Jacobs, Kelly, Hart, and Hallman LLP

   - 6.4. **Discussion and possible action on the Scope of Work Committee's recommended response to the scope of work questions posed by the Texas Water Development Board regarding the 2011 Brazos G Regional Water Plan**
   - 6.5. **Discussion and possible action on the Executive Committee recommendations for the voting member vacancies representing Environmental and Small Business interest categories**
   - 6.6. **Progress report on Scope of Work study tasks**
   - 6.7. **Discussion and possible action on a Request to Amend the 2006 Brazos G Regional Water Plan by increasing steam-electric water demands for Somervell County and identifying a water management strategy to supply those increased demands**
   - 6.8. **Presentation of plaques to outgoing voting members**
7. **DISCUSSION AND POSSIBLE ACTION ON NEW BUSINESS TO BE CONSIDERED AT NEXT MEETING**
8. **CONFIRMATION OF NEXT MEETING DATE**
9. **ADJOURN**

"Lunch will be served during the course of the meeting for members only"

Agenda items may be considered, deliberated and/or acted upon in a different order than set forth above.

Meeting agendas and materials are available online at www.brazosgwater.org
For additional information, please contact
Julie Andress at 254-761-3145 or via e-mail info@brazosgwater.org
Brazos River Authority, Administrative Agent

NOTICE OF OPEN MEETING

BRAZOS G REGIONAL WATER PLANNING GROUP
10:00 a.m., Wednesday, February 27, 2008
Brazos River Authority Central Office
4600 Cobbs Drive, Waco, Texas 76710

AGENDA

1. **CALL MEETING TO ORDER**

2. **INVOCATION**

3. **NOTICE OF MEETING**

4. **ATTENDANCE AND ANNOUNCEMENTS**

5. **FEATURED BRIEFING**

   5.1. **STATE SENATOR KIP AVERITT, CHAIR SENATE NATURAL RESOURCE COMMITTEE**

6. **BREAK**

7. **PUBLIC INPUT - Public questions and comments on agenda items or water planning issues** ***(limited to 5 minutes each; public must fill out a 'Request to Speak' form prior to the discussion of the agenda item)***

8. **PROGRAM**

   8.1. **Report from Texas Parks and Wildlife Department staff and possible discussion regarding department activities**

   8.2. **Report from Texas Water Development Board (TWDB) staff and possible discussion on water planning issues**

   8.3. **Report and possible discussion on Brazos G quarterly Financial Report**

   8.4. **Discussion and possible action on the Nominations Committee recommendation of nominee(s) for the vacant At-large Brazos G Executive Committee Position**

   8.5. **Report and possible discussion on proposed amendment to 2006 Brazos G Regional Water Plan regarding increases in steam-electric water demands for Somervell County and identifying a water management strategy to supply those increased demands**

   8.6. **Discussion and possible action on second biennium funding cycle regarding Scope of Work study tasks for 2011 Brazos G Regional Water Plan**

   8.7. **Report from Chair and possible discussion on Brazos G notice to Groundwater Management Areas regarding timeline for submittal of Desired Future Conditions to TWDB, Brazos G comments on amendments to Texas Administrative Code Chapter 357, and TWDB letter regarding Public Interest voting-member position**

9. **DISCUSSION AND POSSIBLE ACTION ON NEW BUSINESS TO BE CONSIDERED AT NEXT MEETING**

10. **CONFIRMATION OF NEXT MEETING DATE**

11. **ADJOURN**

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For additional information, please contact
Julie Andress at 254-761-3145 or via e-mail info@brazosgwater.org
Brazos River Authority, Administrative Agent

NOTICE OF OPEN MEETING

BRAZOS G REGIONAL WATER PLANNING GROUP
10:00 a.m., Tuesday, April 29, 2008
Brazos River Authority Central Office
4600 Cobbs Drive, Waco, Texas 76710

AGENDA

1. **CALL MEETING TO ORDER**

2. **INVOCATION**

3. **NOTICE OF MEETING**

4. **ATTENDANCE AND ANNOUNCEMENTS**

5. **PUBLIC INPUT - Public questions and comments on agenda items or water planning issues** ***(limited to 5 minutes each; public must fill out a 'Request to Speak' form prior to the discussion of the agenda item)***

6. **PROGRAM**

   6.1. **Report from Texas Parks and Wildlife Department staff and possible discussion regarding department activities**

   6.2. **Report from Texas Water Development Board (TWDB) staff and possible discussion on water planning issues**

   6.3. **Report from Region C liaison and Brazos G voting member, Terry Kelley, and possible discussion on Region C activities**

   6.4. **Report and discussion of regional water plan amendment process and anticipated Brazos G meeting schedule to comply with statutory requirements of the amendment process.**

   6.5. **Discussion and possible action on proposed amendment to 2006 Brazos G Regional Water Plan to include water treatment and transmission infrastructure for Somervell County Water District's Wheeler Branch Reservoir Project**

   6.6. **Discussion and possible action on proposed amendment to 2006 Brazos G Regional Water Plan to include water treatment and transmission infrastructure for the City of Cleburne's Lake Whitney Water Supply Project**

   6.7. **Discussion and possible action on proposed amendment to 2006 Brazos G Regional Water Plan regarding Recommended & Alternative Water Management Strategies for Palo Pinto County Municipal Water District No. 1**

6.8. **Discussion and possible action on proposed amendment to 2006 Brazos G Regional Water Plan regarding increases in steam-electric water demands for Somervell County and identifying a water management strategy to supply those increased demands**

6.9. **Report and discussion on current regional water planning activities for the 2011 Regional Water Plan**

6.10. **Report from Scope of Work Committee Chair and possible action on Scope of Work Committee's recommendations for Phase II of the Third Round of Regional Water Planning (2011 Planning Cycle)**

6.10.1. **Items required for Regional Water Planning grant application and scope of work**

6.10.2. **Suggested study topics for Phase II of the 2011 Planning cycle, and**

6.10.3. **Public input received during April 16, 2008 Public Hearing**

7. **Report from Executive Committee and possible action on recommendations regarding voting member interest position definitions and Bylaw requirements**

8. **DISCUSSION AND POSSIBLE ACTION ON NEW BUSINESS TO BE CONSIDERED AT NEXT MEETING**

9. **CONFIRMATION OF NEXT MEETING DATE**

10. **ADJOURN**

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For additional information, please contact
Trey Buzbee at 254-761-3168 or via e-mail info@brazosgwater.org
Brazos River Authority, Administrative Agent

NOTICE OF OPEN MEETING

BRAZOS G REGIONAL WATER PLANNING GROUP
10:00 a.m., Wednesday, June 4, 2008
Brazos River Authority Central Office
4600 Cobbs Drive, Waco, Texas 76710

AGENDA

1. **CALL MEETING TO ORDER**

2. **INVOCATION**

3. **NOTICE OF MEETING**

4. **ATTENDANCE AND ANNOUNCEMENTS**

5. **PUBLIC INPUT - Public questions and comments on agenda items or water planning issues *(limited to 5 minutes each; public must fill out a 'Request to Speak' form prior to the discussion of the agenda item)***

6. **PROGRAM**

   6.1. Report from Texas Parks and Wildlife Department staff and possible discussion regarding department activities

   6.2. Report from Texas Water Development Board (TWDB) staff and possible discussion on water planning issues

   6.3. **Public Hearing** - Oral and/or written public suggestions and recommendations on proposed amendment to 2006 Brazos G Regional Water Plan to include water treatment and transmission infrastructure for Somervell County Water District's Wheeler Branch Reservoir Project ***(limited to 5 minutes each; public must fill out a 'Request to Speak' form prior to the discussion of the agenda item)***

   6.4. **Public Hearing** - Oral and/or written public suggestions and recommendations on proposed amendment to 2006 Brazos G Regional Water Plan regarding Recommended & Alternative Water Management Strategies for Palo Pinto County Municipal Water District No. 1 ***(limited to 5 minutes each; public must fill out a 'Request to Speak' form prior to the discussion of the agenda item)***

   6.5. **Public Hearing** - Oral and/or written public suggestions and recommendations on proposed amendment to 2006 Brazos G Regional Water Plan to include water treatment and transmission infrastructure for the City of Cleburne's Lake Whitney Water Supply Project ***(limited to 5 minutes each; public must fill out a 'Request to Speak' form prior to the discussion of the agenda item)***

   6.6. **Public Hearing** - Oral and/or written public suggestions and recommendations on proposed amendment to 2006 Brazos G Regional Water Plan regarding increases in steam-electric water demands for Somervell County and identifying a water

management strategy to supply those increased demands ***(limited to 5 minutes each; public must fill out a 'Request to Speak' form prior to the discussion of the agenda item)***

6.7. Discussion and possible action on proposed amendment to 2006 Brazos G Regional Water Plan to include water treatment and transmission infrastructure for Somervell County Water District's Wheeler Branch Reservoir Project

6.8. Discussion and possible action on proposed amendment to 2006 Brazos G Regional Water Plan to include water treatment and transmission infrastructure for the City of Cleburne's Lake Whitney Water Supply Project

6.9. Discussion and possible action on Scope of Work for Phase II of the Third Round of Regional Water Planning for developing the 2011 Brazos G Regional Water Plan

6.9.1. Report from Scope of Work Committee Chair

6.9.2. Presentation of DRAFT Scope of Work and explanation of funding to be requested from the TWDB

6.9.3. Recommendation to the Brazos G RWPG regarding the Scope of Work for Phase II funding for development of the 2011 Brazos G Regional Water Plan

6.9.4. Consideration and approval of Scope of Work and authorization of Brazos River Authority to submit an application to TWDB requesting funding for the development of the 2011 Brazos G Regional Water Plan

6.10. Discussion and possible action on solicitation of new Brazos G Regional Water Planning Group Public Interest and Water Utilities voting member positions

6.11. Discussion and possible action on response to Water Demand Projections for Power Generation in Texas draft study prepared by the TWDB

7. DISCUSSION AND POSSIBLE ACTION ON NEW BUSINESS TO BE CONSIDERED AT NEXT MEETING

8. CONFIRMATION OF NEXT MEETING DATE

9. ADJOURN

"Lunch will be served during the course of the meeting for members only"

Agenda items may be considered, deliberated and/or acted upon in a different order than set forth above.

**** Tentative, pending decision by TWDB**

Meeting agendas and materials are available online at www.brazosgwater.org
For additional information, please contact

NOTICE OF OPEN MEETING

BRAZOS G REGIONAL WATER PLANNING GROUP
10:00 a.m., Wednesday, July 9, 2008
Brazos River Authority Central Office
4600 Cobbs Drive, Waco, Texas 76710

AGENDA

1. **CALL MEETING TO ORDER**
2. **INVOCATION**
3. **NOTICE OF MEETING**
4. **ATTENDANCE AND ANNOUNCEMENTS**
5. **PUBLIC INPUT - Public questions and comments on agenda items or water planning issues** ***(limited to 5 minutes each; public must fill out a 'Request to Speak' form prior to the discussion of the agenda item)***
6. **PROGRAM**
   - 6.1. **Report from Texas Parks and Wildlife Department staff and possible discussion regarding department activities**
   - 6.2. **Report from Texas Water Development Board (TWDB) staff and possible discussion on water planning issue**
   - 6.3. **Report on Brazos G response to Water Demand Projections for Power Generation in Texas draft study prepared by the TWDB**
   - 6.4. **Discussion and possible action on proposed amendment to the 2006 Brazos G Regional Water Plan regarding increases in steam-electric water demands for Somervell County and identifying a water management strategy to supply those increased demands**
   - 6.5. **Report from Scope of Work Committee Chair on submission of grant application for Phase II of the Third Round of Regional Water Planning**
7. **DISCUSSION AND POSSIBLE ACTION ON NEW BUSINESS TO BE CONSIDERED AT NEXT MEETING**
8. **CONFIRMATION OF NEXT MEETING DATE**
9. **ADJOURN**

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Trey Buzbee at 254-761-3168 or via e-mail info@brazosgwater.org
Brazos River Authority, Administrative Agent

Appendix D

Results of Groundwater Samples Tested During FY2008[1]

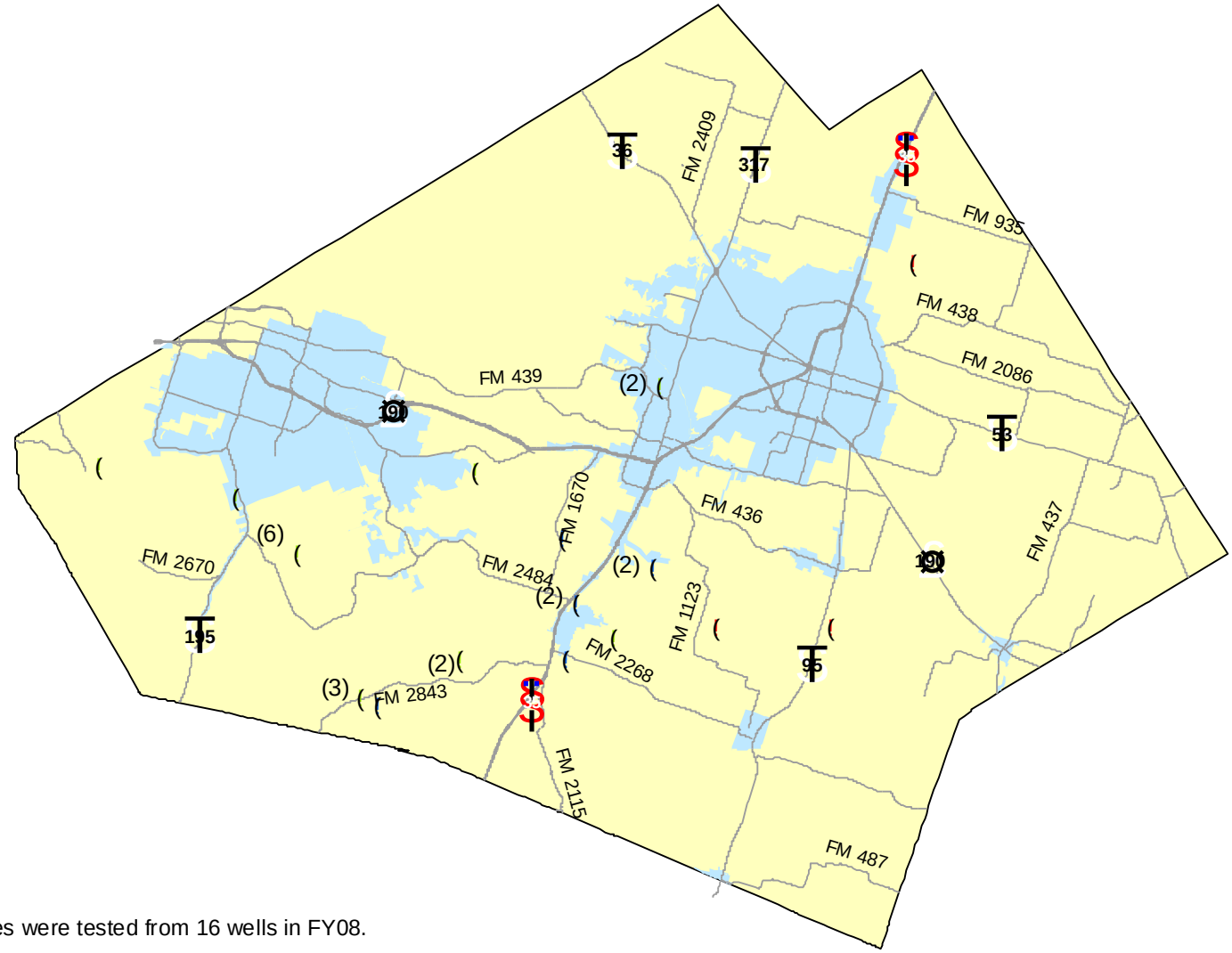
Test Date	CUWCD #	Aquifer[2]	Depth (ft)	Coliform Bacteria[3]	Fecal Matter	Alkalinity (mg/L)	Conductivity (µs/cm)	Total Dissolved	Fluoride[4] (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	pH	Phosphate (mg/L)	Sulfate[4] (mg/L)
7/29/2008	E-02-032G	Edwards(BFZ)	75	**Present**	Absent	440	1552	1032	2.30	100	1.20	0.001	7.9	0.07	80
7/29/2008	E-02-032G	Edwards(BFZ)	75	**Present**	Absent	440	1610	1027	2.30	120	1.40	0.024	7.9	0.11	80
10/3/2007	E-02-107G	Edwards(BFZ)	90	**Present**	Absent	400	517	302	0.10	420	0.50	0.006	7.9	0.14	4
7/1/2008	E-02-1153P	Upper Trinity	340	**Present**	Absent	320	1072	763	2.30	140	2.50	0.000	7.7	0.07	80
1/15/2008	E-02-1205G	Edwards(BFZ)	120	**Present**	Absent	400	417	329	1.80	420	0.90	0.003	7.3	0.06	31
10/4/2007	E-02-1205G	Edwards(BFZ)	120	**Present**	Absent	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1/15/2008	E-02-144G	Austin Chalk	30	Absent	Absent	320	376	297	0.70	320	0.00	0.000	7.3	0.19	12
6/10/2008	E-02-313G	Edwards(BFZ)	200	Absent	Absent	340	467	285	1.00	360	4.20	0.003	7.6	0.07	15
12/18/2007	E-02-3574G	Austin Chalk	30	**Present**	Absent	320	576	296	0.50	380	1.50	0.004	7.2	0.06	17
10/9/2007	E-02-424G	Middle Trinity	790	Absent	Absent	480	2630	1660	2.30	440	2.50	0.003	7.8	0.07	80
10/9/2007	E-02-424G	Middle Trinity	790	Absent	Absent	460	2860	1803	2.30	440	1.20	0.000	7.7	0.05	80
10/9/2007	E-02-424G	Middle Trinity	790	Absent	Absent	520	2630	1714	2.30	440	1.80	0.003	7.8	0.11	80
10/3/2007	E-02-670G	Upper Trinity	550	**Present**	Absent	440	608	354	1.00	500	0.90	0.005	7.6	0.14	9.00
12/4/2007	E-02-670G	Upper Trinity	550	Absent	Absent	400	613	443	1.00	40	0.80	0.015	7.3	0.10	9
10/9/2007	E-03-009G	Lower Trinity	890	Absent	Absent	N/A	6530	4400	2.30	340	35.00	0.375	7.8	0.04	80
10/3/2007	E-05-075P	Middle Trinity	555	Absent	Absent	320	1986	1182	2.30	480	0.70	0.003	7.7	0.09	80
2/13/2008	E-06-047P	Middle Trinity	870	N/A	NA	380	946	632	0.00	100	0.60	0.013	7.9	0.08	80
2/26/2008	E-06-047P	Middle Trinity	870	N/A	N/A	380	863	630	Unavailable	100	2.20	0.006	7.9	0.08	80
10/9/2007	E-07-049G	Edwards(BFZ)	140	Absent	Absent	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2/26/2008	E-08-001P	Alluvium	55	Absent	Absent	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1/29/2008	E-08-003P	Lower Trinity	750	Absent	Absent	540	1958	1408	2.30	80	1.10	0.000	7.9	0.05	80
1/29/2008	E-08-003P	Lower Trinity	750	**Present**	Absent	560	1953	1402	2.30	80	1.00	0.001	7.9	0.14	80
2/12/2008	E-08-003P	Lower Trinity	750	Absent	Absent	500	1870	1412	2.30	120	0.20	0.000	8.0	0.05	80
2/12/2008	E-08-003P	Lower Trinity	750	**Present**	Absent	520	1861	1413	2.30	120	0.10	0.001	8.0	0.10	80
5/20/2008	E-08-003P	Lower Trinity	750	**Present**	Absent	640	2620	1558	2.30	140	1.90	0.005	8.1	0.06	80
5/20/2008	E-08-003P	Lower Trinity	750	**Present**	Absent	540	2390	1416	2.30	100	0.90	0.000	8	0.03	80
6/24/2008	N2-05-003P	Middle Trinity	615	**Present**	Absent	420	1646	1062	2.30	80	0.00	0.000	8.6	0.00	80

Results Summary					
	#of samples tested	(+) Coliform	%	(+) Fecal Matter	%
FY2008 totals	27	13	48%	0	0%
FY2007 totals	38	24	63%	8	21%
FY2006 totals	15	3	20%	0	0%
FY2005 totals	14	5	36%	0	0%

Notes:

1. Samples were collected by the well owner and tested by the Clearwater staff within 24 hours of collection. The well owner was given instructions on collecting the sample and was asked to draw the sample as close to the wellhead as possible. Laboratory results were not conducted by a certified lab, therefore, the data is provided for informational purposes only.
2. The aquifer designation was determined by AECOM, Inc.
3. The presence/absence test only indicates if total coliform is present. No distinction is made on the origin of the bacteria.
4. The limit of the Fluoride test is 2.3 mg/L and the limit of the Sulfate test is 80 mg/L.
5. NT means not tested because the test was not requested or the test could not be performed because the equipment was under repair.

Clearwater UWCD Lab - Groundwater Samples Tested in FY2008



A total of 27 samples were tested from 16 wells in FY08.

Clearwater Underground Water Conservation District
2180 N. Main St., PO Box 729
Belton, TX 76513
July 23, 2009

3 1.5 0 3 6 9 12 Miles

File Name

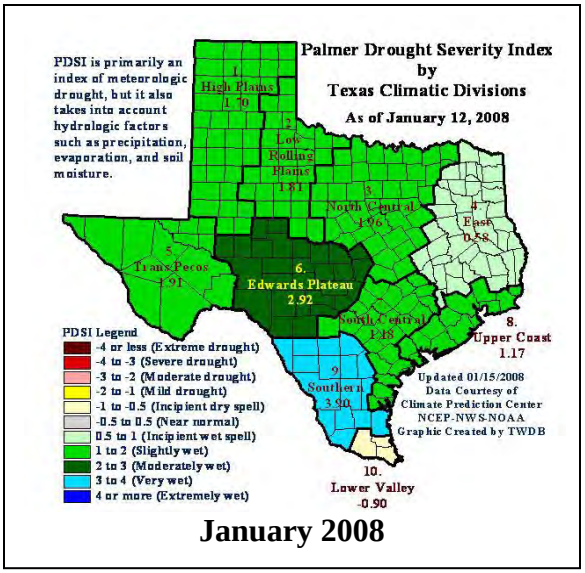
Data Type

Legend

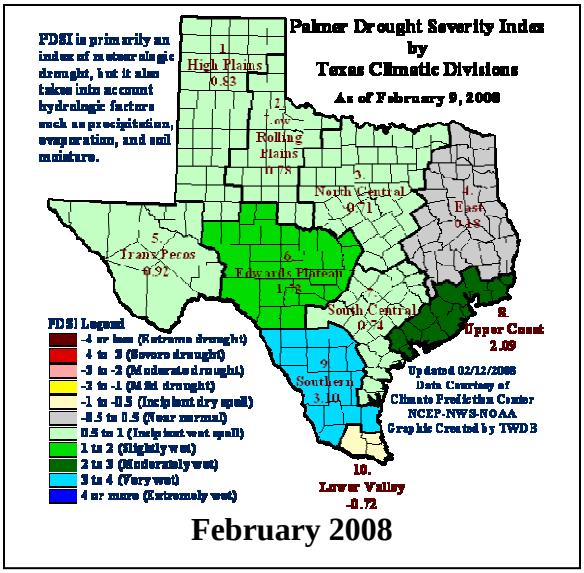
- Edwards
- Trinity
- Other Sources
- Bell_Cities

Appendix E

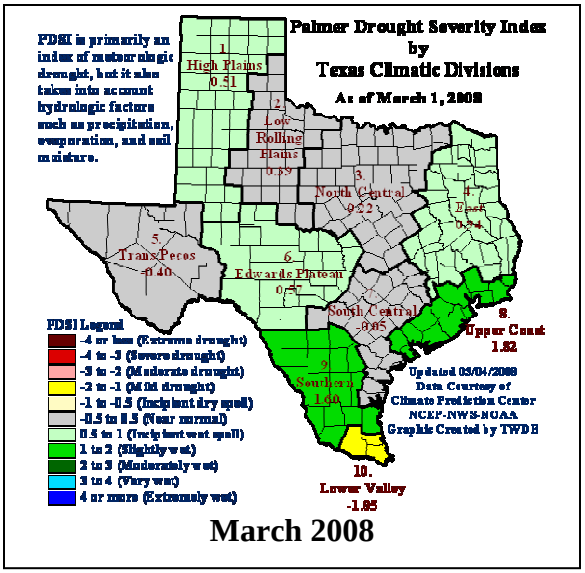
Palmer Drought Severity Index
January – December 2008



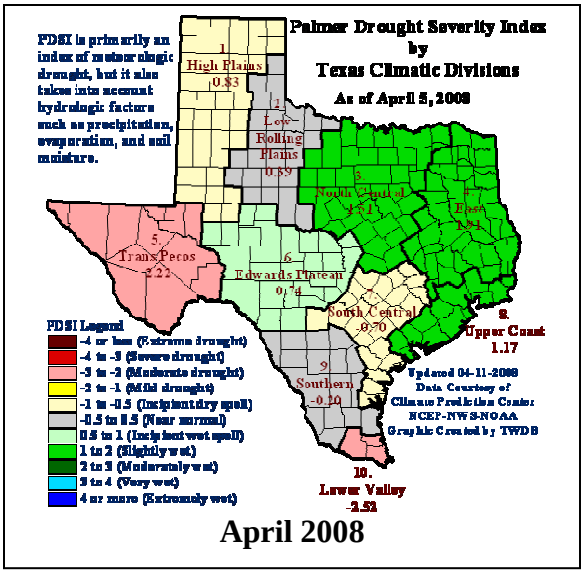
January 2008



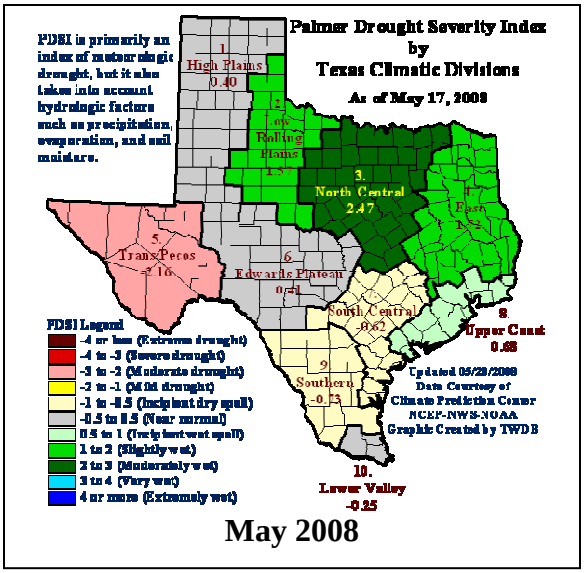
February 2008



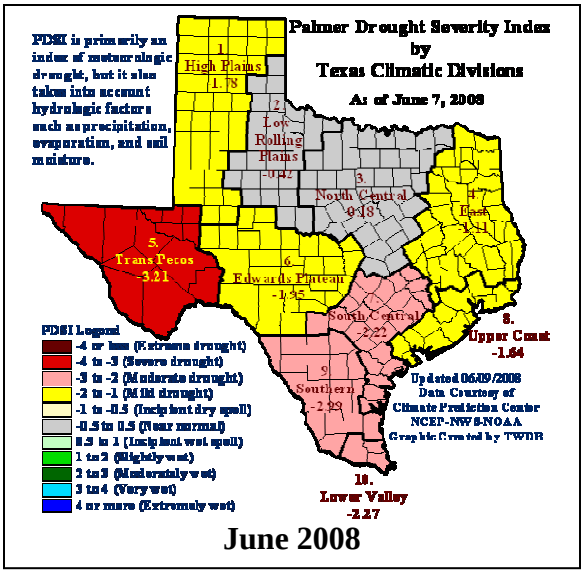
March 2008



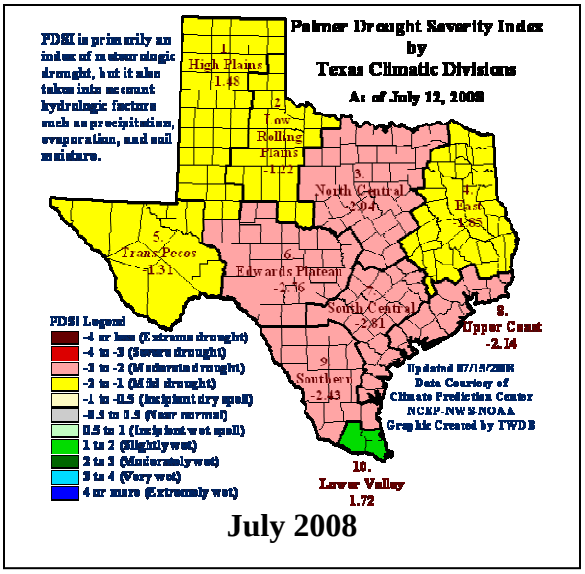
April 2008



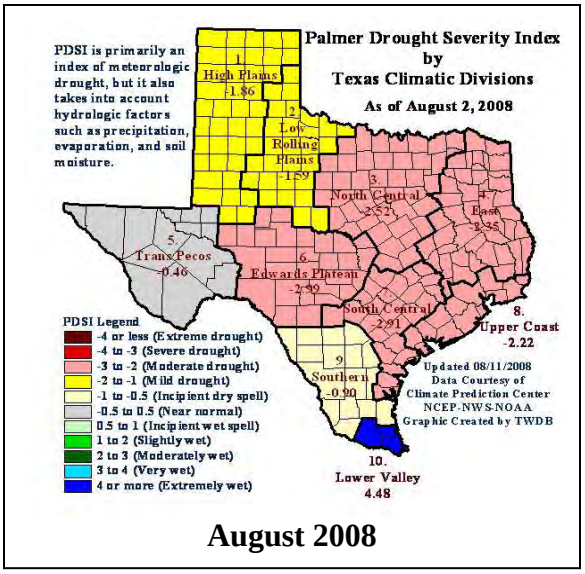
May 2008



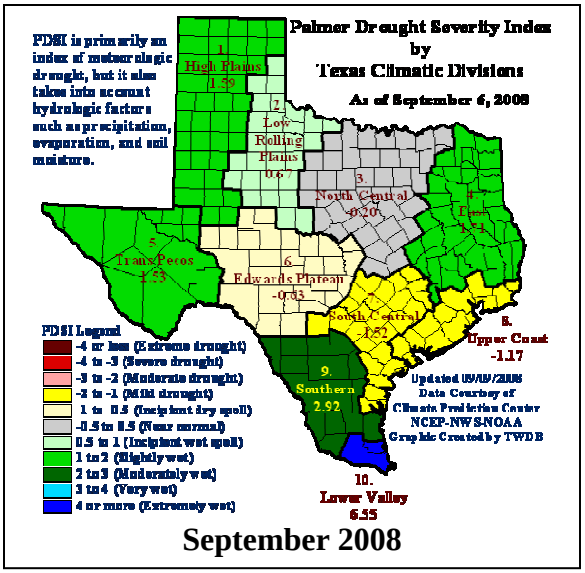
June 2008



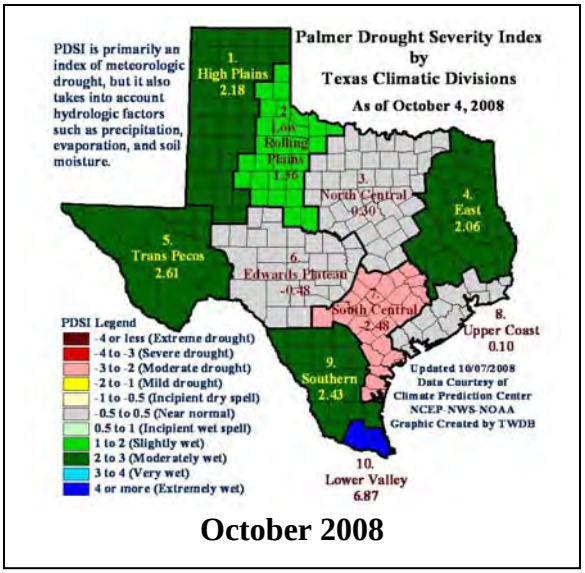
July 2008



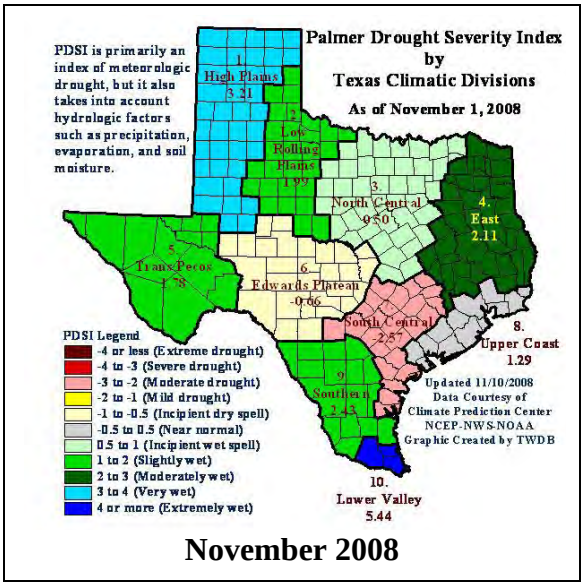
August 2008



September 2008



October 2008



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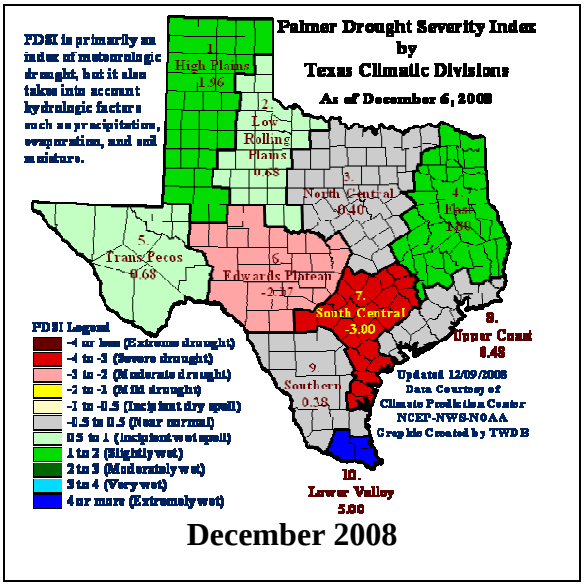

December 2008

DROUGHT PREPAREDNESS COUNCIL

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JACK COLLEY
Council Chairman

February 14, 2008

TO: The Honorable Rick Perry, Governor, State of Texas
The Honorable David Dewhurst, Lieutenant Governor, State of Texas
Mr. Phil Wilson, Secretary of State, State of Texas
The Honorable Mario Gallegos, Jr., President Pro Tempore of the Senate, State of Texas
The Honorable Tom Craddick, Speaker of the House, State of Texas, State of Texas
The Honorable Steve Ogden, Chairman, Senate Finance Committee, State of Texas
The Honorable Kip Averitt, Chairman, Senate Natural Resources Committee, State of Texas
The Honorable John Carona, Chairman, Senate Committee on Transportation & Homeland Security, State of Texas
The Honorable Warren Chisum, Chairman, House Appropriations Committee, State of Texas
The Honorable Mike Hamilton, Vice-Chairman, House Natural Resources Committee, State of Texas
The Honorable Sid Miller, Chairman, House Agriculture & Livestock Committee, State of Texas
The Honorable Aaron Peña, Chairman, House Criminal Jurisprudence Committee, State of Texas
Mr. Brian Newby, Chief of Staff, Office of the Governor
Mr. Steven McCraw, Director, Texas Governor's Office of Homeland Security

FROM: Chief Jack Colley, Chairman, Drought Preparedness Council

SUBJECT: Statewide Drought Situation Report

1. Next Council Meeting

March 13, 2008, 2:00 p.m., Governor's Conference Room of the Governor's Division of Emergency Management State Operations Center, Texas Department of Public Safety Headquarters, 5805 N. Lamar Blvd., Austin, Texas.

2. General Conditions

Most of Texas remained dry during January and the early part of February. The only locations with widespread above-normal precipitation were parts of the Big Bend area and the coastal regions. In contrast, precipitation for the past thirty days was well below normal in most of the Panhandle, West Texas, the Edwards Plateau, and inland areas of South Texas.

January constitutes the fourth consecutive month of significantly below normal precipitation for the state as a whole. This dry weather is consistent with weather patterns normally associated with a La Niña event in the tropical Pacific during the wintertime. The dryness is not exceptional; similar recent stretches of dry weather occurred in 2005-2006 (as part of a multi-year drought) and 2000-2001. However, particular parts of the state remain worse off than others.

It was particularly dry during the fall and winter in parts of the Cross Timbers, Low Rolling Plains, and South Texas. Water deficits in the areas are not likely to be associated with water supply issues in the near term, because of the ample rainfall received the previous year. The main impacts are associated with agriculture and fire. Spring planting is likely to be seriously affected in areas that are short of moisture, and fire danger will remain an issue. Early spring rainfall may greatly improve the situation, but the weather is more likely to remain dry.

The long-range forecast from the Climate Prediction Center indicates high chances of continued dry and warm weather through March. Beyond that time frame, temperatures are expected to remain generally warmer than normal, but the precipitation trend is unknown.

3. Overall Statewide Drought Conditions

The East region is under " Near Normal" conditions and the rest of the state is under " Incipient Wet Spell" to " Moderately Wet" drought conditions according to the Palmer Drought Severity Index (PDSI). The PDSI varies from extremely wet, very wet, moderately wet, to slightly wet, incipient wet spell, near normal, incipient dry spell, mild drought, moderate drought, severe drought, and extreme drought in order of increasing severity.

The Crop Moisture Index (CMI) indicates the Trans Pecos, Southern, and Lower Valley regions are under " Mildly Dry" conditions, while the remainder of the state is under " Moisture Adequate" to " Fields Too Wet" conditions. The CMI varies from flooding, standing water, fields too wet, moisture adequate, mildly dry, abnormally dry, excessively dry, severely dry, and extremely dry in order of increasing severity.

The Six-Month Standardized Precipitation Index (SPI) indicates at the end of October, significant portions of the state, including the East, Southern, and Lower Valley regions, were experiencing " Moderately Dry" conditions. The remainder of the state is under " Near Normal" conditions.

The Keetch-Byram Drought Index (KBDI) indicates significant areas with high fire danger in South Central Texas. The KBDI is a drought index specifically used to describe potential or expected fire behavior. The index is classified as Low, Moderate, High or Extreme fire danger, in order of increasing severity.

Texas Forest Service reports outdoor burning bans in 189 counties, covering most of the state.

Ten water supply systems are under mandatory water use restrictions according to the Texas Commission on Environmental Quality's (TCEQ) list of Public Water Supplies Effected by

Drought. Another eight community water supply systems are under voluntary water use restrictions.

The Climate Prediction Center (CPC) predicts below normal precipitation for most of Texas during February to April 2008 and March to May 2008. During the same periods, the CPC predicts above normal temperatures for the entire state.

National Oceanic and Atmospheric Administration (NOAA) Seasonal U.S. Drought Outlook, through April 2008, indicates persisting drought conditions in the High Plains, Low Rolling Plains, Southern, and the Lower Valley areas of Texas. Drought is expected to develop over parts of the Edwards Plateau, and South Texas during the same period.

4. Water Utility Status

February began with 23 public water systems on the public water supply affected list. Of these systems, 10 are asking customers to adhere to a mandatory outside watering schedule and eight are asking customers to voluntarily conserve. So far this year, an additional five systems were able to relax all outside watering restrictions and return to normal usage patterns. With future forecast indicating dryer than normal conditions in the coming months, additional public water systems may enact drought contingency plans and implement watering restrictions.

5. Water Rights – Statewide

Surface water conditions were near normal for most of the State during the month of January. New temporary water use permit applications are being reviewed on a site-specific basis and issued if there is sufficient surplus water at the requested source is available. Applications for new water use permits and amendments to existing permits remained near normal for the month. Water rights owners in the Brazos River Basin whose permits contain " Hale Clause" restrictions are observing the less severe streamflow restrictions of their permits during the winter months. The availability of unappropriated water for new permits continues to decrease in all river basins in the State and the search for long-term, dependable alternate sources of water remains a high-priority issue.

6. Water Rights – Lower Rio Grande / Rio Grande Watermaster (RGWM)

Current Overall Conditions: As of January 26, 2008, the U.S. combined ownership at Amistad/Falcon stands at 102.44% (3,474,703 acre-feet (ac-ft)) of conservation capacity, up from 74.54% (2,479,151 ac-ft) a year ago at this time. Overall the system is holding at 71.87% (4,257,038 ac-ft) of conservation capacity with Amistad at 86.64% (2,838,296 ac-ft) and Falcon at 53.60% (1,418,743 ac-ft). Mexico has 30.91% (782,335 ac-ft) of the water it can store at Amistad/Falcon.

Allocations: As of the printing of the January ownership report, the U.S. allocated in excess of 56,000 ac-ft to Class A & B rights. The U.S. continues to store an amount in excess of 677,000 ac-ft for future allocations in 2008.

Storage & Loss Amistad vs. Falcon: The U.S. is currently storing approximately 2.27 million ac-ft at Amistad (123%) occupying 430,400 ac-ft of Mexico's space at Amistad, which is not an issue so long as Amistad is not above conservation capacity. The U.S. is currently storing approximately 1.20 million ac-ft at Falcon (77.57%).

Evaporation and seepage year-to-date (ytd) losses at Amistad are 69,212 ac-ft. For the same period, the U.S. lost 59,827 ac-ft at Falcon. This data continues to indicate that proportionally

Amistad is twice as efficient as Flacon in overall water storage and loss prevention within the Amistad/Falcon system.

Releases to Meet Demands: In 2008 to date, Mexico released 7,207 ac-ft from Amistad and 230,228 ac-ft from Falcon to meet supply needs. The U.S. released 53,153 ac-ft from Amistad and 94,414 ac-ft from Falcon for U.S. needs. Combined with gains between Amistad and Falcon, the U.S. inflows to Falcon have totaled 67,540 ac-ft. So far, the U.S. has met 72% of overall needs in the middle and lower Rio Grande directly from middle Rio Grande inflows and Amistad this year. The movement of water from Amistad is primarily driven by the U.S. excess amount in storage and the need to keep it below conservation capacity, particularly when the U.S. is occupying Mexico's space in Amistad.

Upper Rio Grande (New Mexico): Elephant Butte in New Mexico is currently storing 454,807 ac-ft (22.48%) and Caballo Dam in New Mexico, downstream of Elephant Butte, is storing 25,943 ac-ft (11.43%). This water storage in part is used to meet water needs in the El Paso area.

Outlook: Most all water accounts began 2008 with 100% usable balances. However, a dry weather pattern contributed to an increase in pre-plant irrigation demand during the month of December for the 2008 spring planting season. Although some moisture was received in January, the dry weather pattern persists in this region which could further contribute to increased irrigation demand in February. In addition, Mexico' s low ownership in the reservoirs is of concern going forward into spring since it could result in increased evaporation and seepage losses for the U.S. A continuation of drought conditions could result in an increased demand and further reduce reserves for the U.S., perhaps driving the U.S. total to approximately 70% by the end of 2008.

7. South Texas Watermaster – Guadalupe / Lavaca / San Antonio / Nueces Region

Area Counties: Bastrop, Bexar, Blanco, Caldwell, Comal, Fayette, Frio, Guadalulpe, Hays, and Medina

Rainfall and Area Conditions: Once again, below average monthly rainfall fell across the San Antonio Regional Area for the month of January. Month-to-date rainfall measured at the San Antonio International Airport was 0.34 in.; the average for January is 1.66 in. Total annual rainfall to date is 0.34 in.; normal year to date is 1.45 in., a departure from normal of -1.11 in. The U. S. Drought Monitor, dated January 22, 2008, indicates the San Antonio Regional Area is experiencing a moderate drought impacting crops, pastures, and grasslands. Ground moisture continues to remain poor due to the continued drying trend.

Stream Flow Conditions: The Guadalupe and Blanco Rivers continue to register fair stream flows in spite of minimal amounts of rainfall because the cypress trees are now dormant, requiring much less water. Small creeks are now dried and most streams are beginning to quickly pool or dry. Municipal water use decreased because of residential lawns going dormant with the colder weather patterns. Industrial water use remains constant.

Most major rivers in the San Antonio Regional Area are now beginning to drop below their historical monthly averages for January. The Guadalupe River at Spring Branch is currently 326 cubic feet per second (cfs); the mean flow for January is 385 cfs. The San Marcos River at Luling is 326 cfs; the mean flow for January is 385 cfs. Lastly, the Blanco River at Wimberley is 62 cfs; the mean flow for January is 127 cfs.

Currently, Canyon Lake Reservoir is at 909.16 ft elevation, impounding 383,819 ac-ft. It is still over 100% of capacity. The Edwards Aquifer level at the J17 well in Bexar County is 688.5 ft;

the historical average for January is 669.5 ft. This is 19.0 ft above the monthly historical average. The San Marcos Springs are flowing at 211.0 cfs; the historical monthly average for January is 174.0 cfs. This is 37.0 cfs above the monthly historical average. Lastly, the Comal Springs are flowing at 398.0 cfs; the historical flow for January is 306.0 cfs. This is 92.0 cfs above the historical monthly average.

Drought Restrictions: Temporary water right permits are being regulated as well as permits with stream flow restrictions.

Area Counties: Atascosa, Karnes, Gonzales, Wilson, McMullen, Dewitt, Guadalupe, Lavaca, Fayette, Colorado, Wharton, and Jackson

Rainfall and Area Conditions: This area received 0.5 to 1.7 in. of rainfall for the month of January. Soil moisture conditions are variable in the area. The central and southern portions of the area received very little precipitation over the last few months whereas the eastern portions of the area have good soil moisture. There was little irrigation water use during January. Lake Texana is at 98% capacity. Last month' s ending was at 99% of capacity, which is 43.34 ft above mean sea level (msl). According to the U.S. Drought Monitor, most of the area is experiencing moderate drought conditions. This area received little rainfall over the last few months, although stream flow conditions consistently held strong.

Stream Flow Conditions: The San Antonio River near Falls City is currently flowing at a rate of 541 cfs, compared with a reading of 564 cfs for the end of December; The January historical mean flow for this site is 308 cfs. The Cibolo Creek near Falls City is flowing at a rate of 30 cfs, with a reading of 39 cfs for the end of December; the historical mean for January is 34 cfs. The Guadalupe River near Cuero is flowing at 1,030 cfs, with an end-of-December reading of 1,160 cfs; the historical mean for January is 1,140 cfs The Lavaca River at Edna is flowing at 49 cfs, with an end-of-December reading 45 cfs; the historical mean for January is 72 cfs. The Navidad River near Halletsville is currently flowing at 34 cfs, with an end-of-December reading of 35 cfs; the historical mean flow for January is 35 cfs. The Atascosa River near Whitsett is flowing at 12 cfs, with an end-of-December reading also of 12 cfs; the historical mean flow for January is 12 cfs. Lastly, the Nueces River near Tilden is currently flowing at 75 cfs, with an end-of-December reading also of 88 cfs; the historical mean flow for January is 77 cfs.

Drought Restrictions: Currently, no restrictions other than normal permit restrictions are in place. However, river flows are monitored on a daily basis. Most of the temporary permit holders are allowed to divert.

Area Counties: Bandera, Blanco, Comal, Kendall, and Kerr

Rainfall and Area Conditions: This area received various amounts of precipitation ranging from 0.50 to 0.75 in. for the month of January. With current rainfall amounts for the month, the Texas Crop Moisture Index classifies this area of the Hill Country in the mildly dry range of the index. Most of the surface water diversions in the area are for municipal and industrial uses with a few surface irrigators. The U.S. Drought Monitor indicates the area is currently in abnormally dry conditions.

Stream Flow Conditions: Most of the major streams were starting to show a decline going into the month of January. Some of the smaller secondary tributaries lost their surface flow altogether. The Guadalupe River near Kerrville has a current stream flow of approximately 94 cfs, with the historical monthly mean of 117 cfs. This equates to 23 less cubic feet per second flowing past Kerrville for the month of January. The Guadalupe River near Comfort has a current stream flow of approximately 173 cfs, with the historical monthly mean of 174 cfs. This equates to one cubic foot per second more flowing past Comfort. The Medina River near

Bandera has a current stream flow of 63 cfs, with the historical monthly mean of 128 cfs. This equates to 65 less cubic feet per second flowing past Bandera for the month of January.

Drought Restrictions: No restrictions other than normal permit restrictions in place at this time. However, the river flows are monitored on a daily basis. Most of the temporary permit holders that divert from the various rivers and creeks are able to do so.

Area Counties: Edwards, Real, Kinney, Uvalde, Zavala, Dimmit, La Salle, and Webb Counties

Rainfall and Area Conditions: The Southwest Texas Regional Area received no relief from the current moderate drought conditions experienced during the month of January. The month ended with very little measurable rainfall for the entire area. The range of rainfall in the area was between .00 to 0.10 in. for the month. Most of the diversions of surface water were for irrigation use and smaller amounts were for municipal and industrial uses. The U.S. Drought Monitor indicates the area is experiencing moderate drought conditions at this time.

Stream Flow Conditions: The Nueces River at Laguna has stream flows of 137 cfs, compared to 170 cfs for last month, with the mean being 100 cfs. The Nueces River near Brackettville has stream flows of 0.36 cfs compared to 0.92 cfs, for last month, with the mean being 1.1 cfs. The Nueces River below Uvalde has stream flows of 118 cfs compared to 141 cfs for last month, with the mean being 73 cfs. The Frio River at Concan has stream flows of 73 cfs, compared to 101 cfs for last month, with the mean being 101 cfs. The Sabinal River at Sabinal has stream flows of 4.1 cfs, compared to 4.6 cfs for last month, with the mean being 17 cfs. The Leona River near Uvalde has stream flows of 63 cfs compared to 64 cfs for last month, with the mean being 45 cfs.

Drought Restrictions: No drought restrictions are in effect for the Southwest Texas Regional Area at this time. Stream flows of the intermittent and tributary streams in the area are flowing below average for this time of the year.

Area Counties: Bee, Goliad, Victoria, Calhoun, Jackson, Refugio, Aransas, San Patricio, Nueces, Kleberg, Jim Wells, Duval, Live Oak, Kenedy, Willacy, Brooks, and Jim Hogg

Rainfall and Area Conditions: This area received a significant amount of rainfall during the month of January, ranging from scattered showers to several inches. The U. S. Drought Monitor depicts most of the area is currently experiencing moderating drought conditions. The Corpus Christi Reservoir System received some inflows from run-off of localized rains experienced in the area, but the level of reservoir system dropped only slightly. Most of the surface water diversions in the area continue to be for municipal and industrial uses; little irrigation water use was noted.

Stream Flow Conditions: Area streams flows decreased slightly and are starting to flow below what is expected for this time of the year. The Guadalupe River near Victoria was flowing at approximately 1,200 cfs at the beginning of the month and was approximately 1,090 cfs towards the end of the month, compared to 1,270 cfs last month. Based on 73 years of record, the historical mean at this site for this time period is 1,690 cfs. The San Antonio River near Goliad flowed at a rate of approximately 630 cfs at the beginning of the month and decreased to approximately 700 cfs towards the end of the month, compared to 700 cfs last month. Based on 72 years of record, the historical mean at this site for this month is 684 cfs. The San Antonio River at McFaddin, located below Goliad, depicted stream flows of approximately 800 cfs at the beginning of the month and ended at approximately 763 cfs, compared to the December 2007 reading of 1,250 cfs. The Guadalupe River near Tivoli, below the confluence of the San Antonio River and Guadalupe River, depicted stream flows of approximately 1,900 cfs at the beginning of the month and ended the month at approximately 2,080 cfs, compared to 2,100 cfs last

month. The historical mean at this site for this time period, based on two years of record, is 2,450 cfs. The Nueces River near Tilden depicted stream flows of approximately 100 cfs at the beginning of the month and ended the month at approximately 82 cfs, compared to 118 cfs last month. The historical mean for this site during this time, based on 59 years of record, is 122 cfs. The Frio River near Tilden depicted stream flows of approximately 110 cfs at the beginning of the month and ended the month at approximately 115 cfs, compared to 120 cfs last month. The historical mean at this site for this time period, based on 29 years of record, is 107 cfs. The Atascosa River near Whitsett depicted stream flows of approximately 14 cfs, compared to 16 cfs last month. This historical mean at this site for this time period, based on 74 years of record, is 76 cfs. The Mission River near Refugio depicted stream flows of approximately 25 cfs at the beginning of the month and ended the month at approximately 24 cfs, compared to 25 cfs last month. The historical mean at this site, based on 67 years of record, is 96 cfs. The Aransas River near Skidmore depicted stream flows of approximately 4.5 cfs at the beginning of the month and ended the month at approximately 3.7 cfs, compared to 3 cfs last month. The historical mean at this site for this time period, based on 42 years of record, is 13 cfs. Stream flows over the Calallen Dam near Corpus Christi, were 0.0 cfs at the beginning of the month and ended at 0.0 cfs, compared to 21 cfs last month. The historical mean at the site for this time period, based on 7 years of record, is 88 cfs. Stream flows at this site rose to approximately 150 cfs around the 19th of the month due to localized rainfall events.

Area Counties: Sterling, Tom Green, Irion, Concho, Coke, Runnels, Reagan, and Schleicher

The Concho River Valley fell short of monthly rainfall averages in January. Regardless, according to information provided by the USDA, the Drought Monitor Index for the Concho Valley remains downgraded from moderately dry and severe during the beginning of 2008 to normal conditions at this time.

Rainfall and Area Conditions: Total rainfall for the month of January was 0.39 in. The average rainfall amount for the month of January is 0.78 in. The total amount of rainfall for the year is 0.39 in. Area reservoirs are showing an increase in the amount of storage from the previous month. Irrigation demand on appropriated surface water rights in the Concho Valley decreased due to the end of the seasonal growing periods of cotton, grain sorghum, and hay grazer crops. Soil moisture content is fair.

Stream Flow Conditions: The mean daily discharge, based on five years of record, for USGS Gauging Station 08130700 (Spring Creek above Twin Buttes Reservoir near San Angelo) is 27.0 cfs. The most recent value is 25.0 cfs. The mean daily discharge at USGS Gauging Station 08136000 (Concho River at San Angelo/Bell St.), based on 76 years of record, is 4 cfs. It is currently at 3.5 cfs. The mean daily discharge at USGS Gauging Station 08128000 (South Concho at Christoval), based on 72 years of record, is 17 cfs. The most recent daily value is 17 cfs. A survey of Area lakes indicate that Lake Nasworthy is at 82% of capacity (8408 ac-ft), O. C. Fisher is 9% of capacity (10,338 ac-ft), and Twin Buttes Lake is 44% of capacity (82,560 ac-ft).

Drought Restrictions: No restrictions on diversions in the Concho Valley are in effect at this time.

8. Upper Colorado

The Upper Colorado River area received below-normal precipitation during the month of January 2008. The National Weather Service in San Angelo reported monthly precipitation of 0.39 inches (in.), 0.43 in. below normal. The area reported less than normal precipitation for the past five consecutive months. The pool levels in E.V. Spence and O.H. Ivie Reservoirs continued to decrease slightly during the month. The pool levels of E.V. Spence and O.H. Ivie

Reservoirs are 14% and 67 % respectively.

9. Texas Panhandle and Southern High Plains

Amarillo Area: Lake Meredith is at 50.19 ft. Lake Greenbelt is at 58 ft, up by 0.06 ft. Lake Mackenzie is at 76 feet, down by about 0.5 ft. The National Weather Service in Amarillo reported a total of 0.24 in. of moisture for January, behind by 0.41 in. for the year.

Lubbock Area: The Lubbock area experienced below-normal precipitation during January 2008. Lubbock received 0.07 in. for the month; the average rainfall for January is 0.50 in. Similar amounts were recorded throughout the area. The total precipitation for 2008 to date stands at 0.07 in. This is 0.43 in. below normal for this point in the year. The long term drought situation has not changed and all of the communities previously noted on mandatory water restrictions remain on those restrictions. No new communities were added to the water restrictions list during the month of January. As Lake Meredith continues to decline, the City of Lubbock is making preparations to construct a pipeline from Lake Alan Henry to the City of Lubbock, stretching uphill an estimated 65 miles in length, to use as an additional source of water. The City of Lubbock owns the water rights at the lake.

White River Lake is down 27 ft from normal; normal is 46 ft. This is the same level that existed at the end of December 2007. Lake Alan Henry is 1.4 ft below full capacity; however, the lake is not used for public drinking water supplies at present.

10. Agricultural Concerns

Dry conditions beginning in late summer of 2007 extended through the fall and winter, causing abnormally dry conditions over much of the state. This dry weather pattern is continuing to reduce grazing opportunities over much of the state, with the exception of the Upper Gulf Coast and parts of East Texas. Winter pastures as well as wheat and oat fields serve as an important source of high quality forage for the beef cattle industry. The winter and early spring months normally see as many as 3 million head of stocker cattle on winter pastures as rancher seek to use these quality forages for weight gain prior to shipping cattle to feedlots. The dry Fall and Winter eliminated grazing opportunities in winter pastures over most of the Edwards Plateau, Rolling Plains, High Plains and Southwest Texas, as these pastures are mostly in poor to very poor conditions due to drought. Fire danger is adding significant risk to many ranching operations over the state.

The wheat crop rating is 37% of average compared to 63% at this time in 2007. Ninety-one percent of the wheat crop is rated at fair to very poor conditions. Many insect pests associated with dry weather are further damaging already poor wheat conditions. Wheat prices are near an all time high due to short stocks and poor conditions due to drought over a large part of the U.S. winter wheat planting area.

Planting conditions are very poor for summer crops in most of the state, with the exception of the Upper Gulf Coast and southern areas of East Texas. Corn and sorghum are planted from the Rio Grande Valley to Central Texas beginning in mid to late February. At this time, there is a critical shortage of soil moisture. As a result, planting may be delayed without significant, widespread rain in the near future. The weather over the next month will play a key role in which crops are planted and the prospects for those crops.

11. Drought Impacts to Wildlife

No information available at this time.

12. Wildfire Concerns

The Keetch-Byram Drought Index (KBDI) is used to help determine potential for fire risk. It is a numerical index where each number is an estimate of the amount of precipitation (in 100ths of an inch) needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil, and 800 a completely dry soil. The KBDI' s relationship to fire danger is that as the index increases, the vegetation is subjected to increased moisture stress. KBDI levels and its relationship to expected fire potential are reflected in the following:

KBDI = 0 – 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. This is typical of spring dormant season following winter precipitation.

KBDI = 201 – 400: Typical of late spring; early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.

KBDI = 401 – 600: Typical of late summer, early fall. Lower litter and duff layers contribute to fire intensity and will burn actively.

KBDI = 601 – 800: Often associated with more severe drought and increased wildfire occurrence. Intense, deep-burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

There are currently 152 counties, illustrated in Attachment 2, with KBDI values in excess of 400, indicating areas within these counties are beginning to experience dry conditions, which could result in an increased fire risk potential.

The Council, which is chaired by Jack Colley, Chief, Governor's Division of Emergency Management, is composed of state agencies concerned with the effects of drought and fire on the citizens of the State of Texas. The attached information was compiled and provided by representatives listed below. Points of contact, telephone numbers, and web site addresses are also provided.

Jack Colley, Chief, Governor's Division of Emergency Management, (512) 424-2443, fax (512) 424-2444, web site: http://www.txdps.state.tx.us/dem

John Sutton, Texas Water Development Board, (512) 463-7988, fax (512) 463-9893, web site: http://www.twdb.state.tx.us

Chris Loft, Texas Commission on Environmental Quality, (512) 239-4715, fax (512) 239-4770, web site: http://www.tceq.state.tx.us

Richard Egg, Texas State Soil & Water Conservation Board, (254) 773-2250, fax (254) 773-3311, web site: http://www.tsswcb.state.tx.us

Christy Davis, Texas Department of Agriculture, (512) 475-1611, fax (512) 463-5837, web site: http://agr.state.tx.us

Dr. Travis Miller, Texas Cooperative Extension, (979) 845-4008, fax (979) 845-0604, web site: http://soilcrop.tamu.edu

Cindy Loeffler, Texas Parks & Wildlife Department, (512) 912-7015, fax (512) 707-1358, web site: http://www.tpwd.state.tx.us

Edward T. Morris, Department of Housing and Community Affairs, (512) 475-3329, Fax (512) 475-7498, web site: http://www.tdhca.state.tx.us

Michael Dunivan, Texas Forest Service, (830) 997-5426, web site: http://txforestservice.tamu.edu

Scott Alley, Texas Department of Transportation, (512) 416-3187, fax (512) 416-2941, web site: http://www.dot.state.tx.us/

Paul Tabor, Texas Department of State Health Services, (512) 458-7126, fax (512) 458- 7472, web site: http://www.dshs.state.tx.us/

Thomas Walker, Office of the Governor, Economic Development & Tourism, (512) 936-0169, fax (512) 936-0141, web site: http://www.governor.state.tx.us/divisions/ecodev

Harvey Everheart, Texas Alliance of Groundwater Districts, (806) 872-9205, fax (806) 872-2838, web site: http://www.texasgroundwater.org/

Dr. John W. Nielsen-Gammon, Office of the State Climatologist, (979) 862-2248, fax (979) 862-4466, web site: http://www.met.tamu.edu/osc/

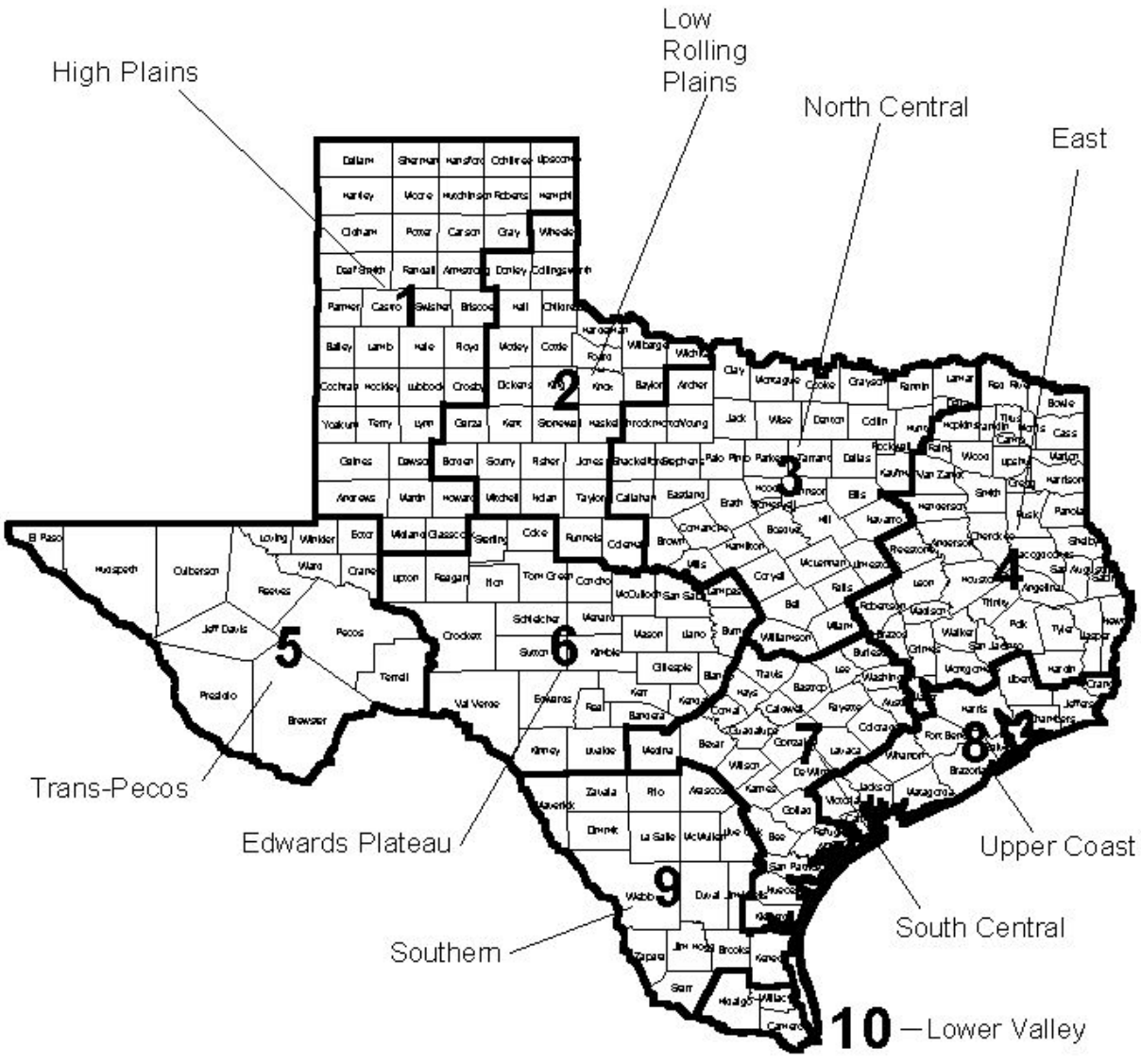
Gus Garcia, Office of Rural Community Affairs, (512) 936-7876, fax (512) 936-6776, web site: http://www.orca.state.tx.us

cc:

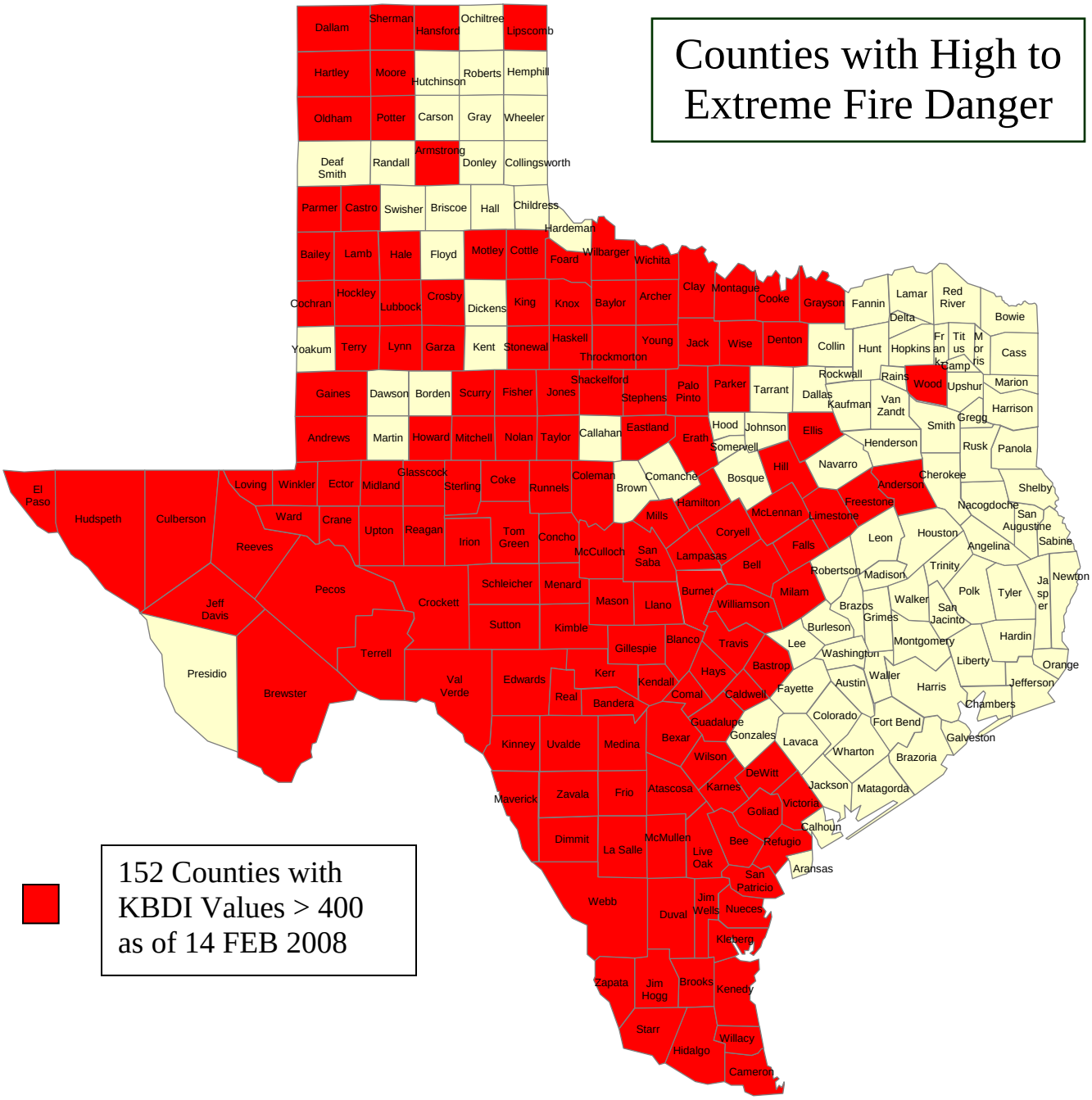
Amy Jeter, Committee Clerk, Senate Finance Committee
Sarah Hicks, Committee Director, Senate Finance Committee
Teddy Carter, Committee Clerk, Senate Natural Resources Committee
Amy Peterson, Committee Director, House Appropriations
Hope Wells, Committee Clerk, House Natural Resources Committee
Steven Schar, Committee Clerk, House Agriculture and Livestock Committee
Gina Chung, Committee Clerk, House Criminal Jurisprudence Committee
Zak Covar, Policy Advisor for TCEQ Issues, Governor's Policy Office
Auburn Mitchell, Policy Advisor for Agriculture/TDA, Governor's Policy Office
Rob Johnson, Lt. Governor's Chief of Staff
Carmen Cernosek, Lt. Governor's Natural Resources Policy Analyst
Shane Linkous, Deputy Division Chief, Intergovernmental Relations, Attorney General's Office
Ernest Angelo, Jr., Chairman, Public Safety Commission
Louis E. Sturns, Member, Public Safety Commission
Colonel Thomas Davis, Director, Department of Public Safety
Lieutanant Colonel David McEathron, Assistant Director, Department of Public Safety
Lori Gabbert,, Budget Analyst, Legislative Budget Board (LBB-DPS)
Tom Lambert, Budget Analyst, Legislative Budget Board (LBB-TCEQ)
Ed Perez, Executive Director, Texas Office of State-Federal Relations, Washington, DC
Brandon Steinmann, Director, Texas Office of State-Federal Relations, Austin, Texas

Attachment 1

CLIMATIC REGIONS



Attachment 2



DROUGHT PREPAREDNESS COUNCIL

RICK PERRY
Governor

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JACK COLLEY
Council Chairman

March 13, 2008

TO: The Honorable Rick Perry, Governor, State of Texas
The Honorable David Dewhurst, Lieutenant Governor, State of Texas
Mr. Phil Wilson, Secretary of State, State of Texas
The Honorable Mario Gallegos, Jr., President Pro Tempore of the Senate, State of Texas
The Honorable Tom Craddick, Speaker of the House, State of Texas, State of Texas
The Honorable Steve Ogden, Chairman, Senate Finance Committee, State of Texas
The Honorable Kip Averitt, Chairman, Senate Natural Resources Committee, State of Texas
The Honorable John Carona, Chairman, Senate Committee on Transportation & Homeland Security, State of Texas
The Honorable Warren Chisum, Chairman, House Appropriations Committee, State of Texas
The Honorable Mike Hamilton, Vice-Chairman, House Natural Resources Committee, State of Texas
The Honorable Sid Miller, Chairman, House Agriculture & Livestock Committee, State of Texas
The Honorable Aaron Peña, Chairman, House Criminal Jurisprudence Committee, State of Texas
Mr. Brian Newby, Chief of Staff, Office of the Governor
Mr. Steven McCraw, Director, Texas Governor' s Office of Homeland Security

FROM: Chief Jack Colley, Chairman, Drought Preparedness Council

SUBJECT: Statewide Drought Situation Report

1. Next Council Meeting

April 10, 2008, 2:00 p.m., Governor' s Conference Room of the Governor' s Division of Emergency Management State Operations Center, Texas Department of Public Safety Headquarters, 5805 N. Lamar Blvd., Austin, Texas.

2. General Conditions

The last half of February and the first half of March continued the general trend this winter of wet conditions in the eastern third of Texas and dry conditions in the remainder of the state. The dividing line runs roughly north to south from Wichita Falls to Corpus Christi. East of that line, rainfall has been adequate; west of that line, rainfall has been deficient.

The driest parts of the state are in the Edwards Plateau and South Texas climate regions. While the recent storm that passed through the state during the first full week of March greatly improved conditions along a band extending east by northeast from Abilene, areas to the south and north missed out on significant amounts of precipitation. Overall, the Edwards Plateau endured its driest December through February period on record, with an average of barely more than a half an inch (in.) of rainfall. In South Texas and the Lower Valley, the October through February period was the 3rd driest on record. In fact, for over 90 days many places within the triangulated cities of Eagle Pass, Leakey, and Laredo did not receive a drop of rain, though the rain-free period did break for that area during the recent storm.

The dry winter is consistent with past winters during moderate La Niña events. With the La Niña expected to strongly influence the weather in Texas for another couple of months, the Climate Prediction Center's outlook indicates an enhanced change for drier than normal conditions for the next three months. For many agricultural producers in the central and western parts of Texas, a rainfall deficit during the next couple of months could lead to an unsuccessful spring planting season.

3. Overall Statewide Drought Conditions

The Lower Valley climatic division is experiencing " Moderate Drought" conditions and the Trans-Pecos region is under " Mild Drought" conditions, according to the Palmer Drought Severity Index (PDSI). The remainder of the state varies from " Near Normal" to " Moderately Wet" conditions. The PDSI varies from extremely wet, very wet, moderately wet, slightly wet, incipient wet spell, near normal, incipient dry spell, mild drought, moderate drought, severe drought, and extreme drought in order of increasing severity.

The Crop Moisture Index (CMI) indicates the Southern and Lower Valley regions are experiencing " Abnormally Dry" conditions.The Trans-Pecos and Edwards Plateau regions are under " Mildly Dry" conditions. The remainder of the state ranges from " Moisture Adequate" to " Fields Too Wet" drought conditions. The CMI varies from flooding, standing water, fields too wet, moisture adequate, mildly dry, abnormally dry, excessively dry, severely dry, and extremely dry in order of increasing severity.

The Six-Month Standardized Precipitation Index (SPI) indicates that at the end of February, the Low Rolling Plains, Edwards Plateau, South Central, and Southern regions are experiencing " Severely Dry" conditions. The North Central region is under " Moderately Dry" conditions. The remainder of the state is under " Near Normal" conditions. The SPI varies in categories of extremely dry, severely dry, moderately dry, near normal, moderately wet, very wet, and extremely wet conditions.

The Keetch-Byram Drought Index (KBDI) indicates significant areas with high fire danger on the Edwards Plateau and in South Central Texas. The KBDI is a drought index specifically used to describe potential or expected fire behavior. The index is classified as Low, Moderate, High or Extreme fire danger, in order of increasing severity.

Texas Forest Service reports outdoor burning bans in 170 counties, covering most of the state.

Ten water supply systems are under mandatory water use restrictions according to the Texas Commission on Environmental Quality's (TCEQ) list of Public Water Supplies Effected by Drought. Another eight community water supply systems are under voluntary water use restrictions.

The Climate Prediction Center (CPC) predicts below normal precipitation for most of Texas from March to May 2008. It also predicts below normal precipitation for the southwestern half of Texas from April to June 2008. During the same periods, the CPC predicts above normal temperatures for the entire state.

National Oceanic and Atmospheric Administration (NOAA) Seasonal U.S. Drought Outlook, through May 2008, indicates developing and persisting drought conditions in the High Plains, Low Rolling Plains, Trans-Pecos, Edwards Plateau Southern, and the Lower Valley areas of Texas. Drought is expected to develop over parts of the Edwards Plateau, and South Texas during the same period.

Water level measurements were available for all seven key monitoring wells. Water levels rose in three of the seven monitoring wells since the beginning of February, ranging from 0.03 feet (ft) in the Castro County Ogallala well to 1.07 ft in the Harris County Gulf Coast well. Water levels declined in the remaining monitoring wells, ranging from 1.36 ft in the Gatesville Trinity well to 5.03 ft in the Bexar County Edwards well. The J-17 well recorded a water level of 47.50 ft below land surface, 5.03 ft below last month's measurement. This water level is 33.50 ft above the Stage 1 critical management level.

4. Water Utility Status

March begins with the same data as February, with 23 public water systems still asking customers to be aware of usage. Of these systems, 10 are asking customers to adhere to a mandatory watering schedule and eight are asking for voluntary conservation. An additional five systems relaxed all restrictions since January. It is expected that the lack of rain and increased usage in the coming weeks will begin to mandate additional restrictions based on water systems Drought Contingency Plans.

5. Water Rights – Statewide

Surface water conditions were near normal for most of the state during the month of February. New temporary water use permit applications are reviewed on a site-specific basis and issued if there is sufficient surplus water at the requested source. Applications for new water use permits and amendments to existing permits remained near normal for the month. Water rights owners in the Brazos River Basin, whose permits contain Hale Clause restrictions, are observing the less severe stream flow restrictions of their permits during the winter months. The availability of unappropriated water for new permits continues to decrease in all river basins in the state and the search for long-term, dependable alternate sources of water remains a high-priority issue.

6. Water Rights – Lower Rio Grande / Rio Grande Watermaster (RGWM)

Current Overall Conditions: As of February 23, 2008, the U.S. combined ownership at Amistad/Falcon stands at 101.89% (3,456,057 acre-feet (ac-ft)) of conservation capacity, up from 75.05% (2,496,176 ac-ft) a year ago at this time. Overall the system is holding 71.74% (4,248,931 ac-ft) of conservation capacity, with Amistad at 87.11% (2,853,699 ac-ft) and Falcon at 52.71% (1,395,232 ac-ft). Mexico has 31.33% (792,874 ac-ft) of the water it can store at Amistad/Falcon.

Allocations: As of the printing of the February ownership report, the U.S. allocated in excess of 93,850 ac-ft to Class A & B rights. The U.S. continues to store an amount in excess of 685,000 ac-ft for future allocations in 2008.

Storage & Loss Amistad vs. Falcon: The U.S. is currently storing approximately 2.27 million ac-ft at Amistad (123%) occupying 437,700 ac-ft of Mexico's space at Amistad, which is not an issue so long as Amistad is not above conservation capacity. We are currently storing approximately 1.17 million ac-ft at Falcon (75.90%).

Evaporation and seepage losses at Amistad year-to-date (ytd) are 87,151 ac-ft. For the same period, the U.S. lost 75,474 ac-ft at Falcon. The ratio of loss between Amistad and Falcon continues to indicate that proportionally Amistad is twice as efficient as Flacon in overall water storage and loss prevention within the Amistad/Falcon system.

Releases to Meet Demands: In 2008 to date, Mexico released 14,359 ac-ft from Amistad and 240,499 ac-ft from Falcon to meet Mexican supply needs. The U.S. released 105,087 ac-ft from Amistad and 168,565 ac-ft from Falcon to meet U.S. needs. Combined with gains between Amistad and Falcon, U.S. inflows to Falcon totaled 131,615 ac-ft. So far, the U.S. met 78% of overall needs in the middle and lower Rio Grande directly from middle Rio Grande inflows and Amistad this year. The movement of water from Amistad is driven primarily by U.S. excess amount in storage and the need to keep it below conservation capacity, particularly when the U.S. is occupying Mexico's space in Amistad.

Upper Rio Grande (New Mexico): Elephant Butte in New Mexico is currently storing 484,804 ac-ft (23.96%) and Caballo Dam in New Mexico, downstream of Elephant Butte, is storing 47,021 ac-ft (20.71%). This water storage is used, in part, to meet water needs in the El Paso area.

Outlook: Most all water accounts began 2008 with 100% usable balances. However, a dry weather pattern persists in the region which increased irrigation demand in February. Strong and dry winds from the south contributed to the dryness. These strong winds are forecasted to continue through the beginning of March. Coupled with continued drought conditions, irrigation demand will continue to increase through March, April, May, and June, perhaps driving our total water accounts to approximately 70% usable balances by the end of 2008. Of further concern is Mexico's low ownership in the reservoirs, since it could result in increased evaporation and seepage loss charges for the U.S. To help alleviate losses in Falcon, the U.S. will continue to monitor ownership and elevation levels in both Falcon and Amistad so that U.S. transfers of water from Amistad to Falcon are efficient.

7. South Texas Watermaster – Guadalupe / Lavaca / San Antonio / Nueces Region

Area Counties: Bastrop, Bexar, Blanco, Caldwell, Comal, Fayette, Frio, Guadalulpe, Hays, and Medina

Rainfall and Area Conditions: Once again, below average monthly rainfall fell across the San Antonio Regional Area for the month of February. Month-to-date rainfall measured at the San Antonio International Airport was 0.50 in.; the average for February is 1.75 in. Total annual rainfall to date is 0.62 in.; normal year to date is 3.22 in., a departure from normal of -2.60 in. The U. S. Drought Monitor, dated February 19, 2008, indicates the San Antonio Regional Area is experiencing a severe drought (i.e. D2-Drought-Severe), impacting crops, pastures and grasslands. Ground moisture continues to remain poor due to the trend of continued drying. Good harvest of broccoli, beets, turnips, cabbage, spinach, garlic, mustard greens, carrots, and Swiss chard were reported with supplemental irrigation.

Stream flow Conditions: The Guadalupe and Blanco Rivers are now showing the impact of the current drought. Unless measurable rainfall occurs in the near future, stream flows will be dramatically reduced by the water consumption of awakening cypress trees that line the rivers. Small creeks are dry and most streams are beginning to quickly pool or run dry. Municipal use has increased because of residential lawn planting, fertilizing, and supplemental watering. Industrial use remains constant.

All major tributaries in the San Antonio Regional Area are now beginning to drop below their historical monthly averages for February. The Guadalupe River at Spring Branch is currently at a flow rate of 144 cubic feet per second (cfs); the mean flow for February is 364 cfs. The San Marcos River at Luling is 268 cfs; the mean flow for February is 460 cfs. Lastly, the Blanco River at Wimberley is 49 cfs; the mean flow for February is 166 cfs.

Currently, Canyon Lake Reservoir is at 908.99 ft of elevation, impounding 378,029 ac-ft. It is at 97.88% of capacity. The Edwards Aquifer level at the J17 well in Bexar County is 683.5 ft; the historical average for February is 669.5 ft. This is 14.0 ft above the monthly historical average. The San Marcos Springs are flowing at 189.0 cfs; the historical monthly average for February is 177.0 cfs. This is 12.0 cfs above the monthly historical average. Lastly, the Comal Springs are flowing at 386.0 cfs; the monthly historical flow for February is 307.0 cfs. This is 79.0 cfs above the historical monthly average.

Drought Restrictions: Temporary water right permits are regulated as well as permits with stream flow restrictions.

Area Counties: Edwards, Real, Kinney, Uvalde, Zavala, Dimmit, La Salle, and Webb Counties

Rainfall and Area Conditions: The Southwest Texas area received no relief from the drought conditions for the month of February. There were only scattered showers reported for the beginning into the middle of the month; the range of rainfall in the area was from 0.00 in. to 0.20 in. The month ended with no rain for the entire area.

Currently, most of the diversions of surface water are for irrigational use and small amounts for municipal and industrial uses. Irrigated crops in the area include cabbage, hay grazers, carrots, and pecans. The U.S. Drought Report indicates this area is experiencing severe to extreme drought conditions at this time.

Stream flow Conditions: Stream flows for the major tributaries in the area are flowing generally below the mean for this time of year. The Nueces River at Laguna has stream flows of 117 cfs, compared to 137 cfs last month, with the mean being 109 cfs. The Nueces River near Brackettville has stream flows of 1.4 cfs, compared to 0.36 cfs last month, with the mean being 4.2 cfs. The Nueces River below Uvalde has stream flows of 58 cfs, compared to 118 cfs last month, with the mean being 64 cfs. The Frio River at Concan has stream flows of 59 cfs, compared to 73 cfs last month, with the mean being 91 cfs. The Sabinal River at Sabinal has stream flows of 2.3 cfs, compared to 4.1 cfs last month, with the mean being 16 cfs. The Leona River stream flows near Uvalde are 51 cfs, compared to 63 cfs last month, with the mean being 51 cfs. Stream flows of the intermittent and tributary streams in the area are flowing from average to below average for this time of the year.

Drought Restrictions: No drought restrictions applied at this time with the exception of Temporary Permits.

Area Counties: Bee, Goliad, Victoria, Calhoun, Jackson, Refugio, Aransas, San Patricio, Nueces, Kleberg, Jim Wells, Duval, Live Oak, Kenedy, Willacy, Brooks, and Jim Hogg

Rainfall and Area Conditions: This area did not receive any significant rainfall during the month of February, ranging from trace amounts to widely scattered showers. The U.S. Drought Monitor indicates conditions in most of the area worsened to moderate and severe drought. The Corpus Christi Reservoir System received some inflows from the run-off of localized scattered showers, but the reservoir system level continued to drop slightly. Most of the surface water diversions in this area continue to be for municipal and industrial uses; little irrigational use was noted.

Stream flow conditions: Area stream flows continue to decrease and are flowing below the historical mean for this time of year. According the USGS Stream Flow Gage at the Guadalupe River near Victoria, the rate of stream flows were approximately 1,100 cfs at the beginning of February and were approximately 984 cfs towards the end, compared to 1,090 cfs in January. The historical mean at this site for February, based on 73 years of record, is 2,500 cfs. The gage at the San Antonio River near Goliad indicated a stream flow rate of approximately 700 cfs at the beginning of the month and decreased to a rate of approximately 534 cfs towards the end of the month, compared to a rate of 700 cfs last month. The historical mean at the site for this month, based on 73 years of record, is 797 cfs. The gage at the San Antonio River at McFaddin, located below Goliad, indicated a rate of approximately 750 cfs at the beginning of the month, and ended at approximately 680 cfs, compared to 763 cfs last month. The historical mean at the site for this month, based on two years of record, is 283 cfs. The gage at the Guadalupe River near Tivoli, below the confluence of the San Antonio and Guadalupe River, indicated a rate of approximately 2,000 cfs at the beginning of the month, and ended the month at approximately 1,650 cfs, compared to 2,080 cfs last month. The historical mean at the site for this month, based on two years of record, is 2,170 cfs. The gage at the Mission River near Refugio indicated a rate of approximately 25 cfs at the beginning of the month, and ended the month at approximately 21 cfs, compared to 24 cfs last month. The historical mean at the site for this month, based on 68 years of record, is 116 cfs. The gage at the Aransas River near Skidmore indicated a rate of approximately 3.5 cfs at the beginning of the month, and ended the month at approximately 2.7 cfs, compared to 3.7 cfs last month. The historical mean at the site for this month, based on 43 years of record, is 10 cfs. The USGS Stream Flow Gage at the Calallen Dam near Corpus Christi indicated stream flows over the dam were nil from last month to the beginning of this month, but ended at approximately 77 cfs. The historical mean at the site for this month, based on eight years of record, is 270 cfs. The stream flows at this site rose to approximately 400 cfs around February 2, reflecting releases from the Corpus Christi Reservoir System.

Corpus Christi Reservoir System: The Corpus Christi Reservoir System received some inflows for the month of February, but the level of the reservoir system continued to decrease compared to last month. The Corpus Christi Reservoir System is currently at 97.0% capacity, (924,083 ac-ft), compared to 67.3% of capacity, (630,104 ac-ft), during this same time last year. The level of Choke Canyon is currently at 96.9% of capacity, (673,914 ac-ft), compared to 73.9% of capacity, (518,581 ac-ft), during this same time last year. The level of Lake Corpus Christi is at 97.2% of capacity, (250,169 ac-ft), compared to 48.3% of capacity, (116,523 ac-ft), last year. The City of Corpus Christi continues to divert much of their monthly water supply needs from Lake Texana.

Drought Restrictions: No drought restrictions are activated in the area.

Area Counties: Sterling, Tom Green, Irion, Concho, Coke, Runnels, Reagan, and Schleicher

The Concho River Valley fell short of monthly rainfall averages in February. According to the USDA-provided State Drought Monitor Index, the Concho Valley further escalated in drought severity to " Severe Drought" Conditions. Lack of moisture combined with persistent high winds contributed to these conditions.

Rainfall and Area Conditions: Total rainfall for the month of February was 0.44 in. The average rainfall amount for the month of February is 1.26 in. The total amount of rainfall for the year is 0.69 in. In 2007 ytd, 2.41 in of rain fell. Average annual rainfall ytd is 19 in. Area reservoirs are holding steady in storage due to the previous month' s rainfall amounts. Irrigation demand on appropriated surface water rights in the Concho Valley began to increase in February. This is due to the seasonal beginning of the pre-irrigation of cultivated fields for the upcoming planting season. Soil moisture content is poor. Winter wheat and oats were planted.

Stream flow Conditions: The mean daily discharge rate, based on five years of record, for USGS Gaging Station 08130700 (Spring Creek above Twin Buttes Reservoir near San Angelo) is 14.0 cfs. The most recent value is 24.5 cfs. The mean daily discharge at USGS Gaging Station 08136000, (Concho River at San Angelo/Bell St.), based on 76 years of record, is 6 cfs. Currently, it is registering 7.3 cfs. Mean daily discharge at USGS Gaging Station 08128000, (South Concho at Christoval, Texas), based on 72 years of record, is 16 cfs. The most recent daily value is 17 cfs. Area lakes indicate that Lake Nasworthy is at 81% of capacity, (8228 ac-ft), O.C. Fisher is at 9% of capacity, (10,142 ac-ft), and Twin Buttes Lake is at 45% of capacity, (82,579 ac-ft).

Drought Restrictions: No restrictions on diversions in the Concho Valley are in effect at this time.

8. Upper Colorado

The Upper Colorado River area received below-normal precipitation during the month of February. The National Weather Service in San Angelo reported monthly precipitation of 0.30 in., 0.88 in. below normal. The area reported less than normal precipitation for the past six consecutive months. The flows in the upper reaches of the Colorado River are below the long-term medians except for segments between the E.V. Spence and O.H. Ivie Reservoirs. The upper reaches of the San Saba River and the Llano River are flowing near their long-term median flow rates. The pool levels of both the E.V. Spence and O.H. Ivie Reservoirs decreased slightly during the month of February. The pool levels of E.V. Spence and O.H. Ivie Reservoirs were approximately 14% and 67%, respectively.

9. Texas Panhandle and Southern High Plains

Amarillo Area: On March 6, 2008, Lake Meredith recorded a new daily low of 49.73 ft. Lake MacKenzie was at 76.03 ft, which is down 0.74 in. from January. Lake Greenbelt is at 48 ft, which is up 0.07 in. from January. The National Weather Service reported 0.55 in. for January, which is 0.35 in. below normal.

Lubbock Area: The Lubbock area had normal precipitation during February 2008. Lubbock received 0.72 in. for the month; the average February is 0.71 in. Similar amounts were recorded throughout the Region Two area. Total 2008 precipitation for the area stands at 0.79 in., which is 0.42 in. below normal for this point in the year. The long term drought situation has not changed, and all previously noted communities on mandatory water restrictions remain on those restrictions. No new communities were added to the water restrictions list during the month of February. As Lake Meredith continues to decline, the City of Lubbock is making preparations to construct a pipeline from Lake Alan Henry to the City of Lubbock. The pipeline will stretch an estimated 65 miles in length uphill and will provide an additional water source for the city, which owns the water rights to the lake.

White River Lake in Region Two is down 28 ft from normal (normal is 46 ft at the dam). This is a foot lower than the level at the end of January. Lake Alan Henry of Region Two is full, but is not currently used as a source for drinking water.

10. Agricultural Concerns

Abnormally dry conditions which began in late summer of 2007 extended through the fall and winter over much of the state. Rains or snow over the last 10 days typically amounted from ½- to 4 in. While these amounts are not adequate to return pasture and crop conditions to normal, they provided much needed moisture over large portions of East and North Texas, the Gulf Coast regions, and parts of Central and South Texas. This much needed moisture ranged from light showers to heavy rains. Corn and sorghum planting is active at this time and, while the rains may slightly delay planting, they will be very helpful in stand establishment and will provide moisture for early growth. South, Southwest, and Far-West Texas, the Edwards Plateau, and the Rio Grande Valley remain critically dry. Ranchers who normally have abundant new grass are continuing to feed livestock. Farmers without supplemental irrigation are delaying planting of field crops. Wheat and other small grains in the southern regions of the state are mostly lost due to drought. The Panhandle Region received light snowfall, but the amounts were inadequate to impact agricultural conditions.

The wheat crop rating is 37% of average compared to 67% at this time in 2007. While the crop benefited over much of the state from the recent moisture, 86% of the wheat crop is rated at fair to very poor conditions. Wheat prices are near an all-time high due to short stocks and poor conditions due to drought over a large part of the winter wheat planting area of the U.S.

The planting of corn and sorghum was halted along the coast and in the Blacklands due to rains. The potential for achieving good stands will be significantly enhanced by this moisture.

11. Drought Impacts to Wildlife

No information available at this time.

12. Wildfire Concerns

The Keetch-Byram Drought Index (KBDI) is used to help determine potential for fire risk. It is a numerical index where each number is an estimate of the amount of precipitation (in 100ths of an inch) needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil, and 800 a completely dry soil. The KBDI' s relationship to fire danger is that as the index increases, the vegetation is subjected to increased moisture stress. KBDI levels and its relationship to expected fire potential are reflected in the following:

KBDI = 0 – 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. This is typical of spring dormant season following winter precipitation.

KBDI = 201 – 400: Typical of late spring; early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.

KBDI = 401 – 600: Typical of late summer, early fall. Lower litter and duff layers contribute to fire intensity and will burn actively.

KBDI = 601 – 800: Often associated with more severe drought and increased wildfire occurrence. Intense, deep-burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

There are currently 120 counties, illustrated in Attachment 2, with KBDI values in excess of 400, indicating areas within these counties are beginning to experience dry conditions, which could result in an increased fire risk potential.

The Council, which is chaired by Jack Colley, Chief, Governor's Division of Emergency Management, is composed of state agencies concerned with the effects of drought and fire on the citizens of the State of Texas. The attached information was compiled and provided by representatives listed below. Points of contact, telephone numbers, and web site addresses are also provided.

Jack Colley, Chief, Governor's Division of Emergency Management, (512) 424-2443, fax (512) 424-2444, web site: http://www.txdps.state.tx.us/dem

John Sutton, Texas Water Development Board, (512) 463-7988, fax (512) 463-9893, web site: http://www.twdb.state.tx.us

Chris Loft, Texas Commission on Environmental Quality, (512) 239-4715, fax (512) 239-4770, web site: http://www.tceq.state.tx.us

Richard Egg, Texas State Soil & Water Conservation Board, (254) 773-2250, fax (254) 773-3311, web site: http://www.tsswcb.state.tx.us

Christy Davis, Texas Department of Agriculture, (512) 475-1611, fax (512) 463-5837, web site: http://agr.state.tx.us

Dr. Travis Miller, Texas Cooperative Extension, (979) 845-4008, fax (979) 845-0604, web site: http://soilcrop.tamu.edu

Cindy Loeffler, Texas Parks & Wildlife Department, (512) 912-7015, fax (512) 707-1358, web site: http://www.tpwd.state.tx.us

Edward T. Morris, Department of Housing and Community Affairs, (512) 475-3329, Fax (512) 475-7498, web site: http://www.tdhca.state.tx.us

Michael Dunivan, Texas Forest Service, (830) 997-5426, web site: http://txforestservice.tamu.edu

Scott Alley, Texas Department of Transportation, (512) 416-3187, fax (512) 416-2941, web site: http://www.dot.state.tx.us/

Paul Tabor, Texas Department of State Health Services, (512) 458-7126, fax (512) 458- 7472, web site: http://www.dshs.state.tx.us/

Thomas Walker, Office of the Governor, Economic Development & Tourism, (512) 936-0169, fax (512) 936-0141, web site: http://www.governor.state.tx.us/divisions/ecodev

Harvey Everheart, Texas Alliance of Groundwater Districts, (806) 872-9205, fax (806) 872-2838, web site: http://www.texasgroundwater.org/

Dr. John W. Nielsen-Gammon, Office of the State Climatologist, (979) 862-2248, fax (979) 862-4466, web site: http://www.met.tamu.edu/osc/

Gus Garcia, Office of Rural Community Affairs, (512) 936-7876, fax (512) 936-6776, web site: http://www.orca.state.tx.us

cc:

Amy Jeter, Committee Clerk, Senate Finance Committee
Sarah Hicks, Committee Director, Senate Finance Committee
Teddy Carter, Committee Clerk, Senate Natural Resources Committee
Amy Peterson, Committee Director, House Appropriations
Hope Wells, Committee Clerk, House Natural Resources Committee
Steven Schar, Committee Clerk, House Agriculture and Livestock Committee
Gina Chung, Committee Clerk, House Criminal Jurisprudence Committee
Zak Covar, Policy Advisor for TCEQ Issues, Governor's Policy Office
Auburn Mitchell, Policy Advisor for Agriculture/TDA, Governor's Policy Office
Rob Johnson, Lt. Governor's Chief of Staff
Carmen Cernosek, Lt. Governor's Natural Resources Policy Analyst
Shane Linkous, Deputy Division Chief, Intergovernmental Relations, Attorney General's Office
Ernest Angelo, Jr., Chairman, Public Safety Commission
Louis E. Sturns, Member, Public Safety Commission
Colonel Thomas Davis, Director, Department of Public Safety
Lieutanant Colonel David McEathron, Assistant Director, Department of Public Safety
Lori Gabbert,, Budget Analyst, Legislative Budget Board (LBB-DPS)
Tom Lambert, Budget Analyst, Legislative Budget Board (LBB-TCEQ)
Ed Perez, Executive Director, Texas Office of State-Federal Relations, Washington, DC
Brandon Steinmann, Director, Texas Office of State-Federal Relations, Austin, Texas

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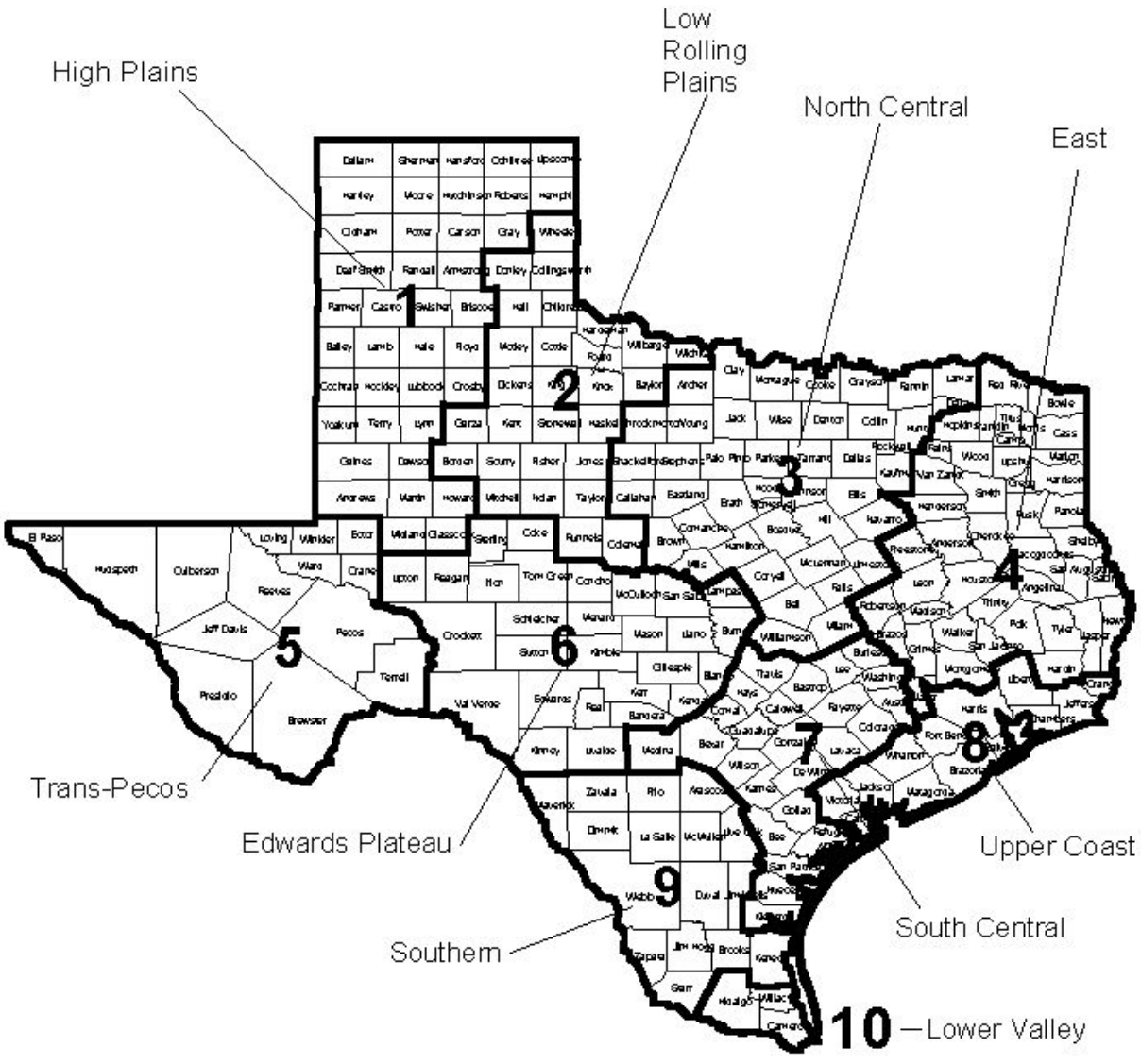
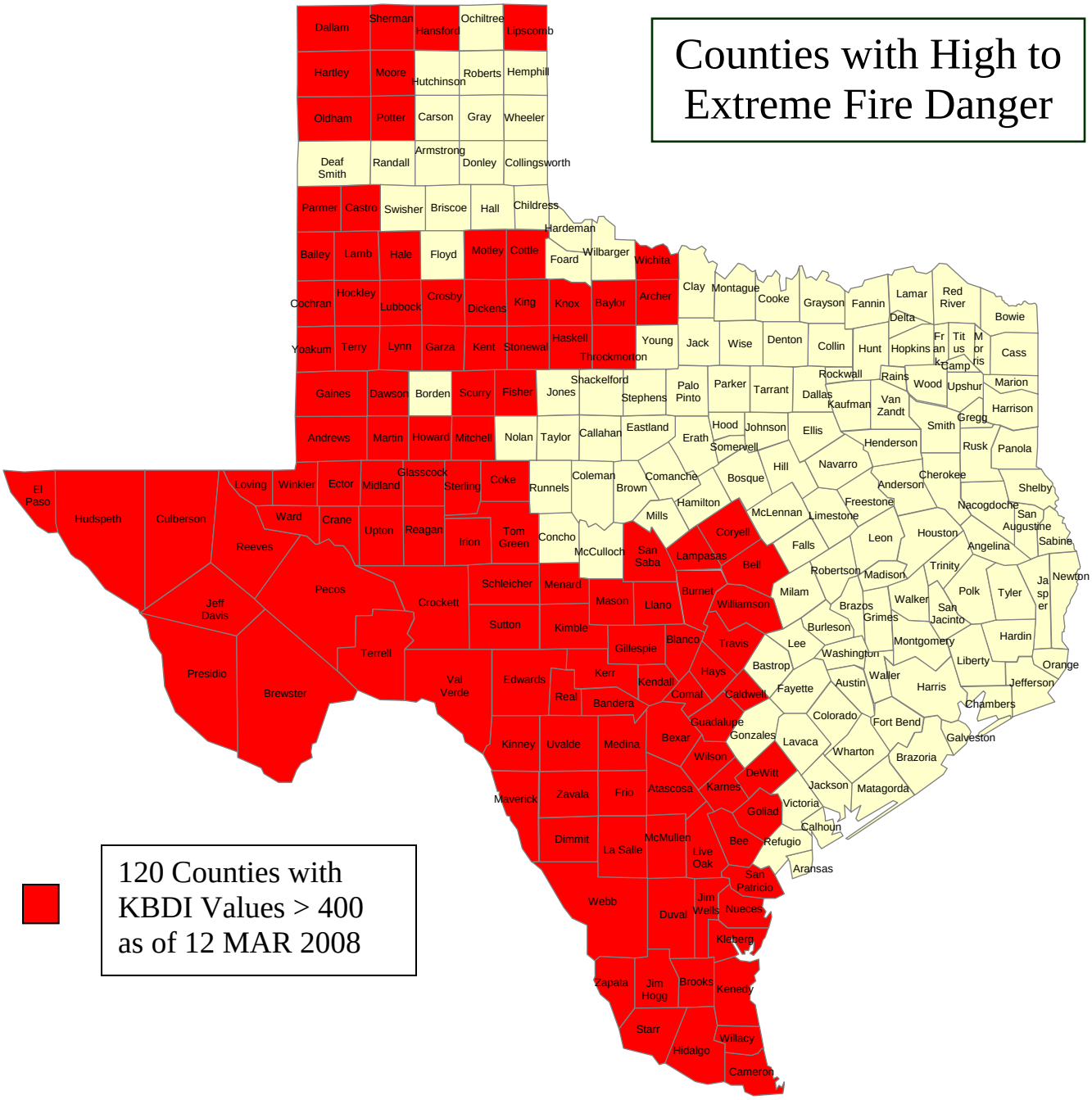


Attachment 2



DROUGHT PREPAREDNESS COUNCIL

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JACK COLLEY
Council Chairman

June 12, 2008

TO: The Honorable Rick Perry, Governor, State of Texas
The Honorable David Dewhurst, Lieutenant Governor, State of Texas
Mr. Phil Wilson, Secretary of State, State of Texas
The Honorable Mario Gallegos, Jr., President Pro Tempore of the Senate, State of Texas
The Honorable Tom Craddick, Speaker of the House, State of Texas,
The Honorable Steve Ogden, Chairman, Senate Finance Committee, State of Texas
The Honorable Kip Averitt, Chairman, Senate Natural Resources Committee, State of Texas
The Honorable John Carona, Chairman, Senate Committee on Transportation & Homeland Security, State of Texas
The Honorable Warren Chisum, Chairman, House Appropriations Committee, State of Texas
The Honorable Mike Hamilton, Vice-Chairman, House Natural Resources Committee, State of Texas
The Honorable Sid Miller, Chairman, House Agriculture & Livestock Committee, State of Texas
The Honorable Aaron Peña, Chairman, House Criminal Jurisprudence Committee, State of Texas
Mr. Brian Newby, Chief of Staff, Office of the Governor
Mr. Steven McCraw, Director, Texas Governor's Office of Homeland Security

FROM: Chief Jack Colley, Chairman, Drought Preparedness Council

SUBJECT: Statewide Drought Situation Report

1. Next Council Meeting

July 10, 2008, 2:00 p.m., Governor's Conference Room of the Governor's Division of Emergency Management State Operations Center, Texas Department of Public Safety Headquarters, 5805 N. Lamar Blvd., Austin, Texas.

2. General Conditions

The month of May produced below-normal precipitation for the State of Texas, and the first ten days of June have been dry as well. As a result, almost the entire state is abnormally dry, and many parts of the state are in or are approaching serious drought conditions.

Areas with particularly severe precipitation deficits include the extreme northwest corner of the state, the area from Midland to Del Rio, areas east of San Antonio, and parts of Deep South Texas. Drought conditions encompass this entire area, from Houston to El Paso as well as the northwest Panhandle. Except for a few isolated areas, most of the rest of the State is in the midst of abnormal dry weather.

An absence of normal precipitation is especially problematic during this time of year. May and early June is climatologically the wettest period of the year through most of the State. For this reason, it is difficult to recover from below-normal precipitation in May with above-normal precipitation during other periods of the year. Furthermore, with the onset of the hot temperatures of summertime, demands on water usage are approaching their peak. This leaves much of the State extremely vulnerable to additional periods of low rainfall.

Long-range forecasts during this time of year have little utility. In this instance, the Climate Prediction Center (CPC) is predicting neither above normal nor below normal conditions for either temperature or precipitation for the State of Texas as a whole.

3. Overall Statewide Drought Conditions

The Trans-Pecos climatic region is experiencing " Moderate Drought" conditions, according to the Palmer Drought Severity Index (PDSI). The remainder of the State varies from " Near Normal" to " Moderately Wet" conditions. The PDSI varies from extremely wet, very wet, moderately wet, slightly wet, incipient wet spell, near normal, incipient dry spell, mild drought, moderate drought, severe drought, and extreme drought in order of increasing severity.

The Crop Moisture Index (CMI) indicates the Trans-Pecos region is experiencing " Abnormally Dry" conditions and the High Plains and Southernregions are under " Mildly Dry" conditions. The remainder of the State is experiencing " Moisture Adequate" conditions. The CMI varies from flooding, standing water, fields too wet, moisture adequate, mildly dry, abnormally dry, excessively dry, severely dry, and extremely dry in order of increasing severity.

The Six-Month Standardized Precipitation Index (SPI) indicates that, as of the end of April, the Southern and Lower Valley regions are experiencing " Extremely Dry" conditions and the High Plains region is under " Severely Dry" conditions. The Low Rolling Plains, Trans-Pecos, Edwards Plateau, North Central, and South Central regions are experiencing " Moderately Dry" conditions. The remainder of the State is under " Near Normal" conditions. The SPI varies in categories of extremely dry, severely dry, moderately dry, near normal, moderately wet, very wet, and extremely wet conditions.

The Keetch-Byram Drought Index (KBDI) indicates significant areas with high fire danger in the High Plains, Trans-Pecos, Edwards Plateau and in South Texas areas. The KBDI is a drought index specifically used to describe potential or expected fire behavior. The index is classified as Low, Moderate, High, or Extreme fire danger, in order of increasing severity.

Texas Forest Service reports outdoor burning bans in 105 counties, covering the western half of the State.

The Texas Commission on Environmental Quality (TCEQ) shows ten water supply systems are under mandatory water use restrictions. Another eight community water supply systems are under voluntary water use restrictions.

The CPC predicts below normal precipitation for the southern third of Texas and above normal temperatures for the western Trans-Pecos area from May 2008 to July 2008. From June 2008 to August 2008, the CPC predicts equal chances of below normal, normal, or above normal precipitation and temperatures for all of the State.

National Oceanic and Atmospheric Administration (NOAA) Seasonal U.S. Drought Outlook, through July 2008, indicates developing and persisting drought conditions in the High Plains, Trans-Pecos, the southern portion of the Edwards Plateau, Southern, and the Lower Valley regions. Drought conditions are expected to improve in the northern and eastern portions of the Edwards Plateau during the same period.

Water level measurements were available for all seven key monitoring wells. Since the beginning of April, water levels rose in only one of the seven monitoring wells; the Harris County Gulf Coast well rose 0.48 feet (ft). Water levels declined in the remaining six monitoring wells, ranging from 0.09 ft in the El Paso County Hueco Bolson well to 3.16 ft in the Bexar County Edwards well. The J-17 well, in Bexar County, recorded a water level of 51.06 ft below land surface, 3.16 ft below last month's measurement. This water level is 29.94 ft above the Stage 1 critical management level.

4. Water Utility Status

May 2008, began with 23 public water systems asking customers to be aware of outside water usage. Of those, 10 are asking customers to follow a mandatory watering restriction based on address and day of the week, and eight are asking for voluntary reductions in water usage. So far in 2008, five public water systems relaxed all restrictions and are operating normally. Recent rains have slowed down outside water usage in some areas of the state. However, West Texas, the Panhandle, and South Texas still need significant amounts of rainfall.

5. Water Rights – Statewide

New temporary water use permit applications are reviewed on a site-specific basis and issued if sufficient surplus water at the requested source exists. Applications for new water use permits and amendments to existing permits remained normal for the month. No curtailment of pumping was required for those permits in the Brazos River Basin containing Hale Clause restrictions, and Lake Proctor restrictions were not necessary for the month. Owners of water rights with these restrictions are reminded to call the " Hale Clause Hotline" on a weekly basis to determine if diversion of water is allowed for the following week. The availability of unappropriated water for new water use permits continues to decrease in all river basins in the State, and the search for long-term, dependable alternate sources of water remains a high priority issue.

6. Water Rights – Lower Rio Grande / Rio Grande Watermaster (RGWM)

Current Overall Conditions: As of May 24, 2008, the U.S. combined ownership at Amistad/Falcon stands at 90.37% of conservation capacity (3,065,295) acre-feet (AF), up from 77.34% (2,572,383 AF) a year ago at this time. Overall the system is holding 56.31% (3,335,261 AF) of conservation capacity with Amistad at 69.88% (2,289,445 AF) and Falcon at 39.51% (1,045,816 AF). Mexico has 10.67% (269,966 AF) of the water it could store at Amistad/Falcon.

Allocations: As of the printing of the April ownership report, in excess of 164,040 acre-feet for irrigation and mining was allocated. An amount in excess of 372,000 acre-feet remains for future allocations in 2008.

Storage & Loss Amistad vs. Falcon: Current storage is approximately 2.19 million acre-feet at Amistad (119%) occupying 352,659 acre-feet of Mexico's space at Amistad (which is not an issue so long as Amistad is below conservation capacity). We are currently storing approximately 1.00 million acre-feet at Falcon (56.2%).

The YTD evaporation and seepage losses at Amistad are 179,383 acre-feet. For the same period, Falcon has lost 156,655 acre-feet. The ratio of loss between Amistad and Falcon remains constant at 1:2 with Amistad twice as efficient in overall storage and loss as compared to total amount in storage.

Releases to Meet Demands: In 2008, Mexico released 539,695 acre-feet from Amistad and 806,735 acre-feet from Falcon for their needs. The U.S. released 340,457 acre-feet from Amistad and 652,501 acre-feet from Falcon for U.S. needs. Combined with gains between Amistad and Falcon, US inflows to Falcon have totaled 389,230 acre-feet. So far, the lower Rio Grande Valley has met 60% of overall needs in the middle and lower Rio Grande directly from middle Rio Grande inflows and Amistad this year. The movement of water from Amistad is primarily driven by U.S. excess amount in storage and the need to keep it below conservation capacity, particularly when the U.S. is occupying Mexico's space in Amistad.

Upper Rio Grande (New Mexico): Elephant Butte in New Mexico is currently storing 616,138 (30.45%) acre-feet and Caballo Dam in New Mexico, downstream of Elephant Butte, is storing 46,210 (20.36%) acre-feet. This water storage in part is used to meet water needs in the El Paso area.

Outlook: Most all accounts began 2008 with 100% usable balances. As we enter peak irrigation season, a dry weather pattern persists in the Region which increases irrigation demand. Strong and dry winds from the south contributed to the dryness. Strong winds are forecast to continue through the middle of June. Coupled with continued drought conditions, irrigation demand will continue to increase through June and July perhaps driving our total to approximately 70% by the end of 2008. Of further concern is the low ownership of Mexico in the reservoirs since it could result in increased evaporation and seepage loss charges for the U.S. To help alleviate losses in Falcon, the U.S. will continue to monitor ownership and elevations levels in both Falcon and Amistad to ensure efficient transfers of water from Amistad to Falcon.

7. South Texas Watermaster – Guadalupe / Lavaca / San Antonio / Nueces Region

Area Counties: Bandera, Blanco, Comal, Kendall and Kerr Counties

The month of May reflects deteriorating drought conditions throughout most of South Texas. The scattered rainfall has not been enough to ease drying soil conditions. Stream flows continue a steady decline in most areas. Temporary permits have been restricted or curtailed throughout South Texas. Some junior water rights have reached their mandated restrictions, which has made it necessary to stop the temporary diversions.

The City of Kerrville on the Upper Guadalupe River will remain closely monitored because of their very junior water right. Flows in the Texas Hill Country have dropped very quickly over the last few weeks and restrictions and curtailments may be forthcoming very soon, unless some badly need showers occur.

Rainfall and Area Conditions: The area received various amounts of precipitation, ranging from 2.0 to 2.5 inches for the month of May. With the current amount of rainfall for May the Texas Crop Moisture Index for this area of the hill country is classified in the **ADEQUATE** to **ABNORMALLY DRY** range of the index. Most of the surface water diversions in this area are for municipal and industrial uses with a few surface water irrigators starting to ready irrigation equipment. The U.S. Drought Monitor indicates that this area is currently in **SEVERE** to **MODERATELY DRY** conditions at this time.

Stream flow Conditions: Very few of the stream flows of the major streams and tributaries continue to carry near normal flows, with most of the major streams still showing a steady decline in the month of May. Most of the smaller secondary tributaries lost surface flow. The Guadalupe River near Kerrville has a current stream flow of approximately 37 CFS, with the historical monthly mean being 145 CFS. This equates to 108 CFS below the monthly mean for the month of May flowing past Kerrville. The Guadalupe River near Comfort has a current stream flow of approximately 55 CFS, with the historical monthly mean being 281 CFS. This equates to 226 CFS below the monthly mean for May flowing past Comfort, Texas. The Medina River near Bandera has a current stream flow of 20 CFS, with the historical monthly mean being 217 CFS. This equates to 197 CFS below the monthly mean of May flowing past Bandera.

Drought Restrictions: As of May 29, 2008, all temporary surface water permits were suspended. Because of the low stream flows, some state permit holders already hit their flow restrictions and are curtailed from pumping. Therefore, the river flows are heavily monitored on a daily basis.

Area Counties: Bee, Goliad, Victoria, Calhoun, Jackson, Refugio, Aransas, San Patricio, Nueces, Kleberg, Jim Wells, Duval, Live Oak, Kenedy, Willacy, Brooks, and Jim Hogg.

Rainfall and Area Conditions: This area received little rainfall during the month of May. The Coastal Bend area received 1 – 2 inches of rain through out the month that provided some localized runoff to increase stream flows for a short period of time. The U. S. Drought Monitor indicates most of the South Texas Watermaster area is currently experiencing **MODERATE** to **SEVERE** drought conditions, at this time. Only the extreme southwestern segment of the South Texas Watermaster area has extended to **EXCEPTIONAL** drought conditions. The Corpus Christi Reservoir System received some inflows from run-off of localized scattered showers in the area, but the level of reservoir system continued to drop slightly. Most of the surface water diversions in this area continue to be for municipal and industrial uses; little irrigational use is noted.

Stream flow Conditions: Stream flows of area streams continue to decrease, and are flowing well below average for this time of year. According to the USGS Stream Flow Gage at the Guadalupe River near Victoria, stream flows were approximately 1,100 CFS (Cubic Feet per Second) at the beginning of the month, and were approximately 600 CFS towards the end of the month, compared to 1,000 CFS last month. The historical mean at this site during this time (based on 73 yrs. of record) is 2,300 CFS. The gage at the San Antonio River near Goliad indicated stream flows were approximately 700 CFS at the beginning of the month, and ended the month at approximately 300 CFS, compared to 900 CFS last month. The historical mean at this site during this time (based on 73 yrs. of record) is 1,090 CFS. The gage at the San Antonio River at McFaddin, which is below Goliad, indicated the stream flows were approximately 650 CFS at the beginning of the month, and ended at approximately 400 CFS, compared to last month at 725 CFS. The historical mean at this site during this time (based on 2 years of record) is 492 CFS. The gage at the Guadalupe River near Tivoli (below the confluence of the San Antonio and Guadalupe Rivers) indicated stream flows of approximately 1,700 CFS at the beginning of the month, and ended the month at approximately 1,000 CFS,

compared to 1,670 CFS last month. The historical mean at this site during this time (based on 2 yrs of record) is 1,680 CFS. The gage at the Mission River near Refugio, indicated stream flows were approximately 13 CFS at the beginning of the month and ended the month at approximately 10 CFS, compared to 13 CFS last month. The historical mean at this site (based on 68 yrs. of record) is 99 CFS. The USGS Stream Flow Gage of the Nueces River at Calallen Dam, indicated 50 CFS of stream flows over the dam, near Corpus Christi at the beginning of the month, but indicated approximately 1.5 CFS of stream flows towards the end of the month, compared to 36 CFS last month. The historical mean at this site during this time (based on 8 yrs. of record) is 261 CFS. The gage at the Aransas River near Skidmore, indicated stream flows were approximately 6.0 CFS at the beginning of the month, and ended the month at approximately 5.1 CFS, compared to 5.7 CFS last month. The historical mean at this site during this time (based on 44 yrs. of record) is 14 CFS.

Corpus Christi Reservoir System: The Corpus Christi Reservoir System received little inflow for the month of May. Therefore, the level of the reservoir system continued to decrease. The Corpus Christi Reservoir System is currently at 92.5% of capacity (880,897 AF) compared to 79.5% of capacity (744,544 AF) during this same time last year. The level of Choke Canyon is currently at 93.6% of capacity (650,950 AF) compared to 79.0% of capacity (549,197 AF) during this same time last year. The level of Lake Corpus Christi is currently at 89.4% of capacity (229,947 AF) compared to 81.0% of capacity (195,347 AF) last year. The City of Corpus Christi continues to divert much of their monthly water supply needs from Lake Texana.

Drought Restrictions: Currently, there are no drought restrictions (stream flow restrictions) that have been activated in this area.

Area Counties: Atascosa, Karnes, Gonzales, Wilson, McMullen, Dewitt, Guadalupe, Lavaca, Fayette, Colorado, Wharton, and Jackson.

Rainfall and Area Conditions: This area received 0.0 to 4.0 inches of rainfall for the month of May. Rainfall occurred in isolated areas within the south and south western portions of the area. The middle and eastern portions of the area received no rainfall in the month of May. Soil moisture conditions are basically poor in this area. Corn, milo and hay crops are beginning to wilt and show signs of drought damage. Irrigational activity increased due to the dry conditions.

Lake Texana is at 88% of capacity (last month ending at 94% of capacity) which is 41.77 ft. above MSL.

According to the U.S. Drought Monitoring System, the entire area is experiencing **MODERATE** to **SEVERE** drought conditions, at this time.

Stream flow Conditions: Currently, the flow of the San Antonio River near Falls City, is 117 CFS, the historical mean flow for May is 290 CFS, ending for last month at 300 CFS. The Cibolo Creek near Falls City, is flowing at 30 CFS, the ending for last month was 38 CFS, with the historical mean flow for May at 36 CFS. The Guadalupe River near Gonzales, is flowing at 754 CFS, the ending reading for last month was 860 CFS, with the historical mean flow for May at 946 CFS. The Lavaca River at Edna, is flowing at 21 CFS, the ending reading for last month was 42 CFS, with the historical mean flow for May at 111 CFS. The Navidad River near Halletsville is currently flowing at 1.6 CFS, the ending reading for last month was 7.4 CFS, and the historical mean flow for May is 41 CFS. The Atascosa River near Whitsett, is flowing at 1.1 CFS, the ending reading for last month was 9.5 CFS, with the historical mean flow for May being 12 CFS. The Frio River near Tilden is flowing at 12 CFS, the ending reading for last month was 23 CFS, and the historical mean flow for May is 43 CFS. Lastly, the Nueces River

near Tilden is currently flowing at 18 CFS, the ending reading for last month was 8.8 CFS, and the historical mean for May is 80 CFS.

Drought Restrictions: Currently, all temporary permit diversions are suspended in the San Antonio River Basin area.

Area Counties: Edwards, Real, Kinney, Uvalde, Zavala, Dimmit, La Salle and Webb.

Rainfall and Area Conditions: The Southwest Texas area did receive some relief from the drought conditions during May. Small rain showers were reported for the beginning of the month with heavier rain showers reported throughout the middle of month for the northern and southern counties. The range of rainfall in the area was from 0.15 to 5.00 inches for the month. Most diversions of surface water were for irrigational use and small amounts for municipal and industrial uses. Crops being irrigated in the area are: milo, onions, corn, hay grazers, and pecans. The U.S. Drought Report indicates this area is experiencing **MODERATE** to **SEVERE** drought conditions, at this time. Drought restrictions are applied to the Southwest area at this time for temporary permits.

Stream flow Conditions: Stream flows for the major tributaries in this area continue to flow below the mean for this time of year. The Nueces River at Laguna has stream flows of 60 CFS, compared to 78 CFS, for last month, with the historical mean being 327 CFS. The Nueces River near Brackettville has stream flows of .06 CFS, compared to .17 CFS, for last month, with the historical mean being 5.2 CFS. The Nueces River below Uvalde has stream flows of 36 CFS, compared to 47 CFS, for last month, with the historical mean being 293 CFS. The Frio River at Concan has stream flows of 38 CFS, compared to 52 CFS, for last month, with the historical mean being 248 CFS. The Sabinal River at Sabinal has stream flows of .74 CFS, compared to 2.8 CFS, for last month, with the historical mean being 198 CFS. The Leona River near Uvalde has stream flows of 23 CFS, compared to 34 CFS, for last month, with the historical mean being 35 CFS.

Stream flows of the intermittent and tributary streams in the area are flowing below average, for this time of the year.

Drought Restrictions: Currently, drought restrictions are in place for temporary permits, and permits with stream flow restrictions are monitored.

Area Counties: Bastrop, Bexar, Blanco, Caldwell, Comal, Fayette, Frio, Guadalupe, Hays, and Medina.

Rainfall and Area Conditions: Below average monthly rainfall fell across the San Antonio Regional Area for the month of May. Month to date rainfall measured at the San Antonio International Airport was 1.36 inches, the average for May is 4.72 inches. Total annual rainfall to date is 3.88 inches; normal year to date is 12.16 inches resulting in a deficit of 8.28 inches.

The U. S. Drought Monitor, dated May 20, 2008, indicates the San Antonio Regional Area is experiencing **ABNORMALLY DRY** conditions in the eastern half of the regional area, and **MODERATE** conditions in the western half of the regional area, impacting crops, pastures and grasslands. Ground moisture improved for those isolated areas impacted by scattered thunderstorms; otherwise, ground moisture continues to remain poor due to the continuing drying trend. Good harvest of hay grazers, yellow squash, white squash, zucchini, cucumbers, tomatoes, white onions, and garlic were reported with supplemental irrigation. Most " dry land" crops are either lost to the ensuing drought or dramatically stunted due to the lack of rainfall.

Stream Flow Conditions: The Guadalupe and Blanco Rivers are now showing the impact of the current drought. Small creeks are now dried up and most major streams are beginning to quickly pool or dry up entirely. Municipal use has increased because of residential lawn planting, fertilizing, and supplemental watering. Industrial use remains constant.

All major tributaries in the San Antonio Regional Area are now beginning to drop below their historical monthly averages for May. The Guadalupe River at Spring Branch is currently 58 CFS; the historical mean flow for May is 503 CFS. The San Marcos River at Luling is flowing at 115 CFS; the historical mean flow for May is 529 CFS. The Blanco River at Wimberley is not flowing; the historical mean flow for May is 212 CFS.

As of May 28, 2008, Canyon Lake Reservoir is 907.97 feet elevation, and is impounding 369,051 AF, and is 97.5% of capacity. The Edwards Aquifer level at the J-17 well in Bexar County, May 27, 2008, is 671.4 feet (the historical average for May is 666.4 feet) which is 5.0 feet above the monthly historical average. The San Marcos Springs, May 26, 2008, are flowing at 134.0 CFS; the historical monthly average for May is 183.0 CFS. This is 49.0 CFS below the monthly historical average. Lastly, the Comal Springs, May 26, 2008, are flowing at 338.0 CFS (the monthly historical flow for May is 298.0 CFS) which is 40.0 CFS above the historical monthly average.

Drought Restrictions: Temporary Permits are now being regulated, as well as permits with stream flow restrictions.

Area Counties: Sterling, Tom Green, Irion, Concho, Coke, Glasscock, Runnels, Reagan, and Schleicher.

Rainfall and Area Conditions: Rainfall for the Concho River Valley did not meet the forecast expectations for May. According to information provided by the USDA, the State Drought Monitor Index, the Concho Valley remained in **Abnormally Dry** drought conditions in the West, and **Normal** conditions in the east.

Rainfall in San Angelo for the month was 2.20 inches. Areas to the east of San Angelo received more rainfall. The average rainfall amount for the month of May is 3.23 inches. Total rainfall for the year is 8.37 inches. In 2007, to date, there was 13.67 inches of rain. Average annual rainfall, based on a 100-year record, is 19 inches. Area reservoirs are showing continued decreases in the amounts of storage from the previous month' s amounts. Irrigational demand by appropriated surface water rights in the Concho Valley is at normal volume. The Texas Crop Moisture Index shows soil moisture content is **Abnormally Dry**. Winter wheat is being harvested; corn and sorghum have been planted and are established. Currently, cotton is being planted.

Stream Flow Conditions: Mean daily discharge statistics based on 5 years of record for USGS Gaging Station 08130700 (Spring Creek above Twin Buttes Reservoir near San Angelo) are 1.20 CFS. The most recent value is 8.4 CFS. Mean daily discharge statistics at USGS Gaging Station 08136000 (Concho River at San Angelo/Bell St.) based on 76 years of record, is 10.0 CFS. Currently, it is at 4.8 CFS. Mean daily discharge statistics at USGS Gaging Station 08128000 (South Concho at Christoval, Texas) based on 72 years of record, is 15.5 CFS. The most recent daily value is 8.7 CFS. Area lakes indicate Lake Nasworthy is 83% of capacity (8,493 AF) O. C. Fisher is 8% of capacity (8,975 AF) and Twin Buttes Lake is 42% of capacity (83,021 AF).

Drought Restrictions: There are no restrictions on diversions at this time in the Concho Valley.

8. Upper Colorado

The upper Colorado River area received below normal precipitation during the month of May 2008. The National Weather Service in San Angelo reported monthly precipitation of 1.01 inches, 2.08 inches below normal. The annual total to date is 6.96 inches, 0.72 inches below normal. Diminished flows were the norm for most tributaries in the upper Colorado watershed during most of May. Most tributaries of the Upper Colorado River watershed including the San Saba River and upper reaches of the Llano River are flowing at levels below the long-term medians as reported by USGS. The pool levels of EV Spence and OH Ivie Reservoir decreased during the month. The pool levels of EV Spence and OH Ivie Reservoirs were 13% and 66%, respectively.

9. Texas Panhandle and Southern High Plains

Amarillo Area: Lake Meredith is at 47.33 feet, down from 48.23 feet at the beginning of May. Lake Greenbelt is at 57.92 feet, down from 58.61 feet at the beginning of May. Lake Mackenzie is at 74.52 feet, down from 75 feet at the beginning of May.

The National Weather Service in Amarillo reported a total of 2.08 inches of rainfall for the month of May, 2008, 0.32 inches below average. A total of 6.04 inches was recorded since January 1, 2008, 2.45 inches below average for the year.

Lubbock Area: The Lubbock area had above normal precipitation during May 2008. Lubbock received 5.32 inches for the month (average May is 2.13 inches), and similar amounts were recorded throughout the Region 2 area. Total precipitation for 2008 now stands at 7.28 inches, which is 1.89 inches above normal for this point in the year. The long term drought situation has not changed, and all of the communities previously noted as being on mandatory water restrictions remain on those restrictions. No new communities were added to the water restrictions list during the month of May. As Lake Meredith continues to decline, the City of Lubbock is making preparations to construct a pipeline from Lake Alan Henry to the City of Lubbock (65 miles uphill) to use as an additional source of water. The City of Lubbock owns the water rights at this lake.

Region 2 area lake levels show the following:

White River Lake: This lake is down 28 feet from normal (normal is 46 feet at the dam). This is one foot higher than the level that existed at the end of April 2008. The White River Water Supply District has only 4 feet of water left that can be pulled from the Lake for the Public Water Supply. White River WSD has groundwater wells on standby to supply water to customers in the event the lake level drops below usable levels.

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Lake Alan Henry: Almost full (2 feet below the spillway). This lake is not used for public drinking water supplies at present, but will be utilized for this purpose in the near future.

10. Agricultural Concerns

Wheat harvest is under way, with about 40% of the crop harvested. Reports from the Gulf Coast, Central and North Texas indicate above average yields, while reports from the Plains indicate that drought has severely damaged much of the crop. Dry weather during the fall and winter resulted in poor stands while the dry spring has done little to improve conditions. Late planted wheat is in better condition than wheat planted on normal planting dates. Many fields in Southwest Texas, the Edwards Plateau, Rolling Plains and High Plains will be abandoned,

although some areas benefited from localized rains and are harvesting good crops. Statewide, wheat condition is at 48% of normal compared to 82% of normal at this time in 2007.

Drought continues to be a major issue for agricultural producers along the Gulf Coast, South and Southwest Texas and the Rio Grande Valley. While most of the corn crop in the Plains and in North Texas is in good condition, much of the crop in South Texas, the Gulf Coast and Central Texas is either lost due to drought or severely stressed with high potential for aflatoxin, which can destroy corn for feed and food value. Much of the cotton and sorghum crop in the region is also in poor to very poor shape or has been zeroed out by insurance adjusters. Some sesame and other catch crops were planted in late May on the coast and South Texas after the loss of cotton following rain. Pasture conditions continue to decline and ranchers are feeding supplemental feed in this region.

Although scattered rains brought up to three inches in some areas of the South Plains, conditions are mostly poor for the newly planted cotton crop. Unseasonably hot temperatures and high winds have dried out seedbeds and damaged cotton stands either from blow outs or from sand injury. These conditions quickly deplete moisture for planting, leaving dry land producers few options.

Southwest Texas received some beneficial moisture in May, but it was too late for most dry land or limited irrigation producers. Crop and forage losses are widespread. Supplemental feeding of livestock is common.

11. Drought Impacts to Wildlife

No information available at this time.

12. Wildfire Concerns

The Keetch-Byram Drought Index (KBDI) is used to help determine potential for fire risk. It is a numerical index where each number is an estimate of the amount of precipitation (in 100ths of an inch) needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil, and 800 a completely dry soil. The KBDI' s relationship to fire danger is that as the index increases, the vegetation is subjected to increased moisture stress. KBDI levels and its relationship to expected fire potential are reflected in the following:

KBDI = 0 – 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. This is typical of spring dormant season following winter precipitation.

KBDI = 201 – 400: Typical of late spring; early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.

KBDI = 401 – 600: Typical of late summer, early fall. Lower litter and duff layers contribute to fire intensity and will burn actively.

KBDI = 601 – 800: Often associated with more severe drought and increased wildfire occurrence. Intense, deep-burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

There are currently 138 counties, illustrated in Attachment 2, with KBDI values in excess of 400, indicating areas within these counties are beginning to experience dry conditions, which could result in an increased fire risk potential.

The Council, which is chaired by Jack Colley, Chief, Governor's Division of Emergency Management, is composed of state agencies concerned with the effects of drought and fire on the citizens of the State of Texas. The attached information was compiled and provided by representatives listed below. Points of contact, telephone numbers, and web site addresses are also provided.

Jack Colley, Chief, Governor's Division of Emergency Management, (512) 424-2443, fax (512) 424-2444, web site: http://www.txdps.state.tx.us/dem

John Sutton, Texas Water Development Board, (512) 463-7988, fax (512) 463-9893, web site: http://www.twdb.state.tx.us

Chris Loft, Texas Commission on Environmental Quality, (512) 239-4715, fax (512) 239-4770, web site: http://www.tceq.state.tx.us

Richard Egg, Texas State Soil & Water Conservation Board, (254) 773-2250, fax (254) 773-3311, web site: http://www.tsswcb.state.tx.us

Lance Williams, Texas Department of Agriculture, (512) 463-3285, fax (800) 835-2981, web site: http://agr.state.tx.us

Dr. Travis Miller, Texas AgriLife Extension Service, (979) 845-4808, fax (979) 845-0456, web site: http://texasextension .tamu.edu

Cindy Loeffler, Texas Parks & Wildlife Department, (512) 912-7015, fax (512) 707-1358, web site: http://www.tpwd.state.tx.us

Edward T. Morris, Department of Housing and Community Affairs, (512) 475-3329, Fax (512) 475-7498, web site: http://www.tdhca.state.tx.us

Michael Dunivan, Texas Forest Service, (830) 997-5426, web site: http://txforestservice.tamu.edu

Scott Alley, Texas Department of Transportation, (512) 416-3187, fax (512) 416-2941, web site: http://www.dot.state.tx.us/

Paul Tabor, Texas Department of State Health Services, (512) 458-7126, fax (512) 458- 7472, web site: http://www.dshs.state.tx.us/

Thomas Walker, Office of the Governor, Economic Development & Tourism, (512) 936-0169, fax (512) 936-0141, web site: http://www.governor.state.tx.us/divisions/ecodev

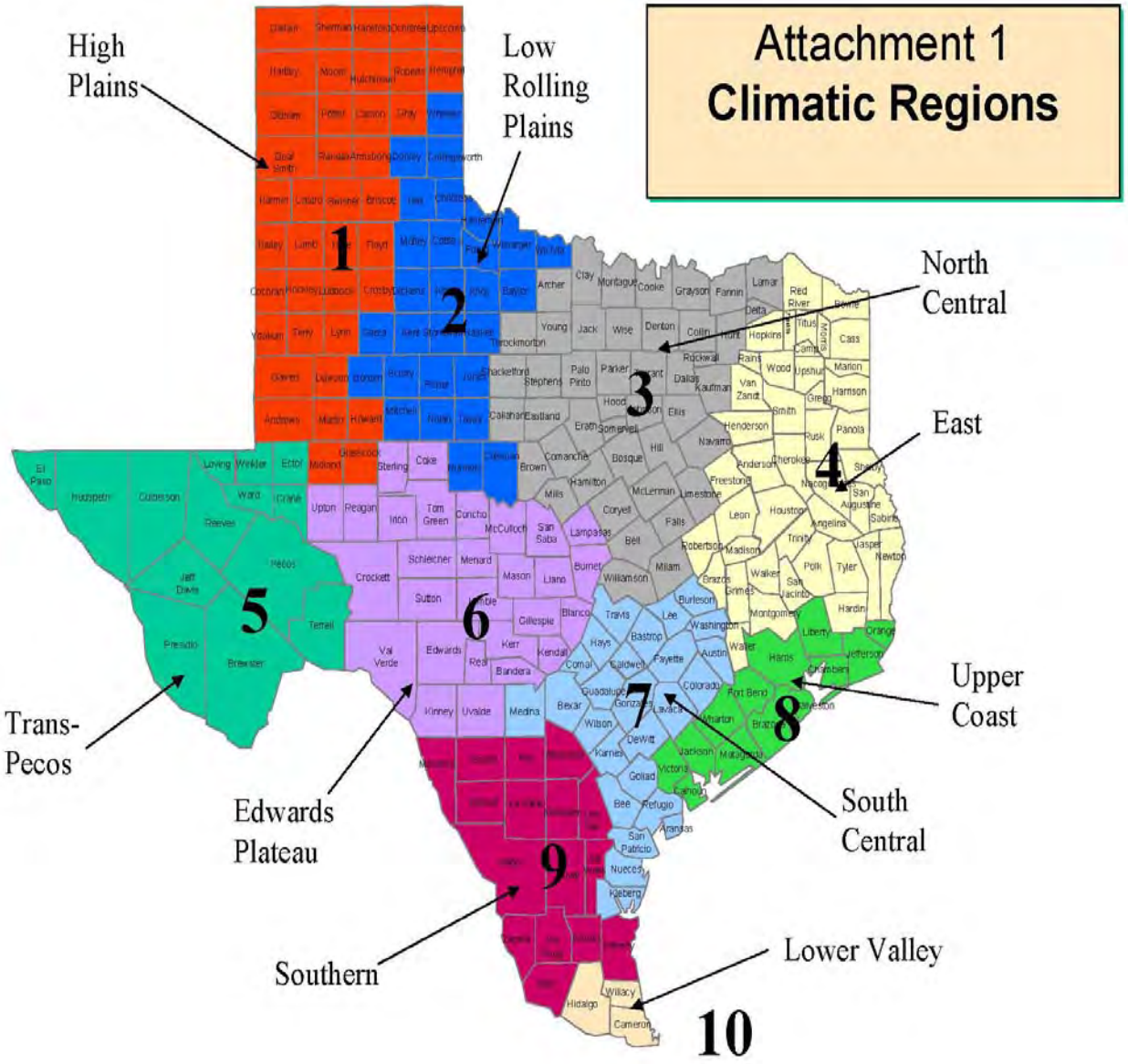
Harvey Everheart, Texas Alliance of Groundwater Districts, (806) 872-9205, fax (806) 872-2838, web site: http://www.texasgroundwater.org/

Dr. John W. Nielsen-Gammon, Office of the State Climatologist, (979) 862-2248, fax (979) 862-4466, web site: http://www.met.tamu.edu/osc/

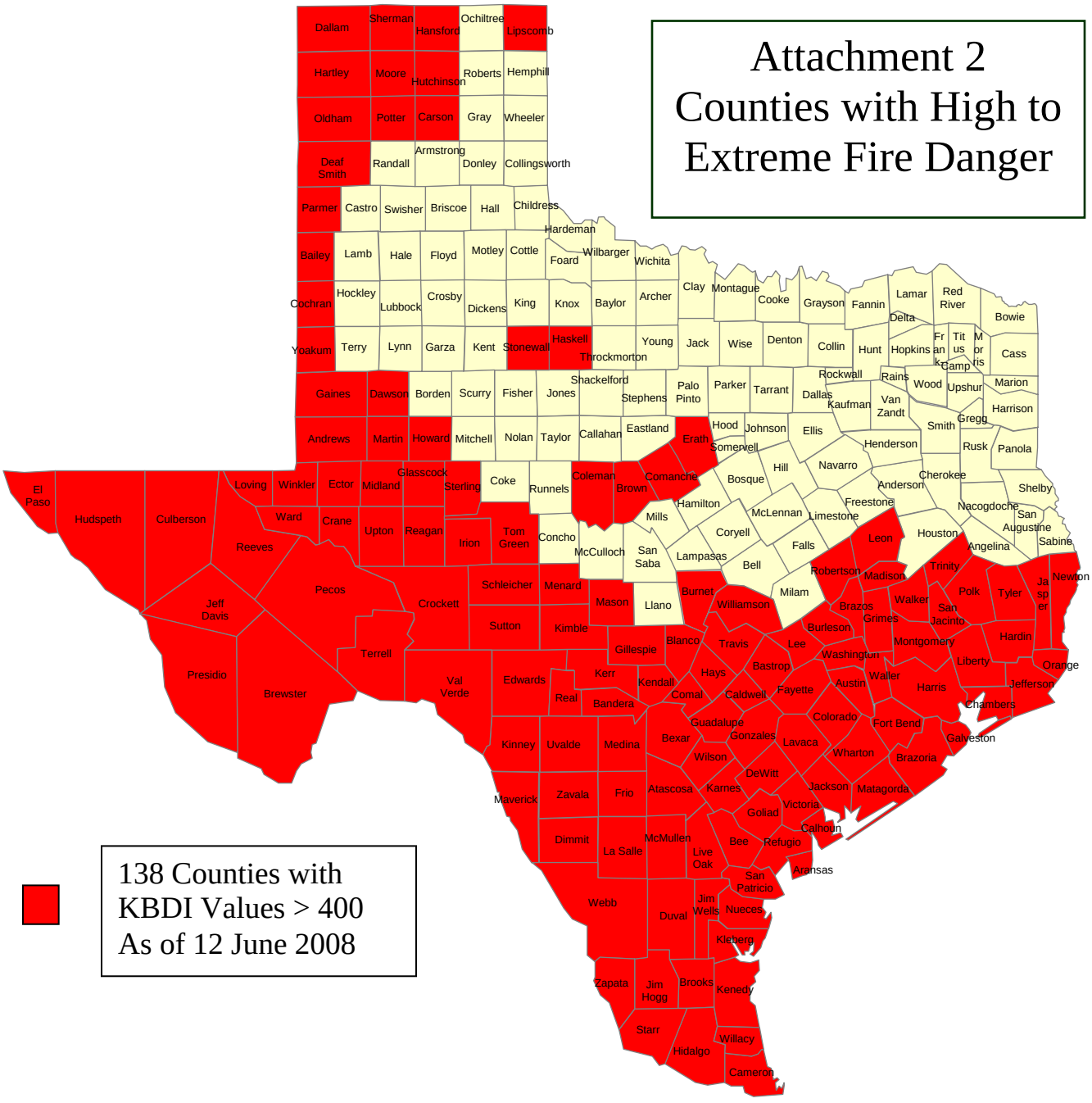
Gus Garcia, Office of Rural Community Affairs, (512) 936-7876, fax (512) 936-6776, web site: http://www.orca.state.tx.us

cc:

Amy Jeter, Committee Clerk, Senate Finance Committee
Sarah Hicks, Committee Director, Senate Finance Committee
Teddy Carter, Committee Clerk, Senate Natural Resources Committee
Amy Peterson, Committee Director, House Appropriations
Hope Wells, Committee Clerk, House Natural Resources Committee
Steven Schar, Committee Clerk, House Agriculture and Livestock Committee
Gina Chung, Committee Clerk, House Criminal Jurisprudence Committee
Zak Covar, Policy Advisor for TCEQ Issues, Governor's Policy Office
Auburn Mitchell, Policy Advisor for Agriculture/TDA, Governor's Policy Office
Rob Johnson, Lt. Governor's Chief of Staff
Carmen Cernosek, Lt. Governor's Natural Resources Policy Analyst
Shane Linkous, Deputy Division Chief, Intergovernmental Relations, Attorney General's Office
Ernest Angelo, Jr., Chairman, Public Safety Commission
Louis E. Sturns, Member, Public Safety Commission
Colonel Thomas Davis, Director, Department of Public Safety
Lieutanant Colonel David McEathron, Assistant Director, Department of Public Safety
Lori Gabbert,, Budget Analyst, Legislative Budget Board (LBB-DPS)
Tom Lambert, Budget Analyst, Legislative Budget Board (LBB-TCEQ)
Ed Perez, Executive Director, Texas Office of State-Federal Relations, Washington, DC
Brandon Steinmann, Director, Texas Office of State-Federal Relations, Austin, Texas


Attachment 1
Climatic Regions
High Plains
Low Rolling Plains
North Central
East
Upper Coast
South Central
Lower Valley
Southern
Edwards Plateau
Trans-Pecos
1
2
3
4
5
6
7
8
9
10

Attachment 2
Counties with High to Extreme Fire Danger



138 Counties with KBDI Values > 400 As of 12 June 2008

DROUGHT PREPAREDNESS COUNCIL

RICK PERRY
Governor

5805 N. Lamar Blvd.
P.O. Box 4087
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Phone: (512) 424-2138
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JACK COLLEY
Council Chairman

July 10, 2008

TO: The Honorable Rick Perry, Governor, State of Texas
The Honorable David Dewhurst, Lieutenant Governor, State of Texas
Ms. Esperanza Andrade, Secretary of State, State of Texas
The Honorable Mario Gallegos, Jr., President Pro Tempore of the Senate, State of Texas
The Honorable Tom Craddick, Speaker of the House, State of Texas,
The Honorable Steve Ogden, Chairman, Senate Finance Committee, State of Texas
The Honorable Kip Averitt, Chairman, Senate Natural Resources Committee, State of Texas
The Honorable John Carona, Chairman, Senate Committee on Transportation & Homeland Security, State of Texas
The Honorable Warren Chisum, Chairman, House Appropriations Committee, State of Texas
The Honorable Mike Hamilton, Vice-Chairman, House Natural Resources Committee, State of Texas
The Honorable Sid Miller, Chairman, House Agriculture & Livestock Committee, State of Texas
The Honorable Aaron Peña, Chairman, House Criminal Jurisprudence Committee, State of Texas
Mr. Brian Newby, Chief of Staff, Office of the Governor
Mr. Steven McCraw, Director, Texas Governor's Office of Homeland Security

FROM: Chief Jack Colley, Chairman, Drought Preparedness Council

SUBJECT: Statewide Drought Situation Report

1. Next Council Meeting

August 14, 2008, 2:00 p.m., Governor's Conference Room of the Governor's Division of Emergency Management, State Operations Center, Texas Department of Public Safety Headquarters, 5805 N. Lamar Blvd., Austin, Texas.

At this time, the Council will continue to meet on a monthly basis.

2. General Conditions

Overall rainfall in Texas was below normal for the month of June, making June the ninth month out of the past ten with below-normal precipitation for the State as a whole. Although the precipitation was spotty, some areas, including western Texas and northeastern Texas, generally received near-normal precipitation for the month. In contrast, less than 50% of normal rainfall fell in central and southern Texas, with zero rainfall observed for the month at some locations near San Antonio and New Braunfels.

As a result of the combination of short-term and long-term dryness, "exceptional drought" conditions were introduced by the U.S. Drought Monitor on July 3, 2008 for an elongated area extending eastward along I-10 from San Antonio. Other extensive areas of central and southern Texas were listed as "extreme drought".

For south-central Texas, the historical record shows no good analogs to the present drought. The most similar years, with dry conditions leading into the hottest part of the summer, were 1917 and 1971; all other years were wetter. Even if rainfall for the rest of the summer is near normal, water demand will remain high, stressing water delivery systems. Fortunately, 2007 was a wet year, so this drought began with ample reservoir levels and hay supplies, which are now dwindling.

The western Edwards Plateau and Pecos River regions were also experiencing extreme dry conditions until the end of June. However, a series of significant convective storms produced two months worth of rain in a few days, at least temporarily easing the drought conditions there. The latest Climate Prediction Center forecasts indicate equal changes of above- and below-normal temperatures and precipitation for the remainder of the summer.

3. Overall Statewide Drought Conditions

The Trans Pecos region is under " Severe Drought" conditions, according to the Palmer Drought Severity Index (PDSI). The South Central, Southern, and Lower Valley regions are experiencing " Moderate Drought" conditions. The remainder of the State varies from " Mild Drought" to " Near Normal" conditions. The PDSI varies, in order of increasing severity, from extremely wet, very wet, moderately wet, slightly wet, incipient wet spell, near normal, incipient dry spell, mild drought, moderate drought, severe drought, and extreme drought.

The Crop Moisture Index (CMI) indicates the Southern region is experiencing " Extremely Dry" conditions. The Edwards Plateau, South Central, and Lower Valley are under " Severely Dry" conditions. In addition, the High Plains, Trans Pecos, and Upper Coast regions are under " Excessively Dry" conditions. The remainder of the state is experiencing " Abnormally Dry" to " Mildly Dry" conditions. The CMI varies, in order of increasing severity, from flooding, standing water, fields too wet, moisture adequate, mildly dry, abnormally dry, excessively dry, severely dry, and extremely dry.

The Six-Month Standardized Precipitation Index (SPI) indicates that at the end of February the Southern and South Central regions are under " Severely Dry" conditions. The Edwards Plateau and Lower Valley are experiencing " Moderately Dry" conditions. The High Plains, Low Rolling Plains, North Central, East, Trans Pecos, and Upper Coast regions are experiencing " Near Normal" conditions. The SPI varies in categories of extremely dry, severely dry, moderately dry, near normal, moderately wet, very wet, and extremely wet conditions.

The Keetch-Byram Drought Index (KBDI) indicates significant areas with high fire danger in the North Central, East, Trans Pecos, Edwards Plateau, South Texas, Upper Coast, Southern, and Lower Valley regions. The KBDI is a drought index specifically used to describe potential or expected fire behavior. The index is classified, in order of increasing severity, as Low, Moderate, High or Extreme fire danger.

Texas Forest Service reports outdoor burning bans in 119 counties.

Fifty water supply systems are under mandatory water use restrictions according to the Texas Commission on Environmental Quality's (TCEQ) list of Public Water Supplies Effected by Drought. Another twenty-six community water supply systems are under voluntary water use restrictions.

The Climate Prediction Center (CPC) predicts normal precipitation for all of Texas from July 2008 to September 2008. During the same period, the CPC predicts above normal temperatures for the western High Plains, Trans Pecos, and western Edwards Plateau in Texas. The remainder of the State has equal chances of below normal, normal, or above normal temperatures.

The CPC predicts equal chances of below normal, normal, or above normal precipitation from August 2008 to October 2008. During the same period, the CPC predicts above normal temperatures for most of the State.

The National Oceanic and Atmospheric Administration (NOAA) Seasonal U.S. Drought Outlook, through September 2008 indicates improvement in drought conditions for most of Texas.

Water level measurements were available for six of the seven key monitoring wells. Water levels declined at all reporting monitoring wells, ranging from 0.98 feet in the Harris Co. Gulf Coast well to 12.80 feet in the Bexar Co. Edwards well. The J-17 well in San Antonio recorded a water level of 73.20 feet below land surface, 12.80 feet below last month's measurement. This water level is 2.2 feet below the Stage 1 critical management level. The Edwards Aquifer Authority declared Stage 1 drought restrictions for the San Antonio segment of the Edwards Aquifer on June 23.

4. Water Utility Status

Due to continued lack of rain, July 2008, began with 81 public water systems on the drought list. This number includes five systems that have been able to remove all restrictions since the first of the year and return to normal operations. Of the remaining 76 public water systems on the list, 50 are asking customers to adhere to mandatory outside watering restrictions and 26 are asking customers to voluntarily reduce usage. The forecast for continued lack of rain will cause additional public water supplies to reach Drought Contingency Plan triggers and result in increased water restrictions.

5. Water Rights – Statewide

New temporary water use permit applications, both short and long term, are being reviewed on a site-specific basis and issued if sufficient surplus water exists at the requested source. Applications for new water use permits and amendments to existing permits remained normal for the month. No curtailment of pumping was required for those permits in the Brazos River Basin containing Hale Clause and Lake Proctor restrictions for the month.

Owners of water rights with these restrictions are reminded to call the " Hale Clause Hotline" on a weekly basis to determine if diversion of water is allowed for the following week. The availability of unappropriated water for new water use permits continues to decrease in all river basins in the State, and the search for long-term, dependable alternate sources of water remains a high priority issue.

6. <u>Water Rights – Lower Rio Grande / Rio Grande Watermaster (RGWM)</u>

Current Overall Conditions: As of June 21, 2008, the U.S. combined ownership at Amistad/Falcon stands at 84.87% of conservation capacity or 2,878,831 acre-feet, up from 82.60% or 2,747,496 acre-feet a year ago at this time. Overall, the system is holding 52.71% or 3,122,044 acre-feet of conservation capacity with Amistad at 68.20% or 2,234,317 acre-feet and Falcon at 33.54% or 887,727 acre-feet. Mexico has 9.61%, or 243,213 acre-feet of water it could store at Amistad/Falcon.

Allocations: As of the printing of the May ownership report, in excess of 531,973 acre-feet to Class A & B rights has been allocated. There is in excess of 296,000 acre-feet for future allocations in 2008.

Storage & Loss Amistad vs. Falcon: The U.S is currently storing approximately 2.13 million acre-feet or 116% at Amistad, occupying 287,802 acre-feet of Mexico's space at Amistad. Approximately 0.75 million acre-feet or 48.4% is being stored at Falcon.

The YTD evaporation and seepage losses at Amistad are 226,992 acre-feet. During the same period, Falcon lost 186,367 acre-feet. The ratio of loss between Amistad and Falcon continues to consistently be 1:2 with Amistad twice as efficient in overall storage and loss as compared to the total amount in storage.

Releases to Meet Demands: In 2008, Mexico released 557,020 acre-feet from Amistad and 844,088 acre-feet from Falcon for Mexico needs. The U.S. released 421,328 acre-feet from Amistad and 816,673 acre-feet from Falcon for U.S. needs. Combined with gains between Amistad and Falcon, U.S. inflows to Falcon totaled 464,504 acre-feet. So far, 57% of U.S. overall needs were met in the middle and lower Rio Grande directly from middle Rio Grande inflows and Amistad this year. The movement of water from Amistad is primarily driven by U.S. excess amount in storage and the need to keep it below conservation capacity, particularly when occupying Mexico's space in Amistad.

Upper Rio Grande (New Mexico): Elephant Butte in New Mexico is currently storing 628,299 or 31.05% acre-feet, and Caballo Dam in New Mexico, downstream of Elephant Butte, is storing 57,560 or 25.36% acre-feet. This water storage is used in part to meet water needs in the El Paso area.

Outlook: All active accounts began 2008 with 100% usable balances. Since entering peak irrigation season, a dry weather pattern persists in the region which increases irrigation demand. According to the Palmer Drought Severity Index report, the following border counties are considered to be suffering a moderate drought: Hidalgo, Cameron, Willacy, Val Verde and McKinney. Furthermore, Starr, Zapata, Webb, Maverick, Brewster, Presidio, Hudspeth and El Paso Counties are suffering from a severe drought. This drought is forecasted to continue through the end of summer. It is feared that irrigation demand will continue to increase through July and possibly August, perhaps driving the U.S. total to approximately 70% by the end of 2008. Of further concern is Mexico's low ownership in the reservoirs, since it could result in increased evaporation and seepage loss charges for the U.S. To help alleviate losses in Falcon, the U.S. will continue to monitor ownership and

elevation levels in both Falcon and Amistad so U.S. transfers of water from Amistad to Falcon can be most efficient.

7. South Texas Watermaster – Guadalupe / Lavaca / San Antonio / Nueces Region

Area Counties: Bandera, Blanco, Comal, Kendall and Kerr Counties

The South Texas area remained in extreme drought conditions for the month of June. The end of the month brought some very limited relief with brief and scattered showers. The flows of most area rivers continue to slowly drop and soil moisture conditions in the area are still in very bad shape.

Many surface water rights reached their restriction limits and cannot divert any surface water until river flows improve. Many temporary water rights were suspended and other areas are being determined on a case by case basis.

The Concho area received some needed rains at month' s end and stream flow conditions were better than South Texas. The flow conditions in the Concho basin should remain steady for the next several weeks.

Area Counties: Bee, Goliad, Victoria, Calhoun, Jackson, Refugio, Aransas, San Patricio, Nueces, Kleberg, Jim Wells, Duval, Live Oak, Kenedy, Willacy, Brooks, and Jim Hogg.

Rainfall and Area Conditions: This area received little rainfall during the month of June. The Coastal Bend area received 1-3 inches of rain throughout the month that provided some localized runoff to increase stream flows for a short period; the rains occurred during the third week of the month. Currently, the U.S. Drought Monitor indicates most of this area is currently experiencing " extreme drought"conditions. The Corpus Christi Reservoir System received some inflows from run-off of localized rain showers experienced in the area, but the level of the reservoir system continued to drop slightly. Most of the surface water diversions in the area continue to be municipal and industrial uses; little irrigational use has been noted.

Stream flow Conditions: Stream flows of the area streams continue to decrease, and are flowing below what is expected for this time of the year. According to the USGS Stream Flow Gage at the Guadalupe River near Victoria, stream flows were approximately 650 CFS at the beginning of the month. At this site, stream flows were approximately 525 CFS at the end of the month compared to 600 CFS at the end of last month. The historical mean at this site, based on 73 years of record, is 2,420 CFS. The gage at the San Antonio River near Goliad indicated that the stream flows were approximately 275 CFS at the beginning of the month. At this site, stream flows were approximately 150 CFS at the end of the month compared to 300 CFS at the end of last month. The historical mean at this site, based on 73 years of record, is 1,230 CFS. The gage at the San Antonio River at McFaddin, which is below Goliad, indicated that the stream flows were approximately 475 CFS at the beginning of the month. At this site, stream flows were approximately 165 CFS at the end of the month compared to 400 CFS at the end of last month. The historical mean at this site, based on 2 years of record, is 638 CFS. The gage at the Guadalupe River near Tivoli, below the confluence of the San Antonio River and Guadalupe River, indicated that the stream flows were approximately 1,000 CFS at the beginning of the month. At this site, stream flows were approximately 750 CFS at the end of the month compared to 1,000 CFS at the end of last month. The historical mean at this site, based on two years of record, is 1,450 CFS. The gage at the Mission River near Refugio indicated that stream flows were approximately 9 CFS at the beginning of the month. At this site, stream flows were approximately 7.5 CFS at

the end of the month compared to 10 CFS at the end of last month. The historical mean at this site, based on 68 years of record, is 76 CFS. The gage of the Nueces River at Calallen Dam indicated 0 CFS stream flows over the dam near Corpus Christi at the beginning of the month. However, stream flows were approximately 33 CFS at the end of the month compared to 1.5 CFS at the end of last month. The historical mean at this site, based on 8 years of record, is 796 CFS. The gage at the Aransas River near Skidmore indicated that the stream flows were approximately 5.0 CFS at the beginning of the month. At this site, stream flows were approximately 4.5 CFS at the end of the month compared to 5.1 CFS at the end of last month. The historical mean at this site, based on 44 years of record, is 12 CFS.

Corpus Christi Reservoir System: The Corpus Christi Reservoir System received some inflows for the month of June, but the level of the reservoir system has continued to decrease. The Corpus Christi Reservoir System is currently at 88.0% of capacity (837,899 acre-feet) compared to 94.0% of capacity or 895,541 acre-feet during this same time last year. The level of Choke Canyon is currently at 90.5% of capacity or 629,414 acre-feet compared to 91.8% of capacity or 638,281 acre-feet during this same time last year. The level of Lake Corpus Christi is currently at 81.0% of capacity or 208,485 acre-feet compared to 94.0% of capacity or 257,260 acre-feet last year. The City of Corpus Christi continues to divert much of their monthly water supply needs from Lake Texana.

Drought Restrictions: Currently, some drought restrictions or stream flow restrictions of water rights have been activated in this area.

Area Counties: Atascosa, Karnes, Gonzales, Wilson, McMullen, Dewitt, Guadalupe, Lavaca, Fayette, Colorado, Wharton, and Jackson.

Rainfall and Area Conditions: This area received 0.00 to 1.0 inches of rainfall for the month of June. Soil moisture conditions are poor in the area. The corn crop is being harvested at this time and milo and hay crops are beginning to wilt and show signs of damage. Irrigation activity increased due to the dry conditions. Lake Texana is at 82% of capacity, which is 40.65 ft. above msl. This is a 6% drop in the capacity from last month.

According to the U.S. Drought Monitoring System, this area is experiencing " extreme drought" conditions, at this time.

Stream flow Conditions: Currently, the flow of the San Antonio River near Falls City is 145 CFS. The historical mean flow for June is 256 CFS, ending for last month at 117 CFS. The Cibolo Creek near Falls City is flowing at 23 CFS. The ending for last month was 30 CFS, with an historical mean flow for June at 28 CFS. The Guadalupe River near Gonzales is flowing at 697 CFS. The ending reading for last month was 754 CFS, with an historical mean flow for June at 1130 CFS. The Lavaca River at Edna is flowing at 14 CFS; the ending reading for last month was 21 CFS, with the historical mean flow for June at 58 CFS. The Navidad River near Halletsville is currently flowing at 2 CFS. The ending reading for last month was 1.6 CFS, and an historical mean flow for June is 19 CFS. The Atascosa River near Whitsett is flowing at .42 CFS. The ending reading for last month was 1.1 CFS, with an historical mean flow for June being 1.6 CFS. The Frio River near Tilden is flowing at 2.2 CFS. The ending reading for last month was 12 CFS; with an historical mean flow for June of 29 CFS. The Nueces River near Tilden is currently flowing at .07 CFS. The ending reading for last month was 18 CFS, with an historical mean for June of 19 CFS.

Drought Restrictions: Currently, all temporary permit diversions have been suspended in the San Antonio River Basin due to meeting junior permit flow restrictions.

Area Counties: Edwards, Real, Kinney, Uvalde, Zavala, Dimmit, La Salle and Webb.

Rainfall and Area Conditions: This area received various amounts of precipitation, ranging from 0.5 to 1.0 inches for the month of June. With the current amount of rainfall for this month, the Texas Crop Moisture Index has this area of the hill country classified in the " excessively dry" range. Most surface water diversions in this area are for municipal and industrial uses with a few surface water permit holders irrigating hay and sod fields. The U.S. Drought Monitor indicates that this area is currently in " severe" to " extreme" conditions, at this time.

Stream flow Conditions: None of the stream flows of major streams and their tributaries are flowing at normal capacity. Most major streams are still showing a steady decline in the month of June. Smaller secondary tributaries lost surface flow. The Guadalupe River near Kerrville has a current stream flow of approximately 39 CFS, with an historical monthly mean of 150 CFS. This equates to 111 CFS below the monthly mean for the month of June flowing past Kerrville. The Guadalupe River near Comfort has a current stream flow of approximately 42 CFS, with an historical monthly mean of 326 CFS. This equates to 284 CFS below the monthly mean for June flowing past Comfort. The Medina River near Bandera has a current stream flow of 8.0 CFS, with an historical monthly mean of 205 CFS. This equates to 197 CFS below the monthly mean of June flowing past Bandera.

Drought Restrictions: On June 12, 2008, the City of Kerrville' s surface water diversion from the Guadalupe River was cut to 500,000 GPD. All temporary surface water permits were suspended in the Guadalupe River Basin above Canyon Lake as well as all temporary surface water permits in the San Antonio River Basin above Lake Medina. Because of the low stream flows, some state permit holders have already reached their flow restrictions and pumping was curtailed. Therefore, the river flows are heavily monitored on a daily basis.

Area Counties: Bastrop, Bexar, Blanco, Caldwell, Comal, Fayette, Frio, Guadalupe, Hays, and Medina.

Rainfall and Area Conditions: The Southwest Texas area received no relief from drought conditions throughout the month of June. No rain was reported for the beginning of the month. However, rain showers were reported throughout the middle of the month for the northern and southern counties. The month ended with no relief for this entire area. The range of rainfall in the area was 0.25-1.00 inches for the month. Most of the diversions of surface water are for irrigational use and small amounts for municipal and industrial uses. Crops being irrigated in the area are: milo, cotton, corn, hay grazers, and pecans. The U.S. Drought Report indicates the area is experiencing " severe" to " extreme" drought conditions, at this time. Currently, drought restrictions are applied to the Southwest area.

Stream Flow Conditions: Stream flows for the major tributaries in the area continue to flow below the mean for this time of year. The Nueces River at Laguna has stream flows of 37 CFS, compared to 60 CFS, for last month, with an historical mean of 203 CFS. The Nueces River near Brackettville has stream flows of 0.00 CFS, compared to .06 CFS for last month. The historical mean is 29 CFS. The Nueces River below Uvalde has stream flows of 19 CFS, compared to 36 CFS for last month, with an historical mean of 242 CFS. The Frio River at Concan has stream flows of 22 CFS, compared to 38 CFS for last month. The historical mean is 147 CFS. The Sabinal River at Sabinal has stream flows of .80 CFS, compared to .74 CFS for last month. The historical mean is 126 CFS. The Leona River near Uvalde has stream flows of 22 CFS, compared to 23 CFS for last month. The historical mean is 24 CFS.

Drought Restrictions: Currently, all temporary permits are not allowed to divert. Permits with stream flow restrictions are monitored closely.

Area Counties: Sterling, Tom Green, Irion, Concho, Coke, Glasscock, Runnels, Reagan, and Schleicher.

Rainfall and Area Conditions: Below average monthly rainfall fell across the San Antonio Regional Area for the month of June. Month to date rainfall measured at the San Antonio International Airport was 0.11 inches. The average for June is 4.30 inches. Total annual rainfall to date is 3.89 inches; normal year to date is 16.63 inches, a departure from normal of 12.74 inches. The U.S. Drought Monitor, dated June 24, 2008, indicates the San Antonio Regional Area is experiencing " extreme drought"impacting crops, pastures and grasslands, stream flows, and reservoir capacities. Ground moisture has rapidly diminished with above average temperatures and the lack of cloud cover. Good harvest of hay grazers, blackberries, sweet corn, yellow and white squash, zucchini, cucumbers, tomatoes, white onions, watermelons, cantaloupes, and garlic were reported with supplemental irrigation. Most " dry land" crops are either lost to the ensuing drought or dramatically stunted due to the lack of rainfall.

Stream Flow Conditions: The Guadalupe and Blanco Rivers are now showing the impact of the current drought. Small creeks are dried up and most major streams are beginning to quickly pool or dry up entirely. Municipal use increased because of residential lawn planting, fertilizing, and supplemental watering. Industrial use remains constant.

All major tributaries in the San Antonio Regional Area are now beginning to drop below their historical monthly averages for May. The Guadalupe River at Spring Branch is currently 42 CFS; the historical mean flow for June is 563 CFS. The San Marcos River at Luling is flowing at 101 CFS; the historical mean flow for June is 600 CFS. Lastly, the Blanco River at Wimberley is at 18 CFS; the historical mean flow for June is 227 CFS.

Currently, Canyon Lake Reservoir is at 905.60 feet elevation and is impounding 351,514 acre-feet, and is 92.7% of capacity. As of June 28, 2008, the Edwards Aquifer level at the J-17 well in Bexar County is 657.5 feet. The historical average for June is 663.7 feet, and this is 6.2 feet below the monthly historical average. The San Marcos Springs are flowing at 121.0 CFS; the historical monthly average for June is 193.0 CFS. This is 72.0 CFS below the monthly historical average. Lastly, the Comal Springs are flowing at 269.0 CFS. The monthly historical flow for June is 290.0 CFS. This is 21.0 CFS below the historical monthly average.

Drought Restrictions: Temporary Permits and permits with stream flow restrictions are monitored closely.

Area Counties: Sterling, Tom Green, Irion, Concho, Coke, Glasscock, Runnels, Reagan, Schleicher

Rainfall for the Concho River Valley came on the last days of the month to meet forecasted expectations for June. According to information provided by the USDA, the State Drought Monitor Index has the Concho Valley at " severe" drought conditions in the west and " moderate" conditions in the east. The index was last updated on June 24, and does not reflect the recent rain event.

Rainfall and Area Conditions: Rainfall in San Angelo for the month was 2.20 inches. Areas surrounding San Angelo received greater rainfall amounts. Average rainfall amount for the month of June is 2.88 inches. The total amount of rainfall for the year is 10.97 inches. In 2007, to date, there was 19.21 inches of rain. Average annual rainfall, based on a 100-year record, is 19.0 inches. Area reservoirs are showing decreases in the amount of storage from the previous month' s amounts. Irrigational demand by appropriated surface water rights in the Concho Valley is at normal volume. The Texas Crop Moisture Index indicates soil moisture content is " extremely dry" . However, the index was last updated on June 21, 2008, and does not reflect the recent rain event. Corn, cotton, and sorghum have been planted and are established.

Stream flow Conditions: Mean daily discharge statistics based on 6 years of record for USGS Gaging Station 08130700, Spring Creek above Twin Buttes Reservoir near San Angelo, are 5.8 CFS. The most recent value is 17 CFS. Mean daily discharge statistics at USGS Gaging Station 08136000, Concho River at San Angelo/Bell St., based on 77 years of record is 7.0 CFS. Currently, it is at 55 CFS. Mean daily discharge statistics at USGS Gaging Station 08128000, South Concho at Christoval, based on 73 years of record is 17 CFS. The most recent daily value is 34 CFS. Discharge levels reflect recent rainfall events. Area lakes indicate Lake Nasworthy is 85% of capacity or 8,691 acre-feet; O. C. Fisher is 7% of capacity or 8,088 acre-feet; and Twin Buttes Lake is 40% of capacity or 75,140 acre-feet.

Drought Restrictions: No additional restrictions are in place for Concho Valley.

8. Upper Colorado (Concho River watershed not included)

The upper Colorado River area received slightly less than normal precipitation during the month of June 2008. The National Weather Service in San Angelo reported monthly precipitation of 2.19 inches, 0.33 inches below normal. The annual total to date is 9.15 inches, 1.05 inches below normal. Diminished flows were the norm for most tributaries in the upper Colorado watershed during most of June. However, recent rains increased flows to near normal in some of the major tributaries of the upper Colorado River watershed. The pool levels of EV Spence and OH Ivie Reservoir decreased slightly during the month and were 13% and 64%, respectively.

9. Texas Panhandle and Southern High Plains

Amarillo Area: Lake Meredith is at 45.80 feet or 68,446 acre-feet, down 1.43 feet since the beginning of the month. Lake Greenbelt is at 57.22 feet, down 0.42 feet from the beginning of the month. Lake MacKenzie is at 73.81 feet, down 0.69 feet from the beginning of the month.

The National Weather Service (NWS) in Amarillo reported a total of 3.91 inches of rain for June, which is 1.04 inches above the monthly average. The NWS reported 7.50 inches for the year, which is 1.51 inches below average.

Lubbock Area: The Lubbock area experienced average precipitation during June 2008. Lubbock received 2.91 inches for the month. The average for June is 2.98 inches. Similar amounts were recorded throughout the Region 2 area. Total precipitation for 2008 now stands at 10.19 inches, which is 1.64 inches above normal for this point in the year. The long term drought situation has not changed, and all of the communities previously noted on mandatory water restrictions remain on those restrictions. No new communities were added to the water restrictions list during the month of June.

The following cities in the South Plains area remain on mandatory drought restrictions status: Lubbock and Amherst.

The following cities in the South Plains area remain on voluntary drought restrictions status: Ralls, Crosbyton, Spur, Post, White River WSC, and Valley WSC.

As Lake Meredith continues to decline, Lubbock is making preparations to construct a pipeline from Lake Alan Henry to Lubbock to use as an additional source of water. Lubbock owns the water rights at this lake.

White River Lake: The lake is down 28.6 feet from normal, which is 46 feet at the dam. This is slightly lower than the level that existed at the end of May 2008. The White River Water Supply District has only 4 feet of water left that can be pulled from the lake for the Public Water Supply. White River WSD has groundwater wells on standby to supply water to customers in the event the lake level drops below usable levels.

Lake Alan Henry: The lake is almost full; two feet below the speedway. This lake is not used for public drinking water supplies at present, but will be utilized for this purpose in the near future.

10. Agricultural Concerns

Wheat harvest is near complete, with 79% of the crop ranging from very poor to fair and the overall condition rated at 47% of normal. The current estimate of the wheat crop indicates that we will harvest 3.4 million acres with a yield of 102 million bushels. Many dryland farmers in Southwest Texas and the High Plains abandoned fields due to drought. Blacklands, Central and Gulf Coast farmers generally had a good to excellent crop. Grazing opportunities on wheat pasture were very short this year due to dry fall weather.

Recent rains brought good moisture to much of the High Plains, southern Rolling Plains, the Edwards Plateau, the lower Gulf Coast, and the Rio Grande Valley. This rain will be very helpful to the High Plains cotton and feed grain crops, but will have little impact on the crops in South Texas which are nearing or at maturity. An estimated 1.0-1.1 million acres of dry land cotton in the High Plains were lost due to heat, dry weather and winds after planting. Many High Plains farmers are planting sorghum on moisture from recent rains. These rains will bring relief to dry pastures and rangelands improving grazing conditions. Statewide, pasture conditions have been mostly poor to fair due to the drought.

Much of the sorghum and corn crop in the Rio Grande is harvested. Harvest is approaching Central Texas at this time. Most of the dry land corn crop in south Texas, the Gulf Coast and Central Texas was severely impacted by drought, with many fields abandoned or harvested for forage. Rains slowed harvest of grain crops on the Gulf Coast. Corn and sorghum conditions are mostly fair to good. Conditions statewide should improve significantly in those regions of west Texas and the High Plains receiving the beneficial rains. Central and Southwest Texas remain critically dry. The cotton crop is progressing rapidly and will see early maturity and low yields due to drought.

Northeast Texas remains the bright spot as far as crop and forage conditions are concerned. Those counties along the Red River with significant acres of planted crops are in good to excellent condition. East Texas received some scattered showers of up to two inches, improving pasture and crop conditions.

Far West Texas had scattered showers, ranging from a trace to six inches. Farmers are planting sorghum in areas that received beneficial rains.

11. Drought Impacts to Wildlife

No information available at this time.

12. Wildfire Concerns

The Keetch-Byram Drought Index (KBDI) is used to help determine potential for fire risk. It is a numerical index where each number is an estimate of the amount of precipitation, in 100ths of an inch, needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil, and 800 a completely dry soil. The KBDI' s relationship to fire danger is that as the index increases, the vegetation is subjected to increased moisture stress. KBDI levels and its relationship to expected fire potential are reflected in the following:

KBDI = 0 – 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. This is typical of spring dormant season following winter precipitation.

KBDI = 201 – 400: Typical of late spring; early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.

KBDI = 401 – 600: Typical of late summer, early fall. Lower litter and duff layers contribute to fire intensity and will burn actively.

KBDI = 601 – 800: Often associated with more severe drought and increased wildfire occurrence. Intense, deep-burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

There are currently 177 counties, illustrated in Attachment 2, with KBDI values in excess of 400, indicating areas within these counties are beginning to experience dry conditions, which could result in an increased fire risk potential.

The Council, which is chaired by Jack Colley, Chief, Governor's Division of Emergency Management, is composed of state agencies concerned with the effects of drought and fire on the citizens of the State of Texas. The attached information was compiled and provided by representatives listed below. Points of contact, telephone numbers, and web site addresses are also provided.

Jack Colley, Chief, Governor's Division of Emergency Management, (512) 424-2443, fax (512) 424-2444, web site: http://www.txdps.state.tx.us/dem

John Sutton, Texas Water Development Board, (512) 463-7988, fax (512) 463-9893, web site: http://www.twdb.state.tx.us

Chris Loft, Texas Commission on Environmental Quality, (512) 239-4715, fax (512) 239-4770, web site: http://www.tceq.state.tx.us

Richard Egg, Texas State Soil & Water Conservation Board, (254) 773-2250, fax (254) 773-3311, web site: http://www.tsswcb.state.tx.us

Lance Williams, Texas Department of Agriculture, (512) 463-3285, fax (800) 835-2981, web site: http://agr.state.tx.us

Dr. Travis Miller, Texas AgriLife Extension Service, (979) 845-4808, fax (979) 845-0456, web site: http://texasextension .tamu.edu

Cindy Loeffler, Texas Parks & Wildlife Department, (512) 912-7015, fax (512) 707-1358, web site: http://www.tpwd.state.tx.us

Edward T. Morris, Department of Housing and Community Affairs, (512) 475-3329, Fax (512) 475-7498, web site: http://www.tdhca.state.tx.us

Michael Dunivan, Texas Forest Service, (830) 997-5426, web site: http://txforestservice.tamu.edu

Scott Alley, Texas Department of Transportation, (512) 416-3187, fax (512) 416-2941, web site: http://www.dot.state.tx.us/

Paul Tabor, Texas Department of State Health Services, (512) 458-7126, fax (512) 458- 7472, web site: http://www.dshs.state.tx.us/

Thomas Walker, Office of the Governor, Economic Development & Tourism, (512) 936-0169, fax (512) 936-0141, web site: http://www.governor.state.tx.us/divisions/ecodev

Harvey Everheart, Texas Alliance of Groundwater Districts, (806) 872-9205, fax (806) 872-2838, web site: http://www.texasgroundwater.org/

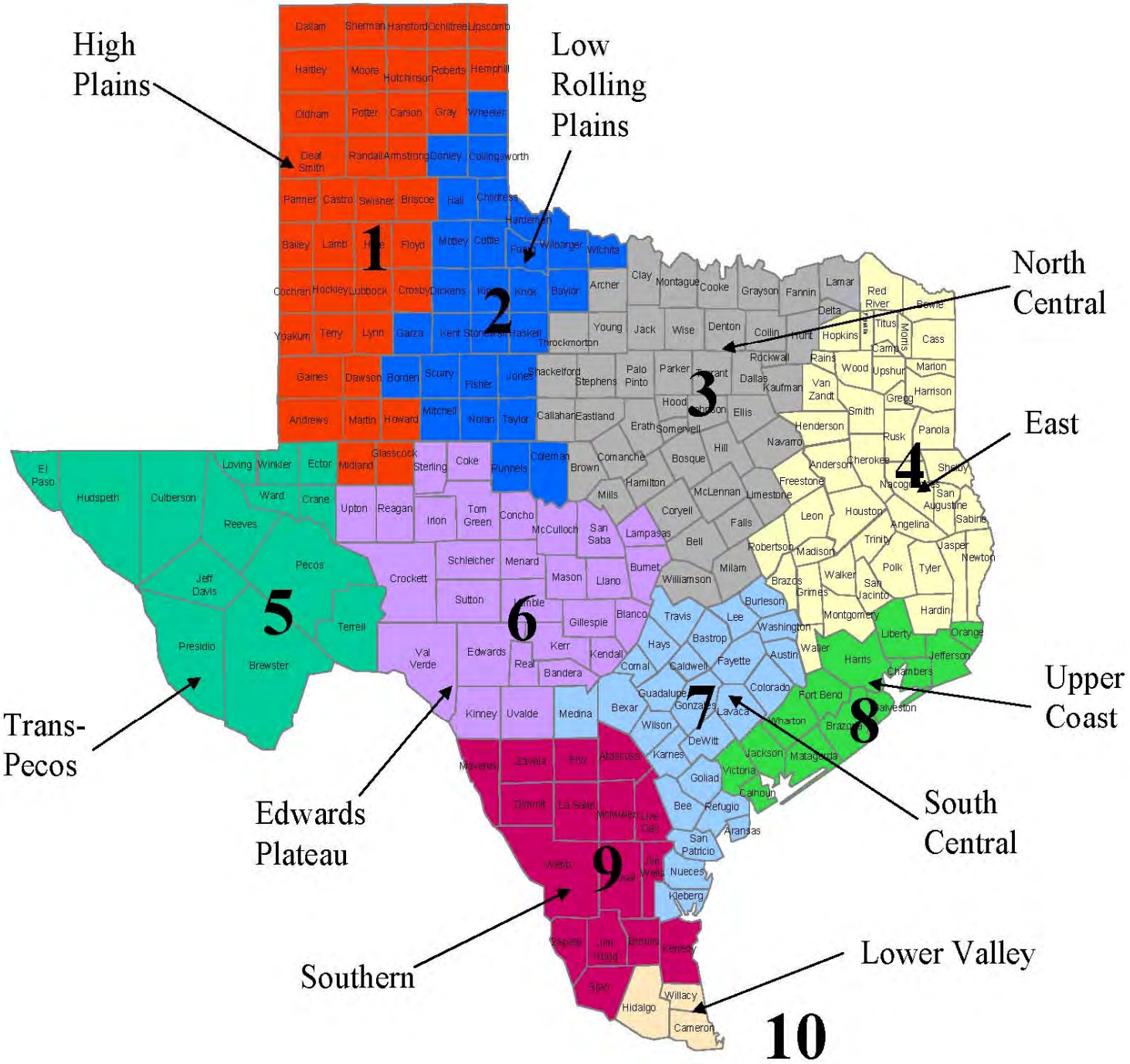
Dr. John W. Nielsen-Gammon, Office of the State Climatologist, (979) 862-2248, fax (979) 862-4466, web site: http://www.met.tamu.edu/osc/

Gus Garcia, Office of Rural Community Affairs, (512) 936-7876, fax (512) 936-6776, web site: http://www.orca.state.tx.us

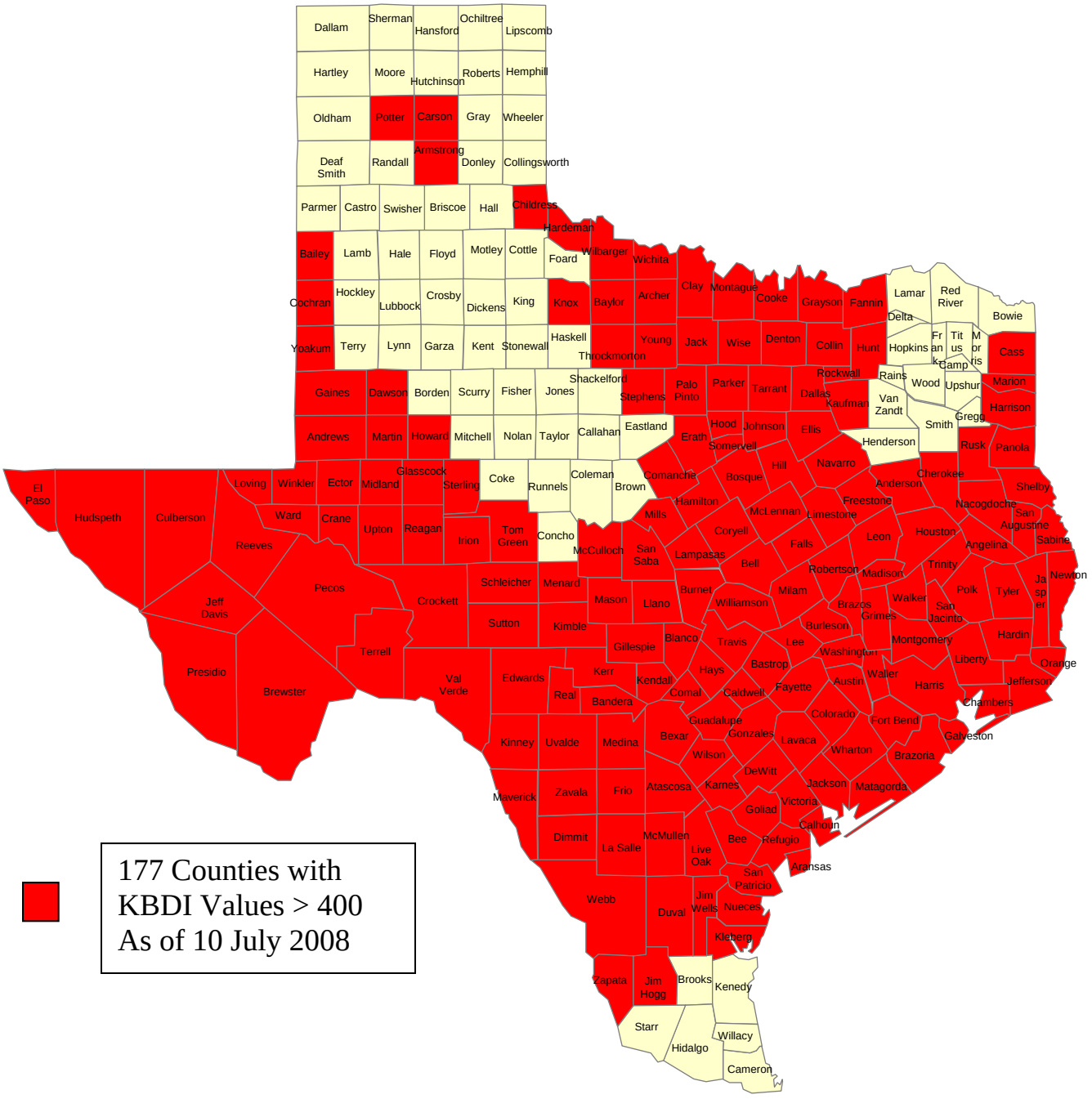
cc:

Amy Jeter, Committee Clerk, Senate Finance Committee
Sarah Hicks, Committee Director, Senate Finance Committee
Teddy Carter, Committee Clerk, Senate Natural Resources Committee
Amy Peterson, Committee Director, House Appropriations
Hope Wells, Committee Clerk, House Natural Resources Committee
Steven Schar, Committee Clerk, House Agriculture and Livestock Committee
Gina Chung, Committee Clerk, House Criminal Jurisprudence Committee
Zak Covar, Policy Advisor for TCEQ Issues, Governor's Policy Office
Auburn Mitchell, Policy Advisor for Agriculture/TDA, Governor's Policy Office
Rob Johnson, Lt. Governor's Chief of Staff
Carmen Cernosek, Lt. Governor's Natural Resources Policy Analyst
Shane Linkous, Deputy Division Chief, Intergovernmental Relations, Attorney General's Office
Ernest Angelo, Jr., Chairman, Public Safety Commission
Louis E. Sturns, Member, Public Safety Commission
Colonel Thomas Davis, Director, Department of Public Safety
Lieutanant Colonel David McEathron, Assistant Director, Department of Public Safety
Lori Gabbert,, Budget Analyst, Legislative Budget Board (LBB-DPS)
Tom Lambert, Budget Analyst, Legislative Budget Board (LBB-TCEQ)
Ed Perez, Executive Director, Texas Office of State-Federal Relations, Washington, DC
Brandon Steinmann, Director, Texas Office of State-Federal Relations, Austin, Texas

Attachment 1
Climatic Regions



Attachment 2
Counties with High to Extreme Fire Danger



177 Counties with
KBDI Values > 400
As of 10 July 2008

DROUGHT PREPAREDNESS COUNCIL

RICK PERRY
Governor

5805 N. Lamar Blvd.
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JACK COLLEY
Council Chairman

October 9, 2008

TO: The Honorable Rick Perry, Governor, State of Texas
The Honorable David Dewhurst, Lieutenant Governor, State of Texas
Ms. Esperanza Andrade, Secretary of State, State of Texas
The Honorable Mario Gallegos, Jr., President Pro Tempore of the Senate, State of Texas
The Honorable Tom Craddick, Speaker of the House, State of Texas
The Honorable Steve Ogden, Chairman, Senate Finance Committee, State of Texas
The Honorable Kip Averitt, Chairman, Senate Natural Resources Committee, State of Texas
The Honorable John Carona, Chairman, Senate Committee on Transportation & Homeland Security, State of Texas
The Honorable Warren Chisum, Chairman, House Appropriations Committee, State of Texas
The Honorable Mike Hamilton, Vice-Chairman, House Natural Resources Committee, State of Texas
The Honorable Sid Miller, Chairman, House Agriculture & Livestock Committee, State of Texas
The Honorable Aaron Peña, Chairman, House Criminal Jurisprudence Committee, State of Texas
Mr. Jay Kimbrough, Chief of Staff, Office of the Governor
Mr. Steven McCraw, Director, Texas Governor's Office of Homeland Security

FROM: Chief Jack Colley, Chairman, Drought Preparedness Council

SUBJECT: Statewide Drought Situation Report

1. Next Council Meeting

November 13, 2008, 2:00 p.m., Governor's Conference Room of the Governor's Division of Emergency Management, State Operations Center, Texas Department of Public Safety Headquarters, 5805 N. Lamar Blvd., Austin, Texas.

At this time, the Council will continue to meet on a monthly basis.

2. General Conditions

The September weather headlines were dominated by Hurricane Ike, which brought heavy precipitation to the Upper Texas coast. Though many reporting stations sustained damage that rendered precipitation measurements useless, radar estimates indicated much of the Houston/Galveston area received 10-15 inches of precipitation from Ike. Much of East Texas north of Houston received 3-6 inches of rain from Hurricane Ike, but monthly rainfall totals were near normal in many locations since precipitation was sparse outside of Hurricane Ike.

Most of Texas outside areas directly affected by precipitation from Ike had below normal precipitation during September. Exceptions were areas of West Central Texas from Lubbock to Midland/Odessa and along the Rio Grande in extreme South Texas, where Brownsville received 9.57 inches of rain. Beneficial summer rains in far West Texas eliminated the severe drought that existed in the El Paso and Big Bend regions at the beginning of June.

South Central Texas remained dry, particularly in the I-35 corridor near Austin and San Antonio, highlighted by Austin/Mabry receiving only 0.02 inches of precipitation during September. This was troublesome because this particular area was the location of an extreme drought going into September. As of October 5th, Austin/Mabry and San Antonio have year-to-date rainfall deficits of 12.25 and 11.88 inches, respectively. At both locations, precipitation totals represent only about 50% of normal precipitation through September. Stream flow at Barton Springs in Austin has slowed to 18 CFS, and according to the USGS, the all-time minimum flow on record for Barton Springs is 17 CFS.

Above normal rainfall in West Central Texas helped eliminate extreme drought conditions near Midland/Odessa. This brought year-to-date precipitation to about 75-90% of normal for the year. Outside of Midland/Odessa, South Central Texas is the only area of the State experiencing drought conditions. This area stretched from the Brazos River east of the Austin/San Antonio area to the Rio Grande River. This included Del Rio which received only 0.46 inches of rain in September. Areas of extreme drought are confined to the Austin metropolitan area and surrounding counties.

The current long-range forecast from the Climate Prediction Center (CPC) calls for an equal chance of above normal, near normal, and below normal precipitation, with the exception of far West Texas. This scenario could help ease the severe drought in South Central Texas if precipitation is either near or above normal, but there is some concern for Far West Texas. Any stretch of below normal precipitation might bring back drought conditions to West Texas.

3. Overall Statewide Drought Conditions

The South Central region is under " Moderate Drought" conditions, according to the Palmer Drought Severity Index (PDSI). The North Central, Edwards Plateau, and Upper Coast regions are experiencing " Near Normal" conditions. The remainder of the State is under " Slightly Wet" to " Extremely Wet" conditions. The PDSI varies from extremely wet, very wet, moderately wet, slightly wet, incipient wet spell, near normal, incipient dry spell, mild drought, moderate drought, severe drought, to extreme drought in order of increasing severity.

The Crop Moisture Index (CMI) indicates the South Central region is under " Excessively Dry" conditions. The North Central, Edwards Plateau, and Upper Coast regions are experiencing " Mildly Dry" conditions. The remainder of the State is under " Moisture Adequate" or " Flooding" conditions. The CMI varies from flooding, standing water, fields too

wet, moisture adequate, mildly dry, abnormally dry, excessively dry, severely dry, and extremely dry in order of increasing severity.

The Six-Month Standardized Precipitation Index (SPI) indicates that, at the end of September, the South Central region is under " Moderately Dry" conditions while the remainder of the State experienced " Near Normal" or " Extremely Wet" conditions. The SPI varies from extremely dry, severely dry, moderately dry, near normal, moderately wet, very wet, to extremely wet conditions in order of increasing severity.

The Keetch-Byram Drought Index (KBDI) indicates significant areas with high fire danger in the North Central, Edwards Plateau, South Central, and Southern regions. The KBDI is a drought index specifically used to describe potential or expected fire behavior. The index is classified as Low, Moderate, High or Extreme fire danger, in order of increasing severity.

Texas Forest Service reports outdoor burning bans in 52 counties.

The CPC predicts above normal precipitation along the Trans Pecos region from September 2008 to November 2008. During the same period, the CPC predicts above normal temperatures for the entire State. The CPC predicts above normal precipitation along the Trans Pecos region from October 2008 to December 2008. During the same period, the CPC predicts above normal temperatures for the entire State.

The National Oceanic and Atmospheric Administration (NOAA) Seasonal U.S. Drought Outlook, through December 2008, indicates persisting areas of drought in the Edwards Plateau, South Central, and Southern regions.

4. Water Utility Status

October 2008 began with 120 public water supplies on the drought list. That number included nine systems that relaxed implemented watering restrictions and returned to normal operations and water usage. The remaining 111 public water systems on the list included 78 systems that placed customers on a mandatory watering schedule and 33 systems that requested voluntary conservation. Based on trigger criteria in the Drought Contingency Plan, it is expected that additional public water systems will relax restrictions during the upcoming winter months.

Eighty water supply systems are under mandatory water use restrictions according to the Texas Commission on Environmental Quality's (TCEQ) list of Public Water Supplies Effected by Drought. Another thirty-three community water supply systems are under voluntary water use restrictions.

5. Water Rights – Statewide

New temporary water use permit applications are reviewed on a site-specific basis and are issued if there is sufficient surplus water at the requested source. Applications for new water use permits and amendments to existing permits remained normal for the month. Beginning September 1, more severe restrictions for water rights of the Hale Clause along the Brazos River and Brazos River Basin were lifted. Until April 1, 2009, owners of these water rights may observe less severe stream flow restrictions of their permits. The availability of unappropriated water for new water use permits continues to decrease in all river basins in the State and the search for long-term, dependable alternate sources of water remains a high priority issue.

6. Water Rights – Lower Rio Grande / Rio Grande Watermaster (RGWM)

Current Overall Conditions: As of September 27, 2008, the U.S. combined ownership at Amistad/Falcon stands at 101.24% of conservation capacity or 3,434,168 acre-feet. This is up from 97.04% or 3,291,483 acre-feet from a year ago at this time. Overall, the system is holding 81.30% or 4,815,617 acre-feet, of conservation capacity with Amistad at 98.24% or 3,218,519 acre-feet and Falcon at 60.34% or 1,597,099 acre-feet. Mexico has 54.58% or 1,381,450 acre-feet of the water it could store at Amistad/Falcon.

Allocations: As of the printing of the August ownership report, the U.S. has allocated in excess of 778,785 acre-feet for irrigation and mining. The U.S. continues to have an amount in excess of 199,000 acre-feet for future allocations in 2008.

Storage & Loss Amistad vs. Falcon: Currently, the U.S. is storing approximately 2.2 million acre-feet at Amistad, occupying 389,141 acre-feet of Mexico's space at Amistad. The U.S. reached conservation capacity at Amistad on 09/29/2008. The current elevation is 1117.68. The U.S. is currently storing approximately 1.2 million acre-feet at Falcon, or 77.6% capacity.

The U.S. evaporation and seepage losses at Amistad are 327,055 acre-feet to date. For the same period, the U.S. lost 251,942 acre-feet at Falcon. The ratio of loss between Amistad and Falcon continues consistently to be 1:2, with Amistad being twice as efficient in overall storage and loss.

Releases to Meet Demands: Mexico released 581,053 acre-feet from Amistad and 861,801 acre-feet from Falcon for Mexico needs. The U.S. released 1,016,936 acre-feet from Amistad and 979,805 acre-feet from Falcon for U.S. needs. Combined with gains between Amistad and Falcon, U.S. inflows to Falcon totaled 1,147,622 acre-feet. So far, the U.S. met 67% of overall needs in the middle and Lower Rio Grande directly from middle Rio Grande and Amistad inflows this year. The movement of water from Amistad is primarily driven by U.S. excess amount in storage and the need to keep it below conservation capacity, particularly when the U.S. is occupying Mexico's space in Amistad.

Upper Rio Grande (New Mexico): Currently, Elephant Butte in New Mexico is storing 584,521 acre-feet or 28.89% and Caballo Dam, downstream of Elephant Butte, is storing 25,132 acre-feet or 11.07%. This water storage, in part, is used to meet water needs in the El Paso area.

Outlook: All active accounts began 2008 with 100% usable balances. Continued rains during mid to late August and into September dropped up to 18 additional inches of rain across the Rio Grande Valley. The reservoirs increased in elevation due to the rainfall in the lower and upper Rio Grande Regions. Consequently, conservation levels were achieved in Amistad and the U.S. is only 11.86 feet below normal in Falcon. To help alleviate losses in Falcon, the U.S. continues to monitor ownership and elevation levels to more efficiently transfer water from Amistad to Falcon.

7. South Texas Watermaster – Guadalupe / Lavaca / San Antonio / Nueces Region

The South Texas and Concho areas of Texas received rainfall for the month of September. However, a large part of South Central Texas remains in some category of drought as specified by the U.S. Drought Monitor.

Neither the rain from Hurricane Ike nor the excessive rains along the Texas/Mexico border had significant impact on the conditions through much of Central Texas. River flows continue to be below average flows for this time of year. Ground moisture conditions remain dry for most of the area.

The Concho area has shown improvement for the month. The area received slightly higher than average rainfall and the Concho River remains near average flows for this time of year.

Area Counties: Bandera, Blanco, Comal, Kendall and Kerr Counties

Rainfall and Area Conditions: This area received various amounts of precipitation, ranging from 0.50 to 2.0 inches for September. With the current amount of rainfall, the Texas Crop Moisture Index in this area of the hill country is classified as " Mildly Dry" . Most surface water diversions in this area are for municipal and industrial uses, with a few surface water permit holders irrigating hay and sod fields. The U.S. Drought Monitor indicates that this area is currently in " Severe Drought" to " Extreme Drought" conditions.

Stream flow Conditions: None of the stream flows of the major streams and their tributaries are flowing at their normal capacities. Most of the major streams showed a steady decline during September. Most of the smaller secondary tributaries lost surface flow. The Guadalupe River near Kerrville, Texas, has a current stream flow of approximately 39 CFS, with the historical monthly mean being 92 CFS. The Guadalupe River near Comfort, Texas, has a current stream flow of approximately 38 CFS, with the historical monthly mean being 204 CFS. The Medina River near Bandera, Texas, has a current stream flow of 13 CFS, with the historical monthly mean being 66 CFS.

Drought Restrictions: On August 7, 2008, Kerrville was restricted in the amount of surface diversions from the Guadalupe River and limited to pumping three million gallons per day. All temporary surface water permits have been suspended in the Guadalupe River Basin above Canyon Lake as well as all temporary surface water permits in the San Antonio River Basin above Lake Medina. Because of the low stream flows, some State permit holders have already reached their flow restrictions and were curtailed from pumping. Therefore, the river flows are heavily monitored on a daily basis.

Area Counties: Bee, Goliad, Victoria, Calhoun, Jackson, Refugio, Aransas, San Patricio, Nueces, Kleberg, Jim Wells, Duval, Live Oak, Kenedy, Willacy, Brooks, and Jim Hogg.

Rainfall and Area Conditions: This area received much needed rainfall during the first half of September. The rainfall events ranged from a trace to over two inches. Hurricane Ike did not produce much rainfall; only the most southern part of this area received rain. The U. S. Drought Monitor indicates this area is experiencing " No Drought to " Abnormally Dry" conditions. The Corpus Christi Reservoir System received little inflows during this time. Therefore, the reservoir level continues to drop. Most of the surface water diversions in this area continue to be for municipal and industrial uses; little irrigational use has been noted.

Stream flow Conditions: Stream flows in the area increased for a short time period during the rain events, but rapidly decreased and are flowing below what is expected for this time of year. According the USGS Stream Flow Gage at the Guadalupe River near Victoria, stream flows were approximately 650 CFS at the beginning of the month; then rose to 1,200 CFS,

and were approximately 370 CFS toward the end of the month. This is compared to 600 CFS last month. The historical mean at this site, based on 73 years of record, is 1,720 CFS. The gage at the San Antonio River near Goliad indicated the stream flows were approximately 575 CFS at the beginning of the month and ended at approximately 300 CFS. This is compared to 650 CFS last month. The historical mean at this site, based on 73 years of record, is 912 CFS. The gage at the San Antonio River at McFaddin, which is below Goliad, indicated the stream flows were approximately 550 CFS at the beginning of the month, and ended at approximately 250 CFS. This is compared to 500 CFS last month. The historical mean at this site, based on two years of record, is 1,580 CFS. The gage at the Guadalupe River near Tivoli, below the confluence of the San Antonio River and Guadalupe River, indicated stream flows of approximately 1,400 CFS at the beginning of the month, and 550 CFS at the end of the month. This is compared to 1,770 CFS last month. The historical mean at this site, based on two years of record, is 1,600 CFS. The gage at the Mission River near Refugio indicated stream flows were at approximately 5.0 CFS at the beginning of the month; stream flows rose to approximately 100 CFS, and ended at approximately 1.3 CFS. This is compared to 3.3 CFS last month. The historical mean at this site, based on 68 years of record, is 100 CFS. The USGS Stream Flow Gage of the Nueces River at Calallen Dam indicated 50 CFS stream flow over the dam near Corpus Christi; stream flows rose to approximately 150 CFS, and ended 100 CFS of stream flow towards the end of the month. This is compared to 3.7 CFS last month. The historical mean at this site during this time, based on eight years of record, is 230 CFS. The gage at the Aransas River near Skidmore indicated that stream flows were approximately 5.0 CFS at the beginning of the month; rose to approximately 1,000 CFS, and ended at approximately 3.6 CFS. This is compared to 5.3 CFS last month. The historical mean at this site during this time, based on 44 years of record, is 5.1 CFS.

Corpus Christi Reservoir System: The Corpus Christi Reservoir System did not receive many inflows during September and the level of the reservoir system continues to drop slightly. The Corpus Christi Reservoir System is currently at 83.9% of capacity or 799,330 acre-feet, compared to 100.0% of capacity or 951,493 acre-feet, during this same time last year. Choke Canyon is currently at 86.2% of capacity or 599,573 acre-feet, compared to 99.9% of capacity or 694,233 acre-feet, during this same time last year. Lake Corpus Christi is currently at 77.6% of capacity or 199,757 acre-feet, compared to 100.0% of capacity or 257,260 acre-feet, last year. Corpus Christi continues to divert much of their monthly water supply needs from Lake Texana.

Drought Restrictions: Water rights have not been curtailed due to permitted stream flow restrictions.

Area Counties: Atascosa, Karnes, Gonzales, Wilson, McMullen, Dewitt, Guadalupe, Lavaca, Fayette, Colorado, Wharton, and Jackson.

Rainfall and Area Conditions: This area received 0.25 to 0.7 inches of rainfall during September. Soil moisture conditions are poor at this time. Hay crops are beginning to suffer due to the dry windy conditions, and farmers have delayed planting winter oats and rye. Lake Texana is at 88% of capacity. The area ended last month at 77% capacity, which is 41.87 feet above mean sea level.

According to the U.S. Drought Monitoring System, this area is experiencing " Abnormally dry to severely dry" conditions at this time.

Stream flow Conditions: The flow of the San Antonio River near Falls City is currently 177 CFS. The historical mean for September is 230 CFS and the ending reading last month was

352 CFS. The Cibolo Creek near Falls City is currently 25 CFS and the ending reading last month was 42 CFS. The historical mean for September is 24 CFS. The Guadalupe River near Gonzales is currently at 657 CFS and the ending reading last month was 624 CFS. The historical mean for September is 763 CFS. The Lavaca River at Edna is currently 11 CFS and the ending reading last month was 12 CFS. The historical mean for September is 32 CFS. The Navidad River near Halletsville is currently at .62 CFS and the ending reading last month was .62 CFS. The historical mean for September is 7.5 CFS. The Atascosa River near Whitsett is currently 2.4 CFS and the ending reading last month was 20 CFS. The historical mean for September is 7.4 CFS. The Frio River near Tilden is currently 10 CFS and the ending reading last month was 16 CFS. The historical mean for September is 15 CFS. The Nueces River near Tilden is currently 1.0 CFS and the ending reading last month was 173 CFS. The historical mean for September is 65 CFS.

Drought Restrictions: Water rights have not been curtailed due to permitted stream flow restrictions.

Area Counties: Edwards, Real, Kinney, Uvalde, Zavala, Dimmit, La Salle and Webb.

Rainfall and Area Conditions: The Southwest Texas area received some relief from the drought conditions during September. There was no rain reported in the beginning of the month with heavier rain showers reported during the middle of the month for the northern region. The month ended with additional showers in the southern counties. The range of rainfall in this area was 0.25 to 2.00 inches for the month. Most of the diversions of surface water were for irrigational use and small amounts for municipal and industrial uses. Crops currently irrigated in the area are: cabbage, wheat, corn, hay grazers, and pecans. The U.S. Drought Report indicates this area is experiencing " Abnormally Dry to Severely Dry" drought conditions at this time.

Stream flow Conditions: Stream flows for the major tributaries in this area continued to flow well below the mean for this time of year. The Nueces River at Laguna had stream flows of 57 CFS, compared to 99 CFS last month. The historical mean is 150 CFS. The Nueces River near Brackettville had stream flows of .12 CFS, compared to 7.1 CFS last month. The historical mean is 20 CFS. The Nueces River below Uvalde had stream flows of 17 CFS, compared to 19 CFS last month. The historical mean is 161 CFS. The Frio River at Concan had stream flows of 32 CFS, compared to 49 CFS last month. The historical mean is 181 CFS. The Sabinal River at Sabinal had stream flows of 0.94 CFS, compared to 1.5 CFS last month. The historical mean is 34 CFS. The Leona River near Uvalde had stream flows of 29 CFS, compared to 29 CFS last month. The historical mean is 56 CFS.

Stream flows of intermittent and tributary streams in the area are flowing below average for this time of year.

Drought Restrictions: Currently, permits with stream flow restrictions are being regulated. The Zavala/Dimmit Water District has a rotational diversion schedule on the Nueces River to ensure adequate water for domestic and livestock use.

Area Counties: Bastrop, Bexar, Blanco, Caldwell, Comal, Fayette, Frio, Guadalupe, Hays, and Medina.

Rainfall and Area Conditions: Above average monthly rainfall fell across the San Antonio Regional Area for the month of September. Month to date rainfall measured at the San Antonio International Airport was 0.34 inches. The average for September is 3.0 inches. Total annual rainfall to date is 13.19 inches; normal year to date is 24.52 inches, a departure

from normal of -11.33 inches. On 09/23/2008, the U. S. Drought Monitor indicated the San Antonio Regional Area is experiencing " Severe to Extreme" Drought Conditions. This has impacted crops, pastures and grasslands, stream flows, and reservoir capacities. Ground moisture is now relatively poor with the lack of rain and no cloud cover with warm temperatures. Preparation for fall planting is underway; plowing, planting, fertilizing, etc. Cotton and hay grazers are harvested.

Stream Flow Conditions: The Guadalupe and Blanco Rivers are showing the impact of the ensuing current drought. Small creeks have dried and most major streams are beginning to quickly pool or dry up entirely. Municipal use has decreased with the shorter days and residential lawns requiring less irrigation. Industrial use remains constant.

All major tributaries in the San Antonio Regional Area are still well below their historical monthly averages for September. The Guadalupe River at Spring Branch is currently 27 CFS; the historical mean flow for September is 296 CFS. The San Marcos River at Luling is flowing at 89 CFS; the historical mean flow for September is 283 CFS. Lastly, the Blanco River at Wimberley is flowing at 11 CFS; the historical mean flow for September is 88.2 CFS.

Currently, Canyon Lake Reservoir is at 900.05 feet elevation and is impounding 312,354 acre-feet, and is at 82.4% of capacity. On 09/28/2008, the Edwards Aquifer level at the J17 well in Bexar County was 669.4 feet. The historical average for September is 661.6 feet, which is 7.8 feet above the monthly historical average. On 09/28/2008, the San Marcos Springs were flowing at 118.0 CFS. The historical monthly average for September is 165.0 CFS. This was 47.0 CFS below the monthly historical average. On 09/28/2008, the Comal Springs were flowing at 296.0 CFS. The monthly historical flow for September is 269.0 CFS; which is 27.0 CFS above the historical monthly average.

Drought Restrictions: Temporary Permits are now regulated, as well as permits with stream flow restrictions.

Area Counties: Sterling, Tom Green, Irion, Concho, Coke, Glasscock, Runnels, Reagan, and Schleicher.

No significant rainfall for the Concho River Valley came in July. According to information provided by the USDA, the State Drought Monitor Index has the Concho Valley at " Severe Drought" .

Rainfall and Area Conditions: Rainfall in San Angelo for the month was 3.99 inches. Areas surrounding San Angelo received slightly higher rainfall amounts. The average rainfall amount for the area was 3.10 inches. The total amount of rainfall for the year is 18.51 inches. In 2007, there was 30.15 inches of rain. Average annual rainfall, based on 100 years of record, is 19 inches. Area reservoirs are showing slight decreases in the amount of storage from the previous month. Irrigational demand by appropriated surface water rights in the Concho Valley is at reduced volume, due to timely rains. The Texas Crop Moisture Index indicates soil moisture content is " Adequate" However, the Index has not been updated since September 6, 2008. Corn and sorghum are finished for the season. Cotton is in full bloom and winter wheat is being planted.

Stream Flow Conditions: Mean daily discharge statistics, based on six years of record, for USGS Gaging Station 08130700 at Spring Creek above Twin Buttes Reservoir near San Angelo is 0.00 CFS. The most recent value is 0.20 CFS. Mean daily discharge statistics at USGS Gaging Station 08136000 at Concho River at San Angelo/Bell Street is 4.7 CFS. This

is based on 77 years of record. Currently, it is at 3.0 CFS. Mean daily discharge statistics at USGS Gaging Station 08128000 at South Concho at Christoval is 11 CFS. This is based on 73 years of record. The most recent daily value is 13 CFS. Area lakes indicate Lake Nasworthy is at 83% of capacity or 8,493 acre-feet, O. C. Fisher is at 6% of capacity or 7,450 acre-feet, and Twin Buttes Lake is at 34% of capacity.

Drought Restrictions: Water rights have not been curtailed due to permitted stream flow restrictions.

8. Upper Colorado (Concho River watershed not included)

The upper Colorado River area received above normal precipitation during the month of September 2008. The National Weather Service in San Angelo reported monthly precipitation of 3.99 inches, which is 1.04 inches above normal. The annual total to date is 16.92 inches, which is 0.62 inches below normal. According to the U.S. Drought Monitor, the drought conditions in the area range from abnormally dry to moderate, and the upper reaches of the Llano River watershed are in an area of severe drought. Most tributaries in the upper Colorado watershed have diminished flows. The pool levels of EV Spence and OH Ivie Reservoir decreased during the month. The pool levels of EV Spence and OH Ivie Reservoirs were 12% and 59% of capacity, respectively.

9. Texas Panhandle and Southern High Plains

Amarillo Area: The Amarillo Region reports the following summary for the Northern panhandle area:

Lake Meredith is at 50.44 feet; up from a record low of 45.25 feet reported in July 2008. Lake Greenbelt started the month of July at 57.12 feet, and ended at 56.10 feet. Lake MacKenzie is at 72 feet, down three inches from the first of September. Lake Greenbelt is at 55.5 feet, down six inches from the first of September. The National Weather Service in Amarillo reported a total rainfall in September of 1.32 inches, which is 1.30 inches above the yearly average.

Lubbock Area: The Lubbock area had average precipitation during September 2008. Lubbock received 8.70 inches for the month. The average rainfall for September is 2.50 inches. Similar amounts were recorded throughout the Region 2 area. Approximately 7.9 inches fell within a 24 hour period and marked the largest single rainfall event in the area' s history. Total precipitation for 2008 now stands at 24.14 inches; which is 8.60 inches above normal for this point in the year. The long term drought situation has not changed, and all of the communities previously noted as being on mandatory water restrictions remain on those restrictions. No new communities were added to the water restrictions list during September.

The following cities in the South Plains area remain on mandatory drought restrictions status: Lubbock and Amherst.

The following cities in the South Plains area remain on voluntary drought restrictions status: Ralls, Crosbyton, Spur, Post, White River WSC, and Valley WSC.

As Lake Meredith continues to decline, the City of Lubbock is making preparations to construct a pipeline from Lake Alan Henry to the City of Lubbock, 65 miles uphill, to use as an additional source of water. The City of Lubbock owns the water rights at this lake.

White River Lake: The lake is down 18.1 feet from normal. The normal level is 46 feet at the dam. This is approximately the same level that existed at the end of August 2008. This leaves the White River Water Supply District in a better position to supply water to its customers than it has in the past. White River WSD has groundwater wells on standby to supply water to its customers in the event the lake level drops below usable levels.

Lake Alan Henry: The lake is full. This lake is not used for public drinking water supplies at present, but will be utilized for this purpose in the near future.

10. Agricultural Concerns

No information available at this time.

11. Drought Impacts to Wildlife

No information available at this time.

12. Wildfire Concerns

The Keetch-Byram Drought Index (KBDI) is used to help determine potential for fire risk. It is a numerical index where each number is an estimate of the amount of precipitation, in 100ths of an inch, needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil, and 800 a completely dry soil. The relationship of the KBDI to fire danger is, as the index increases, the vegetation is subjected to increased moisture stress. KBDI levels and its relationship to expected fire potential are reflected in the following:

KBDI = 0 – 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. This is typical of spring dormant season following winter precipitation.

KBDI = 201 – 400: Typical of late spring; early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.

KBDI = 401 – 600: Typical of late summer, early fall. Lower litter and duff layers contribute to fire intensity and will burn actively.

KBDI = 601 – 800: Often associated with more severe drought and increased wildfire occurrence. Intense, deep-burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

There are currently 136 counties, illustrated in Attachment 2, with KBDI values in excess of 400, indicating areas within these counties are beginning to experience dry conditions, which could result in an increased fire risk potential.

The Council, which is chaired by Jack Colley, Chief, Governor's Division of Emergency Management, is composed of state agencies concerned with the effects of drought and fire on the citizens of the State of Texas. The attached information was compiled and provided by representatives listed below. Points of contact, telephone numbers, and web site addresses are also provided.

Jack Colley, Chief, Governor's Division of Emergency Management, (512) 424-2443, fax (512) 424-2444, web site: http://www.txdps.state.tx.us/dem

John Sutton, Texas Water Development Board, (512) 463-7988, fax (512) 463-9893, web site: http://www.twdb.state.tx.us

Chris Loft, Texas Commission on Environmental Quality, (512) 239-4715, fax (512) 239-4770, web site: http://www.tceq.state.tx.us

Richard Egg, Texas State Soil & Water Conservation Board, (254) 773-2250, fax (254) 773-3311, web site: http://www.tsswcb.state.tx.us

Lance Williams, Texas Department of Agriculture, (512) 463-3285, fax (800) 835-2981, web site: http://agr.state.tx.us

Dr. Travis Miller, Texas AgriLife Extension Service, (979) 845-4808, fax (979) 845-0456, web site: http://texasextension .tamu.edu

Cindy Loeffler, Texas Parks & Wildlife Department, (512) 912-7015, fax (512) 707-1358, web site: http://www.tpwd.state.tx.us

Edward T. Morris, Department of Housing and Community Affairs, (512) 475-3329, Fax (512) 475-7498, web site: http://www.tdhca.state.tx.us

Michael Dunivan, Texas Forest Service, (830) 997-5426, web site: http://txforestservice.tamu.edu

Paul Tabor, Texas Department of State Health Services, (512) 458-7126, fax (512) 458- 7472, web site: http://www.dshs.state.tx.us/

Thomas Walker, Office of the Governor, Economic Development & Tourism, (512) 936-0169, fax (512) 936-0141, web site: http://www.governor.state.tx.us/divisions/ecodev

David A. Van Dresar, Texas Alliance of Groundwater Districts, (979) 968-3135, fax (979) 968-3194, web site: http://www.texasgroundwater.org/

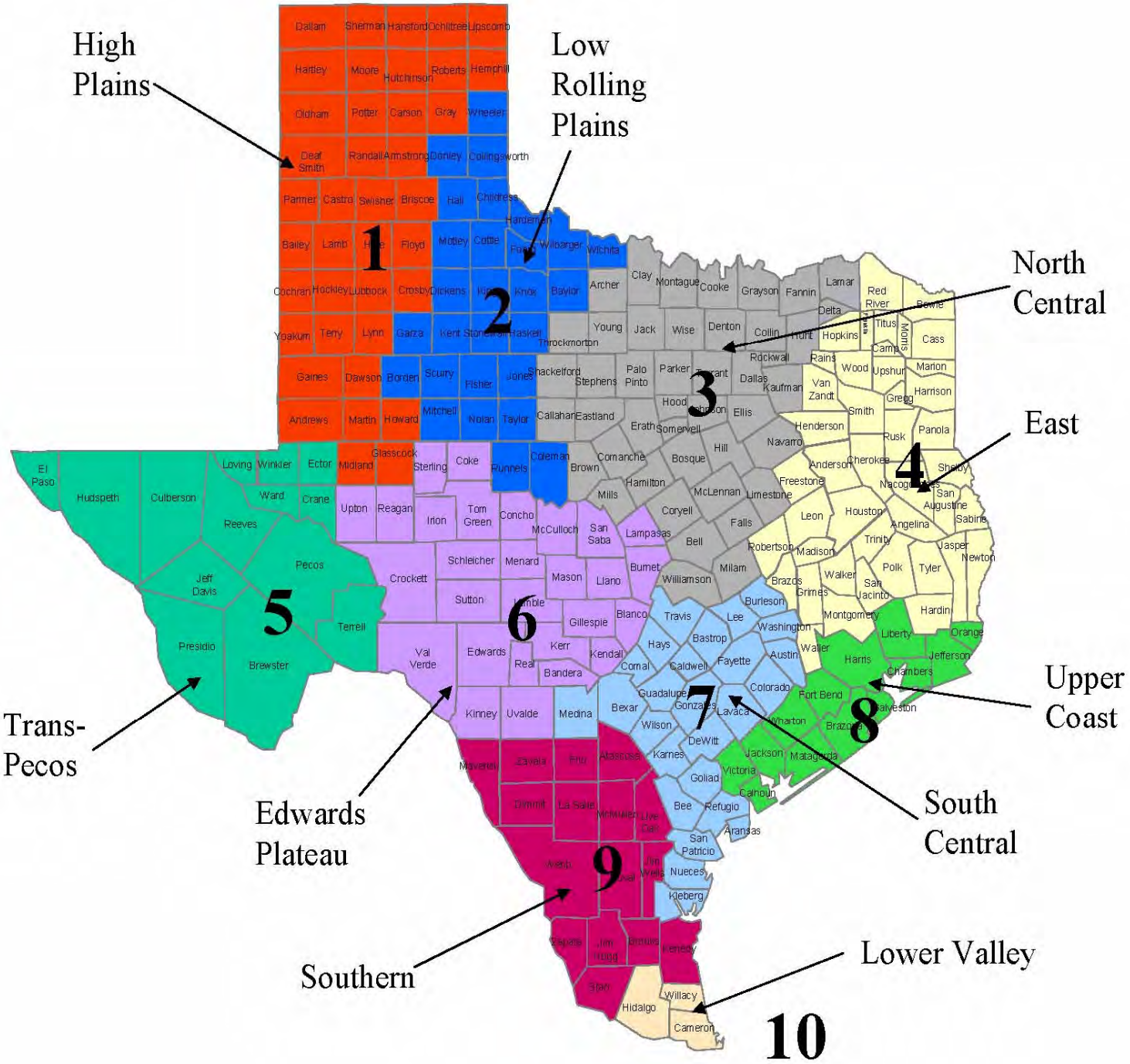
Dr. John W. Nielsen-Gammon, Office of the State Climatologist, (979) 862-2248, fax (979) 862-4466, web site: http://www.met.tamu.edu/osc/

Gus Garcia, Office of Rural Community Affairs, (512) 936-7876, fax (512) 936-6776, web site: http://www.orca.state.tx.us

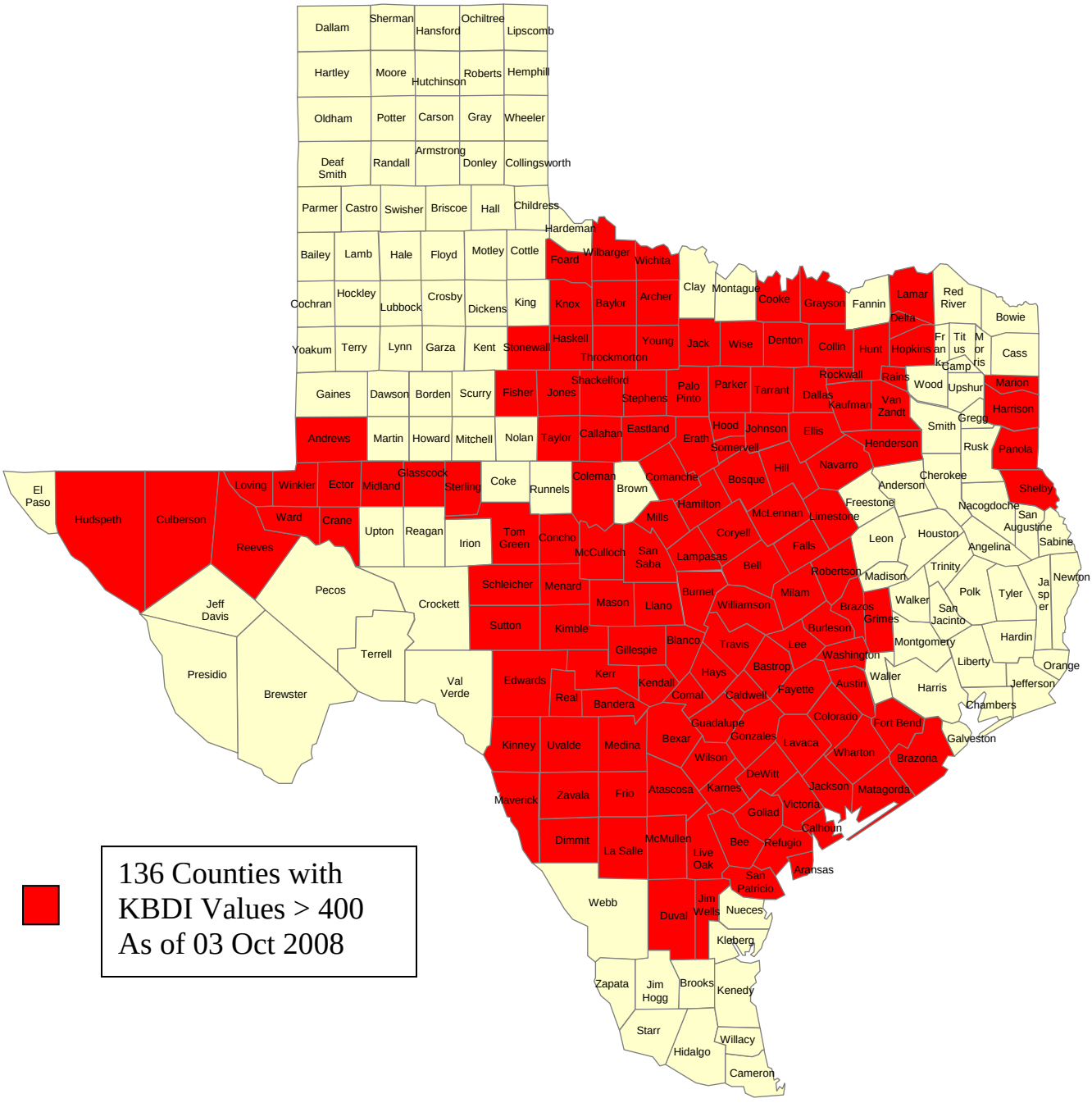
cc:

Amy Jeter, Committee Clerk, Senate Finance Committee
Sarah Hicks, Committee Director, Senate Finance Committee
Teddy Carter, Committee Clerk, Senate Natural Resources Committee
Amy Peterson, Committee Clerk, House Appropriations
Hope Wells, Committee Clerk, House Natural Resources Committee
Steven Schar, Committee Clerk, House Agriculture and Livestock Committee
Anne Creixell, Committee Clerk, House Criminal Jurisprudence Committee
Zak Covar, Policy Advisor for TCEQ Issues, Governor's Policy Office
Auburn Mitchell, Policy Advisor for Agriculture/TDA, Governor's Policy Office
Rob Johnson, Lt. Governor's Chief of Staff
Carmen Cernosek, Lt. Governor's Natural Resources Policy Analyst
Shane Linkous, Deputy Division Chief, Intergovernmental Relations, Attorney General's Office
Allan B. Polunsky, Chairman, Public Safety Commission
Louis E. Sturns, Member, Public Safety Commission
Colonel Stanley Clark, Interim Director, Department of Public Safety
Lieutanant Colonel Lamar Beckworth, Interim Assistant Director, Department of Public Safety
Lori Gabbert,, Budget Analyst, Legislative Budget Board (LBB-DPS)
Tom Lambert, Budget Analyst, Legislative Budget Board (LBB-TCEQ)
Ed Perez, Executive Director, Texas Office of State-Federal Relations, Washington, DC
Brandon Steinmann, Director, Texas Office of State-Federal Relations, Austin, Texas

Attachment 1
Climatic Regions



Attachment 2
Counties with High to Extreme Fire Danger



136 Counties with
KBDI Values > 400
As of 03 Oct 2008

DROUGHT PREPAREDNESS COUNCIL

RICK PERRY
Governor

5805 N. Lamar Blvd.
P.O. Box 4087
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JACK COLLEY
Council Chairman

November 13, 2008

TO: The Honorable Rick Perry, Governor, State of Texas
The Honorable David Dewhurst, Lieutenant Governor, State of Texas
Ms. Esperanza Andrade, Secretary of State, State of Texas
The Honorable Mario Gallegos, Jr., President Pro Tempore of the Senate, State of Texas
The Honorable Tom Craddick, Speaker of the House, State of Texas
The Honorable Steve Ogden, Chairman, Senate Finance Committee, State of Texas
The Honorable Kip Averitt, Chairman, Senate Natural Resources Committee, State of Texas
The Honorable John Carona, Chairman, Senate Committee on Transportation & Homeland Security, State of Texas
The Honorable Warren Chisum, Chairman, House Appropriations Committee, State of Texas
The Honorable Mike Hamilton, Vice-Chairman, House Natural Resources Committee, State of Texas
The Honorable Sid Miller, Chairman, House Agriculture & Livestock Committee, State of Texas
The Honorable Aaron Peña, Chairman, House Criminal Jurisprudence Committee, State of Texas
Mr. Jay Kimbrough, Chief of Staff, Office of the Governor
Mr. Steven McCraw, Director, Texas Governor's Office of Homeland Security

FROM: Chief Jack Colley, Chairman, Drought Preparedness Council

SUBJECT: Statewide Drought Situation Report

1. Next Council Meeting

December 11, 2008, 2:00 p.m., Governor's Conference Room of the Governor's Division of Emergency Management, State Operations Center, Texas Department of Public Safety Headquarters, 5805 N. Lamar Blvd., Austin, Texas.

At this time, the Council will continue to meet on a monthly basis.

2. General Conditions

Overall Texas precipitation during the month of October was above normal in the panhandle and below normal in most other locations. The first half of October was more active than the second half across the State, characterized by several cold fronts pushing through Texas. These fronts brought heavy rain to the northern half of Texas, particularly the Panhandle, with isolated areas of Central and Southeast Texas receiving normal to above normal rainfall in October. However, the southern half of Texas was abnormally dry, worsening drought conditions already afflicting a large area.

The main drought concern is in the I-35 corridor near Austin and San Antonio stretching west to the Rio Grande River. The storm systems passing through Texas avoided these areas and, for the second straight month, most of South Central and West Central Texas received little, if any, precipitation. Del Rio had only 0.16 inches and San Antonio had only 0.26 inches of rainfall during October. Most of the USGS stations along the Colorado River in this region reported stream flow below normal levels, less than the 10^{th} percentile.

The good news across Texas compared to three months ago, drought conditions are much less widespread, thanks in large part to a wet August. However, the area of extreme drought in South Central Texas expanded during the last two months, increasing 1.8% in the past week alone, and now encompasses a 15-20 county region centered just to the south of Austin. The year-to-date precipitation in San Antonio as of November 9 was 13.50 inches. At least three more inches of precipitation in 2008 is needed to avoid having its driest year since the long-term drought of the 1950s. Austin/Camp Mabry, currently with 14.96 inches of precipitation in 2008, is in danger of receiving less than 20 inches of annual rainfall for only the tenth time since records were first kept in 1856.

Regions of moderate to severe drought extend from the area of extreme drought southward to the middle Texas coast, westward to the Rio Grande River, including Victoria and areas just to the north of Corpus Christi. After a very dry October, a small area along the Red River near Sherman was classified as having moderate drought conditions. The USGS station at Denison Dam along the Red River was reporting streamflow at only the second percentile.

The current long-range forecast from the Climate Prediction Center (CPC) calls for a 33-40% chance of below normal precipitation for the central third of Texas and a greater than 40% chance of below normal precipitation for the southern third of Texas. Due to the greater than 40% chance of below normal precipitation in most of South Texas, expect persistent drought conditions in these areas in addition to the possible development of drought conditions to the south of areas already in severe to extreme droughts. An equal chance of below normal, near normal, and above normal precipitation in extreme North Texas should improve the moderate drought along the Red River.

3. Overall Statewide Drought Conditions

The South Central region is under " Moderate Drought" conditions, according to the Palmer Drought Severity Index (PDSI). The Edwards Plateau region is at " Incipient Dry Spell," and the remainder of the State is mostly under " Slightly Wet" to " Extremely Wet" conditions. The PDSI varies from extremely wet, very wet, moderately wet, slightly wet, incipient wet spell, near normal, incipient dry spell, mild drought, moderate drought, severe drought, and extreme drought in order of increasing severity.

The Crop Moisture Index (CMI) indicates the South Central region is under " Abnormally Dry" conditions and the remainder of the State is under " Mildly Dry" to " Moisture Adequate"

conditions. The CMI varies from flooding, standing water, fields too wet, moisture adequate, mildly dry, abnormally dry, excessively dry, severely dry, and extremely dry in order of increasing severity.

The Six-Month Standardized Precipitation Index (SPI) indicates the South Central region is under " Moderately Dry" conditions, while the remainder of the State is experiencing " Near Normal" or " Extremely Wet" conditions. The SPI varies in categories of extremely wet conditions, very wet, moderately wet, near normal, moderately dry and, severely dry, extremely dry in order of increasing severity.

The Keetch-Byram Drought Index (KBDI) indicates the South Central region is under " very high fire risk" condition. The North Central, East, Edwards Plateau, Upper Coast, as well as Southern regions are under " high fire risk" conditions, and the Trans-Pecos region is under " fire risk above average" condition. The KBDI is a drought index specifically used to describe potential or expected fire behavior. The index is classified as Low, Moderate, High or Extreme fire danger, in order of increasing severity.

Texas Forest Service reports outdoor burn bans in 47 counties.

The Climate Prediction Center (CPC) forecasts above normal precipitation with up to 40% chance in upper High Plains, Low Rolling Plains, North Central, and East regions, but below normal precipitation with up to 40% chance in Trans-Pecos, Edwards, South Central, Upper Coast, Southern, and Lower Valley regions from November 2008 to January 2009. During the same period, the CPC forecasts above normal temperatures for the entire state.

The National Oceanic and Atmospheric Administration (NOAA) Seasonal U.S. Drought Outlook through January 2009, forecasts persisting areas of drought in the Edwards Plateau, South Central, Upper Coast, and Southern regions, and " likely developing drought" conditions in lower Southern region.

4. Water Utility Status

November 2008 began with 120 public water systems on the drought list. That number included 13 water systems that relaxed restrictions imposed in 2008 and returned to normal operations and water usage. The remaining 107 water systems on the list included 75 systems that placed their customers on mandatory outside water restrictions and 32 systems that requested voluntary conservation. With the approach of colder winter weather conditions, it is expected additional water systems will review the triggers of their Drought Contingency Plans and be able to relax all watering restrictions.

5. Water Rights – Statewide

New temporary water use permit applications are reviewed on a site-specific basis and are issued if there is sufficient surplus water at the requested source. Applications for new water use permits and amendments to existing permits remained normal for the month. Beginning September 1, more severe restrictions for water rights of the Hale Clause along the Brazos River and Brazos River Basin were lifted. Until April 1, 2009 the owners of these water rights may observe less severe stream flow restrictions of their permits. The availability of unappropriated water for new water use permits continues to decrease in all river basins in the State and the search for long-term, dependable alternate sources of water remains a high priority issue.

6. Water Rights – Lower Rio Grande / Rio Grande Watermaster (RGWM)

Current Overall Conditions: As of October 25, 2008, the U.S. combined ownership at Amistad/Falcon stands at 100.00% of conservation capacity or 3,392,011 acre-feet. This is down from 103.92% or 3,524,967 acre-feet from a year ago at this time. Overall, the system is holding 98.80% or 5,851,705 acre-feet, of conservation capacity with Amistad at 100.92% or 3,306,075 acre-feet and Falcon at 96.17% or 2,545,629 acre-feet. Mexico has 97.18% or 2,459,694 acre-feet of the water it could store at Amistad/Falcon.

Allocations: As of the printing of the September ownership report, the U.S. has allocated in excess of 785,038 acre-feet for irrigation and mining. The U.S. continues to have an amount in excess of 636,328 acre-feet for future allocations in 2008.

Storage & Loss Amistad vs. Falcon: The U.S. is currently storing approximately 1.8 million acre-feet at Amistad. The U.S. reached conservation capacity at Amistad on September 29, 2008. The U.S. is currently storing approximately 1.5 million acre-feet at Falcon, or 100% capacity.

Evaporation and seepage losses at Amistad YTD are 16,828 acre-feet. During the same period, the U.S. lost 20,243 acre-feet at Falcon. The ratio of loss between Amistad and Falcon continues to be 1:2, consistently with Amistad being twice as efficient in overall storage and loss.

Releases to Meet Demands: Mexico released 865,432 acre-feet from Amistad and 861,801 acre-feet from Falcon for Mexico needs. The U.S. released 1,551,433 acre-feet from Amistad and 1,009,950 acre-feet from Falcon for U.S. needs. Combined with gains between Amistad and Falcon, U.S. inflows to Falcon totaled 1,764,336 acre-feet. So far, the U.S. met 64% of overall needs in the middle and Lower Rio Grande directly from middle Rio Grande and Amistad inflows this year. The movement of water from Amistad is primarily driven by U.S. excess amount in storage and the need to keep it below conservation capacity, particularly when the U.S. is occupying Mexico's space in Amistad.

Upper Rio Grande (New Mexico): Currently, Elephant Butte in New Mexico is storing 582,089 acre-feet or 28.77% and Caballo Dam, downstream of Elephant Butte, is storing 17,025 acre-feet or 7.50%. This water storage, in part, is used to meet water needs in the El Paso area.

Outlook: All active accounts began 2008 with 100% usable balances. The reservoirs increased in elevation due to the rainfall here and in the upper Rio Grande Regions as well. To help alleviate losses in Falcon, the U.S. will continue to monitor ownership and elevations levels in both Falcon and Amistad for more efficient U.S. transfers of water from Amistad to Falcon. It appears at this point that 2009 will start with all active accounts at full capacity. The unique situation at this point is both the U.S. reservoirs are considered full as are the majority of the Mexican reservoirs in the Rio Grande Basin. Effective October 26, 2008, No Charge Pumping was declared from Amistad down to the Gulf for all diversion requests until further notice.

7. South Texas Watermaster – Guadalupe / Lavaca / San Antonio / Nueces Region

The South Texas and Concho areas of Texas received rainfall during October. The drought ranges from " Severe" to " Extreme" according to the U.S. Drought Monitor. There was minimal rainfall in the central part of the State with surrounding areas receiving sufficient

amounts to limit the drought conditions. Cooler weather is expected and irrigation will decrease, but the area is still in need of rain.

Area Counties: Bandera, Blanco, Comal, Kendall and Kerr Counties

Rainfall and Area Conditions: This area received various amounts of precipitation, ranging from 2.0 to 2.50 inches during October. With the current amount of rainfall, the Texas Crop Moisture Index in this area of the hill country is classified as " Abnormally Dry" . Most surface water diversions in this area are for municipal and industrial uses, with a few surface water permit holders irrigating hay and sod fields. The U.S. Drought Monitor indicates that this area is currently in " Severe Drought" to " Extreme Drought" conditions.

Stream flow Conditions: None of the major streams or their tributaries flowed at normal capacities. Most of the major streams showed a steady decline during October and most of the smaller, secondary tributaries lost surface flow. The Guadalupe River near Kerrville has a current stream flow of approximately 47 CFS. The historical monthly mean is 122 CFS. The Guadalupe River near Comfort has a current stream flow of approximately 35 CFS. The historical monthly mean is 278 CFS. The Medina River near Bandera has a current stream flow of 17 CFS. The historical monthly mean is 104 CFS.

Drought Restrictions: On August 7, 2008, Kerrville was restricted in the amount of surface diversions from the Guadalupe River and limited to pumping three million gallons per day. All temporary surface water permits in the Guadalupe River Basin above Canyon Lake and the San Antonio River Basin above Lake Medina were suspended. Because of the low stream flows, some State permit holders already reached their flow restrictions and were curtailed from pumping. Therefore, the river flows are heavily monitored on a daily basis.

Area Counties: Bee, Goliad, Victoria, Calhoun, Jackson, Refugio, Aransas, San Patricio, Nueces, Kleberg, Jim Wells, Duval, Live Oak, Kenedy, Willacy, Brooks, and Jim Hogg.

Rainfall and Area Conditions: This area received little rainfall during October. Some localized rainfall events occurred throughout the month, ranging from a trace to over one inch, which provided temporary soil moisture and runoff into local area streams. The U. S. Drought Monitor indicates this area is experiencing " No Drought to " Abnormally Dry" conditions. The Corpus Christi Reservoir System received little inflows during this time. Therefore, the reservoir level continued to drop. Most of the surface water diversions continued to be for municipal and industrial uses little irrigational use has been noted.

Stream flow Conditions: Stream flows in the area continued to decrease and were flowing below expectations for this time of year. According the USGS Stream Flow Gage at the Guadalupe River near Victoria, stream flows were approximately 400 CFS at the beginning of the month and approximately 360 CFS toward the end of the month, compared to 370 CFS last month. The historical mean at this site, based on 73 years of record, is 1,730 CFS. The gage at the San Antonio River near Goliad indicated the stream flows were approximately 200 CFS at the beginning of the month and ended at approximately 275 CFS, compared to 300 CFS last month. The historical mean at this site, based on 73 years of record, is 829 CFS. The gage at the San Antonio River at McFaddin, which is below Goliad, indicated the stream flows were approximately 250 CFS at the beginning of the month, and ended at approximately 285 CFS, compared to 250 CFS last month. The historical mean at this site, based on one year of record, is 308 CFS. The gage at the Guadalupe River near Tivoli, below the confluence of the San Antonio River and Guadalupe River, indicated stream flows of approximately 800 CFS at the beginning of the month, and 850 CFS at the end of the month, compared to 850 CFS last month. The historical mean at this site, based

on two years of record, is 1,940 CFS. The gage at the Mission River near Refugio indicated stream flows at approximately 5.0 CFS at the beginning of the month and ended at approximately 4.2 CFS, compared to 1.3 CFS last month. The historical mean at this site, based on 68 years of record, is 242 CFS. The USGS Stream Flow Gage of the Nueces River at Calallen Dam indicated 125 CFS stream flow over the dam near Corpus Christi. Stream flows rose to approximately 300 CFS around October 4, 2008 and ended at approximately 18 CFS of stream flow towards the end of the month, compared to 100 CFS last month. The historical mean at this site during this time, based on eight years of record, is 2,110 CFS. The gage at the Aransas River near Skidmore indicated that stream flows were approximately 4.5 CFS at the beginning of the month and ended at approximately 3.1 CFS, compared to 3.6 CFS last month. The historical mean at this site during this time, based on 43 years of record, is 38 CFS.

Corpus Christi Reservoir System: The Corpus Christi Reservoir System did not receive much inflow during October and the level of the reservoir system continued to drop slightly. The Corpus Christi Reservoir System is currently at 80.7% of capacity or 768,306 acre-feet, compared to 98.8% of capacity or 941,373 acre-feet, during this same time last year. Choke Canyon is currently at 84.1% of capacity or 584,844 acre-feet, compared to 98.5% of capacity or 684,660 acre-feet, during this same time last year. Lake Corpus Christi is currently at 71.3% of capacity or 183,462 acre-feet, compared to 99.8% of capacity or 257,713 acre-feet, last year. Corpus Christi continues to divert much of their monthly water supply needs from Lake Texana.

Drought Restrictions: Water rights have not been curtailed due to permitted stream flow restrictions.

Area Counties: Atascosa, Karnes, Gonzales, Wilson, McMullen, Dewitt, Guadalupe, Lavaca, Fayette, Colorado, Wharton, and Jackson.

Rainfall and Area Conditions: This area received 0.00 to 1.7 inches of rainfall during October. Soil moisture conditions are poor at this time. Hay season ended and oat and rye crops are suffering without supplemental irrigation. There is currently very little irrigation activity. Lake Texana is at 82% of capacity. The area ended last month at 88% capacity, which is 40.8 feet above mean sea level.

According to the U.S. Drought Monitoring System, this area is experiencing " Abnormally Dry to Severely Dry" conditions at this time.

Stream flow Conditions: The flow of the San Antonio River near Falls City is currently 212 CFS. The historical mean for October is 254 CFS and the ending reading last month was 177 CFS. The Cibolo Creek near Falls City is currently 23 CFS and the ending reading last month was 25 CFS. The historical mean for October is 27 CFS. The Guadalupe River near Gonzales is currently at 321 CFS and the ending reading last month was 657 CFS. The historical mean for October is 879 CFS. The Lavaca River at Edna is currently 10 CFS and the ending reading last month was 10 CFS. The historical mean for October is 48 CFS. The Navidad River near Halletsville is currently at 0.96 CFS and the ending reading last month was 0.62 CFS. The historical mean for October is 14 CFS. The Atascosa River near Whitsett is currently 2.8 CFS and the ending reading last month was 2.4 CFS. The historical mean for October is 10 CFS. The Frio River near Tilden is currently 6.6 CFS and the ending reading last month was 10 CFS. The historical mean for October is 59 CFS. The Nueces River near Tilden is currently 0.3 CFS and the ending reading last month was 1 CFS. The historical mean for October is 36 CFS.

Drought Restrictions: Water rights have not been curtailed due to permitted stream flow restrictions.

Area Counties: Edwards, Real, Kinney, Uvalde, Zavala, Dimmit, La Salle and Webb.

Rainfall and Area Conditions: The Southwest Texas area received very little relief from the drought conditions during October. There was no rain reported in the beginning of the month, but heavier rain showers were reported during the middle of the month for the northern region. The month ended with no additional relief from the drought. The range of rainfall in this area was 0.05 to 1.5 inches for the month. Most of the diversions of surface water were for irrigational use and small amounts for municipal and industrial uses. Crops currently irrigated in the area are: cabbage, wheat, corn, hay grazers, and pecans. The U.S. Drought Report indicates this area is experiencing " Abnormally Dry" to " Severe" drought conditions at this time.

Stream flow Conditions: Stream flows for the major tributaries in this area continued to flow well below the mean for this time of year. The Nueces River at Laguna had stream flows of 50 CFS, compared to 57 CFS last month. The historical mean is 203 CFS. The Nueces River near Brackettville had stream flows of 0.09 CFS, compared to 0.12 CFS last month. The historical mean is 16 CFS. The Nueces River below Uvalde had stream flows of 16 CFS, compared to 17 CFS last month. The historical mean is 186 CFS. The Frio River at Concan had stream flows of 28 CFS, compared to 32 CFS last month. The historical mean is 133 CFS. The Sabinal River at Sabinal had stream flows of 0.74 CFS, compared to .94 CFS last month. The historical mean is 23 CFS. The Leona River near Uvalde had stream flows of 28 CFS, compared to 29 CFS last month. The historical mean is 45 CFS.

Stream flows of intermittent and tributary streams in the area are flowing below average for this time of year.

Drought Restrictions: Currently, permits with stream flow restrictions are being regulated. The Zavala/Dimmit Water District has a rotational diversion schedule on the Nueces River to ensure adequate water for domestic and livestock use.

Area Counties: Bastrop, Bexar, Blanco, Caldwell, Comal, Fayette, Frio, Guadalupe, Hays, and Medina.

Rainfall and Area Conditions: Well below average monthly rainfall fell across the San Antonio Regional Area during October. Month to date rainfall measured at the San Antonio International Airport was 0.07 inches. The average for October is 3.86 inches. Total annual rainfall to date is 13.45 inches; normal year to date is 28.38 inches, a departure from normal of 14.93 inches. On October 28, 2008, the U. S. Drought Monitor indicated the San Antonio Regional Area is experiencing " Severe to Extreme" Drought Conditions. This has impacted crops, pastures and grasslands, stream flows, and reservoir capacities. Ground moisture is now relatively poor with the lack of rain and no cloud cover. Winter oats, mustard greens, turnips, beets, carrots, swiss chard, collard greens, and spinach are being planted.

Stream Flow Conditions: The Guadalupe and Blanco Rivers were showing the impact of the worsening drought. Small creeks have dried and most major streams are beginning to quickly pool or dry up entirely. Municipal use has decreased with the shorter days and residential lawns require less irrigation. Industrial use remained constant.

All major tributaries in the San Antonio Regional Area were still well below their historical monthly averages for September. The Guadalupe River at Spring Branch is currently 35

CFS, the historical mean flow for October is 350 CFS. The San Marcos River at Luling is flowing at 100 CFS, the historical mean flow for October is 414 CFS. The Blanco River at Wimberley is flowing at 12 CFS, the historical mean flow for October is 117 CFS.

Currently, Canyon Lake Reservoir is at 899.19 feet elevation, impounding 303,757 acre-feet, and is at 80.17% of capacity. On October 31, 2008, the Edwards Aquifer level at the J17 well in Bexar County was 667.8 feet. The historical average for October is 664.6 feet, which is 3.2 feet above the monthly historical average. On October 30, 2008, the San Marcos Springs were flowing at 105 CFS. The historical monthly average for October is 161 CFS. This was 56 CFS below the monthly historical average. On October 31, 2008, the Comal Springs were flowing at 286 CFS. The monthly historical flow for October is 281 CFS; which is 5 CFS above the historical monthly average.

Drought Restrictions: Temporary Permits are now regulated, as well as permits with stream flow restrictions.

Area Counties: Sterling, Tom Green, Irion, Concho, Coke, Glasscock, Runnels, Reagan, and Schleicher.

Beneficial rains came to the Concho River Valley in October. However, the amounts were below average. According to information provided by the USDA, the State Drought Monitor Index has the Concho Valley at " Moderate Drought" .

Rainfall and Area Conditions: Rainfall in San Angelo for the month was 1.81 inches. Areas surrounding San Angelo received slightly higher rainfall amounts. The average rainfall amount for the area was 2.33 inches. The total amount of rainfall for the year is 20.31 inches. In 2007, there were 30.98 inches of rain. Average annual rainfall, based on 100 years of record, is 19 inches. Area reservoirs were showing slight decreases in the amount of storage from the previous month. Irrigation demand by appropriated surface water rights in the Concho Valley has reduced volume, due to timely rains. The Texas Crop Moisture Index indicated soil moisture content was " Abnormally Dry" However, the Index has not been updated since October 4, 2008. Cotton is being stripped and picked and winter wheat is being planted.

Stream Flow Conditions: Mean daily discharge statistics, based on six years of record for USGS Gaging Station 08130700 at Spring Creek above Twin Buttes Reservoir near San Angelo was 8.7 CFS. The most recent value was 5.20 CFS. Mean daily discharge statistics at USGS Gaging Station 08136000 at Concho River at San Angelo/Bell Street was 60 CFS. This is based on 77 years of record. Currently, it is at 9.0 CFS. Mean daily discharge statistics at USGS Gaging Station 08128000 at South Concho at Christoval was 26 CFS. This is based on 73 years of record. The most recent daily value was 19 CFS. Area lakes indicate Lake Nasworthy is at 82% of capacity or 8,396 acre-feet, O. C. Fisher was at 6% of capacity or 6,491 acre-feet, and Twin Buttes Lake was at 33% of capacity or 62,206 acre-feet.

Drought Restrictions: There are no additional restrictions on diversions in the Concho Valley.

8. Upper Colorado (Concho River watershed not included)

The upper Colorado River area received less than normal precipitation during October. The National Weather Service in San Angelo reported monthly precipitation of 1.81 inches, which was 0.76 inches above normal. The annual total to date is 18.73 inches, which was 0.14

inches below normal. According to the U.S. Drought Monitor, the drought conditions in the area range from abnormally dry to moderate, and the upper reaches of the Llano River watershed are in an area of severe drought. Most tributaries in the upper Colorado watershed have diminished flows. However, there were isolated areas that were flowing at or above USGS long-term median. The pool levels of EV Spence and OH Ivie Reservoir decreased during the month. The pool levels of EV Spence and OH Ivie Reservoirs were 11% and 57% of capacity, respectively.

9. Texas Panhandle and Southern High Plains

Amarillo Area: The Amarillo Region reports the following summary for the Northern panhandle area:

Lake Meredith was at 53.41 feet and appears to be on a slow rise. Lake Greenbelt started the month at 55.49 feet and ended without change. Lake MacKenzie was at 71.90 feet. The National Weather Service in Amarillo reported a total rainfall in October of 3.87 inches, which was 3.78 inches above the yearly average.

Lubbock Area: The Lubbock area had average precipitation during October. Lubbock received 3.77 inches for the month. The average rainfall for October is 1.66 inches. Similar amounts were recorded throughout the Region 2 area. Total precipitation for 2008 now stands at 27.91 inches; which is 10.64 inches above normal for this point in the year. The long term drought situation was not changed and all of the communities previously noted as being on mandatory water restrictions remained on those restrictions. No new communities were added to the water restrictions list during October.

The following cities in the South Plains area remained on mandatory drought restrictions status: Lubbock and Amherst.

The following cities in the South Plains area remained on voluntary drought restrictions status: Ralls, Crosbyton, Spur, Post, White River WSC, and Valley WSC.

As Lake Meredith continued to decline, the City of Lubbock made preparations to construct a pipeline from Lake Alan Henry to the City of Lubbock, 65 miles uphill, to use as an additional source of water. The City of Lubbock owns the water rights at this lake.

White River Lake: The lake is currently at 28.6 feet at the dam, and is considered to be full at 46 feet. This is an increase of 0.7 feet from the level at the end of September 2008. White River WSD has groundwater wells on standby to supply water to its customers if the lake level drops below usable levels.

Lake Alan Henry: The lake is full. It is not used for public drinking water supplies at present, but will be utilized for this purpose in the near future.

10. Agricultural Concerns

Most of Texas agriculture was negatively affected by drought in 2008. On September 8, 2008, the Texas AgriLife Extension Service released an estimate of drought losses which totaled $1.4 billion in direct losses to agricultural producers to that date, with the estimate containing $1.1 billion in losses to crops and $260 million to the livestock sector which included losses to hay producers. The greatest losses were to cotton, followed by hay, cattle, corn, sorghum and wheat. Severe weather caused the loss of 1.3 million of the

State' s 4.7 million planted acres of cotton. This figure included about 200,000 acres lost to Hurricane Dolly. Much of the cotton loss was dryland cotton in the High Plains. Early summer rains allowed many of these acres to be replanted to sorghum and other crops, whereas severe crop losses along the coast and in central Texas did not receive beneficial moisture and remained dry at this time. Hay is in short supply over most of the eastern part of the State due to the dry spring and summer.

Hurricane Ike provided much needed moisture in parts of east and central Texas on September 11 and 12, but general rainfall was very limited in eastern portions of the State until early November, when light rains brought some relief. Much of the central, southwest, and coastal areas of the State remained dry, offering poor growing conditions for wheat, oats and other winter pastures. Wheat in the Blacklands and south Texas was in poor condition or had not germinated due to dry weather. Livestock operations are culling cattle in central Texas due to lack of water and forages. The High and Rolling Plains are in fair to excellent condition with respect to moisture.

11. Drought Impacts to Wildlife

No information available at this time.

12. Wildfire Concerns

The Keetch-Byram Drought Index (KBDI) is used to help determine potential for fire risk. It is a numerical index where each number is an estimate of the amount of precipitation, in 100ths of an inch, needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil, and 800 a completely dry soil. The relationship of the KBDI to fire danger is, as the index increases, the vegetation is subjected to increased moisture stress. KBDI levels and its relationship to expected fire potential are reflected in the following:

KBDI = 0 – 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. This is typical of spring dormant season following winter precipitation.

KBDI = 201 – 400: Typical of late spring; early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.

KBDI = 401 – 600: Typical of late summer, early fall. Lower litter and duff layers contribute to fire intensity and will burn actively.

KBDI = 601 – 800: Often associated with more severe drought and increased wildfire occurrence. Intense, deep-burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

There are currently 141 counties, illustrated in Attachment 2, with KBDI values in excess of 400, indicating areas within these counties are beginning to experience dry conditions, which could result in an increased fire risk potential.

The Council, which is chaired by Jack Colley, Chief, Governor's Division of Emergency Management, is composed of state agencies concerned with the effects of drought and fire on the citizens of the State of Texas. The attached information was compiled and provided by representatives listed below. Points of contact, telephone numbers, and web site addresses are also provided.

Jack Colley, Chief, Governor's Division of Emergency Management, (512) 424-2443, fax (512) 424-2444, web site: http://www.txdps.state.tx.us/dem

John Sutton, Texas Water Development Board, (512) 463-7988, fax (512) 463-9893, web site: http://www.twdb.state.tx.us

Chris Loft, Texas Commission on Environmental Quality, (512) 239-4715, fax (512) 239-4770, web site: http://www.tceq.state.tx.us

Richard Egg, Texas State Soil & Water Conservation Board, (254) 773-2250, fax (254) 773-3311, web site: http://www.tsswcb.state.tx.us

Lance Williams, Texas Department of Agriculture, (512) 463-3285, fax (800) 835-2981, web site: http://agr.state.tx.us

Dr. Travis Miller, Texas AgriLife Extension Service, (979) 845-4808, fax (979) 845-0456, web site: http://texasextension .tamu.edu

Cindy Loeffler, Texas Parks & Wildlife Department, (512) 912-7015, fax (512) 707-1358, web site: http://www.tpwd.state.tx.us

Edward T. Morris, Department of Housing and Community Affairs, (512) 475-3329, Fax (512) 475-7498, web site: http://www.tdhca.state.tx.us

Michael Dunivan, Texas Forest Service, (830) 997-5426, web site: http://txforestservice.tamu.edu

Paul Tabor, Texas Department of State Health Services, (512) 458-7126, fax (512) 458- 7472, web site: http://www.dshs.state.tx.us/

Thomas Walker, Office of the Governor, Economic Development & Tourism, (512) 936-0169, fax (512) 936-0141, web site: http://www.governor.state.tx.us/divisions/ecodev

David A. Van Dresar, Texas Alliance of Groundwater Districts, (979) 968-3135, fax (979) 968-3194, web site: http://www.texasgroundwater.org/

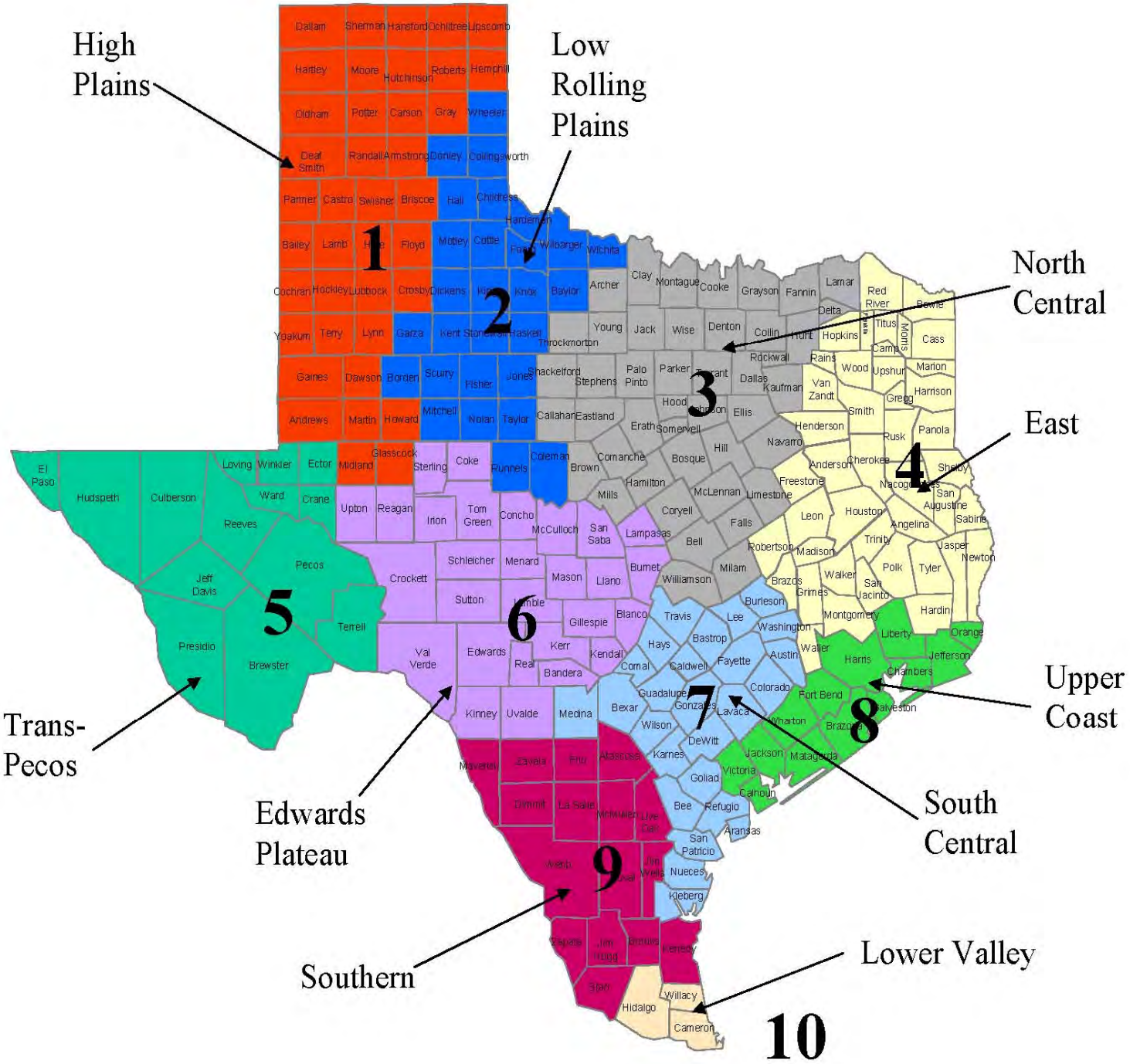
Dr. John W. Nielsen-Gammon, Office of the State Climatologist, (979) 862-2248, fax (979) 862-4466, web site: http://www.met.tamu.edu/osc/

Gus Garcia, Office of Rural Community Affairs, (512) 936-7876, fax (512) 936-6776, web site: http://www.orca.state.tx.us

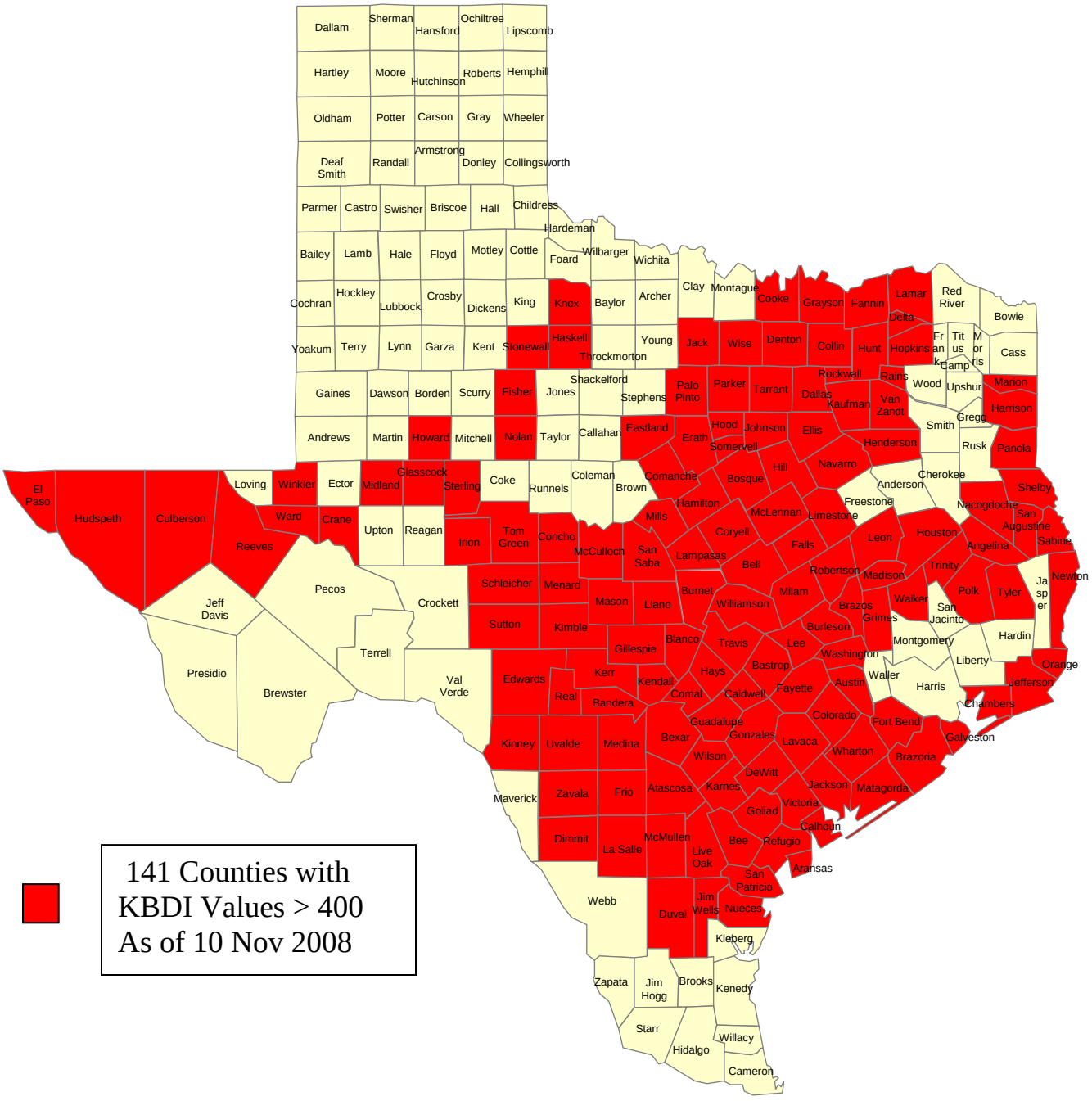
cc:

Amy Jeter, Committee Clerk, Senate Finance Committee
Sarah Hicks, Committee Director, Senate Finance Committee
Teddy Carter, Committee Clerk, Senate Natural Resources Committee
Amy Peterson, Committee Clerk, House Appropriations
Hope Wells, Committee Clerk, House Natural Resources Committee
Steven Schar, Committee Clerk, House Agriculture and Livestock Committee
Anne Creixell, Committee Clerk, House Criminal Jurisprudence Committee
Zak Covar, Policy Advisor for TCEQ Issues, Governor's Policy Office
Auburn Mitchell, Policy Advisor for Agriculture/TDA, Governor's Policy Office
Rob Johnson, Lt. Governor's Chief of Staff
Carmen Cernosek, Lt. Governor's Natural Resources Policy Analyst
Shane Linkous, Deputy Division Chief, Intergovernmental Relations, Attorney General's Office
Allan B. Polunsky, Chairman, Public Safety Commission
Louis E. Sturns, Member, Public Safety Commission
Colonel Stanley Clark, Interim Director, Department of Public Safety
Lieutanant Colonel Lamar Beckworth, Interim Assistant Director, Department of Public Safety
Lori Gabbert,, Budget Analyst, Legislative Budget Board (LBB-DPS)
Tom Lambert, Budget Analyst, Legislative Budget Board (LBB-TCEQ)
Ed Perez, Executive Director, Texas Office of State-Federal Relations, Washington, DC
Brandon Steinmann, Director, Texas Office of State-Federal Relations, Austin, Texas

Attachment 1
Climatic Regions



Attachment 2
Counties with High to Extreme Fire Danger



141 Counties with KBDI Values > 400 As of 10 Nov 2008

DROUGHT PREPAREDNESS COUNCIL

RICK PERRY
Governor

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JACK COLLEY
Council Chairman

December 11, 2008

TO: The Honorable Rick Perry, Governor, State of Texas
The Honorable David Dewhurst, Lieutenant Governor, State of Texas
Ms. Esperanza Andrade, Secretary of State, State of Texas
The Honorable Mario Gallegos, Jr., President Pro Tempore of the Senate, State of Texas
The Honorable Tom Craddick, Speaker of the House, State of Texas
The Honorable Steve Ogden, Chairman, Senate Finance Committee, State of Texas
The Honorable Kip Averitt, Chairman, Senate Natural Resources Committee, State of Texas
The Honorable John Carona, Chairman, Senate Committee on Transportation & Homeland Security, State of Texas
The Honorable Warren Chisum, Chairman, House Appropriations Committee, State of Texas
The Honorable Mike Hamilton, Vice-Chairman, House Natural Resources Committee, State of Texas
The Honorable Sid Miller, Chairman, House Agriculture & Livestock Committee, State of Texas
The Honorable Aaron Peña, Chairman, House Criminal Jurisprudence Committee, State of Texas
Mr. Jay Kimbrough, Chief of Staff, Office of the Governor
Mr. Steven McCraw, Director, Texas Governor's Office of Homeland Security

FROM: Chief Jack Colley, Chairman, Drought Preparedness Council

SUBJECT: Statewide Drought Situation Report

1. Next Council Meeting

January 8, 2008, 2:00 p.m., Governor's Conference Room of the Governor's Division of Emergency Management, State Operations Center, Texas Department of Public Safety Headquarters, 5805 N. Lamar Blvd., Austin, Texas.

At this time, the Council will continue to meet on a monthly basis.

2. General Conditions

Precipitation during November was below normal across a vast majority of Texas, with a few exceptions in East Texas and near the Dallas/Fort Worth area. The western half of the state received little to no rainfall. The continuation of the dry conditions prompted the United States Drought Monitor (USDM) to classify parts of South Central Texas as having exceptional drought conditions. The past three months were the third driest September through November stretch in the South Central Texas Climate Division (CD) Seven since 1895.

Most of the significant precipitation occurred when two frontal boundaries moved across the Eastern half of the State between November 11th and 13th. Veterans Day brought heavy rainfall to the Metroplex. The Houston metro area received the bulk of its monthly rainfall on the 12th. Other than a few widely scattered showers, little precipitation was recorded across the State between the 14th and Thanksgiving on the 27th. A stationary front draped across Central Texas brought precipitation during the latter half of the Thanksgiving weekend, but any significant precipitation stayed to the north and east of drought stricken South Central Texas.

According to radar estimates, a large area receiving less than 25% of normal November precipitation covered most of Texas west of I-35. Del Rio and Fort Stockton received no precipitation during the entire month. The area of I-35 between Austin and San Antonio with the exceptional drought designation also remained extremely dry. Austin Bergstrom reported 0.11" and San Antonio only 0.01" of precipitation. Austin/Mabry received only 50% of its normal year-to-date precipitation and San Antonio only 44% of its normal precipitation. The drought would be much worse if not for an abnormally wet 2007, which saw annual precipitation totals about 40% more than normal in South Central Texas; and 48% more than normal in the Edwards Plateau region.

The USGS stream flow maps indicate several stations along the Colorado River in Central Texas have discharges below the tenth percentile, relative to those that have historically occurred at this time of year. The persistent dry weather is affecting the water discharge downstream along the Upper Texas Coast, with several stations reporting numbers in the first to fifth percentiles. Moderate drought conditions along the Red River in far northern Texas have caused the current discharge to rank below the fifth percentile.

According to the Climate Prediction Center (CPC), the El Nino-Southern Oscillation (ENSO) cycle is forecasted to be neutral through the early part of 2009. The current three-month forecast calls for a 33-40% chance of below normal precipitation for the southern half of Texas, and a small area with a 40% or greater chance of below normal precipitation in an area of West Texas near El Paso.

A greater than equal chance of below normal precipitation covers drought stricken South Central Texas. In addition, development of drought conditions to the south of regions already in extreme to exceptional droughts is possible in the short term. An equal chance of below normal, near normal, and above normal precipitation is expected over the next three months across most of the northern half of Texas, with a 33-40% chance of above normal precipitation forecast for the regions of the panhandle north of Amarillo.

3. Overall Statewide Drought Conditions

The South Central region is under " Moderate Drought" conditions, according to the Palmer Drought Severity Index (PDSI). The Edwards Plateau region is in a " Mild Drought," and the remainder of the State is mostly under " Slightly Wet" to " Extremely Wet" conditions. The remainder of the State is under either " Normal" or " Wet Spell" conditions. The High Plains and east regions are experiencing " Moderately Wet" conditions. The PDSI varies from extremely wet, very wet, moderately wet, slightly wet, incipient wet spell, near normal, incipient dry spell, mild drought, moderate drought, severe drought, and extreme drought in order of increasing severity.

The Crop Moisture Index (CMI) indicates the Southern region is under " Abnormally Dry" conditions and the East region is under the boundary of " Moisture Adequate" and " Fields Too Wet" conditions. The remainder of the State is under " Mildly Dry" to " Moisture Adequate" conditions. The CMI varies from flooding, standing water, fields too wet, moisture adequate, mildly dry, abnormally dry, excessively dry, severely dry, and extremely dry in order of increasing severity.

The Six-Month Standardized Precipitation Index (SPI) indicates the South Central region is under " Moderately Dry" conditions, the High Plains region is under " Moderately Wet" conditions, the Lower Valley region is under " Extremely Wet" conditions, and the remainder of the State is experiencing " Near Normal" conditions. The SPI varies in categories of extremely wet conditions, very wet, moderately wet, near normal, moderately dry and, severely dry, extremely dry in order of increasing severity.

The Keetch-Byram Drought Index (KBDI) indicates the High Plains, Trans-Pecos, Upper Coast, and Lower Valley regions are experiencing an " above average" fire risk. The North Central and Edwards Plateau regions are under " high fire risk" conditions, the South Central and the Southern regions are experiencing a " very high fire risk" condition. The KBDI is a drought index specifically used to describe potential or expected fire behavior. The index is classified as Low, Moderate, High or Extreme fire danger in order of increasing severity.

Texas Forest Service reported outdoor burn bans in 67 counties.

The Climate Prediction Center (CPC) forecast indicates above normal precipitation chances for the upper High Plains region and below normal precipitation for the Texas-New Mexico border line during the December 2008-February 2009. During the same period, the CPC forecast above normal temperatures with a 33% to 50% chance of normal precipitation for the State.

The National Oceanic and Atmospheric Administration (NOAA) Seasonal U.S. Drought Outlook through February 2009, forecast persisting areas of drought in the Edwards Plateau, South Central, North Central, Upper Coast, and Southern regions, and " likely developing drought" conditions in lower Southern region.

4. Water Utility Status

December 2008 began with 120 public water systems on the drought list. The number included 20 water systems that relaxed restrictions imposed in 2008 and returned to normal operations and water usage. The remaining 110 water systems on the list included 70 systems that placed their customers on mandatory outside water restrictions and 30 systems that requested voluntary conservation. Significant rainfall will need to occur in regions of the State for additional systems to relax restrictions. Current long range forecasts do not predict rain events through January 2009.

5. Water Rights – Statewide

New temporary water use permit applications are reviewed on a site-specific basis and are issued if there is sufficient surplus water at the requested source. Applications for new water use permits and amendments to existing permits remained normal during the month. The water rights owners in the Brazos River Basin, whose permits contain the Hale Clause restrictions, observed less severe stream flow conditions during the winter months. The availability of unappropriated water for new water use permits continued to decrease in all river basins in the State and the search for long-term, dependable alternate sources of water remained a high priority issue.

6. Water Rights – Lower Rio Grande / Rio Grande Watermaster (RGWM)

Current Overall Conditions: As of November 22, 2008, the U.S. combined ownership at Amistad/Falcon stood at 96.65% of conservation capacity or 3,477,946 acre-feet. This is down from 103.49% or 3,510,374 acre-feet from a year ago at this time. Overall, the system is holding 97.64% or 6,134,643 acre-feet of conservation capacity with Amistad at 96.25% or 3,342,557 acre-feet and Falcon at 99.37% or 2,792,085 acre-feet. Mexico has 98.97% or 2,656,697 acre-feet of the water it could store at Amistad/Falcon.

Allocations: As of the printing of the November ownership report, the U.S. allocated in excess of 785,038 acre-feet for irrigation and mining. The U.S. continued to have an amount in excess of 603,410 acre-feet for future allocations in 2008.

Storage & Loss Amistad vs. Falcon: The U.S. is currently storing approximately 1.85 million acre-feet or 94.7% at Amistad, and approximately 1.63 million acre-feet or 98.9% at Falcon.

Evaporation and seepage losses at Amistad YTD were 33,183 acre-feet. During the same period, the U.S. lost 35,516 acre-feet at Falcon. The ratio of loss between Amistad and Falcon continued to be 1:2, consistent with Amistad being twice as efficient in overall storage and loss.

Releases to Meet Demands: Mexico released 889,382 acre-feet from Amistad and 861,801 acre-feet from Falcon for Mexico needs. The U.S. released 1,631,946 acre-feet from Amistad and 1,054,455 acre-feet from Falcon for U.S. needs. Combined with gains between Amistad and Falcon, U.S. inflows to Falcon totaled 1,901,038 acre-feet. So far, the U.S. met 65% of overall needs in the middle and Lower Rio Grande directly from middle Rio Grande and Amistad inflows this year. The movement of water from Amistad was primarily driven by U.S. excess amount in storage and the need to keep it below conservation capacity, particularly when the U.S. is occupying Mexico's space in Amistad.

Upper Rio Grande (New Mexico): Currently, Elephant Butte in New Mexico is storing 597,492 acre-feet or 29.53% and Caballo Dam, downstream of Elephant Butte, is storing 19,457 acre-feet or 8.57%. This water storage, in part, was used to meet water needs in the El Paso area.

Outlook: All active accounts began 2008 with 100% usable balances. The reservoirs increased in elevation due to the rainfall here and in the upper Rio Grande Regions. To alleviate losses in Falcon, the U.S. continued to monitor ownership and elevation levels in both Falcon and Amistad for more efficient U.S. transfers of water from Amistad to Falcon. It appeared that 2009 will start with all active accounts at full capacity. Both U.S. reservoirs

are considered full as are the majority of the Mexican reservoirs in the Rio Grande Basin. Effective October 26, 2008, " No Charge Pumping" was declared from Amistad down to the Gulf for all diversion requests until further notice.

7. South Texas Watermaster – Guadalupe / Lavaca / San Antonio / Nueces Region

November left South Central Texas in a drought situation that showed no short term relief in sight. The Coastal regions and Concho River Basin experienced better conditions than the Central region of the State. If rainfall does not occur soon near Austin and San Antonio, the Hill Country could reach the most critical of drought conditions.

Area Counties: Bandera, Blanco, Comal, Kendall and Kerr Counties

Rainfall and Area Conditions: This area received varying amounts of precipitation, ranging from 0.10 to 0.50 inches during November. With that rainfall, the Texas Crop Moisture Index in this area of the Hill Country was classified as " Mildly" to " Normally Dry" . Most surface water diversions in this area are for municipal and industrial uses, with a few surface water permit holders irrigating hay and sod fields. The U.S. Drought Monitor indicated this area is currently in " Extreme Drought" condition.

Stream flow Conditions: None of the major streams or their tributaries flowed at normal capacities. Most of the major streams showed a slight increase in flow during November, which may be contributed to the trees along the water courses in their dormant stages. Most of the smaller secondary tributaries lost surface flow. The Guadalupe River near Kerrville had a stream flow of approximately 53 CFS. The historical monthly mean is 111 CFS. The Guadalupe River near Comfort had a stream flow of approximately 60 CFS. The historical monthly mean is 157 CFS. The Medina River near Bandera had a stream flow of 26 CFS. The historical monthly mean is 98 CFS.

Drought Restrictions: On August 7, 2008, Kerrville restricted the amount of surface diversions from the Guadalupe River and was limited to pumping three million gallons per day. All temporary surface water permits in the Guadalupe River Basin above Canyon Lake and the San Antonio River Basin above Lake Medina were suspended. Because of the low stream flows, some State permit holders reached their flow restrictions and were curtailed from pumping. River flows are monitored on a daily basis.

Area Counties: Bee, Goliad, Victoria, Calhoun, Jackson, Refugio, Aransas, San Patricio, Nueces, Kleberg, Jim Wells, Duval, Live Oak, Kenedy, Willacy, Brooks, and Jim Hogg.

Rainfall and Area Conditions: This area received little rainfall during November. Some localized rainfall events occurred throughout the month, ranging from a trace to one or two inches. The rainfall did not provide much soil moisture or runoff into local area streams. The U.S. Drought Monitor indicated the area is experiencing " No Drought to " Abnormally Dry" to " Severe Drought" conditions. The Corpus Christi Reservoir System received little inflows during this time. Therefore, the reservoir level continued to drop. Most of the surface water diversions continued to be for municipal and industrial uses, little irrigation was noted.

Stream flow Conditions: Stream flows in the area continued to decrease and flowed below expectations for this time of year. According the USGS Stream Flow Gage at the Guadalupe River near Victoria, stream flows were approximately 350 CFS at the beginning of the month and approximately 380 CFS toward the end of the month, compared to 360 CFS last month. The historical mean at the site, based on 73 years of record, is 1,680 CFS. The gage at the San Antonio River near Goliad indicated the stream flows were

approximately 275 CFS at the beginning of the month and ended at approximately 214 CFS, compared to 275 CFS last month. The historical mean at the site, based on 73 years of record, is 516 CFS. The gage at the San Antonio River at McFaddin, which is below Goliad, indicated the stream flows were approximately 270 CFS at the beginning of the month, and ended at approximately 269 CFS, compared to 285 CFS last month. The historical mean at the site, based on two years of record, is 299 CFS. The gage at the Guadalupe River near Tivoli, below the confluence of the San Antonio River and Guadalupe River, indicated stream flows of approximately 820 CFS at the beginning of the month, and 822 CFS at the end of the month, compared to 850 CFS last month. The historical mean at the site, based on two years of record, is 2,860 CFS. The gage at the Mission River near Refugio indicated stream flows at approximately 4.0 CFS at the beginning of the month and ended at approximately 4.8 CFS, compared to 4.2 CFS last month. The historical mean at the site, based on 68 years of record, is 25 CFS. The USGS Stream Flow Gage of the Nueces River at Calallen Dam indicated 25 CFS stream flow over the dam near Corpus Christi and ended at approximately 4.7 CFS of stream flow towards the end of the month. This is compared to 18 CFS last month. The historical mean at the site during this time, based on eight years of record, is 734 CFS. The gage at the Aransas River near Skidmore indicated stream flows were approximately 3.0 CFS at the beginning of the month and ended at approximately 3.5 CFS, compared to 3.1 CFS last month. The historical mean at the site based on 43 years of record, is 5.7 CFS.

Area Counties: Atascosa, Karnes, Gonzales, Wilson, McMullen, Dewitt, Guadalupe, Lavaca, Fayette, Colorado, Wharton, and Jackson.

Rainfall and Area Conditions: This area received 0.00 to 2.7 inches of rainfall during November. The month' s rainfall events in theLavaca Area were small, isolated showers. Soil moisture conditions were very poor. Hay season ended and oat and rye crops suffered without supplemental irrigation. There was very little irrigation activity. Lake Texana is at 78% of capacity, which is 40.04 feet above mean sea level.

According to the U.S. Drought Monitoring System, this area experienced " Severe" to " Extreme" drought conditions.

Stream flow Conditions: The flow of the San Antonio River near Falls City was 184 CFS. The historical mean for November is 256 CFS. The Cibolo Creek near Falls City is 33 CFS and the ending reading last month was 25 CFS. The historical mean for November is 30 CFS. The Guadalupe River near Gonzales is at 515 CFS and the ending reading last month was 657 CFS. The historical mean for November is 786 CFS. The Lavaca River at Edna is at 13 CFS and the ending reading last month was 11 CFS. The historical mean for November is 39 CFS. The Navidad River near Halletsville is at 1.6 CFS and the ending reading last month was 0.62 CFS. The historical mean for November is 21 CFS. The Atascosa River near Whitsett is at 4.9 CFS and the ending reading last month was 2.4 CFS. The historical mean for November is 10 CFS. The Frio River near Tilden is at 7 CFS and the ending reading last month was 10 CFS. The historical mean for November is 44 CFS. The Nueces River near Tilden is at 0.4 CFS and the ending reading last month was 1 CFS. The historical mean for November is 48 CFS.

Drought Restrictions: There were no additional restrictions on diversions.

Area Counties: Edwards, Real, Kinney, Uvalde, Zavala, Dimmit, La Salle and Webb.

Rainfall and Area Conditions: The Southwest Texas area received no relief from the drought conditions during November as there was no rain reported during the month. Most

diversions of surface water were for irrigational use and small amounts for municipal and industrial uses. Crops irrigated in the area were: wheat, sesame seeds, winter rye, hay grazers, and pecans. The U.S. Drought Report indicated this area is experiencing " Abnormally Dry" to " Extreme" drought conditions.

Stream flow Conditions: Stream flows for the major tributaries in this area continued to flow well below the mean for this time of year. The Nueces River at Laguna had stream flows of 50 CFS, compared to 50 CFS last month. The historical mean is 129 CFS. The Nueces River near Brackettville had stream flows of 0.14 CFS, compared to 0.03 CFS last month. The historical mean is 4.5 CFS. The Nueces River below Uvalde had stream flows of 17 CFS, compared to 16 CFS last month. The historical mean is 88 CFS. The Frio River at Concan had stream flows of 28 CFS, compared to 28 CFS last month. The historical mean is 96 CFS. The Sabinal River at Sabinal had stream flows of 0.80 CFS, compared to .74 CFS last month. The historical mean is 12 CFS. The Leona River near Uvalde had stream flows of 24 CFS, compared to 28 CFS last month. The historical mean is 49 CFS.

Stream flows of intermittent and tributary streams in the area were flowing well below average for this time of year.

Drought Restrictions: Permits with stream flow restrictions are being regulated. The Zavala/Dimmit Water District had a rotational diversion schedule on the Nueces River to ensure adequate water for domestic and livestock use.

Area Counties: Bastrop, Bexar, Blanco, Caldwell, Comal, Fayette, Frio, Guadalupe, Hays, and Medina.

Rainfall and Area Conditions: Well below average monthly rainfall fell across the San Antonio Regional Area during November. There was no measurable rainfall at the San Antonio International Airport. The average for November is 2.58 inches. Total annual rainfall to date is 13.45 inches; normal year to date is 30.19 inches, a departure from normal of 16.74 inches. On November 18, 2008, the U. S. Drought Monitor indicated the San Antonio Regional Area was experiencing " Severe" to " Extreme" Drought Conditions. This impacted crops, pastures and grasslands, stream flows, and reservoir capacities. Ground moisture was relatively poor due to the lack of rain and cloud cover. Winter oats, mustard greens, turnips, beets, carrots, Swiss chard, collard greens, and spinach were planted.

Stream Flow Conditions: The Guadalupe and Blanco Rivers showed the impact of the worsening drought. Small creeks dried and most major streams are beginning to quickly pool or dry up entirely. Municipal use decreased with the shorter days and residential lawns required less irrigation. Industrial use remained constant.

All major tributaries in the San Antonio Regional Area were well below their historical monthly averages for November. The Guadalupe River at Spring Branch flowed at 48 CFS; the historical mean flow for November is 273 CFS. The San Marcos River at Luling flowed at 98 CFS, the historical mean flow for November is 380 CFS. The Blanco River at Wimberley flowed at 13 CFS, the historical mean flow for November is 116 CFS.

The Canyon Lake Reservoir was at 898.58 feet elevation, impounding 299,517 acre-feet, and was at 79.0591% of capacity. On December 1, 2008, the Edwards Aquifer level at the J17 well in Bexar County was 668.1 feet. The historical average for November is 669.1 feet, which is 1.0 feet below the monthly historical average. On November 30, 2008, the San Marcos Springs were flowing at 102.0 CFS. The historical monthly average for November is 174 CFS. This was 72 CFS below the monthly historical average. On November 30, 2008,

the Comal Springs were flowing at 288 CFS. The monthly historical flow for November is 302 CFS; which is 14 CFS below the historical monthly average.

Drought Restrictions: Most Temporary Permits were not allowed to divert surface water. Surface water permits are closely monitored in regards to " real time" stream flows as to whether or not they are allowed to divert.

Area Counties: Sterling, Tom Green, Irion, Concho, Coke, Glasscock, Runnels, Reagan, and Schleicher.

Rainfall was scarce in the Concho River Valley during November, falling well below the monthly average for the second consecutive month. According to information provided by the USDA, the State Drought Monitor Index of the Concho Valley was at " Abnormally Dry" drought conditions.

Rainfall and Area Conditions: Rainfall in San Angelo during November was 0.25 inches. The average rainfall amount in the area was 1.20 inches. The total yearly amount of rainfall is 20.56 inches. In 2007, there were 31.87 inches of rain. Average annual rainfall, based on 100 years of record, is 19 inches. Area reservoirs were showing slight decreases in the amount of storage from the previous month. Irrigation demand by appropriated surface water rights in the Concho Valley was at a reduced volume, due to timely rains. The Texas Crop Moisture Index indicated soil moisture content was " Abnormally Dry" However, the Index has not been updated since November 1, 2008. Cotton was stripped and picked and winter wheat was planted.

Stream Flow Conditions: Mean daily discharge statistics, based on five years of record, for USGS Gaging Station 08130700 at Spring Creek above Twin Buttes Reservoir near San Angelo was 15 CFS. The most recent value was 9.0 CFS. Mean daily discharge statistics at USGS Gaging Station 08136000 at Concho River at San Angelo/Bell Street was 25 CFS. This is based on 77 years of record. Currently, it is at 8.4 CFS. Mean daily discharge statistics at USGS Gaging Station 08128000 at South Concho at Christoval was 21 CFS. This is based on 73 years of record. The most recent daily value was 21 CFS. Area lakes indicate Lake Nasworthy is at 81% of capacity or 8,300 acre-feet, O. C. Fisher was at 5% of capacity or 6,347 acre-feet, and Twin Buttes Lake was at 33% of capacity or 62,922 acre-feet.

Drought Restrictions: There were no additional restrictions on diversions in the Concho Valley.

8. Upper Colorado (Concho River watershed not included)

The upper Colorado River area received less than normal precipitation during November. The National Weather Service in San Angelo reported monthly precipitation of 0.23 inches, which was 0.87 inches below normal. The annual total to date was 18.96 inches, which was 1.01 inches below normal. According to the U.S. Drought Monitor, the drought conditions in the area ranged from " Abnormal" to " Moderate" , and the upper reaches of the Llano River watershed are in an area of " Severe" drought. Most tributaries in the upper Colorado watershed had diminished flows. However, there were isolated areas that flowed at or above the USGS long-term median. The pool levels of EV Spence and OH Ivie Reservoir decreased during November, reaching levels of 11% and 56% of capacity, respectively.

9. Texas Panhandle and Southern High Plains

Amarillo Area: The Amarillo Region reported the following summary for the Northern panhandle area:

Lake Meredith was at 53.44 feet and decreasing. Lake Greenbelt ended November at 55 feet, 0.3 feet lower than the beginning of the month. The Canadian River upstream of the lake flowed at 25 CFS. Lake MacKenzie was at 71.33 feet. The National Weather Service in Amarillo reported a total rainfall in November of 0.68 inches, which was 3.29 inches above the yearly average.

Lubbock Area: Lubbock received only 0.08 inches for the month. The average rainfall for November was 0.71 inches. Similar amounts were recorded throughout the Region 2 area. Total precipitation for 2008 stood at 27.99 inches; which was 9.97 inches above normal for this point in the year. The long term drought situation was not changed. All of the communities previously noted as being on mandatory water restrictions remained on those restrictions. No new communities were added to the water restrictions list during November, and none were removed.

The following cities in the South Plains area remained on mandatory drought restrictions status: Lubbock and Amherst.

The following cities in the South Plains area remained on voluntary drought restrictions status: Ralls, Crosbyton, Spur, Post, White River WSC, and Valley WSC.

White River Lake: The lake' s pool elevation was at 2352.3 acre-feet, or 17.7 feet below full. This is an increase of 0.31 feet from the level at the end of October 2008. White River WSD has groundwater wells on standby to supply water to its customers if the lake level drops below usable levels.

Lake Alan Henry: The lake is full. It is not used for public drinking water supplies at present, but will be utilized for this purpose in the near future.

10. Agricultural Concerns

No information available at this time.

11. Drought Impacts to Wildlife

No information available at this time.

12. Wildfire Concerns

The Keetch-Byram Drought Index (KBDI) is used to help determine potential for fire risk. It is a numerical index where each number is an estimate of the amount of precipitation, in 100ths of an inch, needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil, and 800 a completely dry soil. The relationship of the KBDI to fire danger is, as the index increases, the vegetation is subjected to increased moisture stress. KBDI levels and its relationship to expected fire potential are reflected in the following:

KBDI = 0 – 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. This is typical of spring dormant season following winter precipitation.

KBDI = 201 – 400: Typical of late spring; early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.

KBDI = 401 – 600: Typical of late summer, early fall. Lower litter and duff layers contribute to fire intensity and will burn actively.

KBDI = 601 – 800: Often associated with more severe drought and increased wildfire occurrence. Intense, deep-burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

There are currently 131 counties, illustrated in Attachment 2, with KBDI values in excess of 400, indicating areas within these counties are beginning to experience dry conditions which could result in an increased fire risk potential.

The Council, which is chaired by Jack Colley, Chief, Governor' s Division of Emergency Management, is composed of state agencies concerned with the effects of drought and fire on the citizens of the State of Texas. The attached information was compiled and provided by representatives listed below. Points of contact, telephone numbers, and web site addresses are also provided.

Jack Colley, Chief, Governor' s Division of Emergency Management, (512) 424-2443, fax (512) 424-2444, web site: http://www.txdps.state.tx.us/dem

John Sutton, Texas Water Development Board, (512) 463-7988, fax (512) 463-9893, web site: http://www.twdb.state.tx.us

Chris Loft, Texas Commission on Environmental Quality, (512) 239-4715, fax (512) 239-4770, web site: http://www.tceq.state.tx.us

Richard Egg, Texas State Soil & Water Conservation Board, (254) 773-2250, fax (254) 773-3311, web site: http://www.tsswcb.state.tx.us

Lance Williams, Texas Department of Agriculture, (512) 463-3285, fax (800) 835-2981, web site: http://agr.state.tx.us

Dr. Travis Miller, Texas AgriLife Extension Service, (979) 845-4808, fax (979) 845-0456, web site: http://texasextension .tamu.edu

Cindy Loeffler, Texas Parks & Wildlife Department, (512) 912-7015, fax (512) 707-1358, web site: http://www.tpwd.state.tx.us

Edward T. Morris, Department of Housing and Community Affairs, (512) 475-3329, Fax (512) 475-7498, web site: http://www.tdhca.state.tx.us

Michael Dunivan, Texas Forest Service, (830) 997-5426, web site: http://txforestservice.tamu.edu

Paul Tabor, Texas Department of State Health Services, (512) 458-7126, fax (512) 458- 7472, web site: http://www.dshs.state.tx.us/

Thomas Walker, Office of the Governor, Economic Development & Tourism, (512) 936-0169, fax (512) 936-0141, web site: http://www.governor.state.tx.us/divisions/ecodev

David A. Van Dresar, Texas Alliance of Groundwater Districts, (979) 968-3135, fax (979) 968-3194, web site: http://www.texasgroundwater.org/

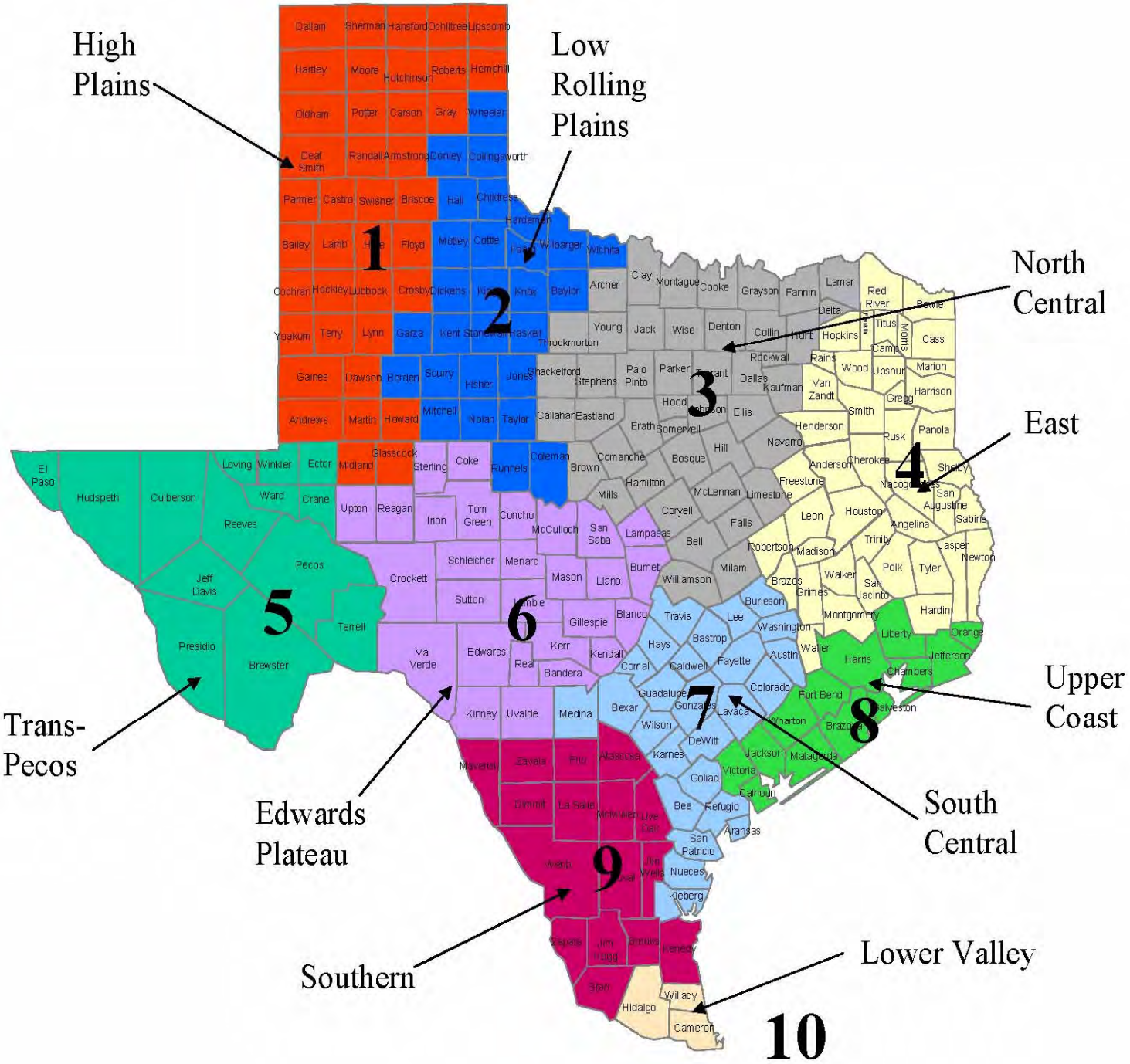
Dr. John W. Nielsen-Gammon, Office of the State Climatologist, (979) 862-2248, fax (979) 862-4466, web site: http://www.met.tamu.edu/osc/

Gus Garcia, Office of Rural Community Affairs, (512) 936-7876, fax (512) 936-6776, web site: http://www.orca.state.tx.us

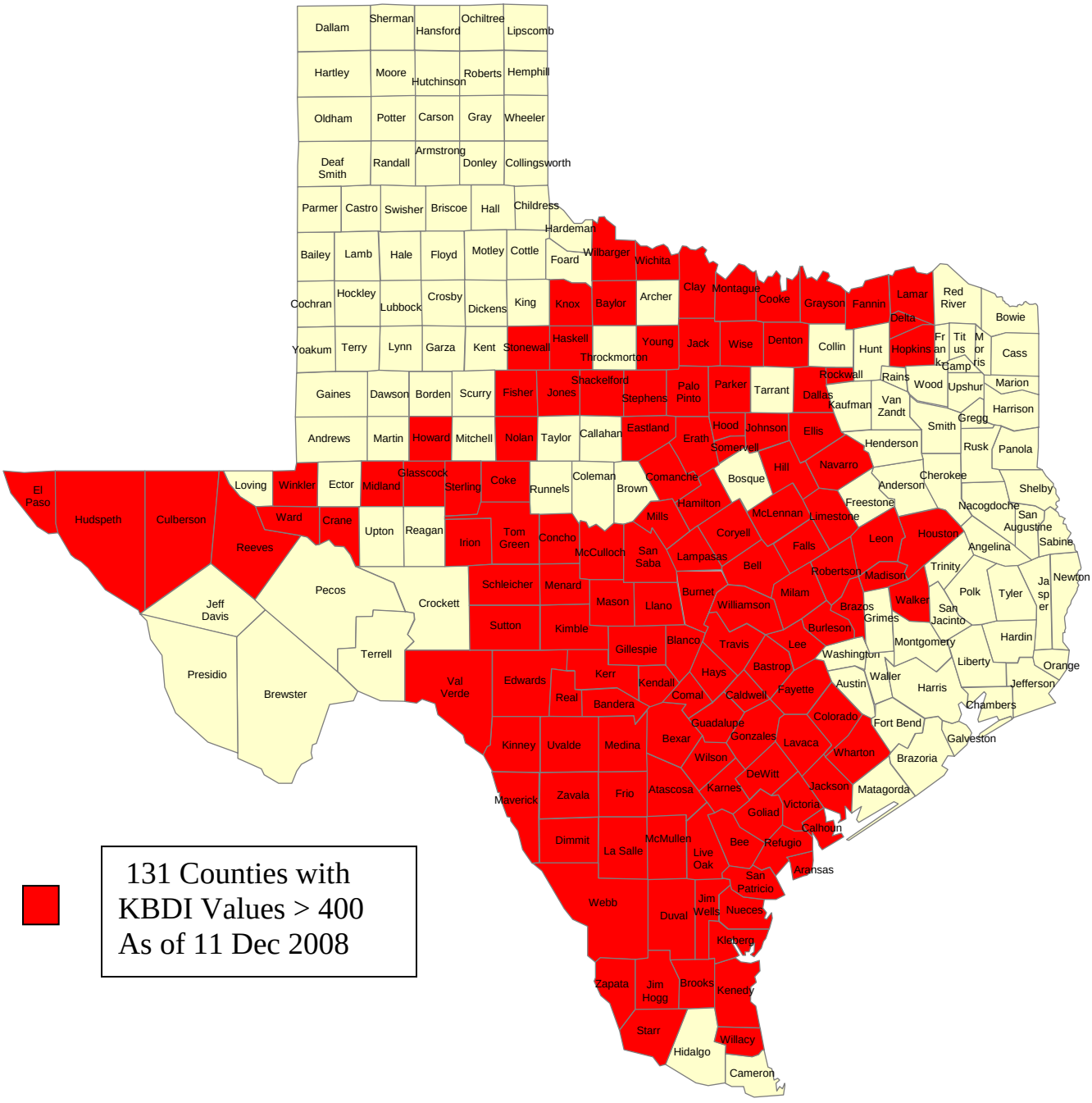
cc:

Amy Jeter, Committee Clerk, Senate Finance Committee
Sarah Hicks, Committee Director, Senate Finance Committee
Teddy Carter, Committee Clerk, Senate Natural Resources Committee
Amy Peterson, Committee Clerk, House Appropriations
Hope Wells, Committee Clerk, House Natural Resources Committee
Steven Schar, Committee Clerk, House Agriculture and Livestock Committee
Anne Creixell, Committee Clerk, House Criminal Jurisprudence Committee
Zak Covar, Policy Advisor for TCEQ Issues, Governor' s Policy Office
Auburn Mitchell, Policy Advisor for Agriculture/TDA, Governor' s Policy Office
Rob Johnson, Lt. Governor' s Chief of Staff
Carmen Cernosek, Lt. Governor' s Natural Resources Policy Analyst
Shane Linkous, Deputy Division Chief, Intergovernmental Relations, Attorney General' s Office
Allan B. Polunsky, Chairman, Public Safety Commission
Louis E. Sturns, Member, Public Safety Commission
Colonel Stanley Clark, Interim Director, Department of Public Safety
Lieutanant Colonel Lamar Beckworth, Interim Assistant Director, Department of Public Safety
Lori Gabbert,, Budget Analyst, Legislative Budget Board (LBB-DPS)
Tom Lambert, Budget Analyst, Legislative Budget Board (LBB-TCEQ)
Ed Perez, Executive Director, Texas Office of State-Federal Relations, Washington, DC
Brandon Steinmann, Director, Texas Office of State-Federal Relations, Austin, Texas

Attachment 1
Climatic Regions



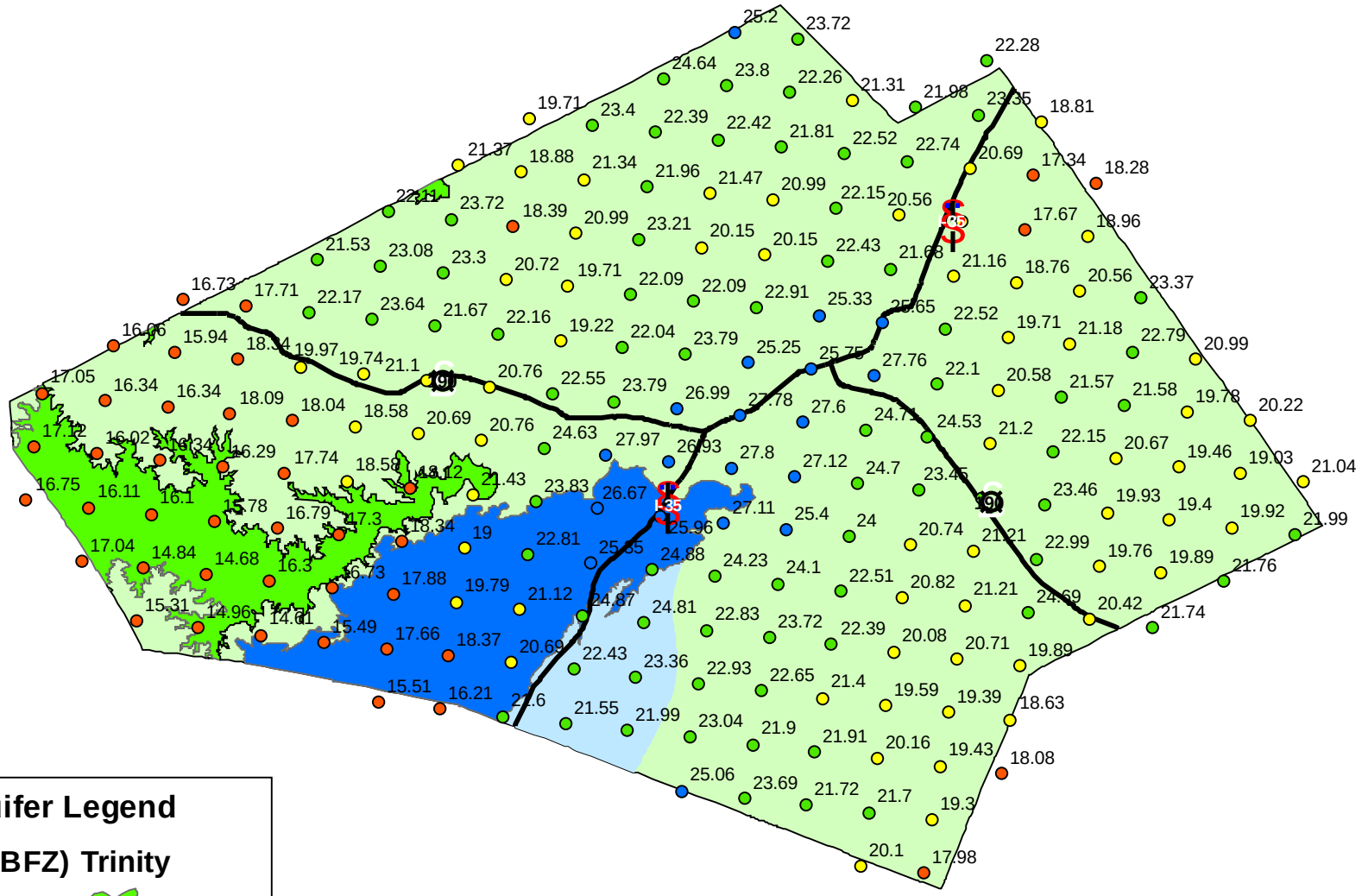
Attachment 2
Counties with High to Extreme Fire Danger



131 Counties with KBDI Values > 400 As of 11 Dec 2008

Appendix F

Rainfall Totals for 2008



Aquifer Legend

Edwards (BFZ)

- Outcrop
- Downdip

Trinity

- Outcrop
- Downdip

Clearwater Underground Water Conservation District
2180 N. Main St., PO Box 729
Belton, TX 76504

July 22, 2009

3 1.5 0 3 6 9 12 Miles

File Name
K:\NOAA Rainfall\Monthly Reports\

Data Source:
National Weather Service
Precipitation Analysis

®

Rainfall in Inches

- 14.61 - 18.50
- 18.51 - 21.50
- 21.51 - 25.00
- 25.01 - 27.97

Appendix G

ATTENTION 5TH GRADE STUDENTS!
INTERESTED IN SOME FREE MONEY??
HOW ABOUT WINNING A $500, $250, OR $100 U.S. SAVINGS BOND?

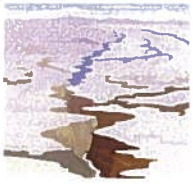
To claim your prize, all you have to do is ENTER and WIN

Clearwater Undergound Water Conservation District's Annual ESSAY and POSTER CONTEST

This year's theme: WATER IS LIFE.
CONSERVE WATER, CONSERVE LIFE.

How do you keep this  from becoming this? 

Think of some creative ways to conserve water and you just might win!!!



The Clearwater Undergound Water Conservation District (CUWCD) is sponsoring an essay and poster contest for all 5th grade students in Bell County. The entries should address ways that we can conserve and protect our water resources—both surface water and groundwater. Entries should include existing conservation practices as well as new and innovative ideas. Be creative and think outside that box!!

See judging criteria on the back of this page.

All participants will receive a CUWCD complimentary packet. Prizes will be awarded to the top three entries in both the essay and poster categories as follows:

1st PLACE---$500 SAVINGS BOND
2ND PLACE--$250 SAVINGS BOND
3RD PLACE--$100 SAVINGS BOND

Entries become the property of CUWCD upon submittal and may be reproduced by the District. Please contact the CUWCD office at 254-933-0120 for additional information.

Essays may be typed or handwritten (please make sure handwriting is legible). Posters must be at least 8 ½ x 11" in size. All entries must be postmarked no later than **December 17, 2007** and submitted to the following:

Clearwater UWCD
PO Box 729
Belton, TX 76513

or

Essays may be faxed to:
254-770-2360
Attn: Cheryl Maxwell

Entries may also be hand delivered to 2180 North Main in Belton by 5:00 p.m. on December 17th. Please fill out the form below and attach it to each entry.

JUDGING CRITERIA FOR ESSAY AND POSTER CONTEST:

Content	**70%**
Knowledge of Existing Conservation Methods	40%
*New Ideas for Conserving Water	30%

Presentation	**30%**
Creativity	20%
Grammar/Spelling	5%
Neatness	5%

*Be sure your entry (essay and/or poster) clearly identifies which methods are your original ideas and suggestions for conserving water.

Research Aid:
Several websites have water conservation tips—type the key words "water conservation" in your search engine. The CUWCD office also has a list of websites, brochures, and literature with information on water conservation. Call 254-933-0120 to visit with District staff.

Please complete the information below and attach it to the back of each entry:

Name:_____ Telephone No. _____

Address:_____

_____

School Name:_____ Teacher:_____

School District:_____ Grade:_____

Appendix H

Clearwater District
2180 North Main
Belton, TX 76513
ph 254-933-0120
alt ph 254-770-2370
fax 254-770-2360

Rainwater Harvesting

Rainwater Harvesting

Collecting rainwater from roofs and storing it for future use is a practical way to maximize the benefits of precipitation in Central Texas. In fact, cisterns that captured rainwater were a common way for early settlers to store water for everyday use. This old practice has now become modernized in Central Texas as several builders are installing rainwater harvesting systems to supply most or all of the water demands for homes and businesses. One famous example is the Lady Bird Johnson Wildflower Research Center in Austin. Typical rainwater harvesting systems include a large catchments area such as the roof of a home, gutters to transport rainfall, and screens which filter leaves and debris. A roof washer (with a 30 micron filter) is installed just before storage in large tanks (50 to 15,000 gallon fiberglass). The storage tank may be buried underground or hidden among landscape.

One estimate by the Texas Cooperative Extension said that 0.6 gallons of water can be harvested for each square foot of roof per inch of rain received, depending on collection efficiency. For example, if an inch of rain falls on a 2,000 square foot roof surface, then 1,200 gallons of water can be harvested. An average rainfall year of 35 inches in Bell County would result in as much as 42,000 gallons of water harvested from rain. With appropriate conservation measures, this may be sufficient to supply household needs.

Rainwater harvesting can also be done by simply placing barrels or buckets outside prior to a rain event. Harvested water could be used for watering plants, however, this water would not be suitable for human consumption unless it is filtered and kept in a closed container.

To best determine whether rainwater harvesting would be a practical way for your family to supply all or some of your water demands, we recommend calculating a water budget

Event

« <	Janu	
S	M	T
28	29	30
4	5	6
11	12	13
18	19	20
25	26	27

using the online calculator found on the Texas Cooperative Extension's website. This website includes a detailed description of rainwater harvesting systems.
Also, check out the extensive rainwater harvesting manual developed by the Texas Water Development Board. It includes everything from rainwater harvesting system components, water treatment, design guidelines, water demand calculations, and cost estimates. A link to this manual is shown below along with other rainwater harvesting resources.

Filter

Item Title
Rainwater Harvesting Contacts & Suppliers
TCE Rainwater Harvesting Landscape Methods
Rainwater Harvesting Manual

<< Start < Prev 1 Next > End >>

Results 1 - 3 of 3

- **Recharge Enhancement and Brush Control**
- **Groundwater and the Hydrologic Cycle**
- **Water Conservation and Water Quality**
- **Plugging Abandonded Wells**
- **New Well Owner Information**
- **Groundwater Conservation Districts**

[Back]

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Appendix I

Clearwater District
2180 North Main
Belton, TX 76513
ph 254-933-0120
alt ph 254-770-2370
fax 254-770-2360

Recharge Enhancement and Brush Control

Recharge Enhancement and Brush Control

The Clearwater District's motto is "Every drop counts!" This statement becomes even more poignant as water supplies shrink because of drought and water demand increases with the predicted doubling of our State's population by 2050. As water planners and landowners grapple with lower flows in streams and the potential for declining water levels in aquifers, solutions such as enhancing recharge of groundwater and educating the public to conserve water must be realized.

Brush control has been studied to quantify the amount of water that can be saved through the elimination of unwanted brush such as mesquite, juniper, and saltcedars. These studies have generally shown that elimination and control of regrowth can enhance the recharge of groundwater and conserve water resources. The Texas State Soil and Water Conservation Board has implemented several brush control programs in watersheds across the State. More about these programs can be found by clicking here.

In our area, the Leon River Restoration Project is attempting to quantify the effects of removal of ashejuniper on water yield in Hamilton and Coryell counties. The project is currently in phase one, however, updates can be found by clicking here.

According to the Texas Cooperative Extension (TCE), unwanted brush can have negative effects on land resources such as "depleting groundwater, reducing stream flow, drying up lakes and reservoirs, increasing the salinity of the soil surface, competing with forage grasses and native plants, and degrading wildlife habitat."[1] As a result, private landowners may wish to learn more about the methods to control and manage brush. These may include mechanical, chemical, prescribed burning or biological methods. These are described in detail in the TCE publication, Brush Management Methods. It can also be downloaded by clicking on the item below.

As always, a landowner should weigh the positives and negatives before implementing

Event

« <	Janu	
S	M	T
28	29	30
4	5	6
11	12	13
18	19	20
25	26	27

brush control measures. There are some desirable uses for brush such as food and cover for wildlife, atheistic appeal, and harvesting for wood burning and crafting. Environmental Defense has prepared a fact sheet to help inform the public about the effectiveness of brush management and the related environmental impacts. This fact sheet can be found by clicking here.
To learn more about brush control measures, visit the TCE bookstore, http://tcebookstore.org/pubsearch.cfm, which has many publications viewable in .pdf form or available for purchase.

---

[1] Source: Texas Cooperative Extension, *Biological Control of Saltcedar*, October 21, 2006, Publication number L-5444.

Filter

Item Title
Brush Management Fact Sheet
Brush Control Manual

<< Start < Prev 1 Next > End >>

Results 1 - 2 of 2

- **Rainwater Harvesting**
- **Groundwater and the Hydrologic Cycle**
- **Water Conservation and Water Quality**
- **Plugging Abandonded Wells**
- **New Well Owner Information**
- **Groundwater Conservation Districts**

[Back]

Appendix J

7th Annual

Bell County Water Symposium

November 8, 2007

8:15 a.m.—3:45 p.m.

AGENDA

8:15 a.m.	*Registration*
8:45 a.m.	*Welcome & Clearwater District Overview* *Horace Grace—Clearwater District*
	Clearwater District Projects *Randy Williams—TCB, Inc.*
9:30 a.m.	*Water Planning in Texas* *Robert Mace—Texas Water Development Board*
10:15 a.m.	*Break*
10:30 a.m.	*Water in Texas: Regulations and Recent Trends* *Ron Kaiser—Texas A&M University*
11:15 a.m.	*Health of Watersheds in Bell County* *Jason McAlister—Blackland Research Center*
12:00 Noon	*Lunch—Legislative Update* *REPRESENTATIVE JIMMIE DON AYCOCK*
1:00 p.m.	*Water Conservation Through Brush Control* *Steve Manning—Central Texas Cattlemen's Association*
1:30 p.m.	*Water Wise Landscape Design* *Dirk Aaron—Texas Cooperative Extension—Bell County*
2:15 p.m.	*Rainwater Harvesting for Homeowners* *Mary Ann Everett—Master Gardeners*
2:45 p.m.	*Break*
3:00 p.m.	*Vermiculture Composting* *Nancy Hawkins—Master Gardeners*
3:30 p.m.	*Closing Comments* *Horace Grace—Clearwater District*

Three CEUs available for Licensed Private and Commercial Pesticide Applicators

Symposium sponsored by the following:
Clearwater Underground Water Conservation District; Texas Cooperative Extension—Bell County;
TCB, Inc.; Lloyd, Gosselink, Blevins, Rochelle & Townsend, P.C.

Appendix K

This Book Belongs To:

Student Name ____________ Subject ____________

208-347-064-2

AMAZING WATER FACTS...

1

ONLY 1% OF THE EARTH'S WATER IS SUITABLE FOR HUMAN CONSUMPTION

While water covers nearly 80% of the Earth's surface, only 1% of that water is usable fresh water. 2% of the water is frozen in glaciers and 97% is salt water.

2

A MILK COW DRINKS ABOUT 35 GALLONS OF WATER A DAY!

Water is also used to grow the corn and alfalfa cows eat. From this, the cow produces almost 6 gallons of milk each day. That's about 93 glasses!

3

WE'RE DRINKING THE SAME WATER THAT THE DINOSAURS DRANK!

Water has been on earth for millions of years. Water cycles from the earth to the air and to the Earth again continuously. This means that your last drink of water could have been used by a dinosaur!

4

FOR A LITTLE UNDER $1.98, YOU CAN BUY...

...an ice cream cone, a couple of soft drinks, two candy bars, or...about 1,000 gallons of clean, drinking water delivered to your house!

5

IT TAKES ONE GALLON OF WATER TO PROCESS A QUARTER POUND OF HAMBURGER!

HERE'S HOW YOU CAN HELP CONSERVE WATER...

Leaky faucets waste water. When you find a dripping faucet at home or at school, tell someone so that it can be repaired.

•

Turn off the water while you brush your teeth...it can save about four gallons of water each day.

•

When you play in the sprinkler, keep it on the grass; not the driveway.

•

Water your lawn early in the morning or late in the evening.

•

Take short showers or keep bathtub water shallow.

•

Don't let the hose run while washing your car or pets. Use buckets, sponges, and a water saving nozzle on the hose.

•

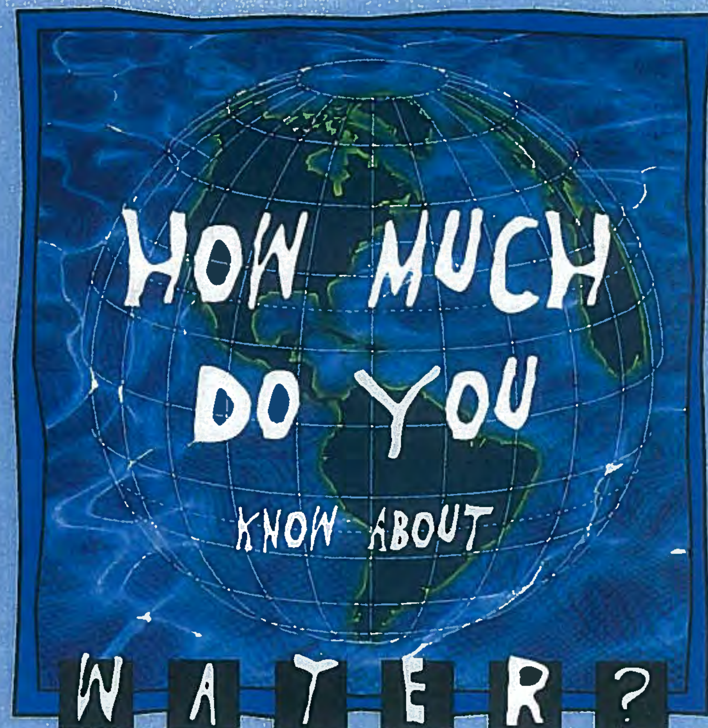
Do not "sweep" walks and driveways with a water hose... use a broom or rake instead.

Clearwater

The Clearwater Underground Water Conservation District was formed to protect the underground water resources of Bell County. These resources include the Trinity aquifer which underlies all of Bell County and the Edwards BFZ aquifer which is located in the southern portion of the County. Clearwater's mission is to develop and implement an efficient, economical and environmentally sound groundwater management program to protect and enhance the water resources of the District. Clearwater is funded by ad-valorem taxes and regulated water well drilling, spacing and pumping. Clearwater supports and promotes public education and conservation of all water resources in the County.

Name:

Subject:



HOW MUCH DO YOU KNOW ABOUT WATER?

Every living thing needs water. Ranchers need water for their livestock to drink. Farmers need it to grow our food. You and your families need water for cooking, cleaning and even playing. But there is only so much water, and there are more people using it every day. So use water wisely...*make every drop count!*

Compliments of

Clearwater

Every drop counts!

P. O. Box [illegible] • Belton, TX [illegible]

1. Center textbook on book cover and fold top and bottom ends to size of book. *Centrar el libro de texto sobre el forro doblando el exceso hasta que midan igual de arriba a abajo.*
2. Fold in sides of book cover to create sleeves for ends of book. *Doblar los lados del forro por dentro formando dos mangas.*
3. Slide ends of book into sleeves and you're covered. *Meter la portada del libro dentro de las mangas del forro y estará cubierto.*
4. Make sure your textbooks are covered at all times! *¡Asegurar que sus libros estén cubiertos a todo tiempo!*

This Book Belongs To:

Student Name ____________ Subject ____________

208-347-064-1

Texas Commission on Environmental Quality and the U.S. Environmental Protection Agency

This book cover has been approved by TCEQ for use in the mandated public education programs associated with your Nonpoint Source Pollution program.

a friendly reminder from:

Clearwater
Underground Water Conservation District

P. O. Box 729 • Belton, TX 76513

(254) 933-0120

www.clearwaterdistrict.org

The Clearwater Underground Water Conservation District was formed to protect the underground water resources of Bell County. These resources include the Trinity aquifer which underlies all of Bell County and the Edwards BFZ aquifer which is located in the southern portion of the County. Clearwater's mission is to develop and implement an efficient, economical and environmentally sound groundwater management program to protect and enhance the water resources of the District. Clearwater is funded by ad-valorem taxes and regulates water well drilling, spacing and pumping. Clearwater supports and promotes public education and conservation of all water resources in the County.

Water Conservation Tips

Wash only full loads in your washing machine and dishwasher.

Don't run water continuously when washing dishes by hand.

Attach "low-flow" faucet aerators to faucets.

Take short showers instead of baths. A full bathtub requires about 36 gallons of water. A five-minute shower using a flow restricter will use just 15-25 gallons.

Install "low-flow" shower heads and toilets.

Don't leave the water running when brushing your teeth or shaving. With the tap running at full force, shaving takes 20 gallons of water, brushing teeth takes 10 and hand washing uses two.

Check for leaky faucets and toilets. If you have leaks, repair them immediately. A leaky tap, dripping once per second, wastes six gallons of water a day.

Don't run water continuously when washing your car. Use a nozzle on the hose to stop the water flow between rinsings. Clean the car with a pail of soapy water.

Use a broom, not a hose to clean driveways and sidewalks.

By saving water you:

Save Money on water and utility bills, sewer and septic costs and, local taxes.

Save Energy by reducing the amount of hot water you use and by saving electricity used to pump water.

Save the Environment by helping ease the burden on water storage, purification, distribution and treatment facilities.

If there was

an element

that supported

every living thing,

would you

wash it down

the drain?

TCEQ
Texas Commission on Environmental Quality

Recyclable Paper

Walraven

1. Center textbook on book cover and fold top and bottom ends to size of book.
2. Fold in sides of book cover to create sleeves for ends of book.
3. Slide ends of book into sleeves and you're covered.
4. Make sure your textbooks are covered at all times!

Appendix L

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT
RESOURCE LIBRARY
May 2008

Videotapes/DVDs

1. ***WATER***
   Backyard Safari
   Pre-K – 2nd Grade

   Why is water so important to life? Youngsters learn why animals and plants have different ways of getting the water they need. They'll also see that water can be liquid, hard ice, or foggy steam. Teacher guide included. (30 minutes)

2. ***WATER CYCLE—GO WITH THE FLOW***
   3-2-1 Classroom Contact
   Grades 4 – 6

   Water on Earth is cleaned in a cycle of evaporation, condensation, and precipitation. Follow the flow from ocean to clouds to rain, discover how dirty water becomes clean, and learn how people fit into the water cycle. Teacher guide included. (15 minutes)

3. ***WATER: FROM THE EARTH FOR YOU***
   Enviro-Tacklebox
   Grades 5 – 9

   Demonstrates how a growing population has put increasing demands upon the world's finite resources. Teacher guide included. (20 minutes)

4. ***GROUNDWATER***
   Earth Revealed—High School Edition
   Grades 9 – College

   Explains how groundwater is distributed and measures its importance to human life. Teacher guide included. (15 minutes)

5. ***MAJOR RIVERS***
   Brazos River Authority
   4th Grade

   Follow along with "Major Rivers" and his horse "Aquifer" as they provide an overview of water in Texas, to include groundwater, surface water, water treatment, wastewater treatment and conservation. (15 minutes)

6. ***GROUNDWATER QUALITY: MANAGING THE RESOURCE***
   The Water Education Foundation (California)

   Since groundwater basins are out of sight under the earth, groundwater resources are easily overlooked and mismanaged. This program provides valuable information about how to better use and protect our precious groundwater supplies. (15 minutes)

7. ***CONJUNCTIVE USE: A COMPREHENSIVE APPROACH TO WATER PLANNING***
   The Water Education Foundation (California)

   This program simplifies an often misunderstood concept: conjunctive use—coordinating surface water and groundwater supplies, which are often managed as separate resources. (11 minutes)

8. ***WATER WELL BASICS***
   American Ground Water Trust
   Grade 6 and above

   An educational video that shows step by step, the processes of well drilling, well construction and equipment installation needed to provide a safe home water supply. (15 minutes)

9. ***DIVINING THE FUTURE: GROUNDWATER CONSERVATION DISTRICTS***
   Texas Alliance of Groundwater Districts; TCEQ; Texas Cooperative Extension; and Texas Groundwater Protection Committee.

   Video provides a general overview of groundwater conservation districts including their role and responsibilities as well as services they provide. (20 minutes)

10. ***FOUNDATIONS: AQUIFERS OF TEXAS***
    Texas Alliance of Groundwater Districts; TCEQ; Texas Cooperative Extension; and Texas Water Development Board.

    Video provides general information on types of aquifers, recharge areas, water movement in aquifers, and water removal from aquifers. (10 minutes)

11. ***CROSSROADS: TEXAS WATER LAW***
    Texas Alliance of Groundwater Districts; TCEQ; Texas Cooperative Extension; and Texas Groundwater Protection Committee.

    Video provides general overview of water law in Texas as it relates to diffused surface water, surface water, and groundwater. (10 minutes)

12. ***TEX*A*SYST: WELL PLUGGING—PLUGGING WATER WELLS IN TEXAS***
    Texas Agricultural Extension Service; Texas Groundwater Protection Committee.

    Video focuses on landowners plugging large diameter water wells. Other videos in the TEX*A*SYST series include Introduction to TEX*A*SYST; Pesticides and Fertilizer Storage; Petroleum Product Storage; Household Hazardous Waste and Septic System; and Livestock Waste Management. (Approx. 10 – 15 minutes each)

13. ***UNDERSTANDING TEXAS WATER ISSUES***
    Real Estate Center, Mays Business School, College Station, TX; Texas Cooperative Extension; Texas Water Resources Institute

    Real estate professionals are caught in the middle of an economy that may soon be more dependent on water than oil. This video discusses the State's basic water dilemmas and solutions. CD also available. (45 minutes)

Videotapes/DVDs—continued

14. BELL COUNTY WATER SYMPOSIUM—FALL 2002, 2003 & 2004
Clearwater Underground Water Conservation District

Set of videotapes documenting the November 7, 2002, November 19, 2003 and October 27, 2004 water symposiums. Topics include the following: 1) Legislative update on water issues; 2) Overview of Bell County aquifers; 3) Brazos G Regional Water Planning Group and the Brazos River Authority; 4) Role of water supply corporations and CCN's; 5) Water quality protection and water conservation; 6) and Rainwater harvesting. (Each tape approximately 2 hours)

15. TEXAS: THE STATE OF WATER Vol. 1 & 2
Texas Parks and Wildlife Department

Texas The State of Water- Finding a Balance is an in-depth, hour long documentary presented and produced by the Texas Parks and Wildlife Department. The program explores how the demand for water will grow dramatically in years to come, and weighs the impact that growth will have on the state. The documentary shows how the steps we take – or do not take – will impact Texas and its people, wildlife and economic vitality for future generations. (Each video 1 hour)

Books

1. THE WATER SOURCEBOOKS
Partnership of EPA, Region 4; Alabama Department of Environmental Regulation; LEGACY—Partners in Environmental Education; and Water Environment Federation

Series consists of a set of 4 volumes appropriate for Grades K-2, Grades 3-5, Grades 6-8, and Grades 9-12. The series explains the water management cycle using a balanced approach and how it affects every aspect of the environment. The curriculum provides strong science and math content, but also links these subject areas to social studies and language arts. Each Sourcebook contains hands-on activities and investigations, fact sheets, reference materials, and a glossary of terms.

2. PROJECT WET CURRICULUM AND ACTIVITY GUIDE
Project WET—Water Education for Teachers
Montana State University
Texas Sponsor: Caddo Lake Institute

A collection of over 90 innovative, interdisciplinary activities that are hands-on, easy to use, and fun for Grades K-12. The Guide is divided into seven concept areas: chemistry and physics of water; life science; earth systems; natural resources; water resource management; society; and culture. Multidisciplinary activities are included, integrating language arts, mathematics, science, geography, history, government, and health.

3. MAKING DISCOVERIES
The Groundwater Foundation

Groundwater activities for the classroom and community. What is an aquifer? How does groundwater get contaminated? Find the answers to these questions and more in this activity book. Through interactive water education experiences, students learn concepts in science, math, language arts, social science, fine arts, and physical education. Hands-on activities focus on groundwater, surface water, wetlands, and pollution prevention.

4. MAKING A BIGGER SPLASH
The Groundwater Foundation

This guide features best-loved water education and festival activities. All the activities in this collection are hands-on, brains-on fun and teach important water concepts to participants.

5. HANDBOOK OF WATER USE AND CONSERVATION
Amy Vickers
WaterPlow Press

A comprehensive and authoritative handbook on water use and efficiency measures for those concerned about efficient water use. Includes ten key steps to a successful conservation program, water use characteristics of major customer sectors, water audit procedures, and hundreds of fact-filled tables, illustrations, and case studies.

Miscellaneous

1. DRIPIAL PURSUIT
The Groundwater Foundation

A card game with interesting water trivia. Just how many gallons of water does it take to produce a hamburger, fries, and soft drink? The answer will surprise you! Dripial Pursuit questions relate to water, natural resources, and geography. The answers are interesting and intriguing and help everyone understand important water concepts.

2. PUDDLE PICTURES
The Groundwater Foundation

Reinforce water lessons by playing this game based on the popular game *Pictionary*. Draw a water-related word and help teammates come up with the word on the card. Example: Can you draw the word "recharge"?

3. THE JUG: A COMPLETE AQUIFER SCIENCE KIT
The Groundwater Foundation

The JUG contains all the supplies needed to construct a groundwater flow model to help students "Just Understand Groundwater." The plastic 8 ½" tall JUG comes with all the needed accessories and detailed instructions for experiments which enable the user to understand important concepts about groundwater including aquifer geology, water movement, water pumping, contamination and cleanup.

4. WATER CONSERVATION LITERATURE PACKETS
Clearwater Underground Water Conservation District

Assembly of water conservation literature from various sources to include the Texas Water Development Board, US Geological Survey, WaterSmart, US Department of Agriculture and US Environmental Protection Agency.

Appendix M

Revised

Clearwater Underground Water Conservation District

Adopted Budget FY2008

REVENUE

*Bell County Tax Appraisal District	$	475,005
Application Fees	$	100
Transport Fees	$	600
Interest	$	34,300
Total	**$**	**510,005**

*Based on 2007 Certified values of $11,875,118,157
Tax rate per $100 valuation is $0.0040

EXPENDITURES

Contracts		
Administrative	$	245,000
Legal	$	45,000
Professional/Technical Consulting	$	50,000
Management Consultant	$	4,000
Appraisal District	$	6,000
Election Expenses	$	12,000
Director's Compensation	$	10,000
Director Expenses	$	5,000
Equipment	$	3,000
Supplies	$	1,000
Insurance	$	2,000
Printing	$	2,500
Communications	$	4,500
*Contingency Fund	$	25,005
Reserves for Uncollected Taxes	$	10,000
Special Programs		
Education	$	14,000
Education Supplies	$	7,000
Other	$	4,000
Water Quality Grant	$	1,000
Studies	$	50,000
GMA 8	$	5,000
Strategic Plan	$	4,000
Total	**$**	**510,005**

*Includes $15,005 anticipated revenue from fees and interest.

8/28/2007

CLEARWATER UNDERGROUND WATER CONSERVATION PROJECT
OCTOBER 2007 THROUGH DECEMBER 31, 2008

SCHEDULE OF REVENUES AND EXPENDITURES

REVENUES:

October 1, 2007 through December 31, 2008		
Bell County Tax Appraisal District		$ 468,314
Application Fees		(275)
Transport Fees		382
Interest		23,037
Other		-
Revenues (October 1, 2007 thru November 30, 2008)		$ 491,458
Carry forward		493,389
Total Revenues		$ 984,847

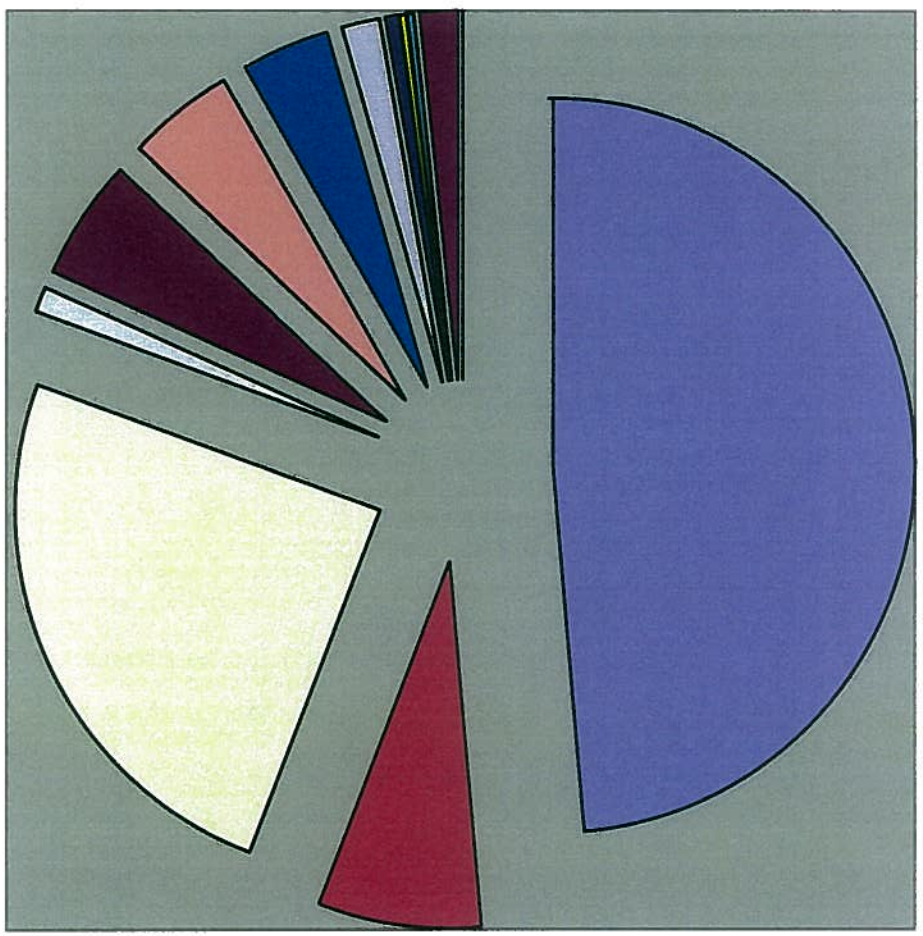
EXPENDITURES:

October 1, 2007 through December 31, 2008		
Administrative Services	$ 212,201	
Board Expenditures	179,589	
Educational Special Programs	11,056	
Educational Supplies	7,820	
Speical Programs Other	2,723	
Water Quality Project	-	
Clearwater Studies	22,281	
Clearwater GMA 8	520	
Total Expenditures		$ 436,191
REVENUES OVER EXPENDITURES		$ 548,656

GMA8 JOINT FUND

REVENUES	$ 7,000
EXPENDITURES:	$ 7,000
REVENUES OVER EXPENDITURES	$ -

Expenditures for FY08



- Admin 49%
- Legal 7%
- Tech. Consulting 25%
- Appr. Dist. 1%
- Studies 5%
- Special Prog. 5%
- Director Comp. 4%
- Director Exp. 2%
- Equip <1%
- Supplies <1%
- Insurance <1%
- Printing <1%
- Communications 1%
- GMA8 <1%

Appendix N

2008 - 2013 Strategic Plan Objectives

"A" Level Objectives

Goal #1: Monitor and manage groundwater in Bell County

- Ensure spring flow gauges in Salado Creek are fully functioning
- Establish 4 additional continuous monitor stations in aquifers
- Enhance water quality monitoring program and data availability
- Identify abandoned wells
- Cooperate with other groups on importance of well registration

Goal #2: Maintain financial and organizational stability and effectiveness

- Develop policy for Board approval establishing goals and future uses for reserve funds in following areas:
  - Legal defense
  - Implementing science-related projects
  - Future building and relocation
  - Operating expenses

Goal #3: Educate and inform citizens

- Develop aquifer information specific to Bell County
- Educate real estate community on groundwater use and availability
- Place more articles in local media on status of groundwater
- Use Community-In-Schools to disseminate information in local school districts
- Promote educational information on water quality testing
- Provide speaker program and identify target groups
- Promote water quality protection and water conservation

Goal #4: Protect and advance the District's interest with governmental bodies and agencies

- Educate/inform local elected officials and government agency representatives about groundwater issues in Bell County

"B" Level Objectives

Goal #1: Monitor and manage groundwater in Bell County

- Compare GAM (groundwater availability model) spatial distribution to actual pumping distribution in the aquifers—Trinity first, then Edwards
- Refine vertical limits of Trinity aquifer using the Clearwater well database
- Investigate and identify brackish water interfaces in Bell County (Edwards BFZ, middle Trinity, and lower Trinity)
- Consider policy options for amending terms of operating permits
- Publish and publicize water level data and maps
- Establish aquifer parameter data before managing by layers
- Inform citizens about importance of managing by layers
- Promote and support conversion to surface water in Bell County

Goal #3: Educate and inform citizens

- Increase presentations to schools and other organizations
- Create and produce videos on Clearwater District and groundwater resources
- Hire expert to help develop education program

Goal #4: Protect and advance the District's interest with governmental bodies and agencies

- Create awareness on ad valorem tax reform to allow lowering of taxes not subject to roll back

"C" Level Objectives

Goal #1: Monitor and manage groundwater in Bell County

- Consider policy options for facilitating surface water supply implementation

Clearwater

Clearwater Underground Water Conservation District
P.O. Box 729, Belton, TX 76513
254-933-0120 www.clearwaterdistrict.org
August 2008