Summer 2011



Board of Directors:

Walter Glenn, President Roger Fussell, Vice Pres.-Hardin Jerry Shands, Treasurer-Jasper Tommy Boykin, Director-Jasper Katherine Davis, Director-Jasper Olen Bean Director-Newton Charles Hughes, Director-Newton John Meek, Director-Newton Sam Ashworth, Director-Hardin Bobby Rogers, Director-Hardin Steve Pittman, Director-Tyler Charles Maclin, Director-Tyler Joseph Keefer, Director-Tyler

John Martin, General Manager John Stover, Esq. - Counsel

Did you Know?

Nearly 80% of all water used in the United States is used for irrigation or the production of electricity.

Inside this issue:

District News-New Directors	2
Drought Intensifies - Continued from page 1	3
Legislative update - Continued from page 1	3
SETGCD Monitor Wells Static Waters Levels	4
Monitor Well Map	5
Drought Conditions	6

Conservation Corner: 'Tips for Winter"

7

THE SETGCD WELL MONITOR



Drought Intensifies — Temps Break Record

According to the Texas Drought Preparedness Council on August 9, 2011 the State Climatologist has declared the past 12 months the most severe one-year drought on record. In addition to the lack of any appreciable rainfall, above normal temperatures have added to the devastating drought major cities in Texas conditions across most of the state.

July was officially the warmest month in the

recorded history of Texas with a state wide average temperature of 87.1. Due that are asking customers to these harsh conditions, the drought intesified in every climate division of Texas except in West Texas, extreme Southeast Texas, along the Rio Grande River, and the Lower Valley. Almost all received less than 50% of their average precipitation in July.

Currently, TCEQ is

reporting that there are 687 public water systems to restrict their water use. 194 system in the last month alone have enacted water restrictions, 128 of those with some sort of mandatory restiction. The oppressive heat and drought have impacted Texas' Cattle and Crop production too. Ranchers are liquidating their cow heards, and are including

(Continued on page 3)



2011 Texas Legislative Session Ends

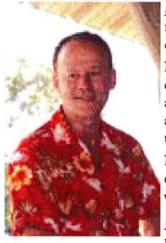
The 2011 Texas legislative regular session has come to an end with several new bills having been passed that affect groundwater.

Senate Bill 332, sponsored by Sen. Troy Fraser, R-Horseshoe Bay, has been the most talked about bill this session with regards to groundwater, as it pertains to of groundwater ownership. The bill was supported by several landowner and agricultural groups such as the Texas Farm Bureau and Texas and Southwestern Cattle Raisers Association.

The bill went through several changes as it moved through the legislature. In its original form it was thought that the bill would severely limit groundwater conservation districts' ability to manage the groundwater, if not totally make them irrelevant. It was also thought that the bill would require the implementation of correlative rights.

In the end, the bill re-affirms that a landowner owns the groundwater below the surface of the land as "real property" and that a landowner has a right to drill and

District News-3 New Directors Appointed in 2011



<u>Steve Pitman</u>. Mr. Pittman was appointed by the Tyler County Commissioners' Court filling the seat previously held by Mr. Herbert Branch. Mr. Pittman is a life long resident of Colmesneil.

Mr. Pittman contracts to deliver professional consulting services to companies focused on developing and expanding markets within the healthcare, technology, communications, and the computer community. Most recently, Mr. Pittman was requested to identify, hire and lead the business development team for Motion Computing, a leader in commercial tablet PC solutions.

Mr. Pittman has a degree in Electrical Engineering from Texas A&M University. Prior to establishing his contracting services and consulting business, Mr. Pittman worked 15 years with Motorola where he led the \$2.5B worldwide paging communications businesses.

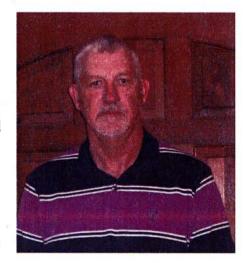
<u>Olen Bean</u>. Mr. Bean was appointed by the Newton County Commissioners' Court to represent the rural water utilities of Newton County. Mr. Bean was born and raised in

Newton County and is a graduate of Newton High School.

Mr. Bean retired in 2004 after working 30 years for the Texas Forest Service. His many years of experience in the Texas Forest Service have kept him busy even after retirement; his many skills are still being put to use as he has been appointed Deputy Emergency Management Coordinator for Jasper, Newton and Sabine Counties.

Olen has been married to his wife Patricia for nearly 40 years. Patricia retired from Newton ISD in 2003 after 30 years of service to the district. They have one son Ryan and three granddaughters and are proud members of Trout Creek Baptist Church.

<u>Charles -P. Hughes</u> - Mr. Hughes was also appointed by the Newton County Commissioners' Court this year, to serve as the representative of the forestry and agricultural interests of Newton County. Mr. Hughes is a life long native of Bon Wier, Texas.



Mr. Hughes is a graduate of Stephen F. Austin State University and learned about the timber industry at the C. P. Hughes Lumber Company where he worked as a millwright. His professional career began in 1976 when he went to



work for Kirby Industries; he continued to work for 26 years as a wood supervisor for Louisiana Pacific.

Mr. Hughes has continues to be an active participant in his community. He is a volunteer with the Bon Wier Fire Department, has served on the Bon Wier Water Supply Board for 12 years, is a member of the Texas Forestry Association and, is currently a member of the Jasper Newton Soil and Water Board where he currently serves as President.

Charles has been married for 49 years to his wife, Connie, and they have one daughter, Penny Stanton (Don), and two grandchildren who live in Broken Arrow, Oklahoma. As a member of First Baptist Church, Kirbyville, Mr. Hughes volunteers his time and service to the Southern Baptist of Texas Convention Disaster Relief team where he most recently was deployed to assist citizens of Minot, North Dakota, who had experienced a devastating flood.

Continued from page 1 Legislative Update produce the groundwater below the surface but not the right to a specific amount. The bill also re-affirms that groundwater conservation districts have the ability to regulate groundwater production as authorized in Chapter 36 of the Texas Water Code.

<u>Senate Bill 660</u> - This bill is related to the sunset review of the Texas Water Development Board. Within the bill several changes have been made to the way in which the Desired Future Conditions (DFCs) are set within the Groundwater Management Areas (GMAs). It will require more in-depth documentation of how the DFCs were are set as well as providing for an increased amount of public participation.

This bill also requires that Regional Water Plans be consistent with applicable DFCs and that GMAs be represented on all of the Regional Water Planning boards. The Southeast Texas Groundwater Conservation District is a member of GMA 14, which will now have representation on the Region G board, Region H board and Region I board. Subsequently, GMA 14 has appointed the Southeast Texas GCD to be its representative to Region I.

<u>House Bill 3328</u>-H.B. 3328 is related to the "Fracking" process done by oil and gas companies. Fracking is the injection of fluids into a oil or gas well with the intent to fracture the rock formation in which the well is drilled. This process greatly increases the amount of oil or gas that is captured from that well. Fracking has garnered lots of attention in the last couple of years due to worries about the chemicals used in the fracking fluid and the potential of contaminating the groundwater.

H.B. 3328 is groundbreaking (no pun intended), in that Texas has taken the steps to require that oil and gas companies disclose the chemical make-up of their fracking fluids. The bill also requires that the volume of water being used to frack the wells be reported. This is important because it is believed that and average of 3–5 million gallons of water are used to frack a single well.

an increased number of calves as they are crittally short on forage, hay and water. It is estimated that over 600,000 cows were sold from ranches this year in Texas.

Continued from page 1 Drought Intensifies

Crop production isn't faring any better. Yields have been generally disappointing and many corn fields in central Texas were harvested for forage or shredded down rather

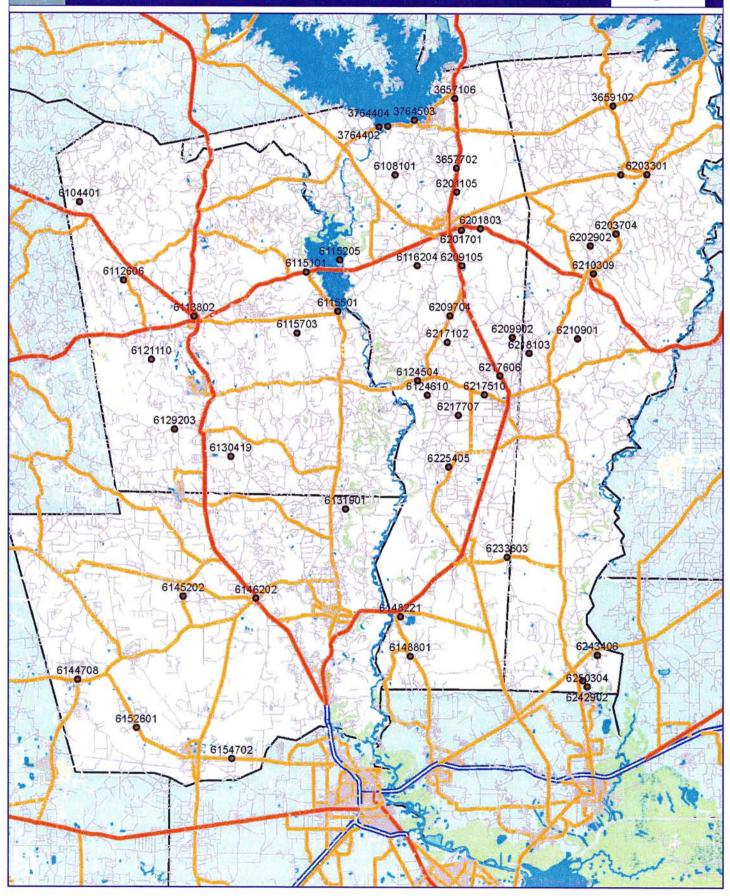
than harvested for grain. Soybeens in north Texas have been averaging about half their normal yields. The greatest losses have been in west Texas with an estimated 3.5 million acres of cotton abandoned. Here in east Texas, hay production has nearly halted and cattle raisers are struggling to find adequate hay supplies. Experts expect that this drought will result in the largest single agricultural loss in state history.

Wildfires have also been of great concern through this drought. The Texas Forest Service is reporting that 249 of Texas' 254 counties have established burn bans. Not only are the number of wildfires up but the size and intesity of them is up as well. It is estimated that over 3.3 million acres have burned this year alone.

Here in Southeast Texas, if you rely on a shallow well or a spring, there is a good chance your water supply has been effected. They are the first to be impacted by rainfall shortages but, they are also the first to respond when the rains begin again.

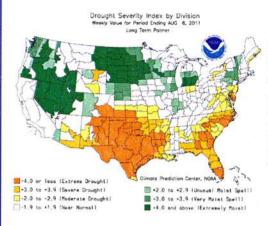
Fortunately, here in the Southeast Texas Groundwater Conservation District, all public water systems utilize groundwater, typically from deep wells. What this means is that although the static water levels of the District's monitor wells are trending downward, the Gulf Coast Aquifer is not being impacted nearly as severely as surface water. On the following page are listed static water levels taken in May of 2011. Of the 50 listed wells, the District has as history of 20 years or greater on 31 of these wells and all but 3 of them have had lower water levels, and in some cases significantly lower.

SETGCD MONITOR WELLS										
				" ' 0' '	101 1			1 D:00	Lowest	
			De	epth to Stat	ic Water Lev	vel	Water Leve	1 Difference	Recorded/Year	
State Well	County	1995	2001	2005	May 2010	May 2011	10 Year	1 Year		
					-	- ' -				
6131901	Hardin	-33.33	-41.95	-12.77	-42.25	-43.06	-1.11	-0.81	-43.02 1968	
6144708	Hardin	-25.4	-28.05	-25.82	-25.23	-26.6	1.45	-1.37	-32.14 1971	
6145202	Hardin				-9.66	-13.96	-13.96	-4.3	-14.04 2010	
6146202	Hardin	-58.72	-55	-52.85	-53.15	-55.55	-0.55	-2.4	-66.80 1993	
6152601	Hardin	-34.35	-37.3	-31.05	-31.66	-35.5	1.8	-3.84	-40.42 1981	
6154702	Hardin	-28.3	-32.34	-29.52	-28.72	-29.26	3.08	-0.54	-32.45 2000	
3657106	Jasper		-8.03	-9.74	-6.3	-8.8	-0.77	-2.5	-9.80 1997	
3657702	Jasper		N/A		-118.95	-119.64	N/A	-0.69	-119.64 2011	
3764402	Jasper		N/A	-115.5	-110.3	-115.38	N/A	-5.08	-116.15 2000	
3764404	Jasper	-59.74	-53	-58.45	-48.75	-53.46	-0.46	-4.71	-66.93 1982	
3764503	Jasper		-33.04	-36.05	-30.43	-38.82	-5.78	-8.39	-39.27 2010	
6108101	Jasper	-44.15	-40.48	-42.09	-41.15	-42.79	-2.31	-1.64	-46.38 1981	
6115205	Jasper		42.27		39.96	38.8	-3.47	-1.16	27.70 1993	
6116204	Jasper		-52.35		-52.9	-54.37	-2.02	-1.47	-54.37 2011	
6124504	Jasper		-31.98	-32.59	-29.35	Dry	N/A	N/A	N/A	
6124610	Jasper		N/A		-31.79	-34.75	N/A	-2.96	-34.75 2011	
6148209	Jasper	-206.4	-220.04		-182.8	-185.34	34.7	-2.54	-220.04 2001	
6148221	Jasper	-33.2	-31.58		-29.8	-33.67	-2.09	-3.87	-39.59 1992	
6148801	Jasper	-5.45	-9.62	-11.93	-8.5	-12.87	-3.25	-4.37	-32.33 1956	
6201701	Jasper	-76.88	N/A	-75.43	-85.58	-83.35	N/A	2.23	-96.05 2009	
6201803	Jasper		N/A	-83.22	-87.5	-88.6	N/A	-1.1	-91.56 2007	
6209105	Jasper		-3.25	-1.9	-3.64	-4.97	-1.72	-1.33	-4.15 1997	
6209704	Jasper		-35.12	-37.58	-33.8	Dry	N/A	N/A	N/A	
6209902	Jasper		-23.21	-24.48	-19.45	-26.96	-3.75	-7.51	-26.96 2011	
6217102	Jasper		N/A	-58.35	Dry	Dry	N/A	N/A	N/A	
6217510	Jasper		-17.59	-18.35	-16.04	-21.9	-4.31	-5.86	-21.90 2011	
6217606	Jasper		-2.98	-2.93	-4.56	-8.42	-5.44	-3.86	-10.73 1997	
6217707 6225405	Jasper		-5.99 -61.11	-15.03 -60.1	-6.85	-16.66	-10.67 -1.04	-9.81	-16.66 2000	
6233603	Jasper		-01.11	The state of the s	-58.14	-62.15		-4.01	-62.15 2011	
3659102	Jasper Newton		N/A	-14.12	-12.65	-13.43 -102.4	-2.43 N/A	-0.78 -3.28	-14.70 1997 -102.40 2011	
6202902	Newton		N/A		-99.12 -13.29	-102.4	N/A	-4.39	-17.68 2011	
6203204	Newton	-65.6	-67.48	-22.4	-69.5	-69.91	-2.43	-0.41	-69.91 2011	
6203301	Newton	-39.65	-41.09	-39.95	-40.88	-41.07	0.02	-0.41	-41.09 2001	
6203704	Newton	-169.8	-171.59	-173.6	-173.38	-174.93	-3.34	-1.55	-182.49 1999	
6210309	Newton	-63.93	N/A	-170.0	-69.35	-67.18	N/A	2.17	-87.96 1992	
6210901	Newton	-00.00	N/A	-17.35	-16.14	-19.5	N/A	-3.36	-34.02 1978	
6218103	Newton		1377	-35.8	-36.09	-40.39	N/A	-4.3	-40.39 2011	
6242909	Newton	-40.24	N/A	-38.48	-36.7	-38.57	N/A	-1.87	-44.35 2002	
6243406	Newton	-27.92	N/A	-27.95	-26	-27.07	N/A	-1.07	-30.00 1981	
6250304	Newton		N/A	-37.98	-35.9	-37.8	N/A	-1.9	-40.30 1989	
6104401	Tyler	-159.96	-162.85	-164.75	-164.96	-165.3	-2.45	-0.34	-178.90 1964	
6112606	Tyler	-121.36	-122.64	-119.15	-122.88	-123.7	-1.06	-0.82	-130.60 1989	
6113802	Tyler	-171.18	-163.5	-164.3	-165.03	-166.65	-3.15	-1.62	-197.80 1992	
6115101	Tyler	-36.8	-33.3	-33.67	-32.83	-33.85	-0.55	-1.02	-36.80 1995	
6115501	Tyler	-113.73	-115.15	-130.21	-116.43	-115.65	-0.5	0.78	-119.21 1992	
6115703	Tyler	-16.6	-9.7	-7.96	-11.95	-19.08	-9.38	-7.13	-19.18 1965	
6121110	Tyler	-10.97	-8.78	-4.57	-11.06	-9.28	-0.5	1.78	-13.40 1971	
6129203	Tyler	-23.65	-18.81	-23.34	-20.9	-26.9	-8.09	-6	-26.90 2011	
6130419	Tyler	-13.72	-5.32	-6.44	-7.65	-16.48	-11.16	-8.83	-16.88 2000	



The SETGCD Well Monitor

Page 6



PRECIPITATION

From January 2010 through June 2011 the average rainfall within the District is approximately 33 inches below our normal rainfall accumulations. For the first six months of 2011 we are already nearly 16 inches below normal. The one month pre-



DROUGHT CONDITIONS

As you can see by the August 6, 2011 Palmer Drought Severity Index (left), nearly the entire state of Texas in experiencing extreme drought conditions. According to the State of Texas Drought Preparedness Council, the period between October 2010 and June 2011 was the driest nine month period on record in Texas since record keeping began in 1895. June 2011 was also the warmest June on record and the fourth warmest month of all time.

RAINFALL TOTALS

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Jasper	0.53	5.79	2.06	4.19	1.34	0.86	2.66	3.20	4.17	1.72
Lumberton	1.38	3.52	2.55	4.20	1.85	1.51	1.61	0.83	2.21	5.64
Newton	0.93	6.09	2.09	3.41	1.02	1.40	1.75	0.35	2.30	N/A
Silsbee	2.85	5.32	3.20	4.27	2.14	1.76	1.88	0.25	2.33	4.65
Woodville	0.88	5.26	2.12	2.62	0.27	0.80	1.86	3.23	1.18	1.57
Kountze	2.60	3.84	2.48	4.92	1.80	0.79	1.03	N/A	3.50	N/A

cipitation probability outlook map (not show, available at http://www.cpc.ncep.noaa.gov/) shows that at least in the short term, we will continue to receive below normal rainfall. However, the three month precipitation probability outlook map (left), dated July 21, 2011, is a little better and shows that we can expect an equal chance of above average rainfall, normal rainfall or below average rainfall.

As you can see from the rainfall chart above, in July some areas actually received near or above normal rainfall. That being said, many areas within the District fell far short of their normal rainfall and in areas like Lubbock, Midland and El Paso, they have received

less than 10% of their normal July rainfall.

SEASONAL DROUGHT OUTLOOK

The U.S. Seasonal Drought Outlook map illustrates that with over a 32 inch precipitation deficiency for the last 18 months, the drought conditions are expected to linger, if not intensify, through at least the Fall. This not only holds true for Southeast Texas, but the entire state of Texas. According to the U.S. Drought Monitor, the percentage of Texas with at least extreme drought conditions is over 90%. Data from TCEQ shows that due to the extreme drought condition, there are over 550 public water supplies that have implemented water restriction.

Only one of which is located within the Southeast Texas Groundwater District.

CONSERVE WATER.... DON'T WAIT 'TILL ITS TOO LATE

Although the Gulf Coast Aquifer is an extremely abundant and resilient natural resource that we are lucky to have here in Southeast Texas we should not take it for granted. We should always be water wise and try to use water in efficient ways. This holds true for both surface water and groundwater.

These are just a few of the many simple things that you can do to help conserve water:

Outdoors

- One inch of water per week in the summer will keep most Texas grasses healthy. To determine how long you should run your sprinklers, place straight-edged cans at different distances away from the sprinkler and time how long it takes to fill an average of 1 inch of water in each can.
- Don't abuse the benefits of an automatic sprinkler system by over-watering. Set it to provide thorough but
 infrequent watering. Check sprinkler heads regularly to make sure they are working properly. Install rain
 shutoff devices and adjust sprinklers to eliminate coverage on pavement.

Prevent evaporation of water. Water lawns early in the morning or in the evening during the hotter summer months. Never water on windy days. Use drip irrigation systems for bedded plants, trees, or shrubs and use low-angle sprinklers for lawns. Cover pools and spas. This can save the equivalent of your pool volume each year! Plant water-efficient, well-adapted, and/or native shrubs, trees, and grasses. Choose plants that are drought and heat tolerant and can survive the minimum winter temperatures in your area. In odd-shaped areas, use drought-tolerant groundcover instead of grass. Many cities provide lists of water-efficient plants.

- Buy a rain barrel or a cistern and collect the water from your gutters to water your plants.
- Use your water efficiently. Don't waste water by cleaning patios or sidewalks with it; use a broom. For plants that need more water, use a hose or watering can to give them additional water.
- Keep grass 3 inches tall during the summer and don't cut more than one-third of its length at one time. Don't scalp lawns when mowing during hot weather. Taller grass holds moisture better. Leave lawn clippings on the lawn instead of bagging.

Indoors

- Water-efficient showerheads and aerators for faucets can significantly reduce the amount of water you use. In fact, installing a water-efficient showerhead is one of the most effective water-saving steps you can take inside your house.
- Leaking faucets and toilets can waste thousands of gallons of water monthly, and they are
 inexpensive to fix. A few small changes in your water use habits can make a huge difference
 in water savings.
- Take shorter showers! This combined with a water efficient showerhead can save thousands of gallons of water each month.
- Don't waste water while brushing your teeth by leaving the water running while you brush. This can waste several gallons of water each day and potentially thousands of gallons per year (per person!).

Conservation Corner

The SETGCD Well Monitor

Page 8



Southeast Texas Groundwater Conservation District P.O. Box 1407, Jasper, TX 75951 (409) 383-1577, www.setgcd.org

" 'We think of our land and water and human resources not as static and sterile possessions but as life giving assets to be directed by wise provisions for future days" -Franklin D. Roosevelt



CALENDAR OF EVENTS

Labor Day - District office closed
SETGCD – Regular meeting of the Board, in Kirbyville, TX
Columbus Day – District office closed
SETGCD — Regular meeting of the Board, in Kirbyville, TX
SETGCD — Regular meeting of the Board, in Kirbyville, TX (last meeting of 2011)
Veterans Day -District office closed
Thanksgiving Day — District office closed
Christmas – District office closed
New Years Day — District office closed

WATER FACTS

- Americans use 5 times the amount of water as Europeans.
- Approximately 2/3 of the water used in the home is used in the bathroom.
- It is estimated that less than 1% of the water treated by public water supplies is used for drinking or cooking.
- 95% of a tomato is water.
- Between 1985 and 2000, industrial usage of water has declined by 24% in the United States.
- It is estimated that it takes 250 gallons of water to produce the electricity used in an average home each day.