#### Spring 2010



#### **Board of Directors:**

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

#### Did you Know?

Heavy water, 2H2O, is water that has 2 hydrogen atoms in the form of deuterium. This increases the water's atomic weight by approximately 10%.

#### Inside this issue:

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**Drought Conditions** 

Conservation Corner: "Conserve Water-Turn Off That light"

# THE SETGCD WELL MONITOR



### **SETGCD Extends Permits**

At the May 13, 2010 east Texas Groundwater Conservation District Directors voted to adopt Resolution 10-03, which transfer permits that are set to expire this year in July and November. The resolution was

adopted to extend the permits due to the pending

submission of Groundwa-ter). The extension will board meeting, the South- ter Management Area 14's be for one year or until (GMA 14) Desired Future such time as the District Texas Water Development Board (TWDB). extends the operating and Once the TWDB reviews the DFCs from the GMA it will run a Groundwater Availability Model (GAM) and issue a MAG (MAG is an acronym for Managed Available Groundwa-

Conditions (DFCs) to the has had time to review the MAG once it is issued by TWDB. The MAG is expected to be issued sometime late this year or early next year.

> Once the MAG is issued the District will be required to incorporate the

> > (Continued on page 3)

# District Sees Marked Increase For Exempt Well Registrations in 2009



The Southeast Texas Groundwater Conservation District saw a significant rise in the number of exempt wells registered in 2009 compared to 2008. In 2008, 191 exempt wells were registered with the District, while in 2009, that number soared to 269, an increase of 40% from 2008. This increase can be attributed to both area growth and an increase in the number of wells being properly registered with the District. Overall, the District saw only a small increase in the total number of wells drilled from 311 in 2008 to 325 in 2009. This is in part due to the lull in oil and gas exploration/production. The number of water wells drilled for the oil and gas industry declined by nearly 60%, dropping from 100 wells in 2008 to 41 wells in 2009. To view the District's 2009 Annual Report visit our website at www.setgcd.org and click on "meetings/news" and you will find the 2009 Annual Report under the Newsletters/Reports heading.

## District News



With the resignation earlier this year of Jasper City Manager Alan Grindstaff, the Jasper City Council appointed Tommy Boykin interim City Manager and a Director of the Southeast Texas Groundwater Conservation District. Director Boykin was sworn in at the March 11, 2010 regular meeting of the Board of Directors. We are welcoming back Mr. Boykin, as he previously served as a Director on the Southeast Texas Groundwater Conservation District Board previously, between 2005 and 2007. Mr. Boykin was an integral part in the early development of the District assisting in creation of the Distruct's Rules and Management Plan.

At the April 8, 2010 meeting of the Board of Directors, the Board honored outgoing Directors Julie Simmons-Carrell and Alan Grindstaff. The Board's Vice President, Roger Fussell, presented Directors Carrell and Grindstaff with plaques showing the District's appreciation for the time and efforts they have put into their communities and the District. Both Directors Carrell and Grindstaff's presence will be missed at the District's meetings.



"We forget that the water cycle and the life cycle are one"

Jacques Cousteau



# 2009 Legislative Interim Charges

With the nearing of the 2010 Texas Legislative Session, the House Natural Resource Committee met on April 15, 2010 to discuss Interim Charge 1. Charge 1

relates to the evaluation of groundwater regulation and permitting processes throughout the state, including the role of state agencies in groundwater management, the development of Desired Future Conditions, and the adoption of groundwater management plans in relation to regional and state water planning. The Committee invited testimony from various stakeholders, eleven groundwater conservation districts, the Edwards Aquifer Authority and the Edwards Aquifer Recovery Implementation Program. The up-coming legislative session promises to be an interesting one due to the Desired Future Conditions deadline (September 1, 2010) and the ensuing MAGs. The Texas Water Development Board (TWDB) will issue MAGs (Managed Available Groundwater) based on the requested Desired Future Conditions submitted by each Groundwater Management Area.

# TEXAS WATER DEVELOPMENT BOARD RULES IN FAVOR OF GMA 1

In a hearing that took place on February 17, 2010, the Texas Water Development Board (TWDB) ruled that the Desired Future Conditions (DFC) of Groundwater Management Area 1 (GMA 1) are "reasonable".

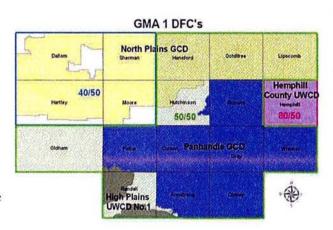
The DFCs were adopted on July 7, 2009. The four northwest counties have set a DFC of 40 percent left in 50 years; Hemphill County is set to have 80 percent left after 50 years; and, the remaining 13 counties have set a 50 percent left after 50 years as a goal.

The DFCs were petitioned/challenged by Mesa Water LP and G&J Ranch, Inc. on the basis that the DFCs were ineffective for aquifer management and unfairly distributed across the GMA. A hearing was held in November 2009 to allow both sides to express their concerns and provide information for TWDB to use in making their decision.

TWDB staff analyzed the information that had been presented and compiled a recommendation report for their board to use in making a final ruling about the reasonableness of the DFCs submitted by GMA 1.

The TWDB staff recommended the Board rule in favor of GMA, stating that after evaluation, the DFCs were "reasonable" and that the districts in GMA have evaluated the potential outcomes of the selected DFCs.

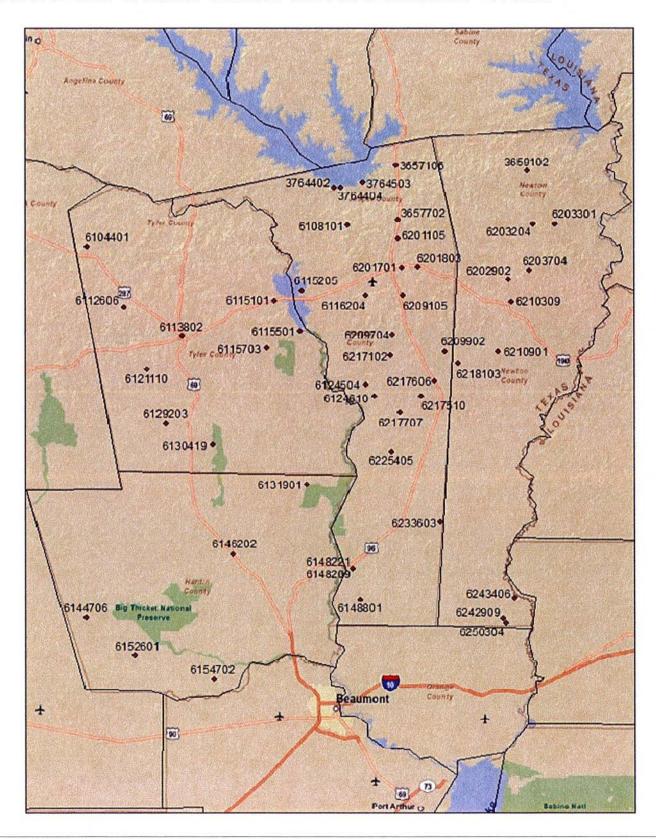
Less than a month after the TWDB's ruling that the DFCs were "reasonable", Mesa Water, LP and G&J Ranch, Inc. filed a lawsuit against the TWDB. The complaint is largely based on how the complainants believe DFCs will adversely, and unequally, affect the private property owners of Hemphill County.



Continued from page 1

results of the MAG into the District's Management Plan. Due to the potential for unknown implication of the MAG, it was recommend by the District's general manager and legal council to extend permits for a period of up to a one year, allowing the District time to review the MAG prior to the issuing of full five year operating and transfer permits. Once the District has had time to review the MAG, the District will issue operating and transfer permits for the normal five year period. No surprises are expected as a result of the MAG due to the fact that the MAG is partially based on the District's own research and previous groundwater availability models. A copy of GMA 14's Draft DFC statement is available on the District's website at <a href="https://www.setgcd.org">www.setgcd.org</a> (click on the "meetings/news" tab on the left side of the web page).

# SETGCD Static Water Level Monitor Wells



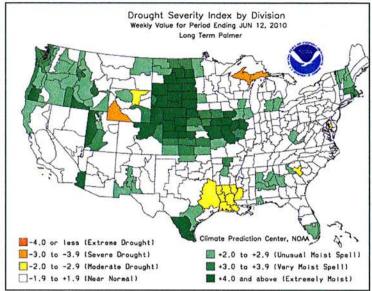
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State_Well	WL_1975	WL_1985	WL_1990	WL_1995	WL_2000	WL_2005	WL_2006	WL_2007	WL_2008	May_2009	Nov_2009	May 2010
6144708	-27.56	-26.86	-27	-25.4	-28.83	-25.82	-25.8	-24.46	-25.13	-24.21	-25.8	-25.23
6146202				-58.72	-56.23	-52.85	-57.18	-53.69	-53.5	-56.86	-54.8	-53.15
6152601	-33.93	-30.18	-36	-34.35	-37.26	-31.05	-30.91		-30.55	-29.67	-30.94	-31.66
6154702	-23.88	-27.72	-29.18	-28.3	-32.45	-29.52	-29.9	-28.89	-28.89	-25.2	locked gate	-28.72
6131901	-40.01	-16.92	-41.37	-33.33	-43.03	-12.77	-24.26	-34.64	-29.05	-25.35	-31.38	-42.25
3657106					-8.81	-9.74	-6.05	-9.75	-8.91	-4.69	-5.17	-6.30
3657702					-118.17		-118.49	-116.87	-118.1	-117.61	-118.3	-118.95
3764402					-116.15	-115.5	-113.82	-114.75		-113.27	-112.32	-110.30
3764404		-66.92		-59.74	-56.1	-58.45	-55.71	-52.91	-53.15	-46.83	-49.19	-48.75
3764503					-38.9	-36.05	-33.67	-35.94	-37.55	-32.33	-31.38	-30.43
6108101	-41.76	-44.25		-44.15	-42.6	-42.09	-41.3	-42.17	-42.48	-40.82	-41.15	-41.15
6115205		33.03	34.7		39.96		36.5	37.65	28.41	28.18	39.38	39.96
6116204					-52.12		-51.46	-52.79	-52.35	-51.61	-52.8	-52.90
6124504					-31.5	-32.59	-27.42	-28.45	-28.5	-24.59	-28.54	-29.35
6148209	-189.61	-200.07	-200.22	-206.4	-217.62				-188.25	-177.09	-181.34	-182.80
6148221	-35.4	-39.18	-18.4	-33.2	-35.23				-31.45	-28.92	-30.63	-29.80
6148801	-8.57	-10,85	-12.32	-5.45		-11.93	-7.44	-9.75	-7.54	-5.38	-10.38	-8.50
6201105					-60.49	-57.98	-58.92	-58.6	destroyed	destroved	destroved	devstroved
6201701	-69.55	-79.35		-76.88	-80.23	-75.43	-75	-80.95	-83.55	-93.42	-96.05	-85.58
6201803					-87.05	-83.22	-86.61	-91.56	-86.4	-85.54	-90.55	-87.50
6209105					-2.05	-1.9	-1.98	4	-2.08	-1.38	-1.5	-3.64
6209704						-37.58	-35.73	-34.35	-37.3	-34.4	-33.82	-33.80
6209902						-24.48	-21.75		-16.87	-16.13	-26.25	-19.45
6217102						-58.35	-59.64		-55.05	Dry	Dry	Dry
6217510					-21	-18.35	-17.33	-16.37	-18.2	-14.7	-17.87	-16.04
6217606					-2.05	-2.93	-1.12	4.9	-0.92	-1.09	-1.42	-4.56
6217707					-16.66	-15.03	-3.75		-7.58	-4.15	-4.63	-6.85
6225405					-61.5	-60.1	-58.78	-58.65	-59.34	-57.5	-59.07	-58.14
6233603					-10.6	-14.12	-10.44	-12.68	-7.2	-10.92	-10.63	-12.65
6202902								-12.8	-16.25	-11.65	-11.5	-13.29
6203204				-65.6	-67.15	-22.4	-29.86	-60.25	-67.9	-68.15	-68.32	-69.50
6203301				-39.65	-40.5	-39.95	-74.13	-40.32	-40.58	-45.42	0	-40.88
6203704				-169.8	-171.66	-173.6	-172.31	-172.56	-173.62	-172.78	-172.83	-173.38
6210309				-63.93	-63.85		-65.37	-71.67	-68.45	-65.93	-65.25	-69.35
6210901	-13.74	-16.49	-17.43		-19.37	-17.35	-17.19	-16.95	-18.05	-16.48	-16.34	-16.14
6218103									-37.52	-33.99	-35.25	-36.09
6242909				-40.24	-41.59	-38.48	-38.55	-37.68	-36.72	-36.03	-33.38	-36.70
6243406				-27.92	-29.7	-27.95	-27.81	-28.28	-24.91	-26.29	-25.96	-26.00
6250304					-38.6	-37.98	-38.37	-36.79	-36.54	-35.58	-30.23	-35.90
6104401	-152.12	-159.36	-161.38	-159.96	-161.77	-164.75	-164.6	-164.6	-164.72	-168.71	-165.17	-164.96
6112606	-121.19	-121.72	-121.65	-121.36	-122.65	-119.15	-122.7	-122.8	UTL-Ike	UTL - Ike	-123.5	-122.88
6113802	-162.5	-163.44	-176.8	-171.18	-163.27	-164.3	-164.67	-164.83	-164.08	-174.13	-164.36	-165.03
6115101	-31.16	-34.47	-31.33	-36.8	-33.55	-33.67	-33.08	-32.73		-33.09	-33.84	-32.83
6115501	-108.29	-109.65	-114.33	-113.73	-114.95	-130.21	-117.49	-114.78	-114.7	Obstr.	-121.25	-116.43
6115703	-14.41	-3.07	-18.82	-16.6	-15.88	-7.96	-5.61	-10.2	4.1	-5	-5.2	-11.95
6121110	7.7-	-3.04	-13.19	-10.97	-9.74	-4.57	-4.55	-10.93	-2.31	-3.96	-5.25	-11.06
6129203	-19.33	-17.17		-23.65	-26.25	-23.34	-17.38	-22.45	-24.07	-15.38	-22.44	-20.90
6130419	-6.67	-5.71	-15.74	-13.72	-16.88	-6.44	-2.4	-7.24	-13.77	-3.62	-8.9	-7.65
6124610									-33.15	-30.59	-32.28	-31.79
3659102											-99.74	-99.12

# The SETGCD Well Monitor

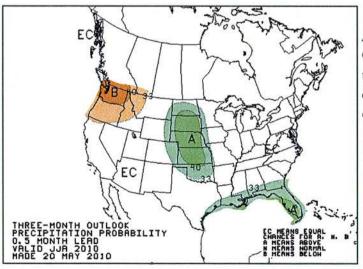
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With above average rainfalls across most of the rest of Texas, drought conditions that have dominated most of the state for the previous two years have been all but eliminated.

#### NORMAL PRECIPITATION EXPECTED

The precipitation probability outlook map (below) for the next three months, provided by NOAA's Climate Prediction Center, shows that we can expect near normal or above normal precipitation for all of Texas.



also shows that the increased rains throughout the winter have eliminated almost all drought conditions in Texas. Although the rains have returned and the outlook for the near future continues to look favorable, there will be lasting effects from the nearly 2 year long drought.

### DROUGHT CONDITIONS

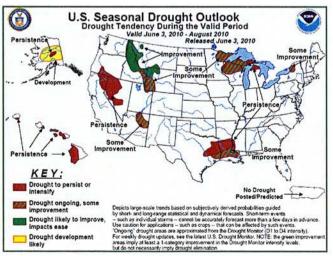
As you can see by the June 12, 2010 Palmer Drought Severity Index (left), Southeast Texas is experiencing moderate drought conditions. Fortunately, Southeast Texas had a moist winter, averaging about 5.5 inches of precipitation a month for the six month period between October 2009 and March 2010. However, for the months of April and May, the District averaged only 1.17 inches. Normal rainfall amounts within the District for April and May are in the 5 inch per month range.

### RAINFALL TOTALS

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Jasper	13.12	1.58	6.27	2.30	4.36	2.61	0.88	2.73
Lumber-	11.52	1.85	7.51	4.26	5.95	2.30	0.64	1.42
Newton	13.70	1.45	4.11	3.12	4.80	1.05	0.28	U/A
Silsbee	9.48	1.50	4.54	4.60	5.36	2.47	0.35	1.86
Woodville	12.34	1.73	4.65	2.84	4.07	3.19	1.04	2.16
Kountze	9.95	1.41	6.83	7.07	5.09	2.62	0.47	0.55

### SEASONAL DROUGHT OUTLOOK

As you can see from the U.S. Seasonal Drought Outlook map (below), with over a 10 inch precipitation deficiency in Southeast Texas, the moderate drought conditions are expected to linger throughout the summer. As mentioned earlier, this map



### CONSERVE WATER..... TURN OFF THAT LIGHT

When it comes to water and energy, in most cases, you can't have one without the other. Water is integral to the recovery of oil and gas, the processing of oil, and in the creation of electricity. Yet, without electricity, it wouldn't be possible to pump, treat, move, heat, or recover more water. The processes are unendingly tied together. A study done by the U.S. Geological Survey says that 48% of all the water consumed in the U.S. goes to power plants. In California, the treatment, storage, and transportation of water accounts for nearly 20% of all electricity used in the state.





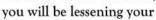
In Texas the average household uses 14,570 kWh of electricity each year. Depending on the method used to create the electricity, conventional power plants can use between 0.40 gallons per kWh and 0.60 gallons per kWh. A hydroelectric plant can lose up to 55 gallons per kWh to evaporation. The U.S. average is 2 gallons per kWh and in Texas, due to the high number of natural gas fired plants, the average amount of water used per kWh is low at only 0.43 gallons.

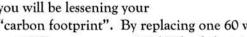
The average Texas home uses approximately 6,250 gallons of water annually without even opening the first tap or taking a single shower. A way we can conserve water outside of the usual "don't brush your teeth with the water running" is by simply

turning off a light. A single 100 watt light bulb left on all day will use over half a gallon of water for the creation of electricity, over 227 gallons annually. You can save even more by replacing all of the old incandescent light bulbs in your home with compact fluorescent lights (CFL). CFLs use nearly 75% less electricity as a standard incandescent light bulb and can be expected to last 8 years.

Another simple way to conserve is to turn off the TV when no one is watching it. A typical 42" LCD TV uses over 200 watts per hour and a 50" plasma TV can use over 350 watts per hour. If both of those TVs were to run 24-7 for one year, they would use over 625 gallons of water. By turning the TVs off you will not only save on your electric bill, but you will also be conserving significant amounts of water. The more electricity you save the more water you save.

By conserving electricity, not only will you reduce the amount of water and fuel used to create electricity but

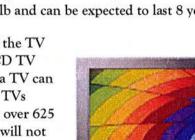




"carbon footprint". By replacing one 60 watt incandescent light bulb with a 13 watt CFL you can save 470 kWh of electrical use, and if your electricity comes from a coal fired plant you will reduce the carbon dioxide expenditure by 730 pounds over the life of the CFL bulb.



Sometimes these numbers seem insignificant but when added up throughout your home and added to the over 120 million other homes in the U.S., these numbers get very large, very quickly. Save water, turn off that light!!!





# The SETGCD Well Monitor

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

«First Name» «Last Name» «Address 1» «Address 2» «City», «State» «Postal Code»

"'Till taught by pain, men really know not what good water is worth"
- From "Don Juan" by Byron



#### CALENDAR OF EVENTS

CAL	ENDAR OF EVENTS
June 22, 2010	GMA 14 meeting, 1:30 pm, in Conroe
July 5, 2010	Independence Day Observed District office closed
July 8, 2010	SETGCD - Rule Change Hearing, 9:30 am to be immediately followed by the Regular meeting of the Board, in Kirbyville
August 12, 2010	Board Holiday—No regular meeting of the Board
September 6, 2010	Labor Day Observed—District office closed
September 9, 2010	SETGCD—Regular meeting of the Board, in Kirbyville
October 14, 2010	SETGCD-Regular meeting of the Board, in Kirbyville

#### WATER FACTS

- The Human body is 66% water.
- A single tree can give off 70 gallons of water per day in evaporation.
- Less than 1% of water treated by public water systems is used for drinking or cooking.
- There are over 17 million private domestic wells in the United States.
- One inch of rain over one acre of land is equal to 27,150 gallons.
- It takes 100 gallons of water to make one pound of wool or cotton.