



DFC Monitoring Well Project Underway

GCUWCD chose GeoProjects, International to continue the DFC Monitoring Well drilling project. Drilling began the first week of February, beginning in Kingsbury off Nash Creek. We then plan to move into Gonzales County and drill two wells before returning to Guadalupe County to begin drilling off Nockenut Road.

Pictured above from left to right: Bill Klemt, GCGCD consulting geologist; Bill Jones, GCGCD District 4 Director/Treasurer and Greg Sengelmann, General Manager of Gonzales County Underground Water Conservation District (GCUWCD).

We are very excited to have the data from this network of monitoring wells to better understand the outcrop of the Carrizo Aquifer.

These wells are funded by joint participation from GCUWCD permit holders CRWA, SSLGC, SAWS, TWA/GBRA, and Alliance Regional Water Authority (ARWA formally HCPUA). We thank everyone involved for helping us gather the data needed to achieve our Desired Future Conditions.

More pictures on page 2.



WWW.GCGCD.ORG



Visit our website for more information and much more!

GCGCD NEWS



WINTER 2018-2019 Newsletter

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Save the Date & Did you know?

Just for fun word search



At our January board meeting, the board underwent restructuring of offices. After over 22 years of loyal, hard work, **Ron Naumann**, one of the GCGCD Founding Directors, instrumental in the District's enabling legislation – Serving as Board President and General Manger has 'relinquished the reigns' (so to speak) and will be 'taking a back seat' – letting others, who have learned from him over all these years, continue on with the task of conserving, preserving and protecting our most valuable resource, the groundwater that sustains us all.

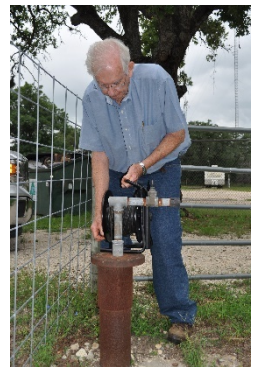


We are pleased to announce our new officers:

President - Hilmar Starcke, III
Vice President – Jeff Schuehle
Secretary – Hilmar Blumberg
Treasurer - William Jones



*To all of our Directors -
Thank you for your dedication
and service!*



Ron - let us do the field work from now on - No more watching for snakes, getting stung by wasps & fire ants, worrying about getting the E-Line snagged.....



Water moccasin right there!

Let us have some fun now!

Pictures from Monitoring Well Site (Sagebiel / Nash Creek Road)



Mixing mud is messy!



Rig dog is very helpful

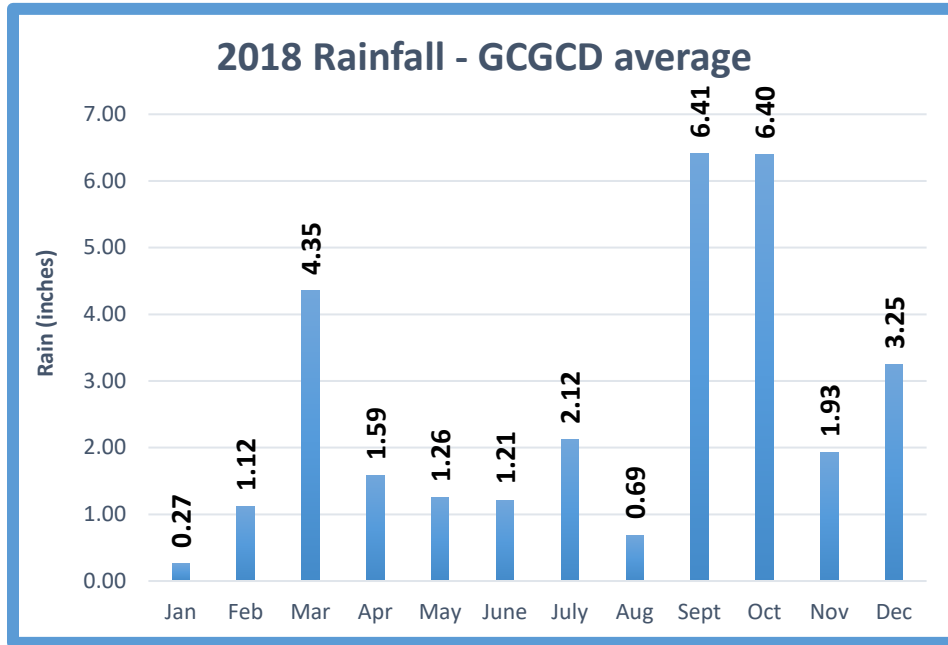


GeoCam Logging



GCGCD 2018 Annual Rainfall

= 30.55"

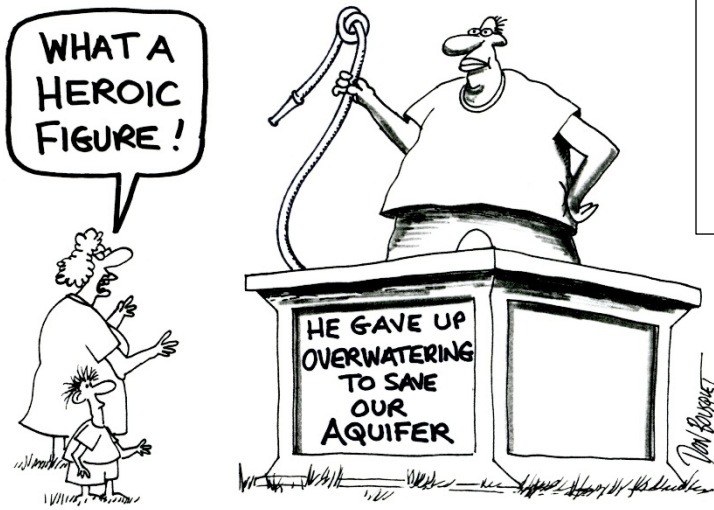
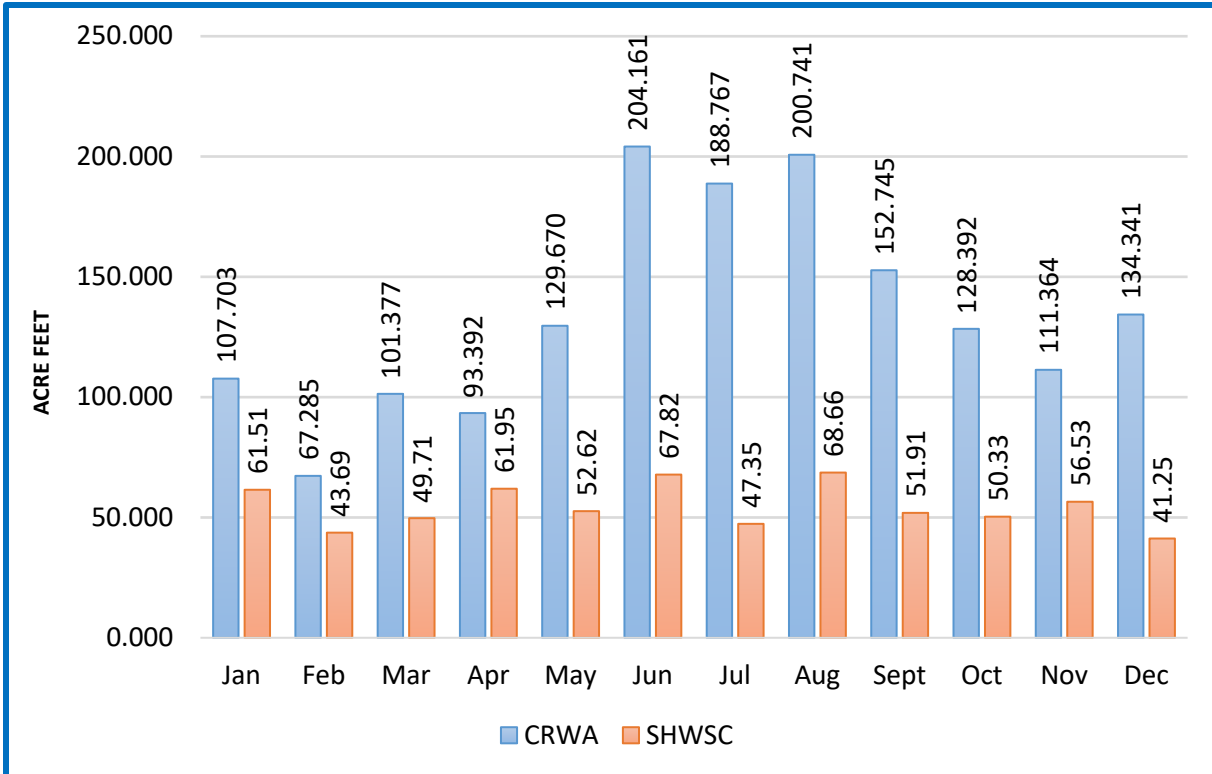


GCGCD Rainfall 2018													
													Annual Total
Location	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	By Site
Baker - TexMesonet	n/a	1.28	5.33	1.79	1.26	1.61	2.52	0.06	8.30	8.53	2.90	4.11	37.69
Diamond Half Ranch	0.45	1.34	2.91	1.50	0.66	0.88	0.88	0.90	7.19	7.36	1.23	1.50	26.80
Grones - TexMesonet	0.25	1.89	3.74	1.58	0.86	1.66	1.39	0.76	6.12	6.16	1.92	3.33	29.66
Jones - TexMesonet	0.20	0.68	4.30	1.98	2.11	1.55	2.27	1.17	6.14	4.96	2.58	3.18	31.12
Kallis Ranch Hwy 90 A	0.34	0.71	6.43	2.09	1.07	1.28	2.32	1.12	5.54	6.49	1.68	3.63	32.70
SHWSC Office - TexMesonet	0.03	0.79	4.64	1.26	0.64	1.49	2.81	0.30	4.29	6.00	1.45	3.10	26.80
SHWSC Plant - TexMesonet	0.15	1.10	3.25	1.24	1.45	0.89	2.14	0.80	7.61	5.16	2.17	3.63	29.59
Strey - TexMesonet	0.46	1.15	4.20	1.24	1.99	0.35	2.62	0.41	6.11	6.51	1.52	3.50	30.06
													GCGCD Total Avg.
Monthly Avg across GCGCD	0.27	1.12	4.35	1.59	1.26	1.21	2.12	0.69	6.41	6.40	1.93	3.25	30.55

Looks like the Groundhog thinks we're going to have an early Spring!



2018 Carrizo Production Totals



Cartoon by Don Bousquet

CRWA Wilcox Production Totals for 2018

1,115.7 AF/YR
36.87% of total permitted amount
(3,026 AF/YR)



TEXAS GROUND WATER ASSOCIATION

72nd ANNUAL CONVENTION & TRADE SHOW

Was held January 22-25, 2019. Another great success! The trade show is an excellent opportunity to network with professionals in the groundwater industry from consultants, drillers, pump installers, geologists, and yes, even Groundwater Conservation Districts!

Need to take Continuing Education Courses? TGWA is an excellent resource for CE classes offering interesting, relevant topics every year.

TGWA is responsible for the quarterly publication of the Fountainhead – a great source for industry insights, technology trends, legislative updates and so much more.

Not a member? [Click here to join!](#)



This year TGWA offered a full day Geoscience Seminar dedicated to the Trinity Aquifer offering overviews and in-depth discussions covering: Geophysical Water Well Logging; Well Construction & Completion techniques; Core Samples in the Middle Trinity, Hays County; Upper Trinity Well fields in Comal County; Water Quality in the Trinity Aquifer; and the Hill Country Portion of Trinity Aquifer System Groundwater Availability Model.

Stay Posted with GCGCD and TGWA to see if additional courses will be available next year!!

Kelley Vickers' two-year term serving as Secretary/Treasurer on the Board of Directors, Texas Ground Water Association, GeoScience Division has expired. Kelley is now serving as the Vice President, for the next two-year term.

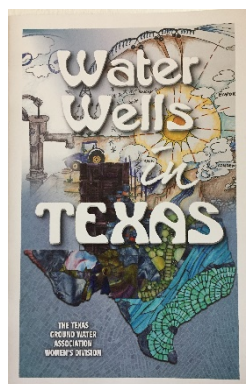
"I am so proud to be a part of this amazing group of people!"

Kelley

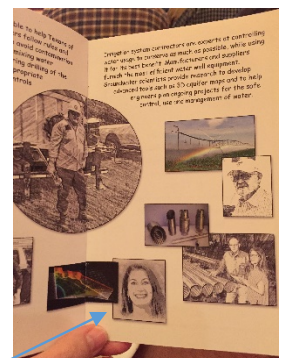
GCGCD is so proud to have been asked to contribute to the fantastic educational booklet, produced by Susan Rumbelow, Women's Division of TGWA.

Excellent Illustrations by
Dayna Fowler Haines

"Groundwater scientists provide research to develop advanced tools such as 3D aquifer maps and to help engineers plan ongoing projects for the safe control, use and management of water."



A peek inside



Kelley Vickers, face of woman in groundwater science ☺



HI-TECH INTERACTIVE ROOM



Water policy and the 86th Texas Legislative Session

[Natural Resource Committee Interim Report 2018](#)

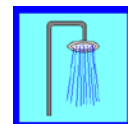
[Senate Committee on Agricultural, Water and Rural Affairs 2018](#)

Click on above links to read full reports

How long does it take you to shower?

Take the TWDB

5 Minute Timer Test!



Can you save more water and beat the timer?

Remember, Every Drop Counts!

Conserve Water
& save money too!





January 2018 - January 2019 Aquifer Levels

Report by William B. Klemt



Summary from Bill Klemt's report:

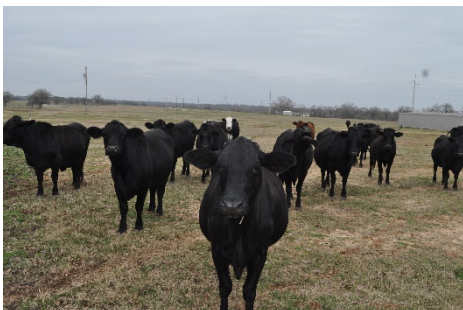
Water levels in the Carrizo aquifer have declined about – 1.6 feet (average of 10 wells) in Guadalupe County which is to be expected; the largest Carrizo measured water level declines were in the CRWA and SSLCG areas; Wilcox aquifer water levels were down about - 0.3 feet; the Carrizo estimated long-term water level decline of about – 1.1 feet per year in the outcrop is of concern; small to moderate long-term water level declines in the Carrizo aquifer are expected over time because of SSLGC, SAWS, SHWSC, and CRWA well fields in Guadalupe and Gonzales Counties.

Completion of the monitor well project in the Carrizo outcrop will allow the District to better track and quantify loss of saturated thickness in the unconfined areas, which is a DFC requirement.

For the purpose of tracking and quantifying future DFC values for the Wilcox, it is recommended at least one Wilcox water level monitor well to be located in SWN Grid 68-40-7 or 68-40-8.

To see the full water level report – visit our website: <http://gcgcd.org/monitoring-wells.html>

William B. Klemt
William B. Klemt, P.G.



Working in front of an audience 😊



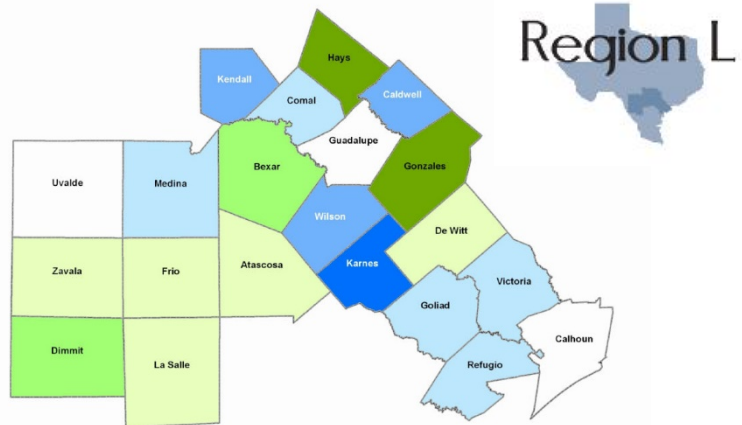
Verifying measuring point (MP) to keep data accurate



[State Flood Assessment Report to the Legislature](#)

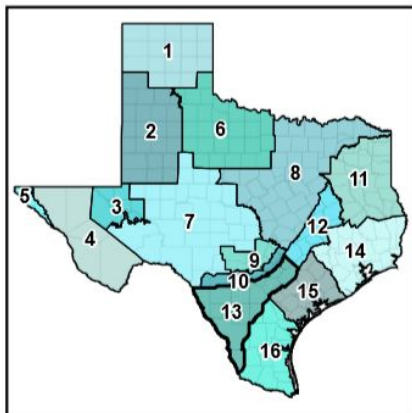


[2019 TWDB Board Meeting Schedules](#)



The South-Central Texas Regional Water Planning Group (SCTRWPG), Region L, consists of Atascosa, Bexar, Caldwell, Calhoun, Comal, DeWitt, Dimmit, Frio, Goliad, Gonzales, Guadalupe, Karnes, Kendall, La Salle, Medina, Refugio, Uvalde, Victoria, Wilson, Zavala, and part of Hays Counties.

Discussion is already underway for the 2021 South Central Texas Regional Water Plan



Groundwater Management Area (GMA) 13 Update

GMA 13 voted on Feb. 1st to engage [LRE Water, LLC](#) consulting services in the development and adoption of Desired Future Conditions (DFC) for GMA 13.

TWC §36.108 requires GCDs to submit DFCs to the TWDB for the groundwater resources within their groundwater management area.

TWDB has issued RFQ for updating the GAM for the Carrizo-Wilcox, Queen City, & Sparta Aquifers – however the proposed completion date of October 2021 means the update will not be available for this planning cycle.

[Plum Creek Conservation District](#) our GCD neighbor in Caldwell County, member of GMA 13
Adopted their revised Management Plan on 11/20/2018



Feb. 14th GCGCD Board Meeting, 122 W. Ireland Street @ 4:30 pm
Mar. 14th GCGCD Board Meeting, 122 W. Ireland Street @ 4:30 pm
Apr. 11th GCGCD Board Meeting, 122 W. Ireland Street @ 4:30 pm

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kelley@gcgcd.org

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ron@gcgcd.org

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hilmar_blumberg@gcgcd.org

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raetzsch@gcgcd.org

District 4 - William Jones – Treasurer
bill_jones@gcgcd.org

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charlie_willmann@gcgcd.org

District 6 - Hilmar Starcke III - President
hil_starcke@gcgcd.org

District 7 - Jeff Schuehle - Vice President
jeff_schuehle@gcgcd.org

William B. Klemt - Consulting Geologist
bill_klemt@gcgcd.org



Did you know that scientists believe they have located a large body of liquid water, approximately 12 miles wide, beneath an ice cap on Mars! This 'underground lake' is located near the Martian south pole. An intriguing discovery indeed!



Just for FUN!!

A	M	D	E	D	I	S	T	R	I	C	T
T	L	F	C	C	S	U	D	U	P	W	L
G	I	C	R	R	P	D	G	L	O	G	E
A	W	V	N	P	A	E	M	E	M	E	O
C	O	N	S	E	R	V	A	T	I	O	N
R	Q	I	A	R	T	L	U	S	Y	L	A
W	O	M	W	M	A	Z	F	J	P	O	R
A	W	A	S	I	Q	S	S	S	L	G	C
L	B	G	E	T	T	H	D	N	I	Y	R
G	C	G	C	D	E	W	T	W	D	B	A
K	W	A	T	E	R	S	F	B	J	H	I
Q	U	E	E	N	S	C	I	T	Y	R	N

Can you find me?



SAWS	LEONA
DISTRICT	MAG
SSLGC	GMA
CONSERVATION	DFC
QUEENSCITY	TWDB
PERMIT	CCSUD
GCGCD	CRWA
GEOLOGY	RAIN
WATER	TERS
RULE	SHWSC
	SPARTA