



State of the District - Staff's Annual Report to the Board for FY 2018-2019

COW CREEK GROUNDWATER CONSERVATION DISTRICT

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This report will summarize the Cow Creek Groundwater Conservation District's activities, water well information and management goals for FY 2018-2019 (October 1st, 2018 - September 30th, 2019).

Well Registrations

138 new water wells were drilled in FY 18-19. New wells completed are up **20%** from FY 17-18, up **4%** from FY 16-17, and up **17%** from FY 15-16.

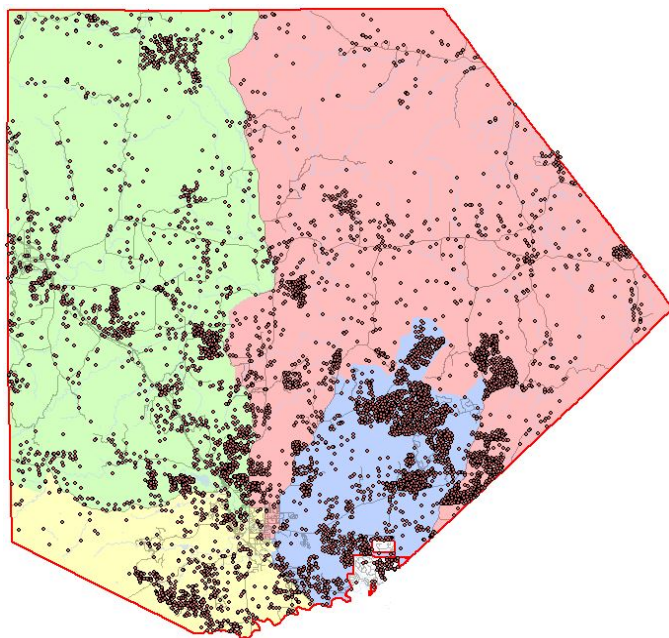
12 in District 1 (8.70%)
39 in District 2 (28.26%)
48 in District 3 (34.78%)
39 in District 4 (38.26%)

Of these **138** new wells, **125** were drilled for domestic use, **7** for livestock use, **2** for subdivision test use, **1** for irrigation use, **0** for public water system use, **0** for monitor well use, **2** for small business, **0** well deepened, and **1** geothermal cluster. **13** existing wells were plugged.

94.20% of the new wells were drilled into the Middle Trinity Aquifer (**117** into the Cow Creek, **12** into the Hensell, and **1** into the Lower Glen Rose). The Upper Trinity (Upper Glen Rose) had **5** well completed into it, the Lower Trinity (Hosston) had **2** well completed into the formation, and the Fort Terret (Edwards) had **1** new well completed.

26 existing wells were registered in FY 18-19 compared to **21** existing wells were registered in FY 17-18, **28** in FY 16-17, **34** in FY 15-16, **39** in FY 14-15, **53** in FY 13-14, **44** in FY 12-13, **58** in FY 11-12 and **86** in FY 10-11.

As of September 30th, 2019, the District had **8,334** registered wells.



Operating Permits for Non-exempt wells

The CCGCD currently has **167** wells that are producing under an operating permit issued by the District. As a combined total they are permitted for **4,891.84 acre feet**.

In FY 18-19 the CCGCD issued **two** new operating permits and renewed **2** existing operating permits. (management objective 1.1)

Below is a sample of actual meter readings from twenty of the District's permitted users:

Permittee	Gallons Pumped FY 18-19	Acre Feet Pumped	Gallons permitted	Acre Feet permitted	Utilized %
Alamo Fiesta RV	3,765,200	11.55	4,250,000	13.04	88.59%
Aqua Texas	48,375,000	148.46	92,541,685	284.00	52.27%
City of Boerne	253,000,660	776.43	602,824,350	1,850.00	41.97%
Comfort ISD	4,817,850	14.79	9,775,530	30.00	49.28%
Foothills Mobile Home Ranch	3,814,260	11.71	5,050,690	15.50	75.52%
Geneva School	5,539,130	17.00	9,351,924	28.70	59.23%
HC African Violets	1,233,770	3.79	2,280,957	7.00	54.09%
Hill Country Montessori	220,490	0.68	1,629,255	5.00	13.53%
Ingram Ready-mix	3,995,000	12.26	8,146,275	25.00	49.04%
KCWCID#1	100,397,100	308.11	162,925,500	500.00	61.62%
Kendall Wood Dental Dr. Metz	43,510	0.13	198,250	0.61	21.95%
KWU	20,833,000	63.93	162,925,500	500.00	12.79%
McMarr Ranch	863,355	2.65	27,697,335	85.00	3.12%
Perry Donup	2,695,570	8.27	53,765,415	165.00	5.01%
SCR Properties	67,355	0.21	85,000	0.26	79.24%
Singing Waters	17,600	0.05	164,900	0.51	10.67%
SWWC - Platten Creek	2,268,000	6.96	2,932,659	9.00	77.34%
Tim Lamberson	299,440	0.92	5,213,616	16.00	5.74%
TR Drilling & Service	242,144	0.74	699,240	2.15	34.63%
Zimmer_Zampese	37,510	0.12	42,500	0.13	88.26%

FY 18-19 Totals	452,525,944	1,388.75	1,152,500,580	3,537	39.26%
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FY 17-18 Totals	581,357,981	1,784.12	1,152,500,580	3,537	50.44%
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	Gallons Pumped FY 17-18	Acre Feet Pumped	Gallons permitted	Acre Feet permitted	Utilized %
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FY 17-18 vs FY 18-19	-128,832,037	-395.37	0.00	0	-11.18%
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	Gallons Pumped	Acre Feet Pumped	Gallons permitted	Acre Feet permitted	Utilized %
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The total **actual** production from these wells is about **39.26%** of what the wells were originally permitted for, compared to **50.44%** in FY 17-18, **45.74%** in FY 16-17, **47.43%** in FY 15-16, **32.83%** in FY 14-15, **27.49%**.

Public Education and Outreach

The District provided water efficient literature and handouts, attended local speaking engagements, and provided articles that are run in local papers.

Water efficient, Drought-oriented, and Conservation related literature provided by CCGCD at speaking engagements and in the District office: (management objective 2.2, 6.2, 7.2, 7.5):

- Water - Yours, Mine & Ours (CCGCD)
- The Texas Manual on Rainwater Harvesting (TWDB)
- Water Conservation Tips (TWDB)
- Conserving Water Outdoors (TWDB)
- Conserving Water Indoors (TWDB)
- Rainwater Harvesting in Texas (Dr. Krishna)
- Texas Lawn Watering Guide (TWDB)
- Water Conscious Landscaping Tips (Bob Webster)
- Water Conservation – Landscape and Drought (Milan Michalec)

Newspaper articles (management objective 2.1, 4.2, 7.1):

- Aquifer Watch (Bi-monthly)

Speaking engagements (management objective 2.3):

Directors:

- Director Webster
 - Area fire chief's meeting September 2019
 - HCA Meeting Summer 2019

- Director Michalec
 - Fredericksburg, October 25, 2018. Met with Rep. Kyle Biederman and Staff to discuss Hill Country water issues.
 - Austin, State Capitol, March 19, 2019. Provided testimony on HB 1806 to Natural Resources Committee.
 - Boerne Star, March 29, 2019. Reality of drought: Sausages, laws and a water district. Part One of a Two-Part Series.
 - Boerne Star, Apr 05, 2019. Reality of drought: Sausages, laws and a water district. Part Two of a Two-Part Series.
 - Boerne Star, May 5, 2019. How San Antonio uses its water to influence Kendall County Development.
 - Austin, State Capitol, May 9, 2019. Provided testimony against HB 1806 to Senate Water and Rural Affairs Committee.
 - Boerne Star, May 10, 2019. Endgame: Water for a water district.
 - Boerne Star, May 20, 2019. Local official opposes state water bill in Austin hearing.
 - Boerne Star, May 29, 2019. House bill opens tap for WCID3 despite opposition.
 - Dripping Springs, September 26, 2019. Hill Country Alliance Leadership Summit Participant.

Conjunctive water management

The District meets regularly with representatives from the Guadalupe Blanco River Authority, the City of Boerne, and Kendall County. (management objective 4.3)

Drought Planning/Management

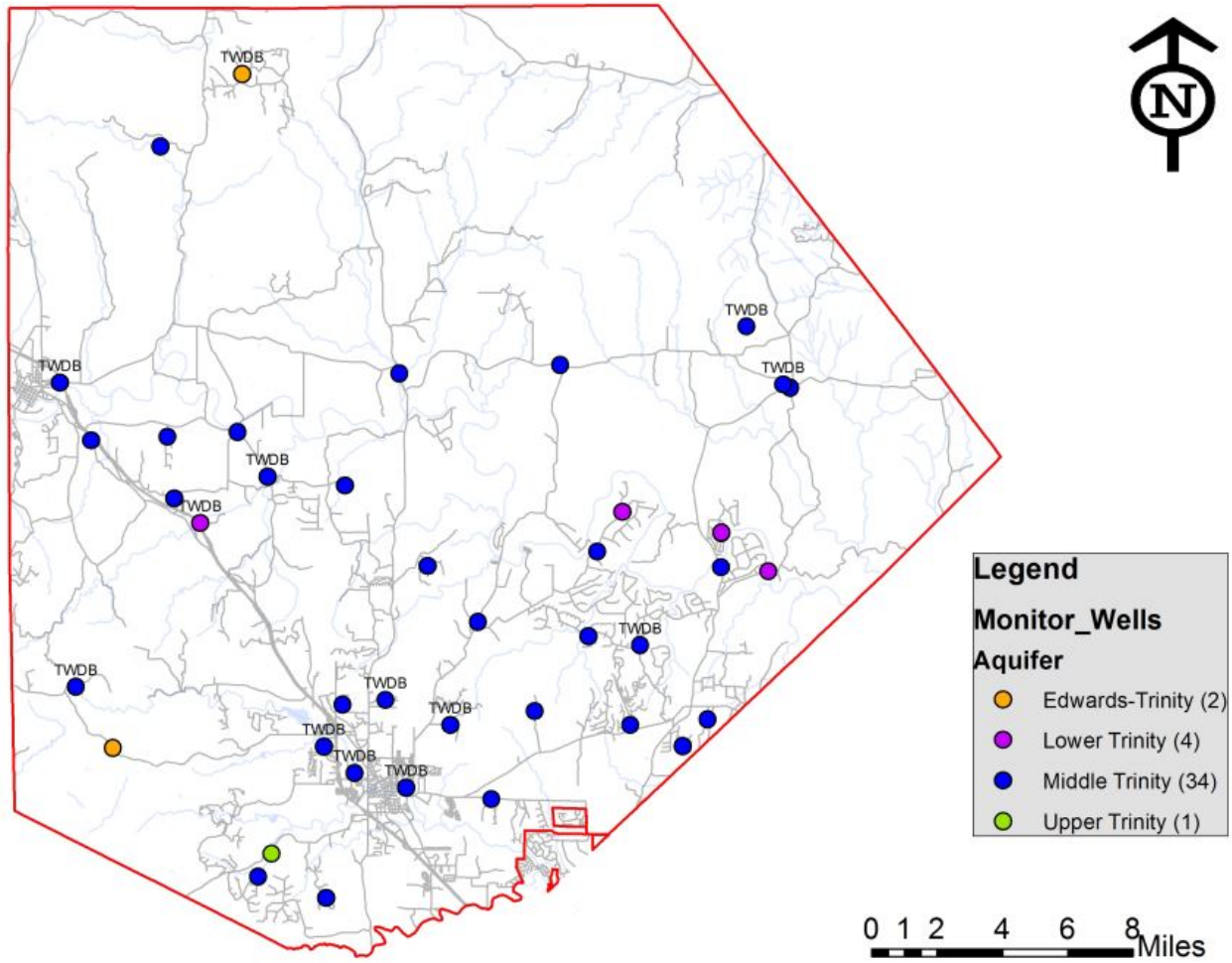
The District continues to gather more valuable data on water levels and rainfall. District Groundwater Technician, Heath Hoffman, correlates stream flows readings from the USGS Comfort and Spring Branch gauges on the Guadalupe with cumulative local rainfall and groundwater levels in the District's 41 monitor wells. The District (management objective 4.2, 6.1)

Meeting Date	Drought Stage
January 12, 2015	Stage 2
May 12, 2015	Stage 1
September 14, 2015	Stage 2
December 15 th , 2015	Stage 1
June 14, 2016	Stage 0
August 9, 2016	Stage 1
September 13, 2016	Stage 0
June 12, 2017	Stage 1
September 12, 2017	Stage 2
July 10, 2018	Stage 3
November 14, 2018	Stage 1
February 11, 2019	Stage 0
August 12, 2019	Stage 1

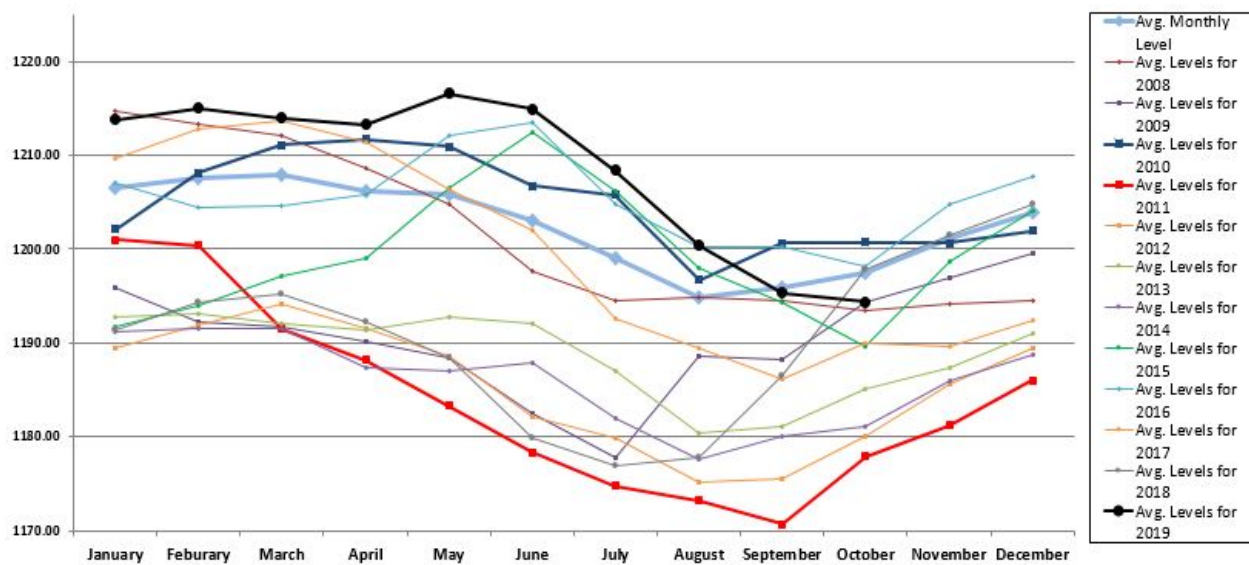
The Board currently reviews the drought stage at each regular monthly meeting and makes a determination based on analysis of the District's network of 40 monitor wells, stream flow in the Guadalupe River, cumulative rainfall and/or other factors as deemed appropriate by the Board. (management objective 6.1).

The District currently takes manual readings in 27 of the monitor wells on a bimonthly basis (about 624 readings annually). The remaining 14 monitor wells are real-time TWDB recorders that take hourly readings. (management objective 6.3)

2018-2019 Monitor Wells



(management objective 8.2)



Other Management Objectives/Strategies

Recharge Enhancement (management objective 7.3 & 7.4)

The District has initiated an effort to establish a regional dialogue about recharge features, how to best catalog them, and how to best protect these features. As of this report, several new recharge features have been located within the District.

Currently the District has a moratorium on the filling, destruction, and removal of caves, sinkholes, swallet holes and critical environmental features, see District Order 2006-021, adopted in May of 2006.

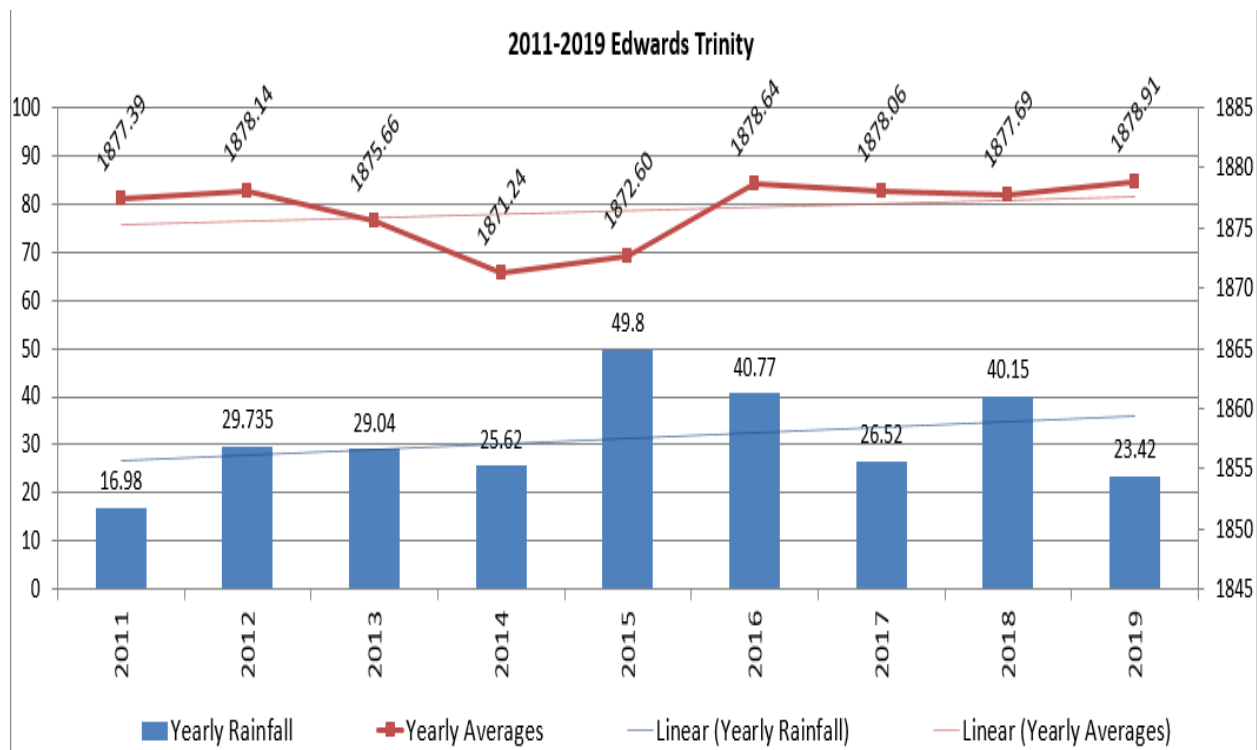
The Board also adopted rules related to the protection of sensitive recharge features in FY12-13.

Brush Control (management objective 7.7)

Currently the District has no adopted policies related to brush control/watershed enhancement. District staff believes that this is a valid management strategy that should be investigated further. The District attends the annual meetings about the Watershed Enhancement Project held by the local soil and water conservation District and the NRCS. Numerous studies and examples have shown that selective and ongoing brush management (i.e. removal of ashe juniper) has improved recharge and groundwater availability.

Addressing Desired Future Conditions in a quantitative manner (management objective 8.1 & 8.2)

The current management plan addresses the DFC for the Edwards Group of the Edwards-Trinity (Plateau) Aquifer and the Trinity Aquifer. The District monitors the water levels in two Edwards (Kft) wells. One of the wells is located in the Northern portion of the District (Alamo Springs) and the other is in the Southwest portion of the District (Champee Springs).



The District monitors water level in 34 Trinity monitor wells.

