



ANNUAL REPORT 2016

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Purpose and Scope:

This Annual Report on the Sutton County Underground Water Conservation District's (District or SCUWCD) is on achieving its management goals and objectives for the year 2016. It is presented to the Board of Directors of the District (the Board) in accordance with the District's Management Plan (Methodology for Tracking Progress, pg. 18). Texas Water Code, Chapter 36.1071. The original Management Plan for the District was adopted in 2004. It has been amended and readopted, every five years, November 12, 2013 is the latest revision.

The Sutton County Underground Water Conservation District (the District) was created by the 69th Texas Legislature (1985) under the authority of Section 59, Article XVI, of the Texas Constitution, and in accordance with Chapter 51 and 52 of the Texas Water Code. Note, in 1995, by Acts of the 74th Legislature, Chapter 52 of the Texas Water Code was repealed and replaced with Chapter 36 of the Texas Water Code effective September 1, 1995. The District, a local government agency, provides for the conservation, preservation, protection, recharge and prevention of waste of the underground water reservoir, Edwards-Trinity (Plateau) Aquifer, located under the District; by consistently adhering to Chapter 36 of the Texas Water Code (TWC). The District conducts administrative and technical activities and programs to achieve these purposes by collecting, archiving and analyzing water well and aquifer data. It regulates water well drilling and production of permitted, non-exempt wells, promoting the capping or plugging of abandoned wells. The District also provides information and educational material to local property owners, interacting with other governmental or organizational entities, and undertaking other groundwater-related activities that may help meet the purposes of the District. The District also strives to maintain groundwater ownership and rights of the landowners as provided in the TWC §36.002.

District Board Meetings for Year 2016

DATE:	TYPE:	NOTES:
January 12, 2016	Regular Board Meeting	
February 9, 2016	Regular Board Meeting	Considered Agricultural Water Cons. Grant
April 12, 2016	Regular Board Meeting	
May 10, 2016	Regular Board Meeting	
June 14, 2016	Regular Board Meeting	
July 12, 2016	Regular Board Meeting & Public Hearing	Desired Future Conditions
August 9, 2016	Regular Board Meeting	
September 13, 2016	Regular Board Meeting & Public Hearing	Budget & Tax Rate Approved
September 27, 2016	Workshop	Draft Rules
October 11, 2016	Regular Board Meeting	
November 8, 2016	Regular Board Meeting & Public Hearing	Clark Abel Well - <10 acres
December 13, 2016	Regular Board Meeting	New Director joins - Archer

Requirements of District Management Plan:

Goal 1.0 – Provide for the Efficient Use of Groundwater (36.1071(a)(1))

1.1 - Provide programs to improve public awareness of efficient use, wasteful practices and conservation measures.

DATE:	PROGRAM:	PURPOSE:	NOTES:
May 9, 2016	6 th Grade Field Day	Visit to Eddie Sawyer's ranch	Partner with AgriLife Ext. & NRCS
July 5, 2016	Good Samaritan	Water Cons., wise use K-8th	Assisted AgriLife Ext.
November 1, 2016	High School Presentation	Watersheds and Water Mgmt.	Mrs. Owens Environmental Class

1.2 - Each year the District will publish one article or newsletter on water conservation.

DATE:	SOURCE:	TITLE:	NOTES:
August 25, 2016	Devil's River News	Sutton Co. UWCD at Your Service	Overview of District
December 1, 2016	Devil's River News	Winterize your Well	How to winterize

Goal 2.0 - Control and Prevent Waste of Groundwater (36.1071(a)(2))

2.1 – The District provides educational leadership to citizens within the District concerning this subject. The activity is accomplished annually through at least one printed publication, such as a brochure, and public speaking at service organizations and public school.

DATE:	EVENT:	PURPOSE:	NOTES:
May 9, 2016	6 th Grade Field Day	Visit to Eddie Sawyer's ranch	Partner with AgriLife Ext. & NRCS
July 5, 2016	Good Samaritan	Water Cons., wise use K-8th	Assisted AgriLife Ext.

*District is currently in the process of preparing brochures for public use.

Goal 3.0 - Natural Resource Issues (36.1071(a)(5))

3.1 – Measure, monthly, the wells in the water level monitoring network within the District with steel tape, E (Electric)-line, and download data from electronic sensors. The table below contains this information.

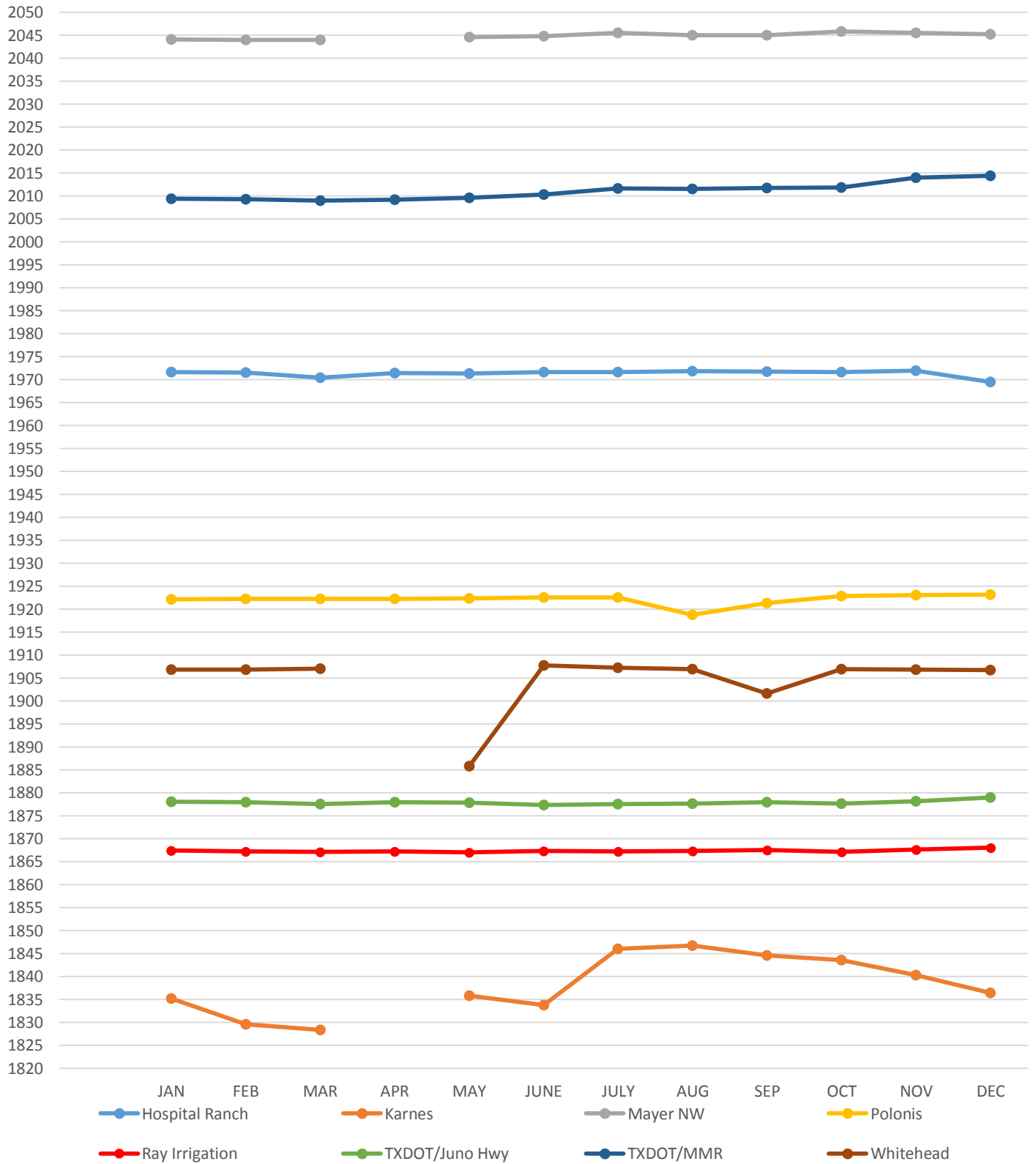
OWNER	WELL #	ASL	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	DIF
Archer	55-29-810	2332.0	283.6	278.5	281.3		282.8	283.9	283.3	284.9	280.1	280.6	278.5	277.7	5.9
County/Cemetery	55-27-615	2143.7	171.0	171.1	170.8	170.4	168.1	168.0	167.1	167.1	166.5	166.2	166.7	167.1	3.9
Teaff	55-27-616	2253.4	263.6	263.4	263.6	263.5	263.3	262.5	261.7	261.8	260.9	260.8	260.6	260.9	2.7
Crites	55-27-622	2133.4	168.0	168.6	167.5	167.5	164.4	162.3	161.0	161.2	160.1	159.7	160.2	160.7	7.3
Karnes	55-33-806	1988.4	153.2	158.8	160.1		152.6	154.6	142.4	141.7	143.8	144.8	148.1	152.0	1.2
Ray Irrigation	55-42-502	2087.6	220.2	220.4	220.5	220.4	220.6	220.3	220.4	220.3	220.1	220.5	220.0	219.6	.6
Shurley/Huddleston	55-35-210	2059.2	155.4	155.3	155.4		154.8	154.5	154.4	154.0	153.8	153.2	152.5	152.5	2.9
TXDOT/Juno Hwy	55-43-205	2083.0	204.9	205.0	205.5	205.1	205.2	205.7	205.5	205.4	205.1	205.4	204.8	204.0	.9
Whitehead	55-25-902	2040.6	133.8	133.8	133.6		154.8	132.8	133.4	133.7	139.0	133.7	133.8	133.9	-1
Hospital Ranch	55-25-406	2213.6	241.9	242.0	243.2	242.2	242.3	241.9	241.9	241.7	241.8	241.9	241.6	244.1	-2.2
Brockman	55-45-305	2265.2	257.1	257.1	257.0	257.0	256.9	255.5	254.9	255.0	255.1	255.1	251.9	254.6	2.5
Ross House	55-38-402	2207.2	189.5	188.9	183.3		188.8	184.1	187.6	188.0	188.4	186.9	187.7	188.2	1.3
Robert Pfluger	55-37-705	2288.6	313.7	313.5	313.4		313.4	313.9	313.5	313.2	313.1	313.5	313.6	313.0	.7
Glen Fisher	55-28-302	2365.0	228.2	229.7	228.6	228.5	228.4	228.3	228.4	228.2	228.1	227.9	227.8	227.8	.4
Bill Stewart	55-20-904	2367.3	245.3	250.7	245.6		240.2	235.8	238.9	237.7	238.2	241.5	242.7	243.6	1.7
Dick Street	55-22-901	2456.3	276.1	276.0	275.9		275.7	275.7	275.7	275.6	275.4	276.7	275.4	275.4	.7
Bill Tittle	55-19-903	2205.6	201.4	201.3	202.1	201.0	199.1	200.8	198.2	202.5	198.5	199.1	199.5	202.5	-1.1
Jones, Claire	55-27-909	2099.6	146.9	147.2	147.1	146.3	144.8	144.6	143.3	143.4	143.5	142.9	142.8	143.5	3.4
TXDOT/MMR	55-18-715	2158.7	149.3	149.4	149.7	149.5	149.1	148.4	147.0	147.1	146.9	146.8	144.7	144.3	5
Mayer NW	55-17-504	2233.6	189.5	189.6	189.6		189.0	188.8	188.0	188.6	188.6	187.7	188.0	188.3	1.2
Hardgrave	55-30-604	2371.0	258.1	258.1	257.5		257.6	256.0	256.8	256.0	256.0	256.9	256.7	256.3	1.8
Condra	55-29-607	2300.7	201.7	201.7	201.1	201.6	200.9	199.8	199.8	199.6	199.5	198.5	198.5	198.8	2.9
Ross	55-38-405	2323.0	269.8	270.1	267.0	268.2	268.8	265.8	267.1	267.8	268.1	267.4	267.6	267.5	2.3
TXDOT/427	55-39-406	2191.6	159.4	159.5	159.1	159.0	159.2	158.6	158.6	158.7	158.9	158.6	158.7	158.6	.8
Highmount	55-27-223	2328.5	320.8	320.9	320.9	320.5	320.9	320.0	319.7	319.6	319.4	319.5	319.3	319.6	1.2
Fisher-Fawcett	55-26-905	2170.8	271.3	271.5	271.6	271.3	271.3	271.5	271.4	271.4	271.6	271.7	271.5	271.4	-1
Polonis	55-33-205	2290.0	367.9	367.8	367.8	367.7	367.6	367.4	367.4	371.2	368.7	367.1	366.9	366.8	1.1
City Well #3	55-27-603	2260.0	290.3	290.1	289.8	289.6	287.3	287.1	286.1	286.2	285.5	285.3	285.7	286.2	4.1
SUTUWCD DCW	55-27-322	2146.0	163.5	163.5	163.4	162.9	162.3	162.1	161.2	161.1	160.5	160.8	161.2	161.8	1.7
Nolan Ryan Ft. Terrett #7	55-39-505	2148.0	127.3	127.8	126.6		127.5	126.9	127.5	127.8	118.3	127.2	127.5	127.7	-4

*measurements in feet below ground level

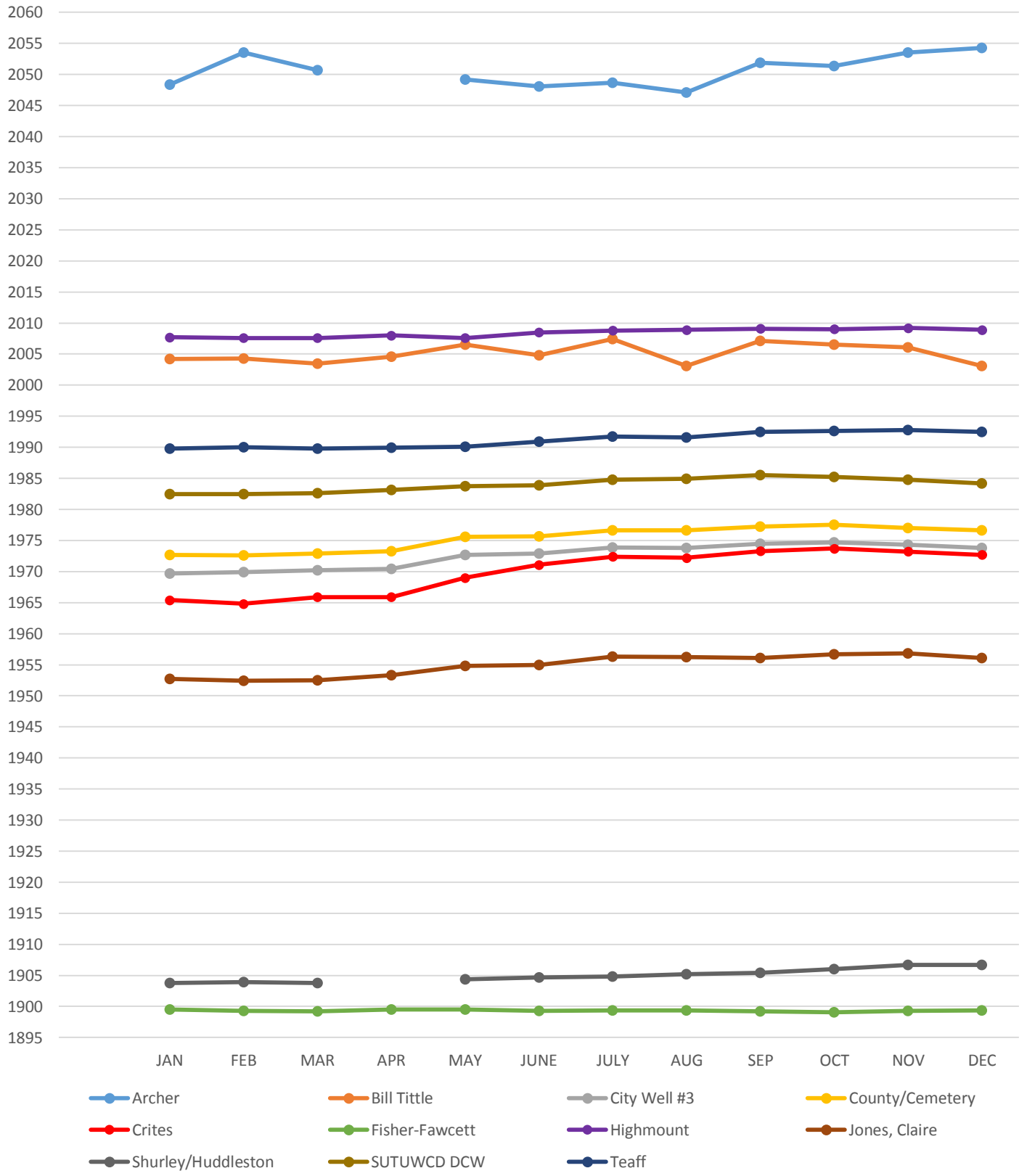
*The 'dif' column is the difference in the January measurement from the December measurement.

*Due to rain and therefore muddy roads, we were not able to access some wells in April that required a manual measurement.

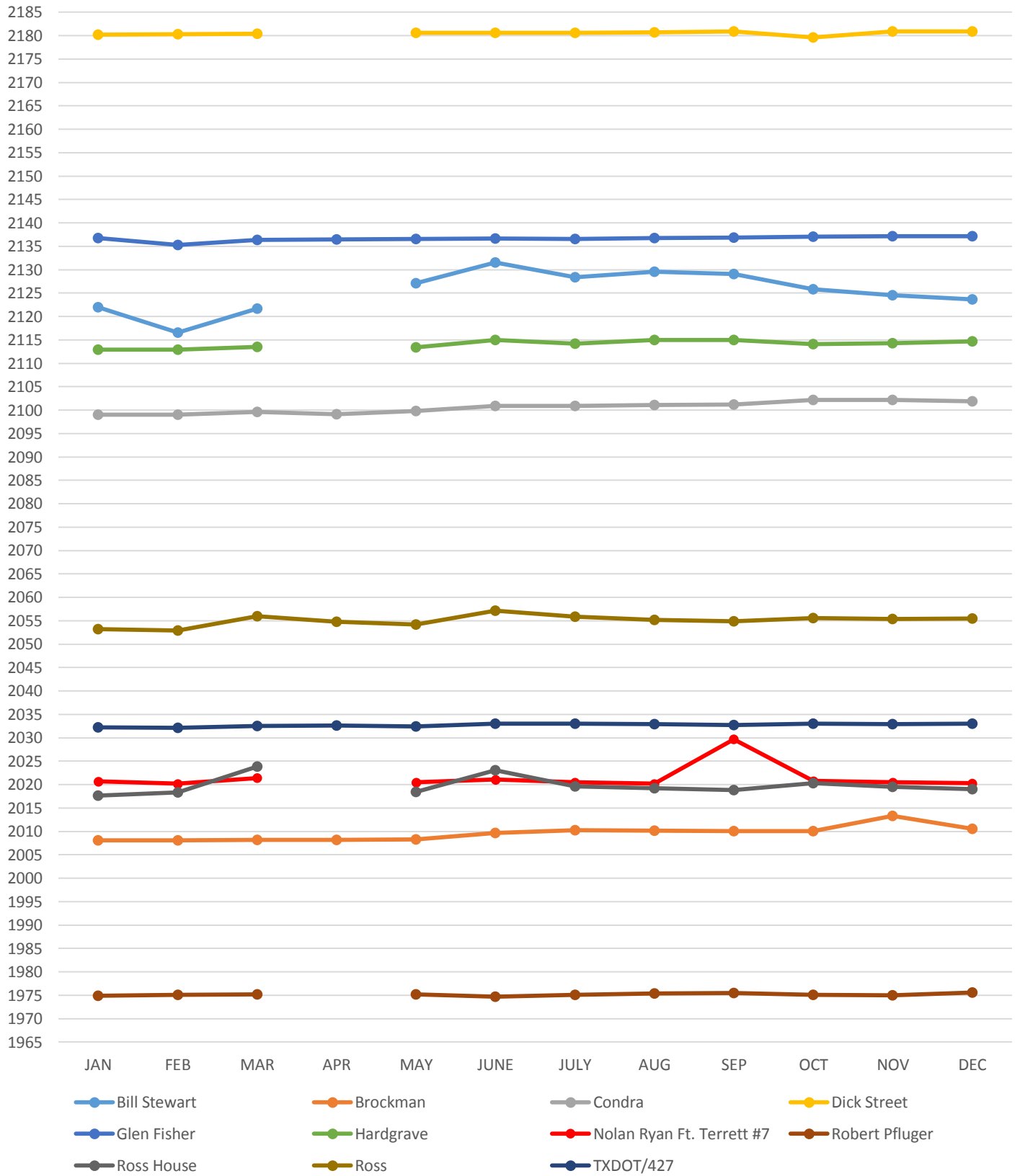
Western Section of Sutton County Water Level Monitoring Wells 2016



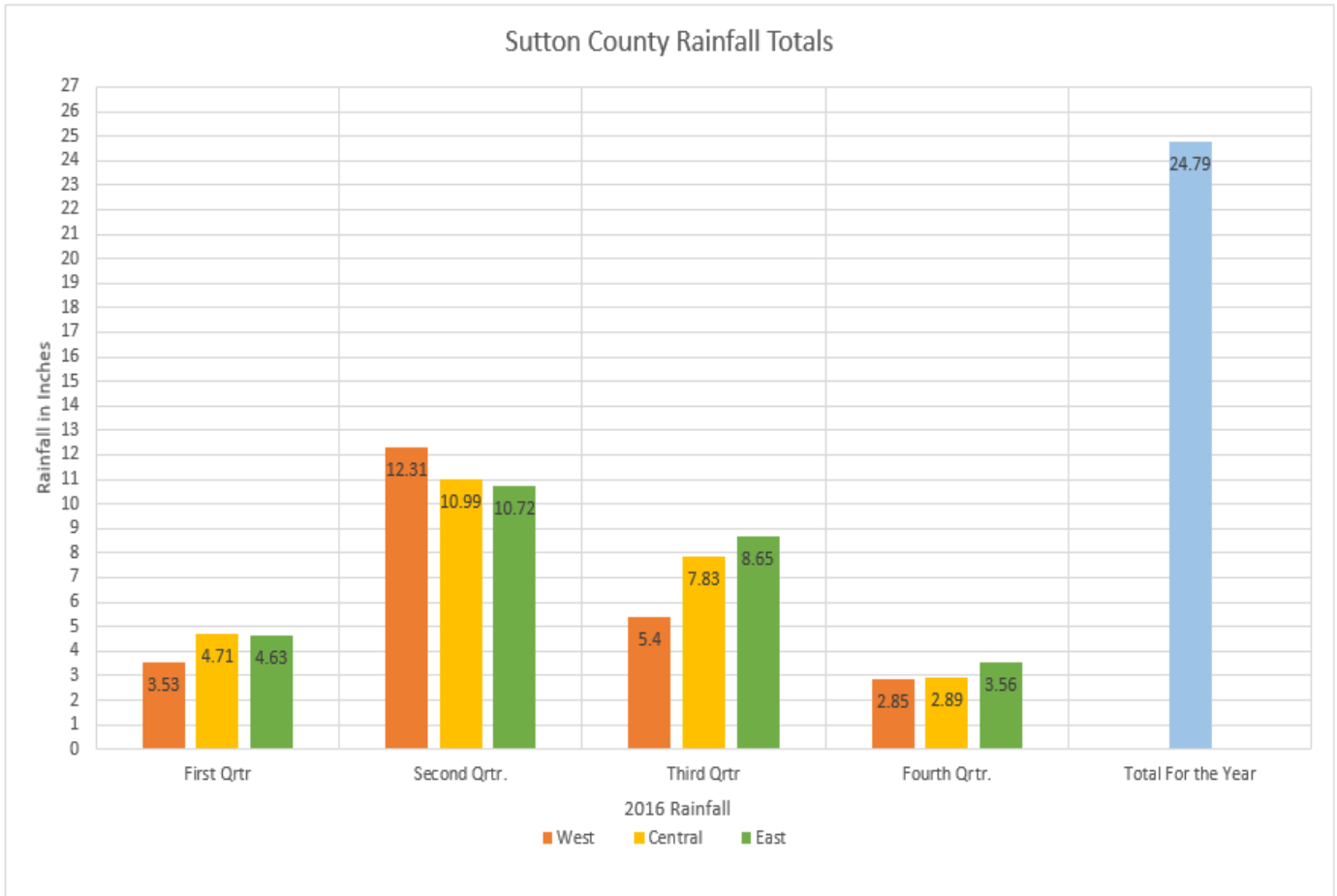
Central Section of Sutton County Water Level Monitoring Wells 2016



Eastern Section of Sutton County Water Level Monitoring Wells 2016



3.2. – Maintain a district-wide rainfall event network using volunteers who monitor and report data they collect along with automatic digital rainfall collectors for the evaluation of aquifer recharge.



The District reports the monthly rainfall results on each rain gauge, then graphs this information quarterly, as shown in the figure above. This data includes the automatic rain gauges, which are measured the third week of the month. Therefore, for the 4th Quarter, the data is missing the electronic rain gauge data for the last week in December. There were only trace amounts of rainfall and therefore should not change our data presented.

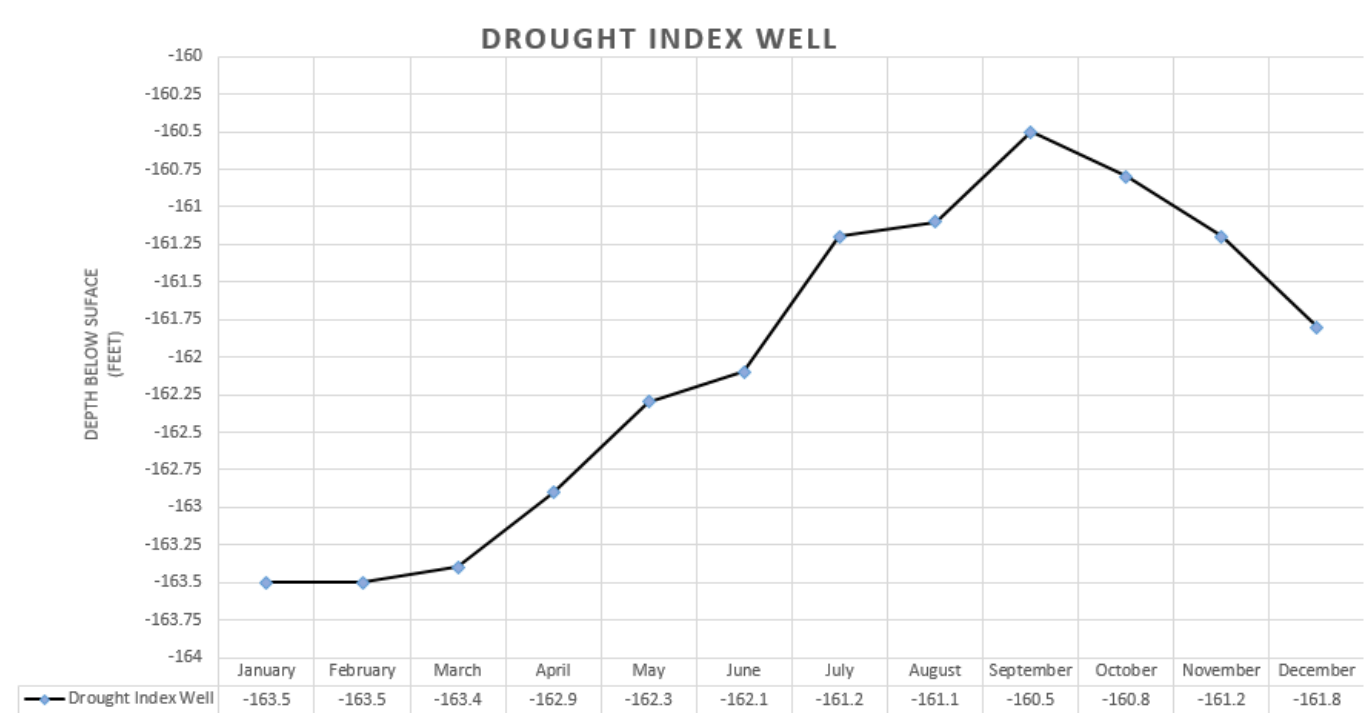
3.3 – Annually sample 33% of the 60 operating monitor wells in the District’s water quality monitoring network. The District is an active participant in the TWDB water quality program providing it with water quality information each year.

The results of the annual water quality monitoring network can be found in the District’s files. This data is analyzed by the District’s geochemist consultant for trends in the water chemistry of the aquifer.

Goal 4.0 - Drought Conditions (36.1071(a)(6))

4.1 – The District has an approved Drought Contingency Plan compliant with TCEQ standards, it also has a drought index well with trigger levels referenced in the plan. Water levels of monitored wells and Drought Index Well are reported monthly. If there are changes that warrant actions to restrict water usage the appropriate trigger in the plan is activated.

There were no triggers or changes that warranted actions to restrict water usage in Year 2016.



This graph illustrates the water levels, over time, in the aquifer at the Drought Index Well, a three foot excursion due to rainfall received during 2016.

Goal 5.0 - Conservation and Precipitation Enhancement (36.1071(a)(7))

5.1 – Provide and distribute literature on water conservation by publishing at least one newsletter or newspaper article annually.

DATE:	SOURCE:	TITLE:	NOTES:
August 25, 2016	Devil's River News	Sutton Co. UWCD at Your Service	Overview of District
May 27, 2016	Devil's River News	Texas Water Law at Work	DFC process

5.2 The District participates in the West Texas Weather Modification Association for precipitation enhancement.

The District’s General Manager reports monthly to the Board of Directors on West Texas Weather Modification Association activities when applicable.

The 2015 Annual Report from the West Texas Weather Modification Association can be found on their website at wtwma.com/analysis_and_research.htm and in the District’s files. The 2016 Annual Report has not been published. When published, the General Manager will distribute to the Board. The 2016 monthly reports can be found here: http://wtwma.com/operations_page.htm.

Seeding Events in Sutton County:

DATE:	NUMBER OF FLARES:	NUMBER OF CLOUDS:
May 10, 2016	12	7
May 14, 2016	6	4
June 1, 2016	4	6
June 26, 2016	10 (1 hygroscopic)	3
August 27, 2016	10 (1 hygroscopic)	12
September 1, 2016	15 (1 hygroscopic)	3
September 2, 2016	10 (1 hygroscopic)	2
September 13, 2016	14 (1 hygroscopic)	1

Goal 6.0 – Addressing in a Quantitative Manner the Desired Future Conditions (DFC) of the Groundwater Resources (36.1071(a)(8))

The District covers part of the Edwards-Trinity (Plateau) Aquifer and is within Groundwater Management Area (GMA) 7. The Edwards-Trinity (Plateau) Aquifer is the largest aquifer not subdivided into multiple GMAs.

Total net drawdown for the Edwards-Trinity (Plateau)/ Pecos Valley Alluvium Aquifers are not to exceed an average of eight (8) feet in 2070, as compared with 2010 aquifer levels. Specifically for Sutton County, drawdown is not to exceed an average of six (6) feet.

The second five year DFC and Modelled Available Groundwater (MAG) will be published after receipt of this information from TWDB, later in 2017

Statewide Participation:

The District participates from time to time, as appropriate, in local and statewide events where it is beneficial to the District's goals and mission. The District participated in these statewide events in 2016 listed below:

- The District's General Manager (GM) participated in the Texas Alliance of Groundwater Districts (TAGD) Annual Groundwater Summit in San Marcos, August 23 – 25.
- The GM was a member of a panel at the TAGD Annual Groundwater Summit to discuss GMAs and the DFC process
- The GM serves as Parliamentarian for TAGD and is a member of the Executive Committee
- The GM serves on the By-Laws Committee for TAGD
- The GM serves on the Legislative Committee for TAGD
- The GM serves on the Conference Planning Committee for TAGD
- The GM serves on the Brackish Desal Subcommittee for TAGD
- The GM is chairman of the GMA-7
- The District is a member of the West Texas Weather Modification Association. The District's GM attended regular board meetings throughout the year.
- The District is a member of the Texas Water Conservation Association
- The District staff attended quarterly Edward's Aquifer Authority Distinguished Lecture Series
- The District staff attended a Groundwater District's Meeting for State Representative Andrew Murr

Permits/Registrations Issued during 2016 Year:

DATE DRILLED:	TYPE:	OWNER:	USE:	DEPTH:	SWN:	TRACKING:
01/05/2016	Exempt	Paul Sullivan	Domestic	310	55-29-310	413754
01/07/2016	Exempt	Zed & Anita Snodgrass	Domestic	349	55-28-523	413540
01/12/2016	Exempt	Marty Parks	Domestic	285	55-36-820	
02/10/2016	Exempt	Larry Romero	Domestic	320	55-20-811	414781
04/04/2016	Exempt	Belinda Dixon	Domestic	408	55-18-909	420970
05/04/2016	Exempt	Larry Szymaszek	Livestock	340	55-47-305	425257
05/27/2016	Exempt	Wesley Lloyd	Livestock	280	55-36-819	424950
05/31/2016	Exempt	John Wilson	Domestic	285	55-27-237	430960
06/24/2016	Exempt	Chet Markgraf	Domestic	480	55-37-809	426411
06/30/2016	Exempt	Edward & Claire Allen	Domestic	300	55-31-110	425613
07/14/2016	Exempt	Jerry Johnson	Livestock	185	55-33-508	431977
07/14/2016	Exempt	Stuart & Lisa Lux	Domestic	420	55-19-630	429234
07/21/2016	Exempt	Doug Camfield	Domestic	320	55-20-408	430962
08/09/2016	Exempt	Carpenter & Day, LLC	Domestic	400	55-46-407	439222
09/23/2016	Exempt	Isabel Hernandez	Livestock	380	55-19-722	433323
09/06/2016	Exempt	Eddie Sawyer	Livestock	305	55-35-117	
11/30/2016	Exempt	Roger Sekula	Domestic	270	55-31-111	438600
12/01/2016	Exempt	Jackson, Weldon	Domestic	300	55-31-112	439690

PLUGGED WELLS IN 2016

COMPLETION DATE:	TYPE:	OWNER:	USE:	DEPTH:	SWN:	PLUG REPORT:
09/23/2016	Exempt	Isabel Hernandez	Domestic	360	55-29-721	162627
07/16/2016	Exempt	Jerry Johnson	NA	140	55-33-507	161589
09/09/2016	Exempt	Eddie Sawyer	NA	325	55-35-118	
08/30/2016	Exempt	Eddie Sawyer	NA	500	55-35-116	

Groundwater Management Area 7:

Groundwater Management Area 7: Meetings

DATE:	LOCATION:	PURPOSE:	NOTES:
January 14, 2016	Central Electric Co-Op – Fredericksburg	Joint Planning	Review of GAMS
April 21, 2016	Hill Country Univ. - Fredericksburg	Joint Planning	DFC Adoptions
September 22, 2016	TAMU Agrilife - San Angelo	Joint Planning	Action on Resolutions

Groundwater Management Area 7: Desired Future Conditions (DFC)

The District shall participate in the joint planning process in Groundwater Management Area (GMA) 7 as defined per TWC § 36.108, including establishment of Desired Future Conditions (DFCs) for management areas within the District. In its evaluation of potential DFCs, the District shall consider results from groundwater availability models, scientific reports, and the conditions of the aquifer.

Edwards-Trinity (Plateau)/ Pecos Valley Alluvium Aquifers:

Total net drawdown not to exceed an average of eight (8) feet in 2070, as compared with 2010 aquifer levels, with specific county drawdowns as follows:

COUNTY	GCD	DROWDOWN (feet)
Coke	Coke County UWCD	0
Crockett	Crockett County GCD	10
Ector	-	8
Edwards	Real-Edwards C&RD	2
Gillespie	Hill Country UWCD	5
Glasscock	Glasscock GCD	40
Irion	Irion County WCD	10
Kimble	Kimble County GCD	1
Menard	Menard County UWD	1
Midland	-	12
Pecos	Middle Pecos GCD	12
Reagan	Santa Rita UWCD	42
Real	Real-Edwards C&RD	4
Schleicher	Plateau UC&SCD	8
Sterling	Sterling County UWCD	7
Sutton	Sutton County UWCD	6
Taylor	-	0
Terrell	Terrell County UWCD	2
Upton	-	16
Uvalde	Uvalde County UWCD	2

Financial Reports and Annual Financial Audit:

Financial reports are given at each meeting of the District's Board of Directors. The Financial Audit of the District for FY 2016 was presented to the Board at the September 13, 2016 Board meeting and was approved on at the October 11, 2016 Board Meeting.

Sutton County UWCD 2017 Budget

