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The District's water-level observation wells were measured in January 2022. Twelve (12) of the District's current wells are completed in the Carrizo aquifer and ten (10) in the Wilcox aquifer. Most of the District's current observation wells were used to provide water level change or elevation information. Also used in this report were three Carrizo wells from Gonzales County.

The 2013 DFC water levels and January 2022 measured water levels are shown on the attached table. Comparisons of water-level measurements and water-level decline calculations can be made using the table. The attached maps show well locations, and Carrizo and Wilcox water-level and decline information.

Carrizo

Average GCGCD Carrizo water levels changed about -1.8 feet for the period January 2021 to January 2022. These wells are either located in the outcrop or close to the outcrop. Recently completed Carrizo outcrop monitor wells are included in the above estimate.

Average water levels, for January 2021 to January 2022, changed an estimated -0.1 feet in the SSLGC Area (Well 67-34-706(6), and in the CRWA Area, average water levels changed about -7.69 feet (Well 67-34-302(3a)) and Well 67-34-505(5).

It is anticipated Carrizo water-level declines will increase moderately within the District due to the addition of the proposed SSLGC Carrizo Well Field in the vicinity of Well 67-34-706(6). The increased rate of decline will slowly decrease with time as water levels approach a new equilibrium.

The Carrizo long-term (2013 - January 2022) water-level declines in the SSLGC and CRWA areas of Guadalupe County are about 20 feet (-2.2 feet/year) and 32 feet (-3.6 feet/year), respectively. Six (6) monitor wells, located near the middle of the Carrizo outcrop, averaged an estimated, - 0.33 feet/year.

Wilcox

The January 2021 - January 2022 Wilcox water-level measurements indicate an average change of + 1.4 feet for 8 wells. Not included in the water-level change calculation were the following wells: a) CRWA 67-34-5 (Deer Stand #3) which indicated a change of -13.8 feet (2016-2022); b) Flying W Wilcox Well 67-33-8 because of a need for a January 2021 measurement. Refer to the attached table for water-level measurements for the above wells.

Additional Observation Wells

The following wells were evaluated for possible inclusion into the District's water level program: a) Mundt (Cz), 67-34-7, water level +379; b) Ronshausen (Cz), 67-34-7, water level +374; c) K-5 (Wx Kiteboard Ranch), 67-18-7, water level +562; and d) Belz (Wx), 68-40-401, water level +511. It is recommended that the Mundt and Belz wells be included in the District's water-level program. Also, because of the distance

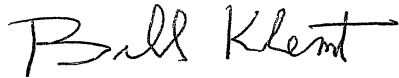
between MWCZ-7 and MWCZ-8 Wells, it is recommended consideration should be given to finding and adding another Carrizo well, or drilling another Carrizo monitor well in the vicinity of SWN Grid 67-34-2.

Note that the addition of the Belz Well (68-40-401) in combination with the Flying W Wilcox (67-33-8) and Vogel (66-40-204) Wells provides needed clarity and information to the Wilcox water-level map. This information better defines the areas of the Wilcox contributing base flow to the Guadalupe River.

Summary

In Summary: 1) Short term (1/2021 - 1/2022) Carrizo water levels declined about 1.8 feet; 2) Long-term (2013 - 2022), Carrizo water levels in the outcrop indicate an average decline of less than one-half foot/year; 3) At the present day level of pumpage, small to moderate water-level declines are continuing in the Carrizo down-dip from the outcrop; 4) However, additional proposed pumpage is expected to increase the rate of Carrizo water-level decline within the District to a more moderate level; and 5) For the most part, Wilcox water levels remain relatively stable.

Sincerely,



William B. Klemt, P.G.



2/10/22

**GCGCD CARRIZO (Cz)/WILCOX (Wx)
WATER-LEVEL PROGRAM**

Measurements shown are from the measuring point (MP)

<u>Date</u>			<u>WL below MP (ft)</u>
David Baker	67-18-8(7c)	MP 1.0 ft >GL	LSD + 622
WS	Lat/Long: 29.654272/97.831397		Depth 232 ft
9/17/15			120.66
1/13/16			119.99
1/20/21			120.80
6/22/21			120.38
9/21/21			135.65 Pumping
1/19/22			120.36
Robert Carter(Wx)	67-19-708(7b)	MP 1.9 ft >GL	LSD +416
WS	Lat/Long:29.657673/97.726433		Depth 295 ft
1/20/13,	33feet (+378) <GL	Sat/thick (2013) = 349 ft (Brac) -33 ft = 316 ft	
1/14/15			036.67
1/20/21			035.28
6/22/21			027.45 ? estimated 35 ft
9/21/21			036.49
1/19/22			033.44
Fred Blumberg (Wx)	67-25-709	MP 1.5 ft >GL	LSD +525
	Lat/Long:29.530255/97.973638		Depth 160 ft
3/20/00			053
1/21/13			053.20
1/20/21			052.84
6/22/21			050.92
9/21/21			051.15
1/19/22			049.26
Dickie Ulrich(Wx)	67-25-910(9a)	MP 0.5 ft >GL	LSD +506
WS	Lat/Long:29.518904/97.887402		Depth (?)
9/02/10			094.60 <MP
1/21/13			099.98 <GL
1/20/21			096.64
6/22/21			094.24
9/21/21			095.90
1/19/22			091.63
Donald Brady(Wx)	67-26-312(7a)	Mp 2.0 ft >GL	LSD +568
WS	Lat/Long:29.616036/97.776164		Depth 410
12/1/99			166
1/21/13			163.33
1/20/21			162.94
6/22/21			164.46
9/21/21			164.90
1/19/22			164.56
SH 466 MWCz-7	67-26-9 (39)	MP 0.4 ft <GL after 1/28/20	LSD +393
	Lat/Long:29.502032/-97.76655	Plugged back from 250 to 132 ft	
		Screen 92 to 132 ft	
		B/Cz 132 ft (+261)	
Estimated 2002 WL Elev. +376			
1/2013 WL Elev +373 (20 ft <LSD)		Sat/thick (2013) = 132 - 20 = 112 ft	
6/12/19		23	
1/28/20		26.28(WS), 24.75(e-line)	
1/19/21		26.35	

	6/21/21		27.17	
	9/20/21		26.76	
	1/18/22		26.30	
Chris Ayotte		67-27-110(2b) MP 2.0 ft >GL		LSD +431
WS		Lat/Long:29.58612/97.7211		Depth 360 ft
	2/23/12		063	
	1/21/13		059.12	
	1/20/21		054.38	
	6/22/21		052.83	
	9/21/21		052.77	
	1/19/22		052.29	
Sagebiel MWCz-3		67-27-4(2d) MP 3.3 ft >GL		LSD +452
Nash Creek WS		Lat/Long:29.546739/-97.720243		Plug back from 270 to 170 ft
				Screen 170 up to 130 ft
				B/Cz 170 ft (+288)
Estimated 2002 WL Elev. +373				
1/2013 WL 91 ft <LSD)			Sat/thick (2013) 79 ft	
	2/08/19		091.5 < GL	
	1/20/21		092.77	
	7/14/21		095.90	
	9/21/21		097.04	
	1/19/22		096.85	
Pete Kallies(Wx)		67-27-706(2) MP 1.0 >GL		LSD +433
WS		Lat/Long:29.533748/-97.738436		Depth 520 ft
	9/24/03		053.24	
	1/21/13		055.70	
	1/20/21		055.73	
	6/22/21		055.95	
	9/21/21		056.11	
	1/19/22		055.30	
Edward Henk		67-33-602(3b) MP 1.55 ft >GL		LSD +541
WS		Lat/Long:29.424211/-97.879389		Depth 225 ft
	8/17/08		108.17	
	1/21/13		111.62	
	1/21/21		121.20	
	6/22/21		121.65	
	9/21/21		121.88	
	1/19/22		122.34	
Blumberg MWCZ 1-B		67-33-6 MP 3.5 ft >GL		LSD +620
		Lat/Long:29.429658/-97.901995		Depth 319 feet, plug back from 355 feet
				Screen 279 - 319 feet
				B/CZ 316 feet
Estimated 2002 WL Elev. +459				
	1/2013		163.06 < GL, 2013 Sat Thick (316 - 163 = 153 ft)	
	7/24/20		169.2 < GL after development	
	1/07/21		169.11	
	6/21/21		168.82	
	9/20/21		168.96	
	1/18/22		168.39	
Sandy Oaks Tavern		67-33-803(8) MP 1.8 ft >GL		LSD +584
(Pole Cat) WS		Lat/Long:29.381048/-97.956268		Depth (?)
	8/1964		125 ft < GL	
	1/21/13		152.59	
	1/20/21		156.93	
	6/22/21		157.05	
	9/21/21		157.38	
	1/19/22		157.63	

Hwy 123 MWCz-2	67-33-8(8a)	MP 3.6 ft >GL	LSD +628
Flying W	Lat/Long: 29.400309/-97.954371		Screen 180 - 220 ft
Estimated 2002 WL Elev. +494			TD 280 ft (+351)
1/20/13 WL 145 ft <GL		B/Cz @ TWCZ-1 (+406 Elev.)	
2/17/18			146.3
2/20/18			146.25 <GL Reported
1/15/19			148.87
1/19/21			147.26
6/21/21			147.1
9/20/21			147.91
1/18/22			147.76
Hwy 123 (Wx)	67-33-8	MP 1.5 ft >GL	LSD +620
Flying W	Lat/Long: 29.409830/-97.954708		Depth 535 ft
6/06/88			140
6/22/21			148.85
9/21/21			160.22
1/19/22			157.43
Blumberg MWCz-1A	67-33-9(6d)	MP 3.0 ft >GL	LSD +570
	Lat/Long: 29.413811/-97.887355		Plug back from 477 ft to 420 ft
Estimated 2002 WL Elev. +430			Screen 360 - 420 & 180 - 200 ft
1/20/13 WL 144ft <GL)		Sat/thick (2013) 420 -144 = 276 ft	B/Cz 420 ft (+150)
3/12/19			147.5
4/04/19			147.5
4/23/19			147.51
1/07/21			149.87
6/21/21			149.75
9/22/21			149.56
1/18/22			149.50
Wells Ranch (Cz)	67-34-302(3a)	MP 1.5 ft >GL	LSD +491
WS	Lat/Long: 29.4706/-97.7747		Depth 250 ft
2002			106 Estimated
4/29/08			110
1/03/13			118.70
1/05/21			143.86
6/15/21			144.83
9/02/21			145.92
1/04/22			147.44
MWCz-8, FM 1117	67-34-4(4b)	MP 0.3 ft <GL	LSD +610
	Lat/Long: 29.452258/97.845193		Depth 415 ft
Estimated 2002 WL Elev. +443			Screen 325 - 365 ft
1/20/13 WL 170 ft <GL)		B/Cz 365 ft (+245)	
7/25/19		Sat/Thick (2013) = 365 - 170 = 195 ft	
8/09/19			179
8/14/19			178.2
1/19/21			179.67
1/19/21			174.11
6/21/21			173.43
9/20/21			173.44
1/18/22			174.63
Bexar Met #2 (Cz)	67-34-505(5)	MP 2.2 ft >GL	LSD +474
Deer stand	Lat/Long: 29.450425/-97.796486		Depth 460 ft
8/20/02			084.09
1/03/13			102.18
1/02/21			125.8

	6/01/21		124.3
	9/01/21		140.9
	1/02/22		137.6
CRWA (Wx)	67-34-5	MP 2.2 ft >GL	LSD +483
Deer stand #3	Lat/Long: 29.449793/-97.797889		Depth 1602 ft
	09/07/16		092.1
	10/14/18		149.9 (off 14 hrs)
	01/02/19		178.2 (off 07 hrs)
	01/20/21		158.6
	06/01/21		143.3
	9/01/21		159.4
	1/03/22		105.9
Blumberg #1 (Cz)	67-34-706(6)	MP 2.0 ft >GL	LSD +514
WS	Lat/Long: 29.385406/-97.852584		Depth 770 ft, T/MCz 330 ft(+184)
			Screen 526 - 772 ft
	1/21/04		109.10 <GL
	1/21/13		121.28
	1/20/21		141.11
	6/22/21		140.12
	9/21/21		143.07
	1/19/22		141.20
Bobby Lakey (Cz)	67-34-710(6c)	MP 2.0 ft >GL	LSD +468
(Baethge) WS	Lat/Long: 29.411429/-97.836769		Depth (?)
	8/17/08		069.84
	1/21/13		074.23
	1/20/21		096.14
	6/22/21		095.19
	9/21/21		097.62
	1/19/22		096.00
Mundt (Cz)	67-34-7	MP 1.5 ft >GL	LSD +520
	Lat/Long: 29.391694/-97.840694		Depth 444 ft
	1/19/22		142.68
Norvin Vogel (Wx)	68-40-204(10a)	MP 1.0 ft >GL	LSD +560
WS	Lat/Long: 29.4929/-98.0703		Depth 90 ft
	10/4/85		024
	1/15/19 (2013)		025.75
	1/20/21		025.36
	6/22/21		026.88
	9/21/21		026.94
	1/19/22		026.29
Belz (Wx)	68-40-401	MP 1.0 ft >GL	LSD +537
	Lat/Long: 29.447778/-98.0950556		Depth 64 ft
	1/19/22		027.00
GCUWCD WATER LEVELS			
James Miller (Cz)	67-27-705	MP 0.5 ft >GL	LSD +391
	Lat/Long: 29.530824/-97.71026		Depth (?)
	8/20/02		030.07
	1/03/13		036.58
	1/05/21		045.80
	6/15/21		045.32
	9/02/21		045.25
	1/04/22		045.52

Bexar Met #3	67-34-612	MP 2.2 ft >GL	LSD +465
Harden #1 Tommy's Well	Lat/Long: 29.457182/-97.775855		Depth 680 ft
8/20/02			075.13 MP 1.5 ft >GL
1/03/13			096.8
1/02/21			124.5
6/01/21			125.5
9/01/21			128.1
1/02/22			128.6
Thyra Harvey(Cz)	67-34-904	MP 1.2 ft >GL	LSD +410
	Lat/Long: 29.39102/-97.782671		Depth (?)
10/25/00			032.17 Barry Miller
01/17/12			054.57
1/05/21			093.86
6/24/21			090.75
9/02/21			095.19
1/05/22			092.84

EGUWCD WATER LEVELS

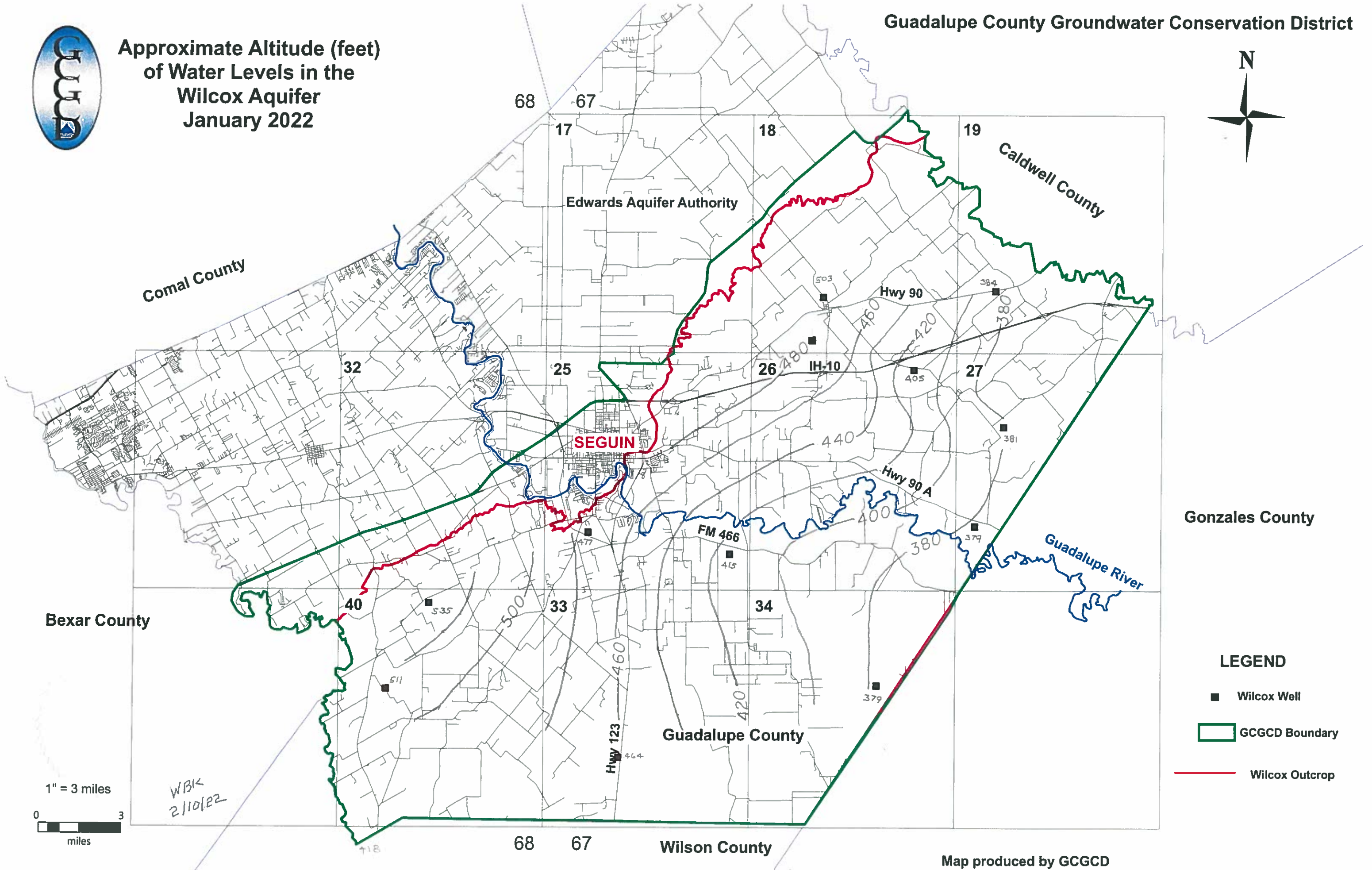
Wilson County

City of La Vernia	68-47-303	MP @ GL	LSD +514
	Lat/Long: 29.358064/-98.130483		Depth 440 ft
1/08/03			94.6
12/01/13			89.3
06/20/20			89.3
10/02/20			96.1
12/01/20			95.8
06/22/21			96 estimated



Approximate Altitude (feet) of Water Levels in the Wilcox Aquifer January 2022

Guadalupe County Groundwater Conservation District



Gonzales County

- LEGEND**
- Wilcox Well
 - GCGCD Boundary
 - Wilcox Outcrop

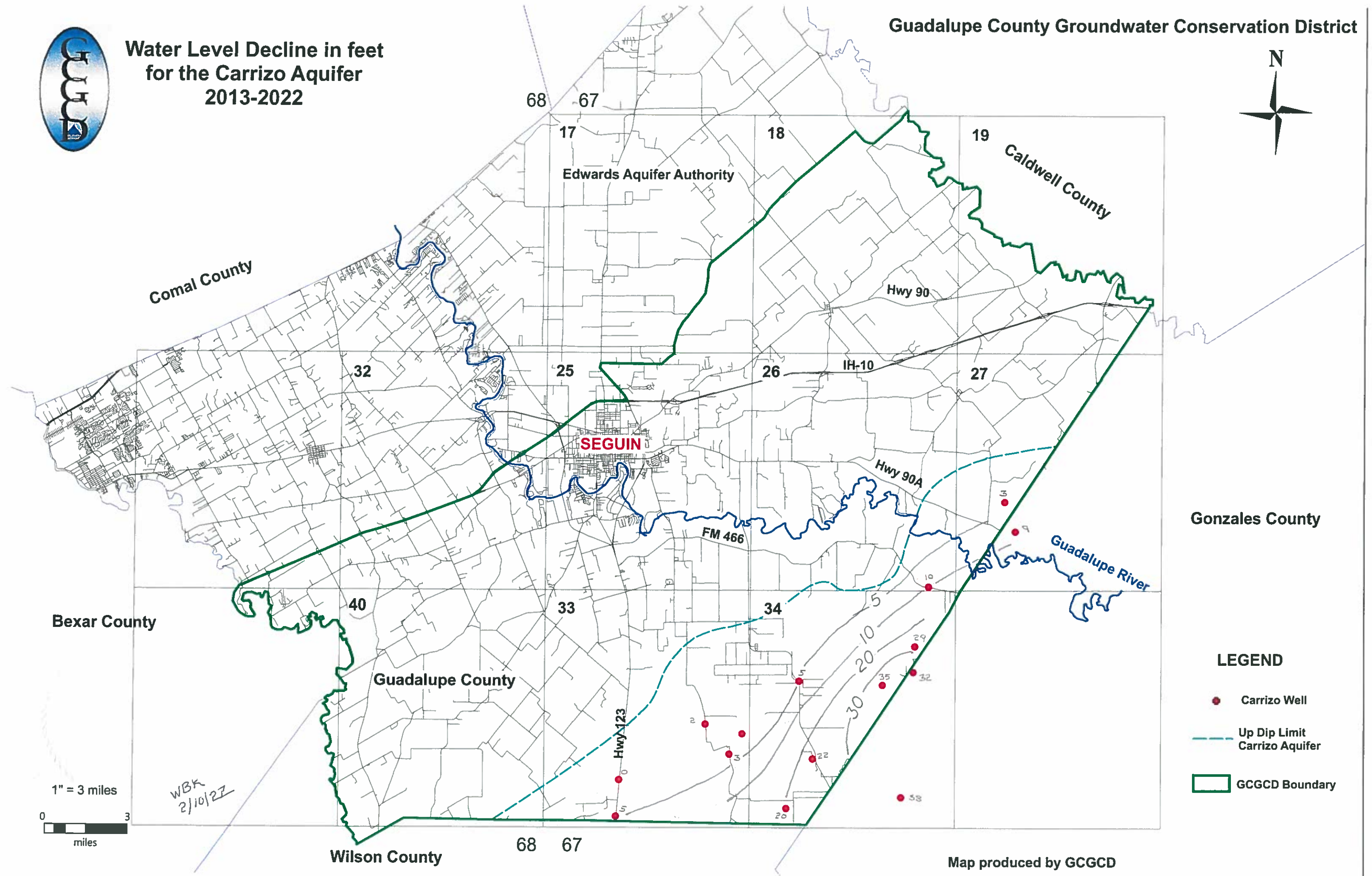
1" = 3 miles
0 3
miles

WBK
2/10/22



Water Level Decline in feet for the Carrizo Aquifer 2013-2022

Guadalupe County Groundwater Conservation District



Gonzales County

LEGEND

- Carrizo Well
- Up Dip Limit Carrizo Aquifer
- GCGCD Boundary

1" = 3 miles
0 3
miles

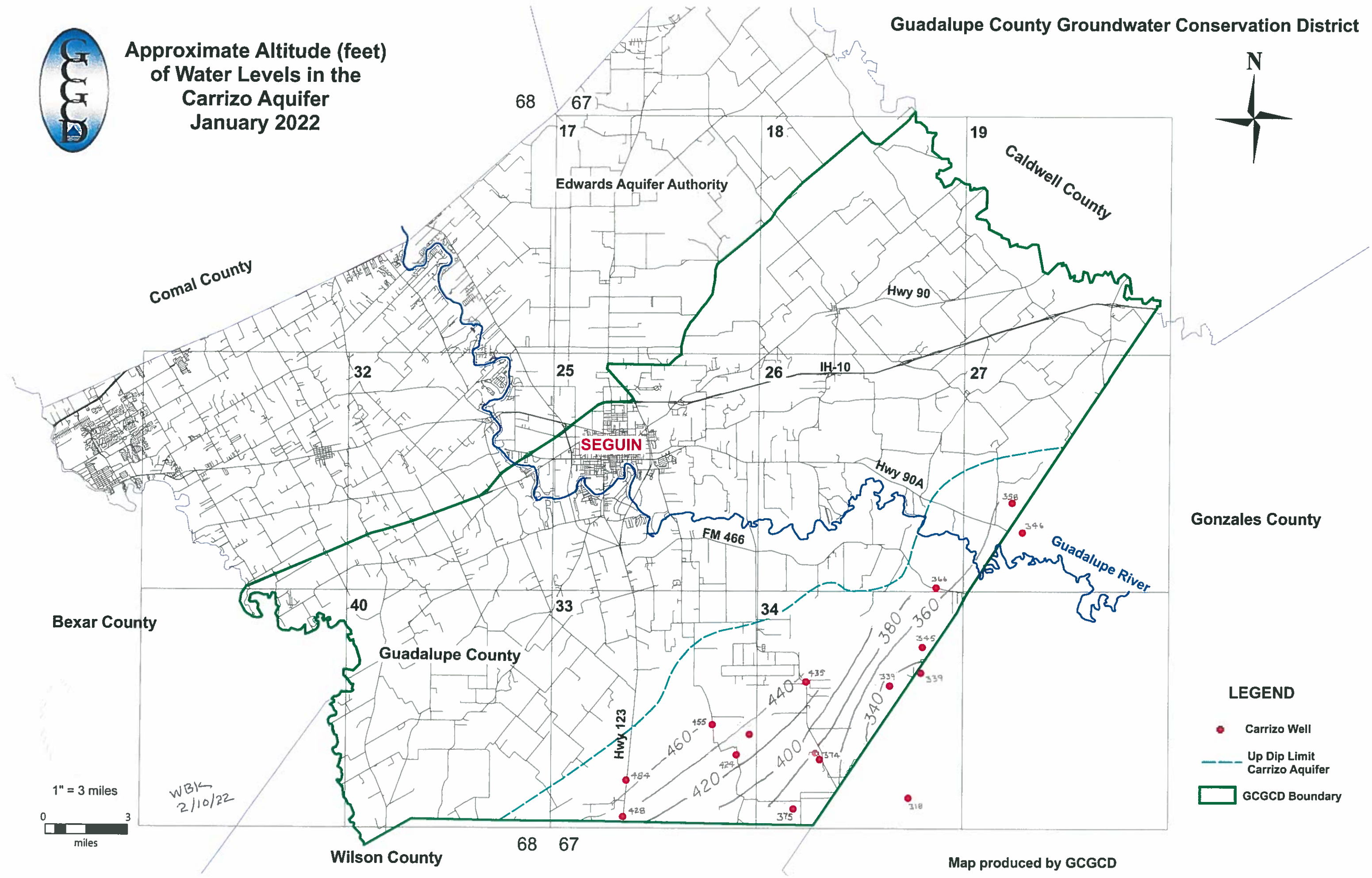
WBK
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Map produced by GCGCD



**Approximate Altitude (feet)
of Water Levels in the
Carrizo Aquifer
January 2022**

Guadalupe County Groundwater Conservation District



1" = 3 miles
0 3
miles

WBK
2/10/22

- LEGEND**
- Carrizo Well
 - - - Up Dip Limit Carrizo Aquifer
 - ▭ GCGCD Boundary