Clearwater
Every drop counts!

Clearwater Underground Water Conservation District
P.O. Box 1989, Belton, Texas 76513
Phone: 254/933-0120 Fax: 254/933-8396
www.cuwcd.org

Clearwater Staff Reports **June 10, 2020**

1. Drought Status
2. Educational Outreach Update
3. Monitoring Wells
4. Rainfall/Drought Conditions
5. Well Registrations
6. Non-Exempt Monthly Well Production

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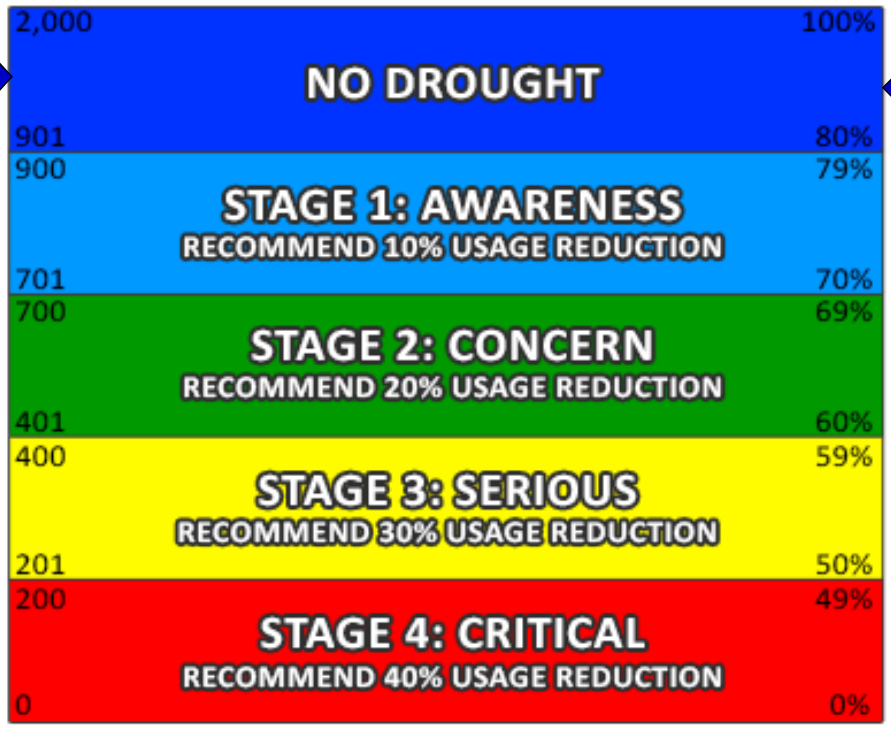
Edwards BFZ Aquifer—Drought Status Report

NO DROUGHT

1,027.04 ac-ft (month)
17.26 cfs

Salado Creek Spring Discharge



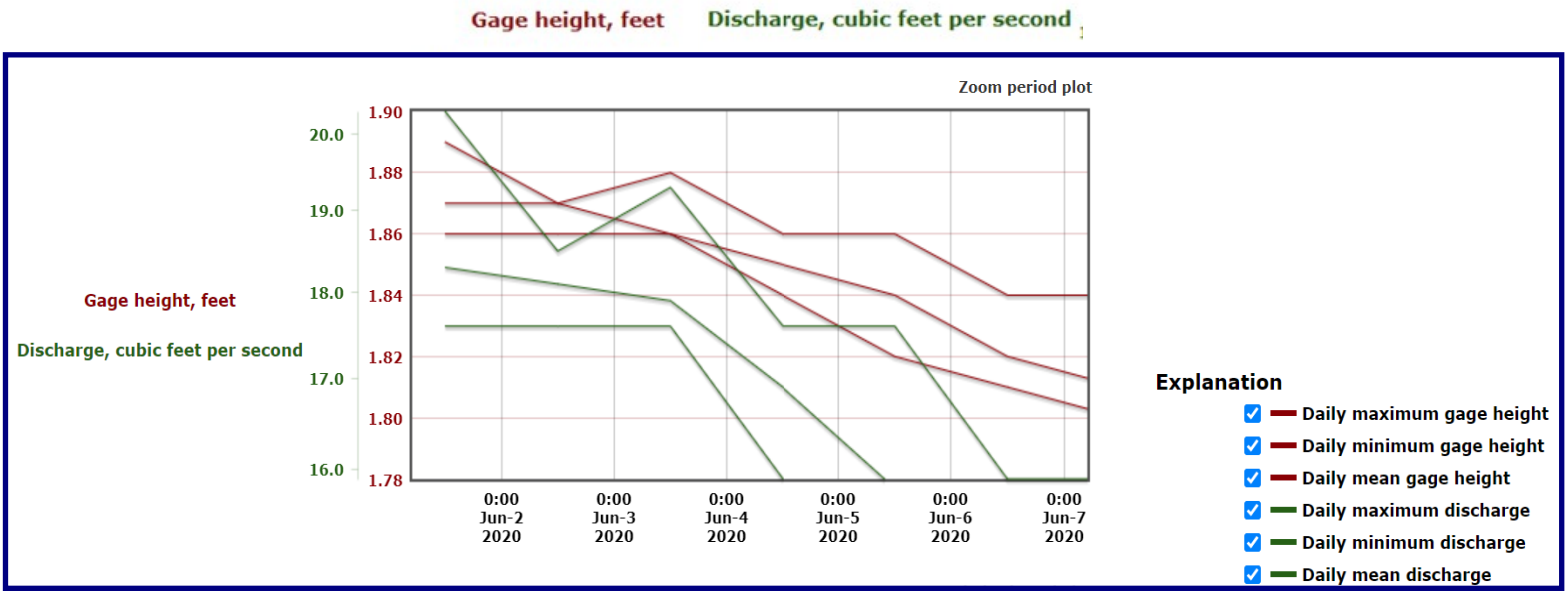
29.52 PDI
89.46 %

Precipitation Deficit Index (PDI)

AS OF 6/07/2020

PDI is based on a 33" normal yearly average and is a 365 day running total.

USGS 08104300 Salado Ck at Salado, TX



Edwards BFZ Aquifer
Initiation and Termination of Drought Stages

Initiation of Stages: The Precipitation Deficit Index (PDI), the daily maximum spring discharge, and average spring discharge values shall be monitored and presented to the District Board at the monthly Board meeting. Drought stages shall be triggered when either the PDI or the average spring discharge measured via stream flow gauges in Salado Creek fall below the trigger level for the periods described below:

PDI: *Monitored daily on a running-year basis over a defined area consisting generally of the area of the Edwards aquifer and contributing areas in Bell and portions of Williamson Counties and which is based on NEXRAD rainfall data provided by the National Oceanic and Atmospheric Administration. The PDI trigger condition must be exceeded for a period of 28 consecutive days.*

Spring Discharge: *Monitored daily with the daily maximum discharge values averaged over a period of five consecutive days on a running five day basis.*

Termination of Stages: Drought stage in effect shall be reduced or terminated when both the PDI and the average spring discharge values are greater than the trigger conditions of the drought stage in effect for t

PDI: *Monitored daily on a running-year basis over a defined area consisting generally of the area of the Edwards aquifer and contributing areas in Bell and portions of Williamson Counties and which is based on NEXRAD rainfall data provided by the National Oceanic and Atmospheric Administration. The PDI trigger condition must be exceeded for a period of 42 consecutive days.*

Spring Discharge: *Monitored daily with the daily maximum discharge values averaged over a period of seven consecutive days on a running seven day basis.*

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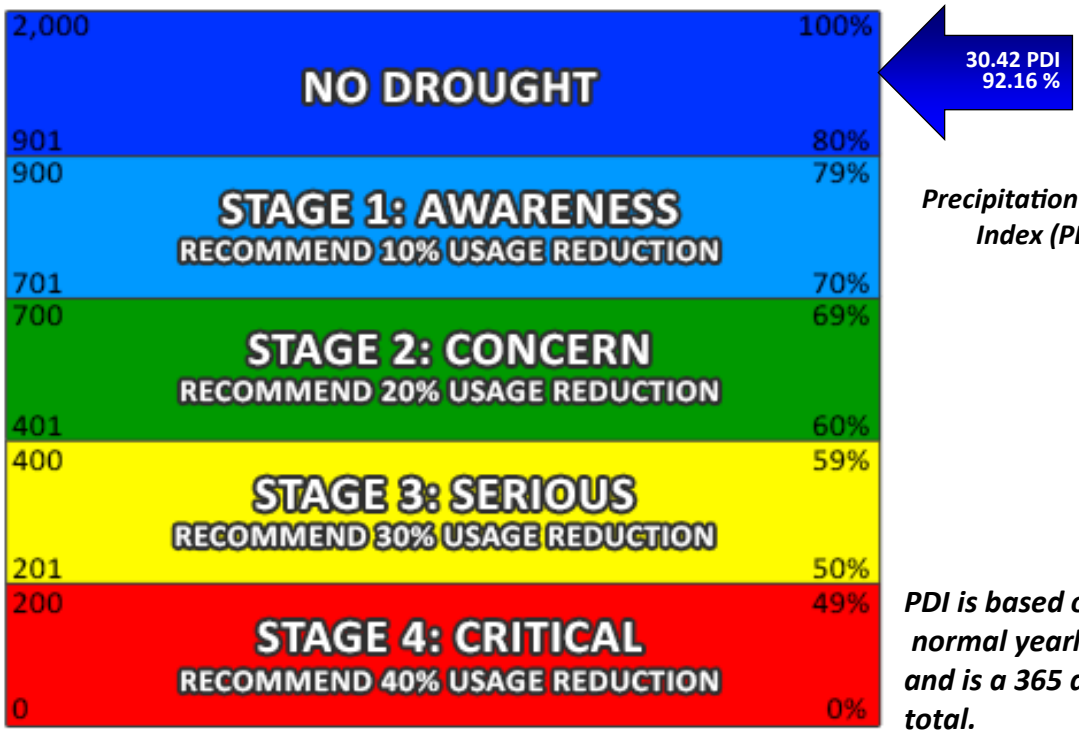
Trinity Aquifer—Drought Status Report

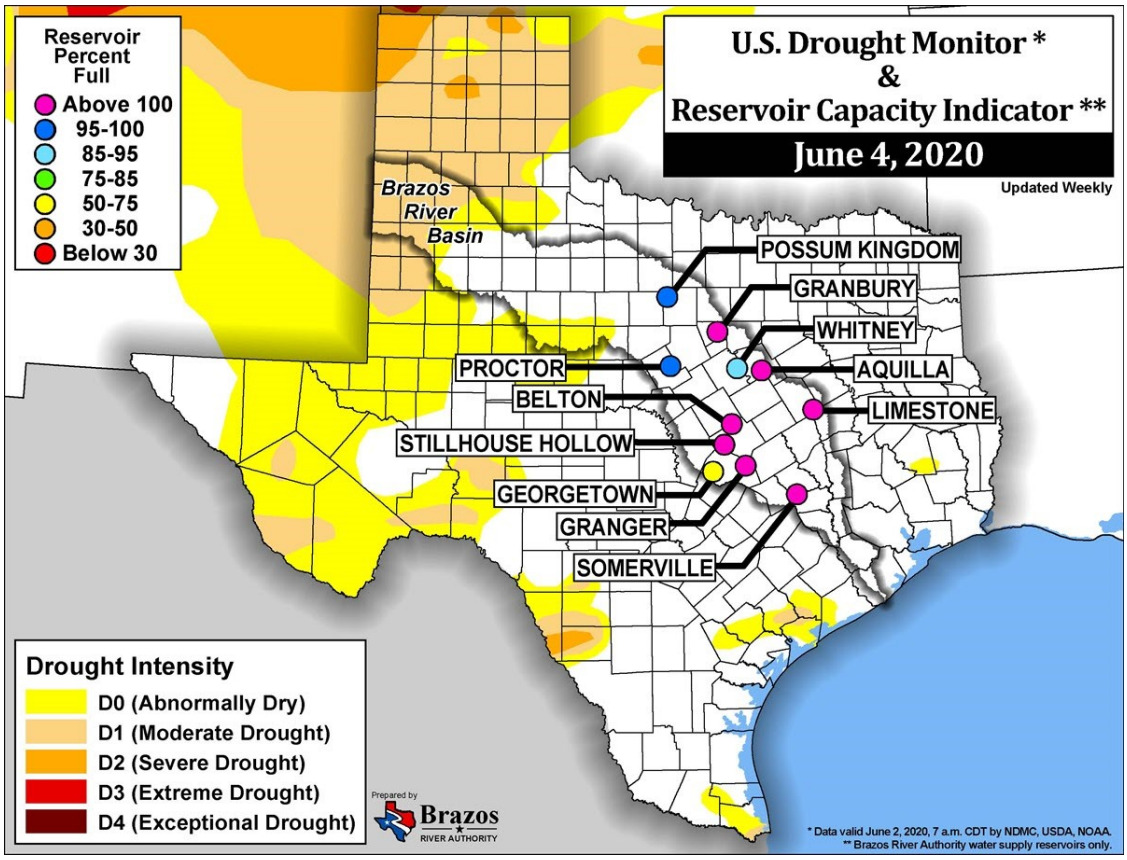
NO DROUGHT



Precipitation Deficit Index (PDI)

AS OF 06/07/2020

PDI is based on a 33" normal yearly average and is a 365 day running total.



Edwards BFZ Aquifer
Initiation and Termination of Drought Stages

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Spring Discharge: *Monitored daily with the daily maximum discharge values averaged over a period of five consecutive days on a running five day basis.*

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PDI: *Monitored daily on a running-year basis over a defined area consisting generally of the area of the Edwards aquifer and contributing areas in Bell and portions of Williamson Counties and which is based on NEXRAD rainfall data provided by the National Oceanic and Atmospheric Administration. The PDI trigger condition must be exceeded for a period of 42 consecutive days.*

Spring Discharge: *Monitored daily with the daily maximum discharge values averaged over a period of seven consecutive days on a running seven day basis.*

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Education Outreach Highlights 6/10/20

1. **Goal: Improve our <u>educational outreach</u> efforts and expand our identified audiences (4th-5th grade, high school environmental sciences students, and the real-estate sales community).**
   Goals and objectives in the Management Plan (A:3, A:4, B,F:1,F:2 pages 22-26).

   - All educational events have been canceled due to COVID-19.

2. **Improve <u>Communication and Reporting of Usage</u> by well owners who are permitted (HEU or OP) by the district. Goals and objectives in the Management Plan (A:1, A:2, A:3,G:1,G:2, pages 22-23).**

   - Continue working with HALFF to make improvements to the new platform and correct flaws as needed.
   - Most of our permitted users are entering their monthly water usage online now.

3. **Increase the <u>District Communication</u> strategically by expanding utilization of a media sources.**
   Goals and objectives in the Management Plan (A:1, A:2, A:3,G:1,G:2, pages 22-23).

   - Continually adding more information to the website to make it a valuable resource to Bell County along with utilizing more social media.

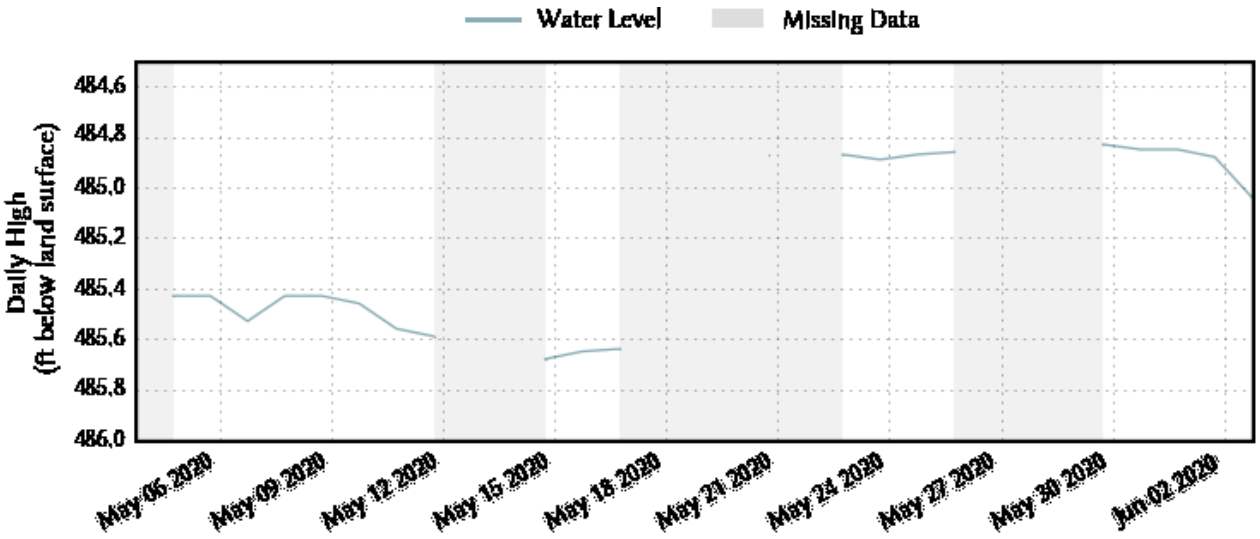
4. **Improve Annual Reporting accuracy and timeliness per State mandated Legislation and Management Plan. Goals and objectives in the Management Plan (A:1,2,3,4; B; C; D; E; F; g pages 22-26).**

   - The 2019 Annual Report was approved at the March meeting.

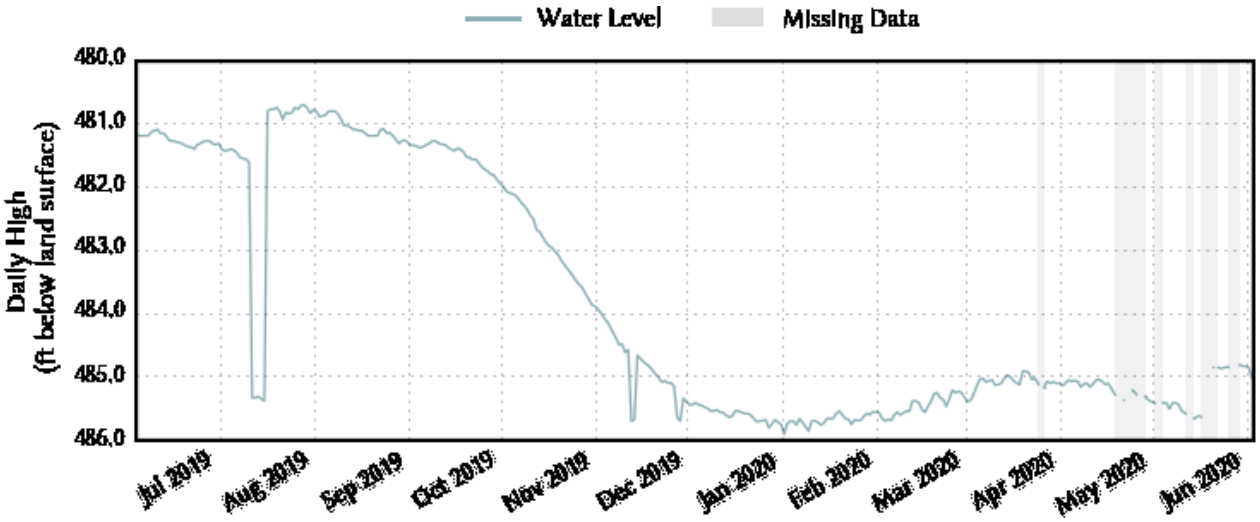
May 2020

Continuous Monitoring Well # 4054701
(Temple - Cearley Well)
Lower Trinity Aquifer

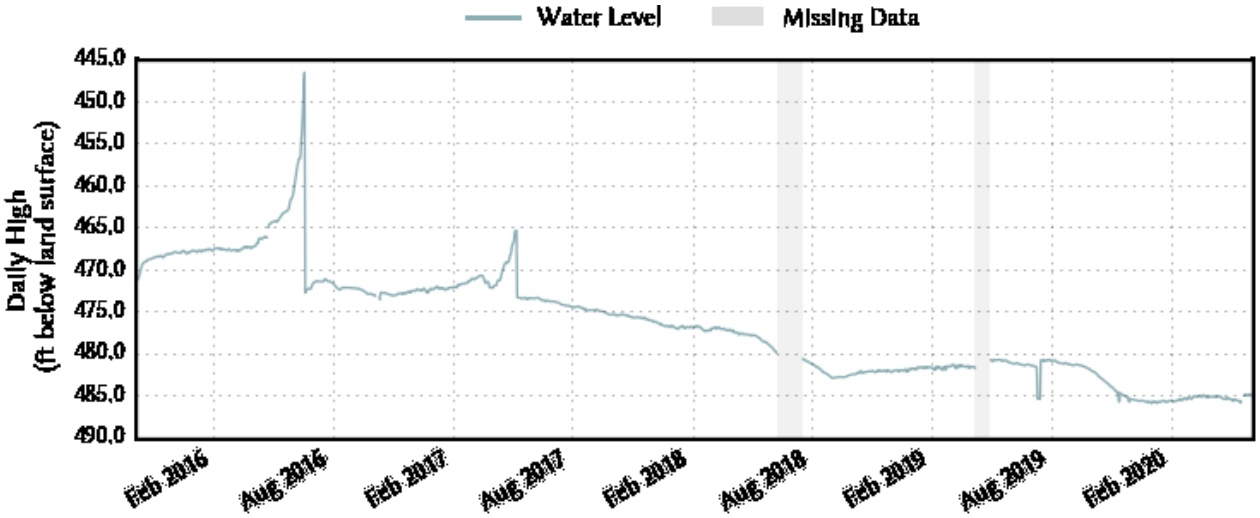
Last 30 Days



1 Year



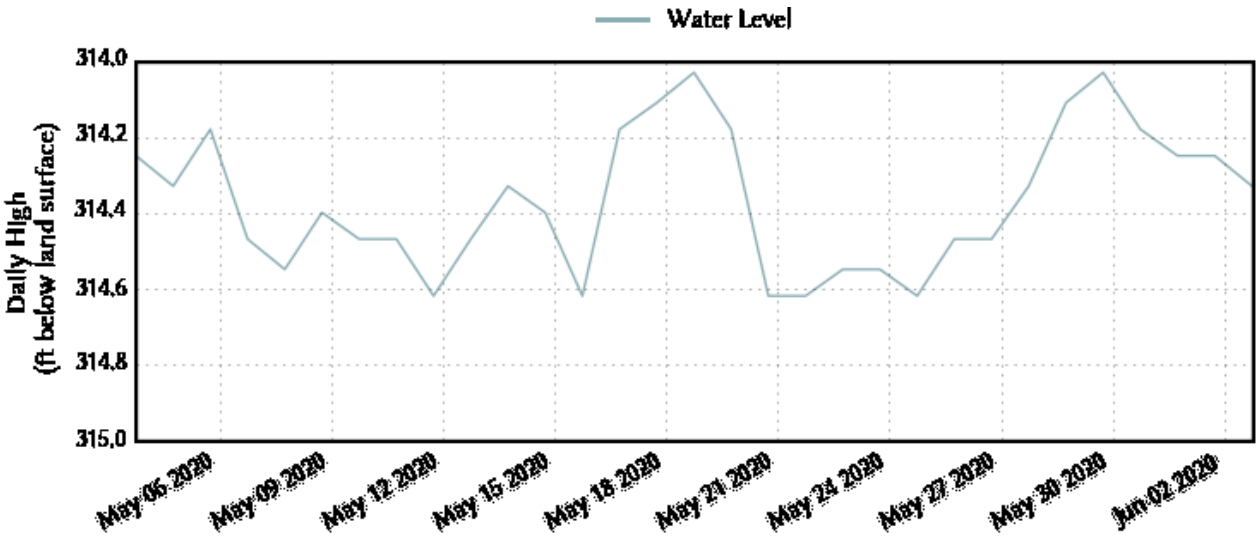
Period Of Record



May 2020

Continuous Monitoring Well # 4057601
(Copperas Cove)
Middle Trinity Aquifer

Last 30 Days



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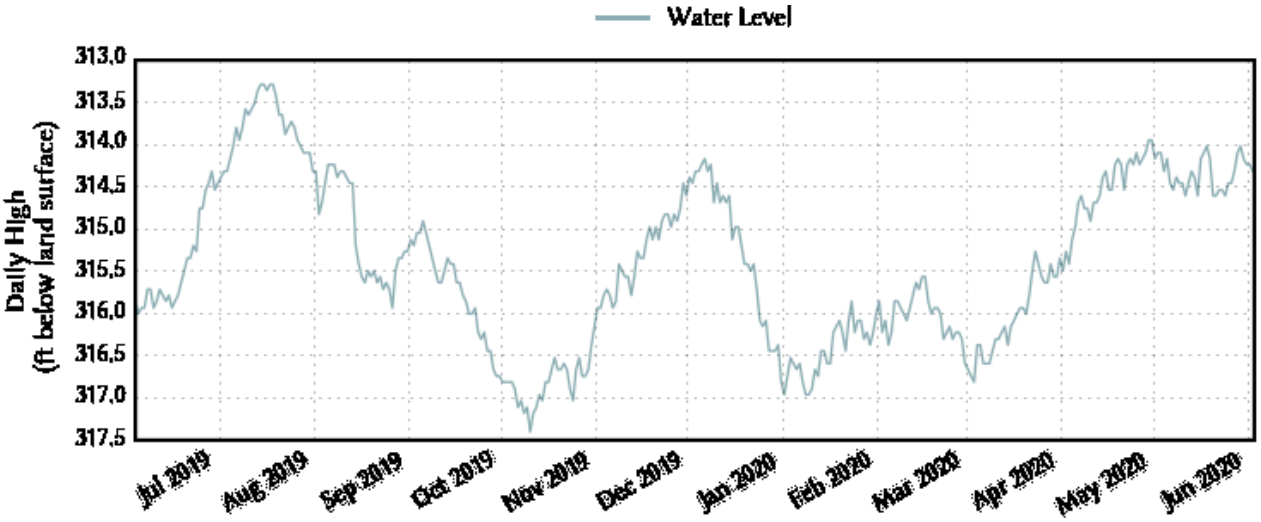
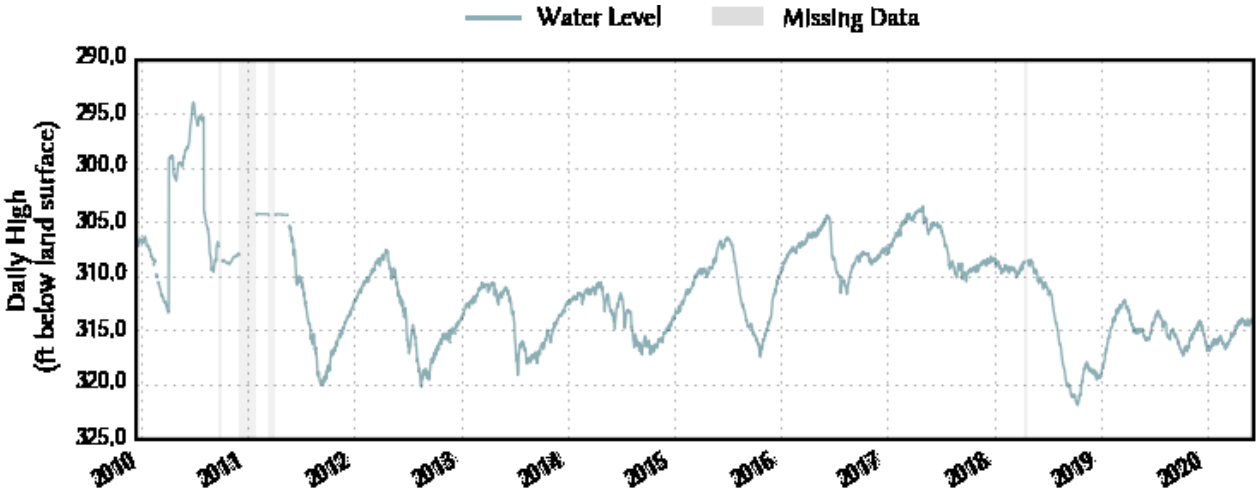


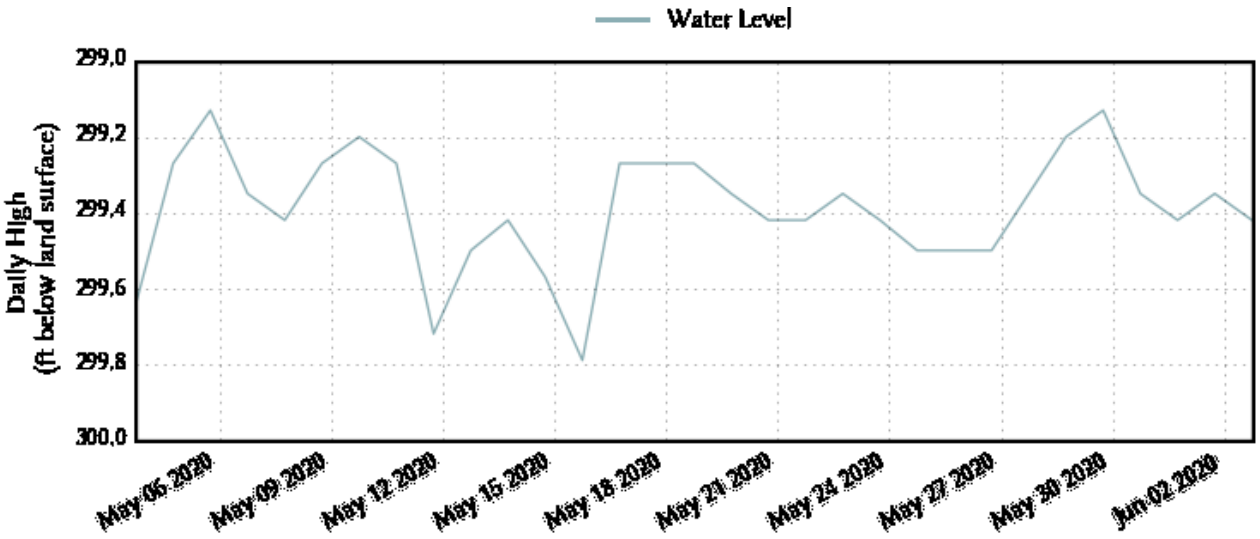
Period Of Record



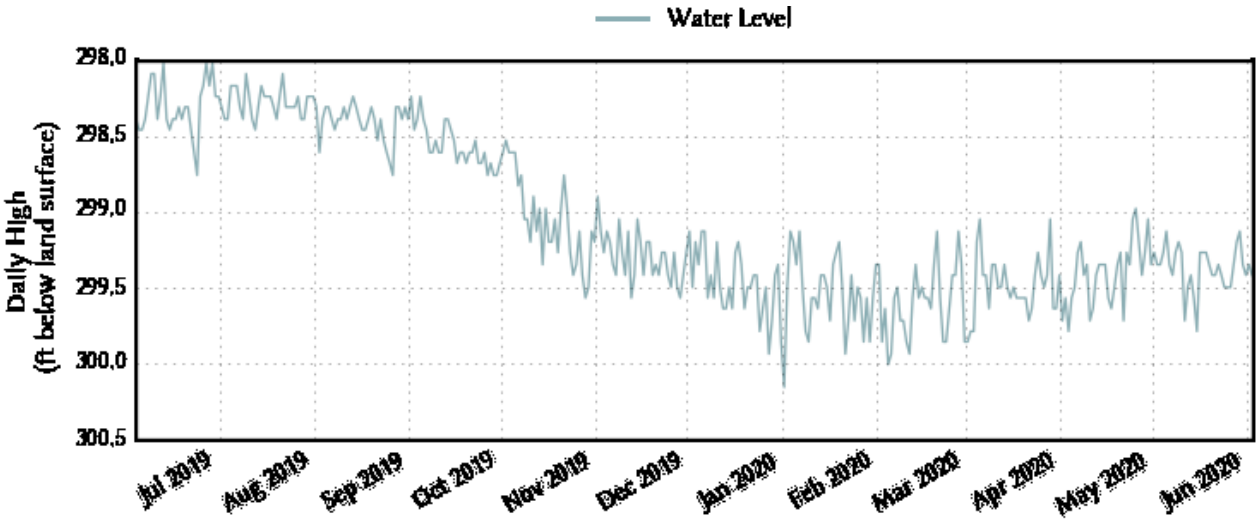
May 2020

Continuous Monitoring Well # 4057602
(Copperas Cove)
Lower Trinity Aquifer

Last 30 Days



1 Year



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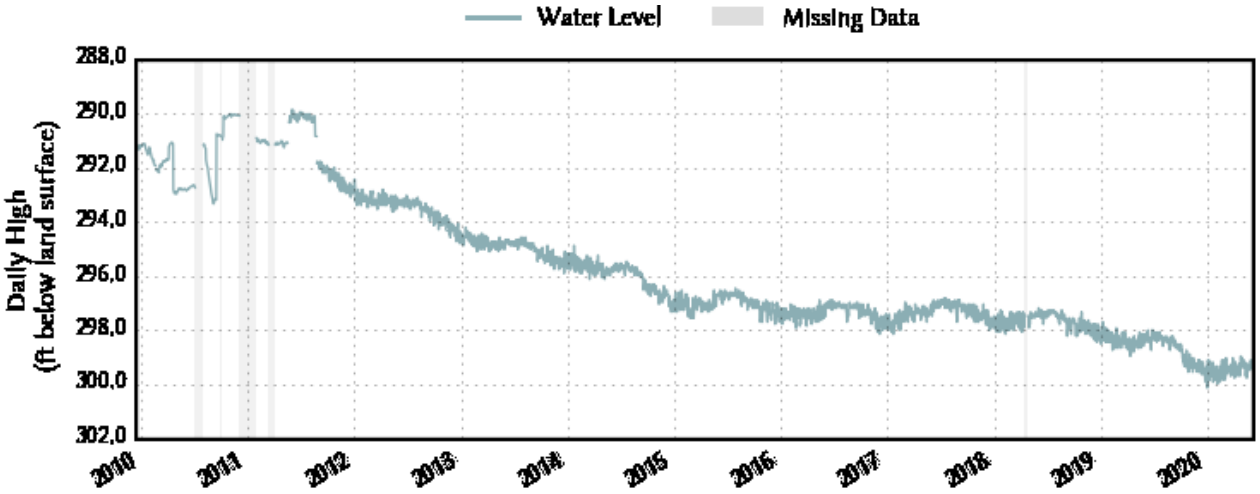
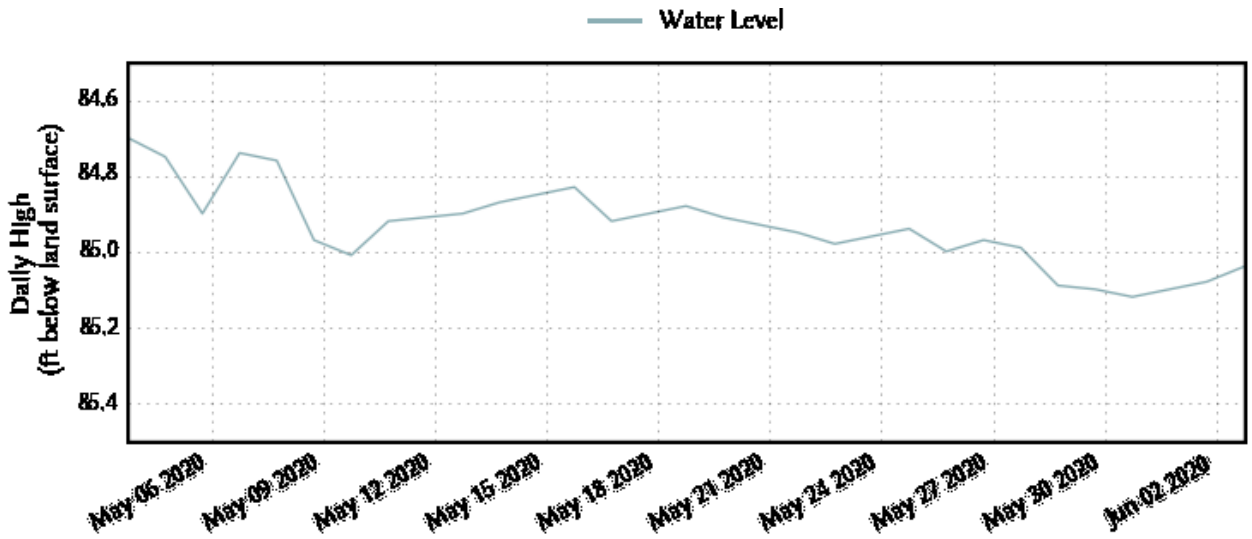


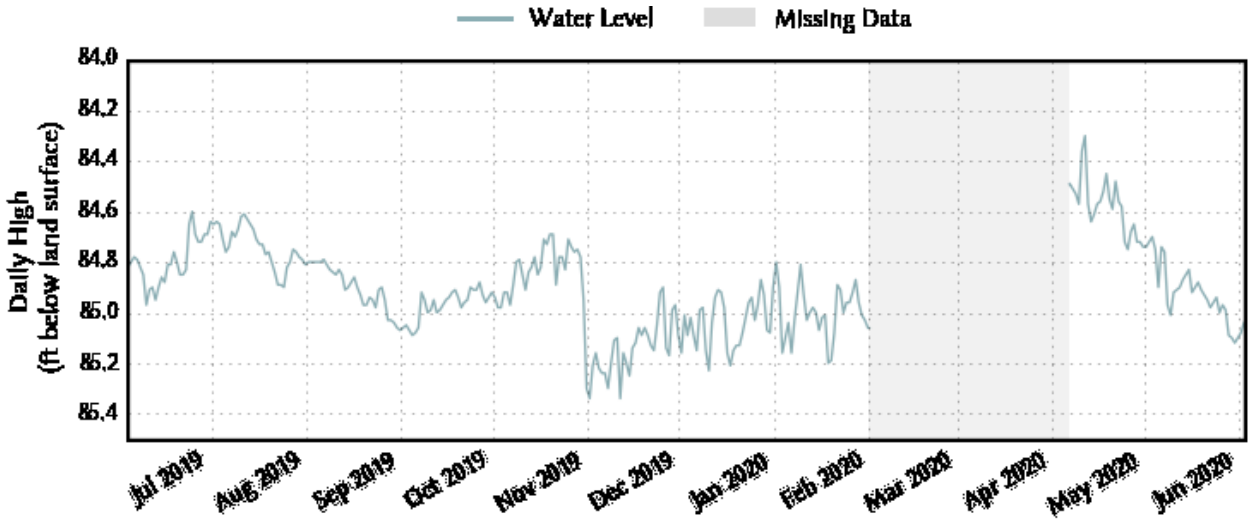
May 2020

Continuous Monitoring Well # 4058201
(Central Texas College - Ranch Rd)
Upper Trinity Aquifer

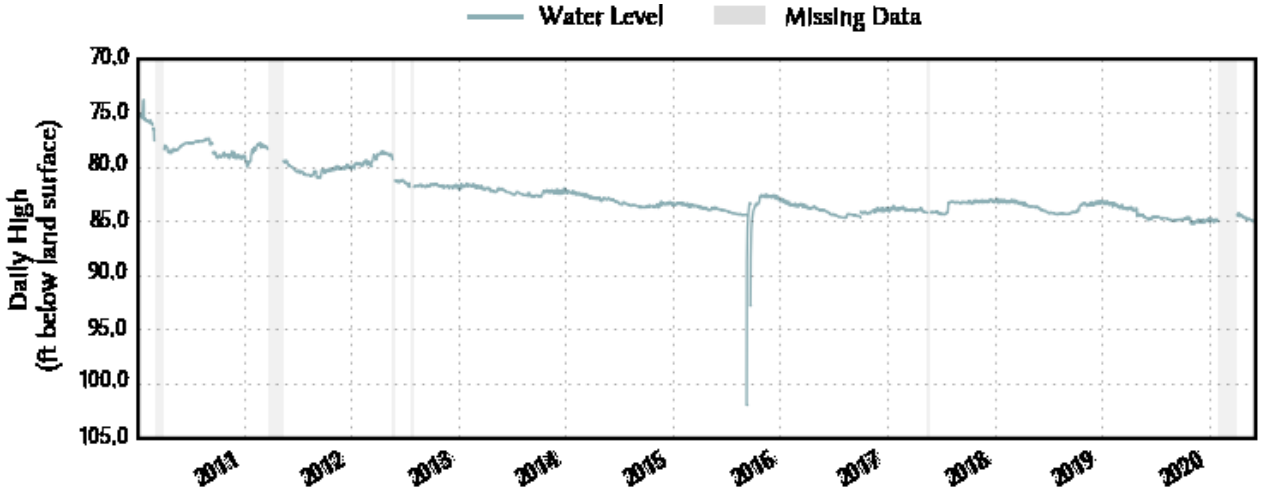
Last 30 Days



1 Year



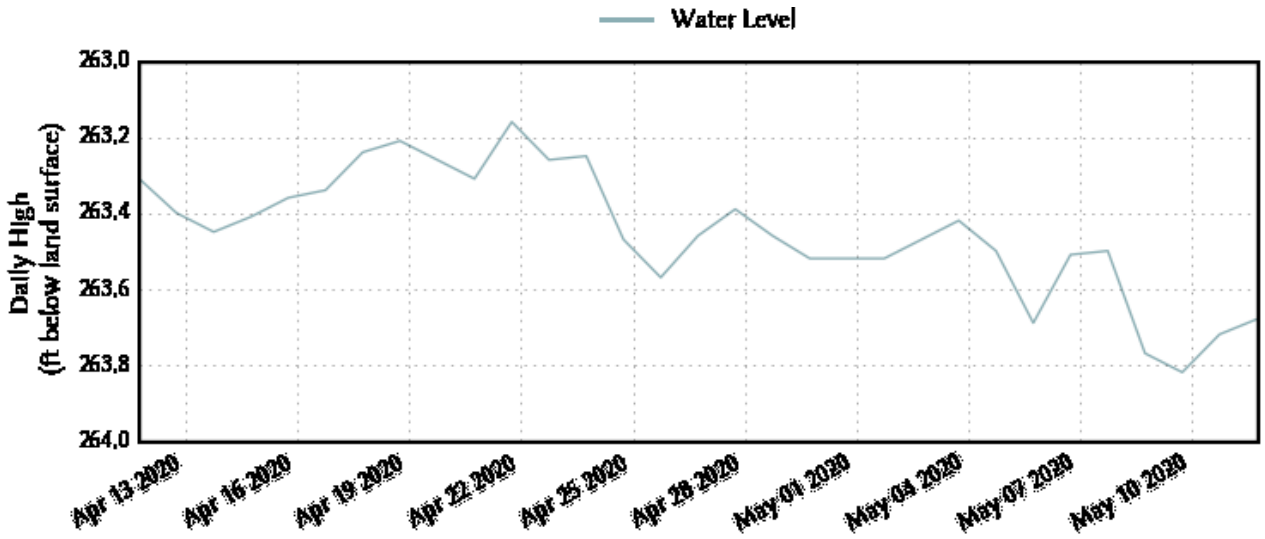
Period Of Record



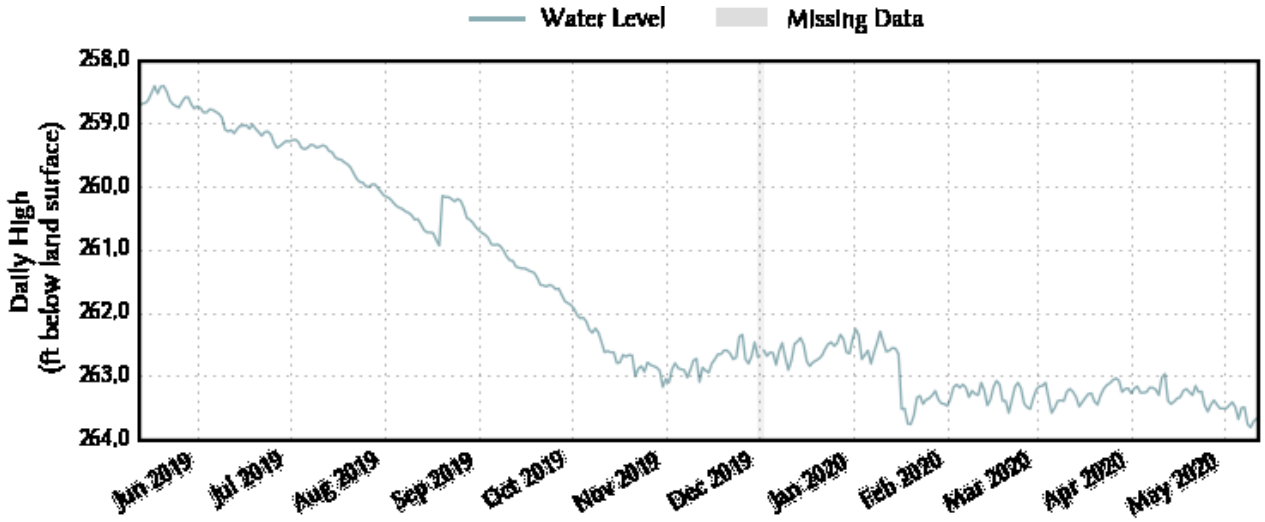
May 2020

Continuous Monitoring Well # 4061509
(Temple - Pea Ridge Well)
Lower Trinity Aquifer

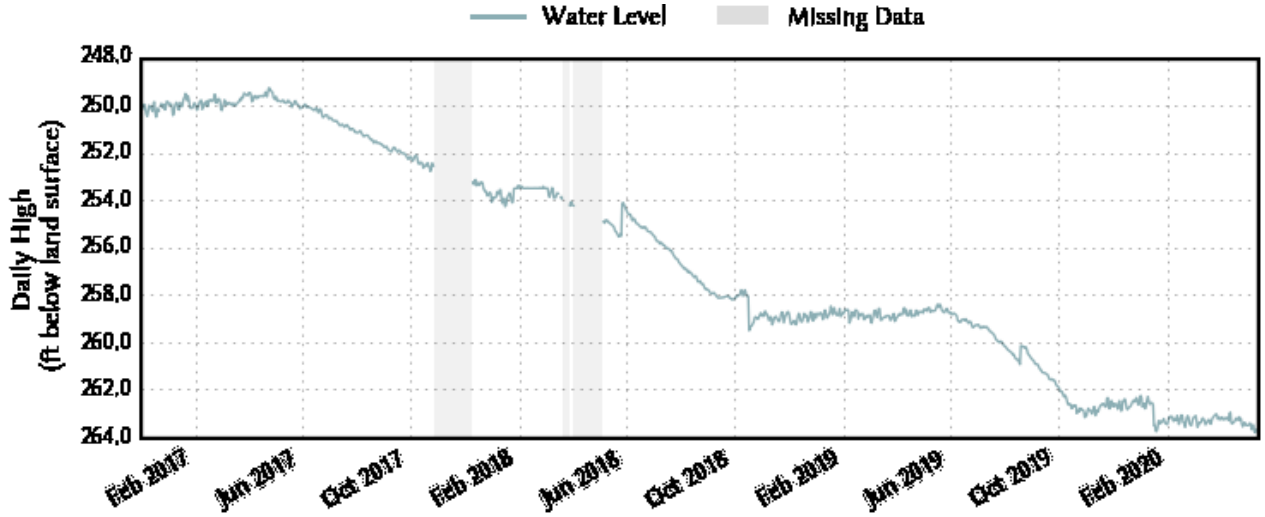
Last 30 Days



1 Year



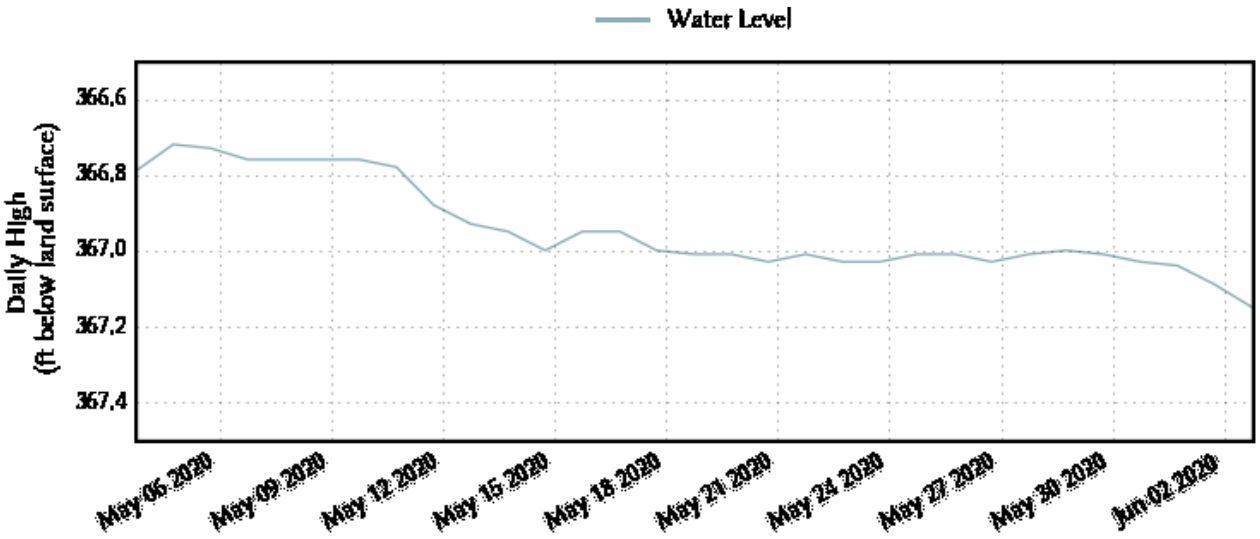
Period Of Record



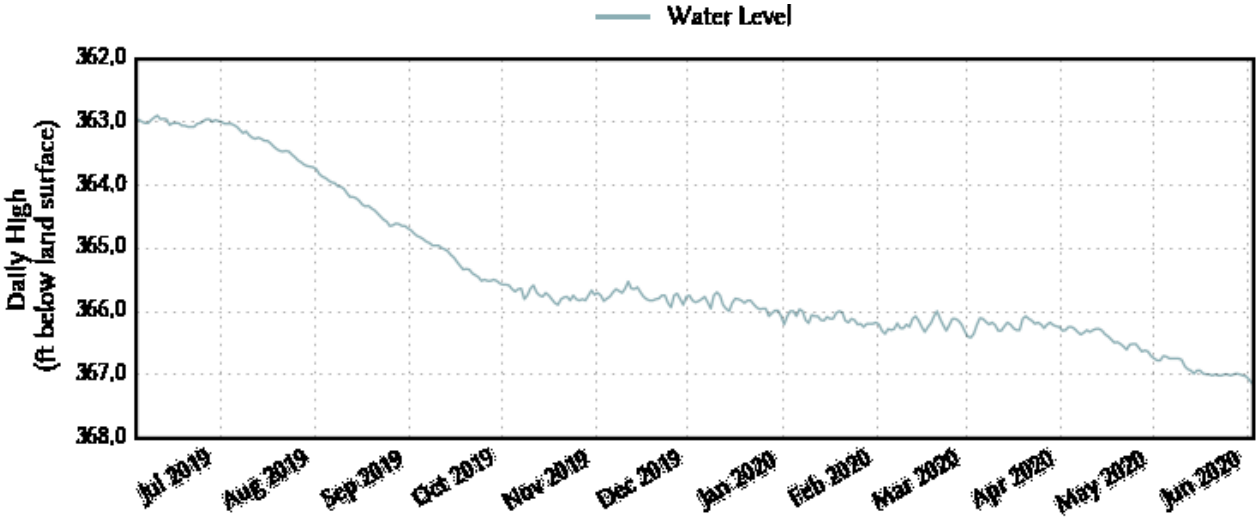
May 2020

Continuous Monitoring Well # 4062501
(Temple - Acres Well)
Lower Trinity Aquifer

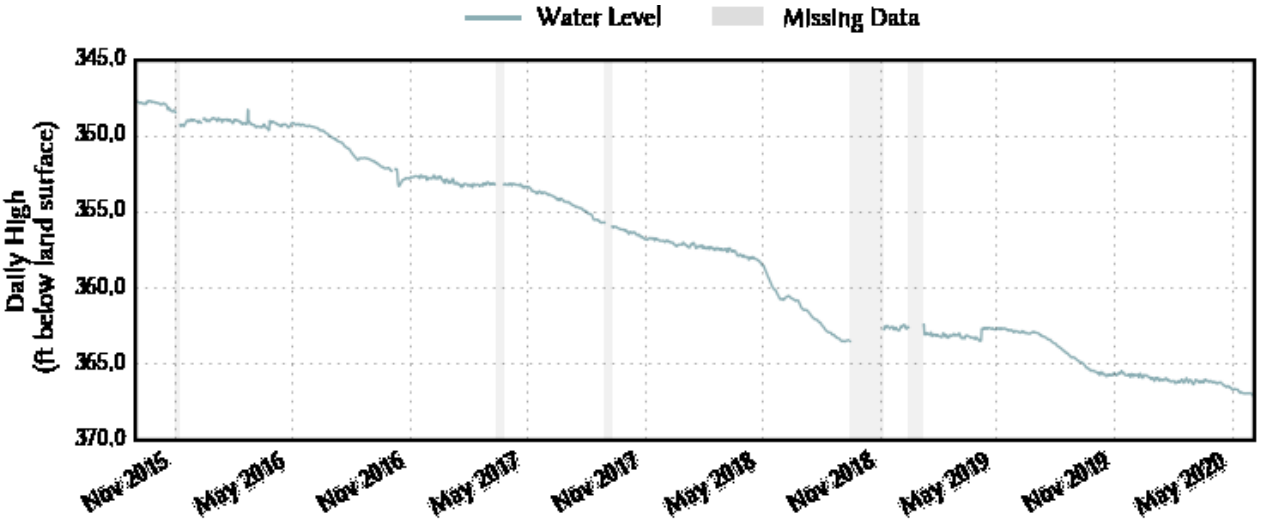
Last 30 Days



1 Year



Period Of Record

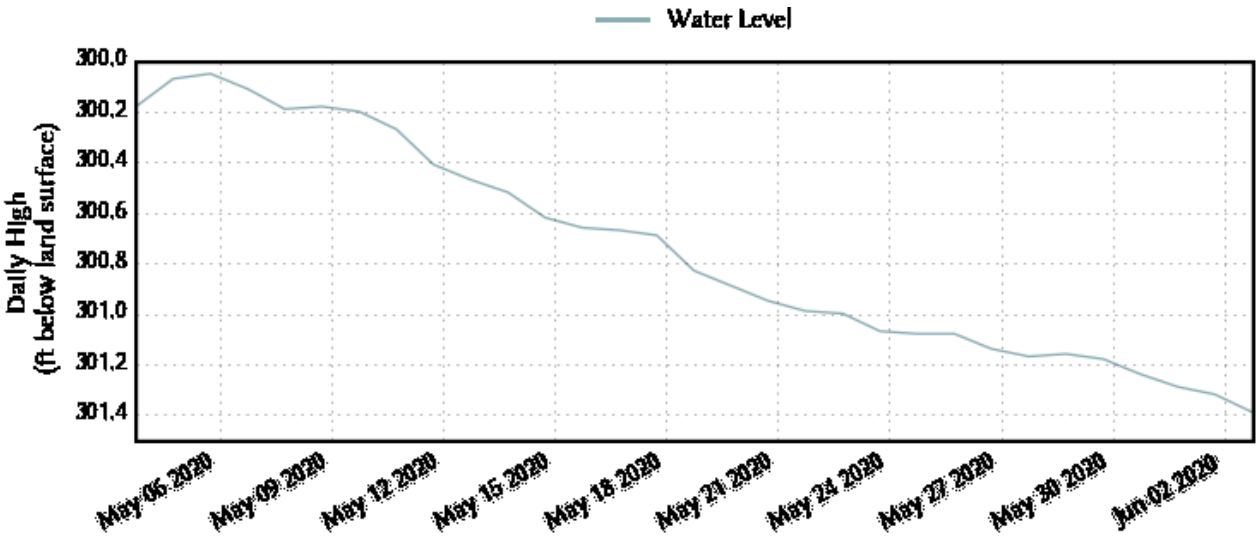


May 2020

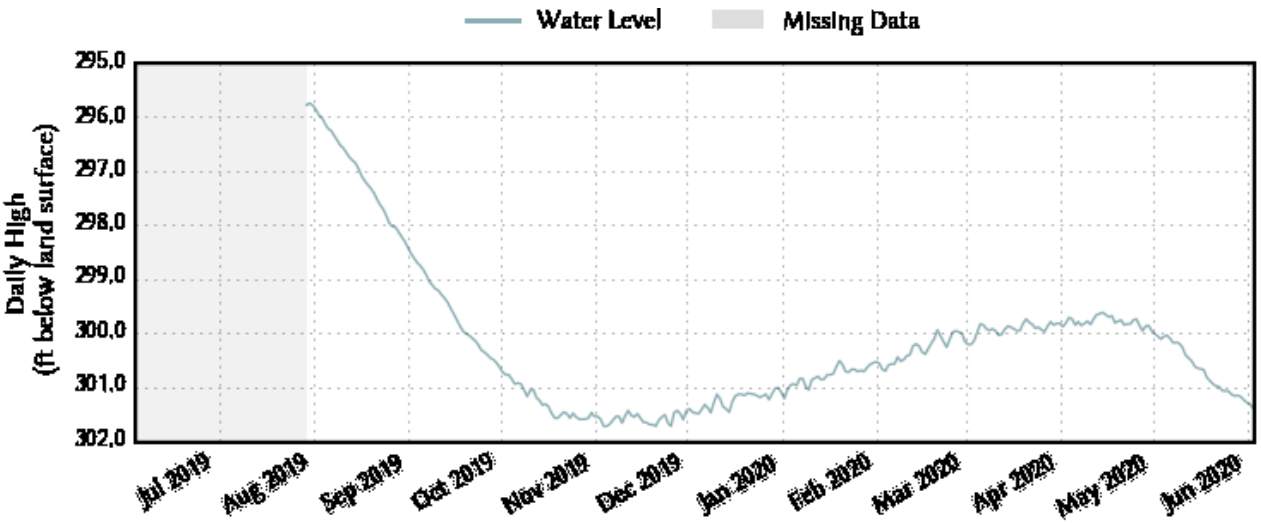
Continuous Monitoring Well # 5802303
(Killeen - River Ridge Ranch Park Well #2)

Lower Trinity Aquifer

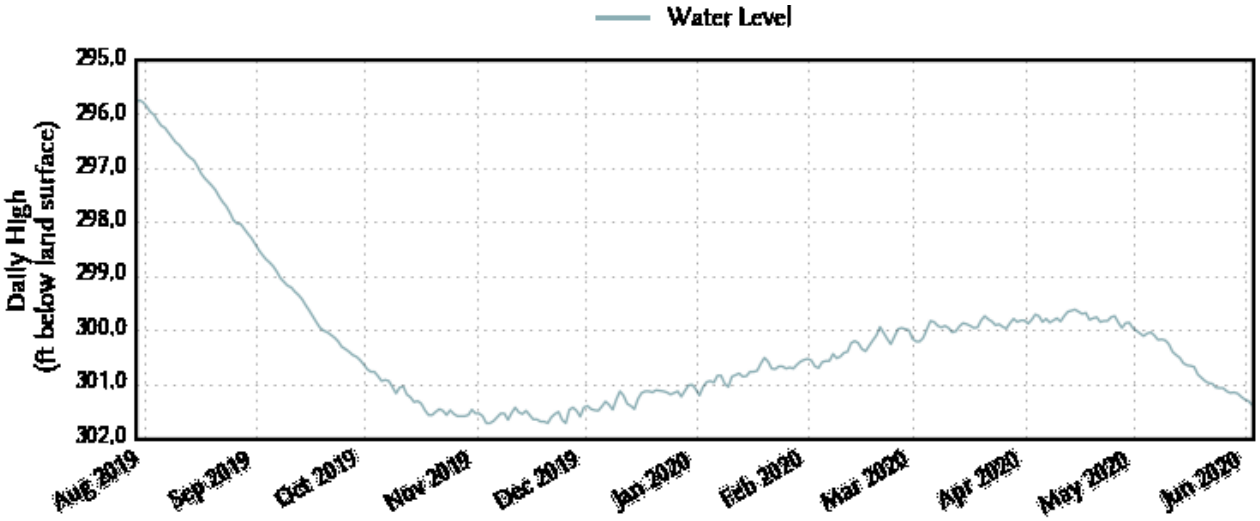
Last 30 Days



1 Year



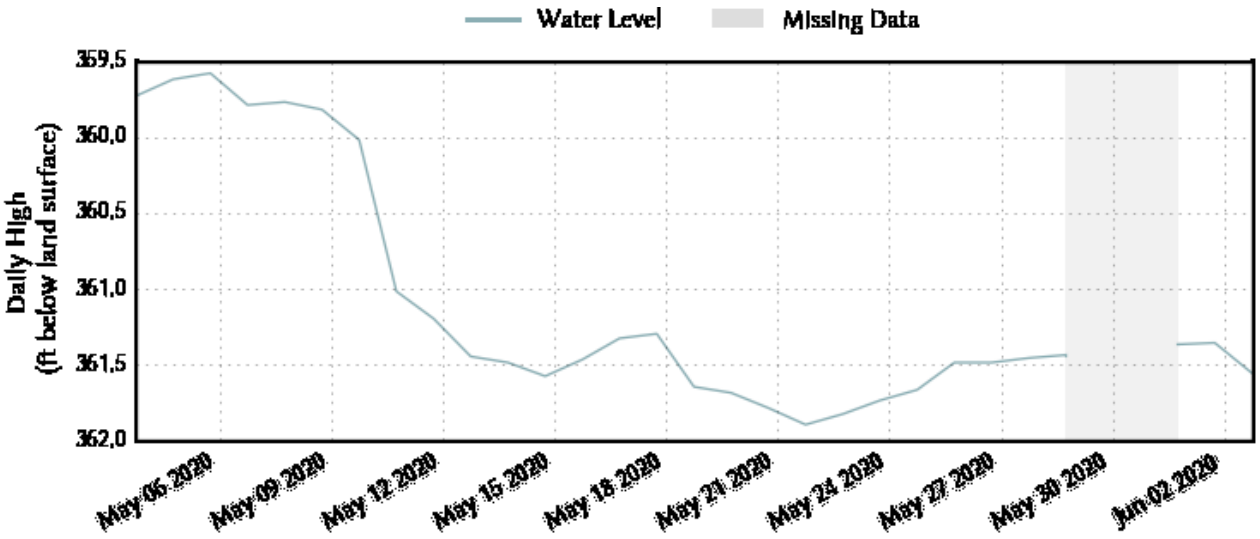
Period Of Record



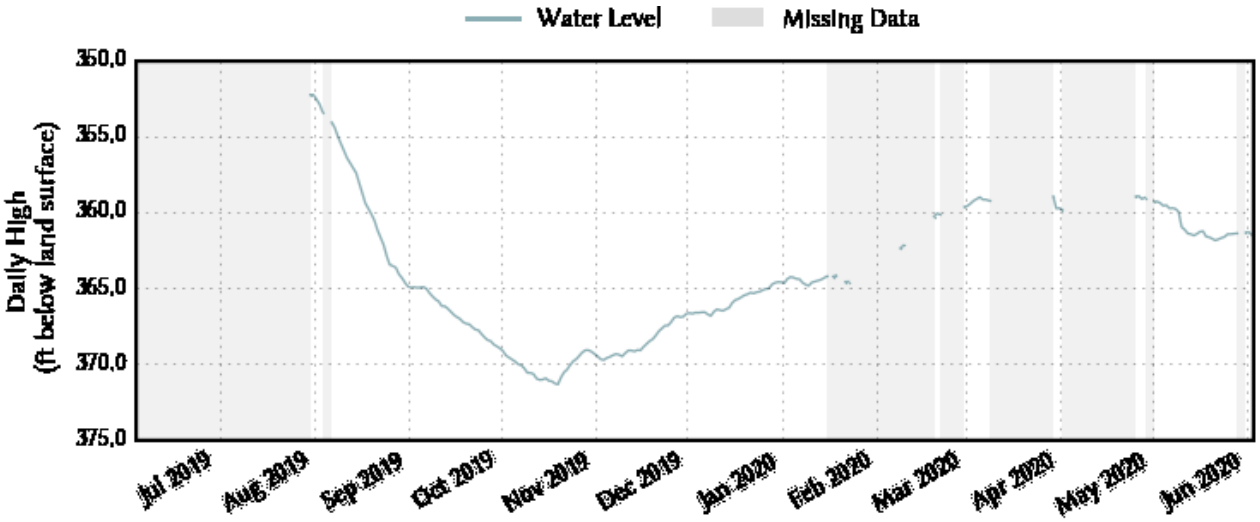
May 2020

Continuous Monitoring Well # 5802304
(Killeen - River Ridge Ranch Park Well #1)
Middle Trinity Aquifer

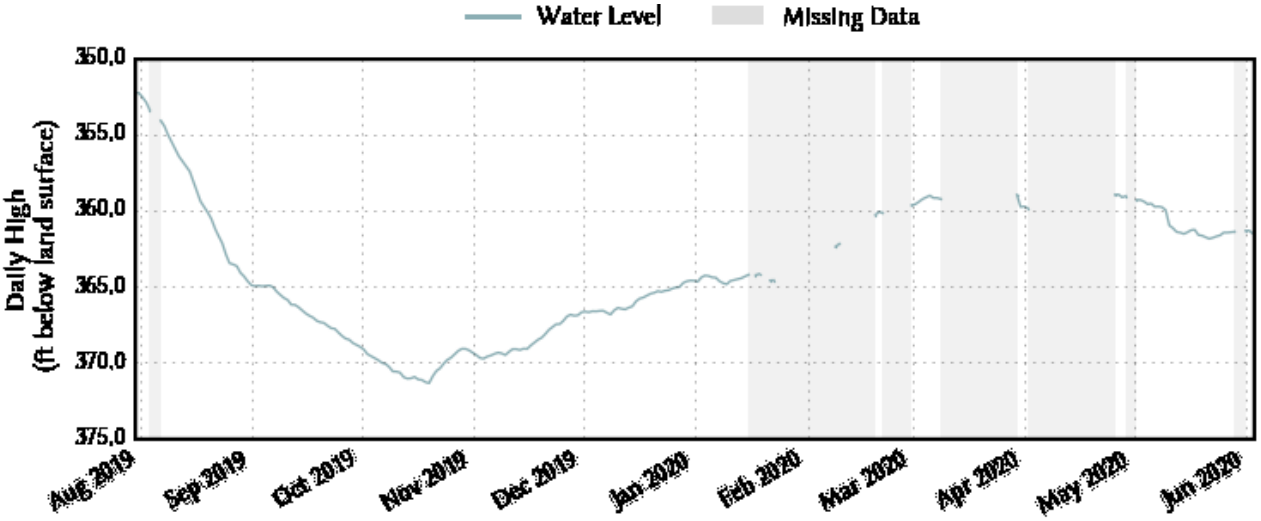
Last 30 Days



1 Year



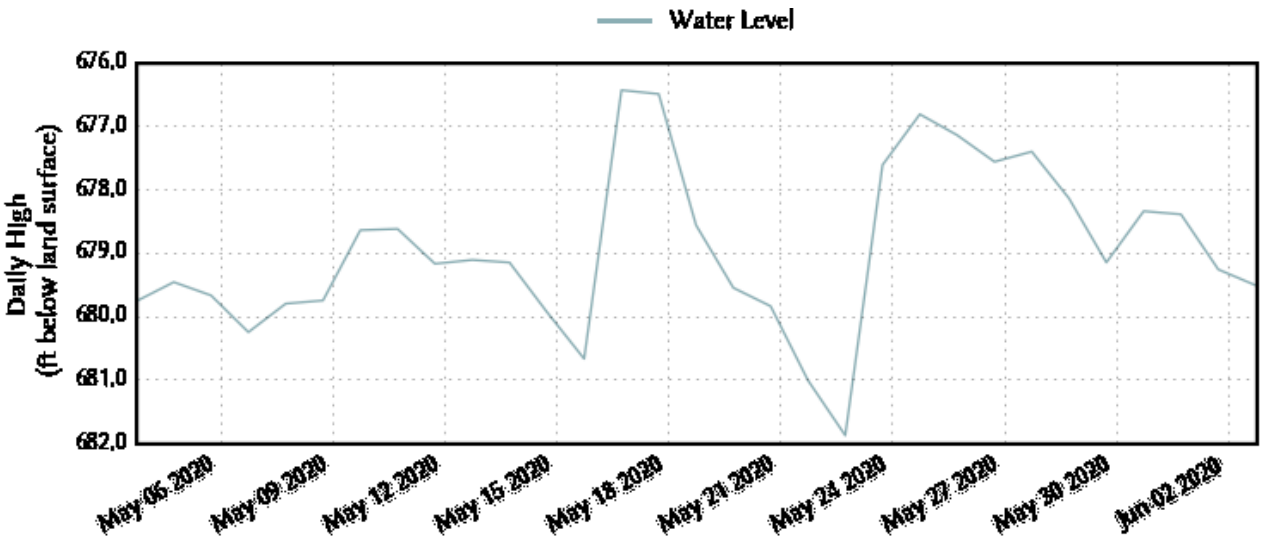
Period Of Record



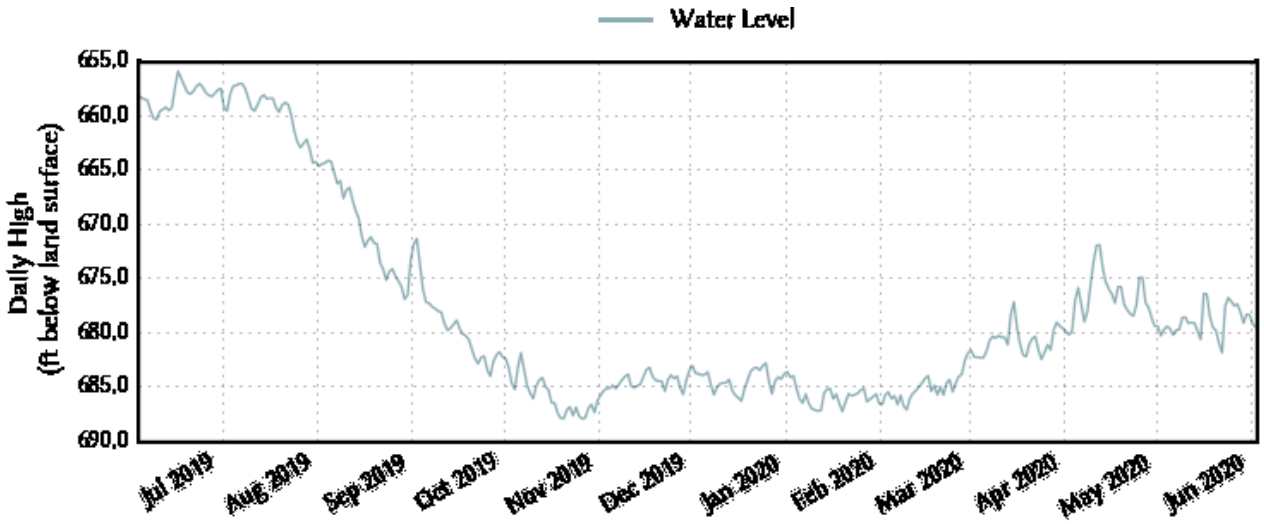
May 2020

Continuous Monitoring Well # 5803701
(Gault Site - Williamson County)
Middle Trinity Aquifer

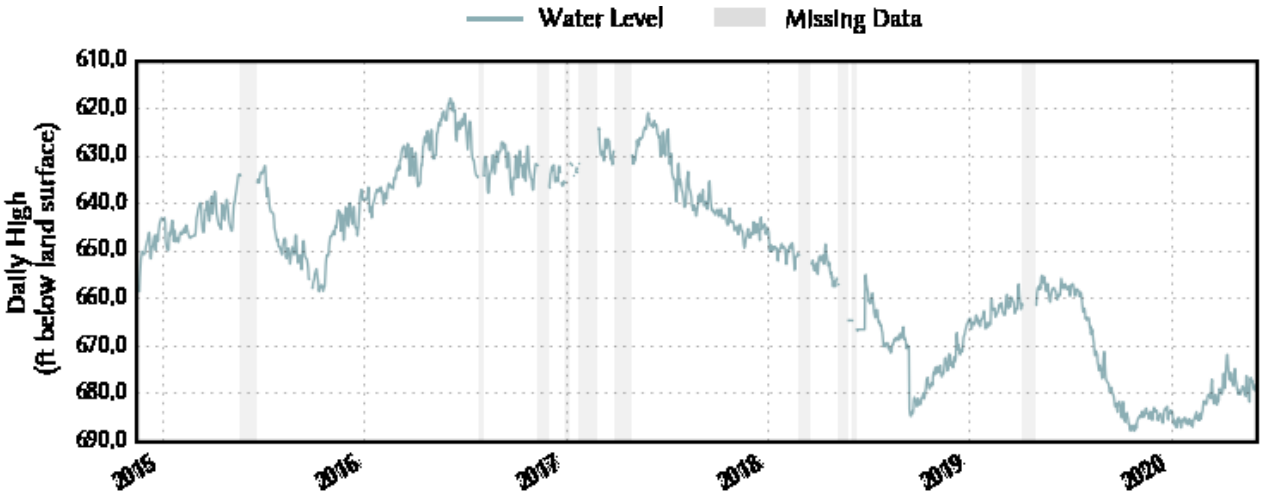
Last 30 Days



1 Year



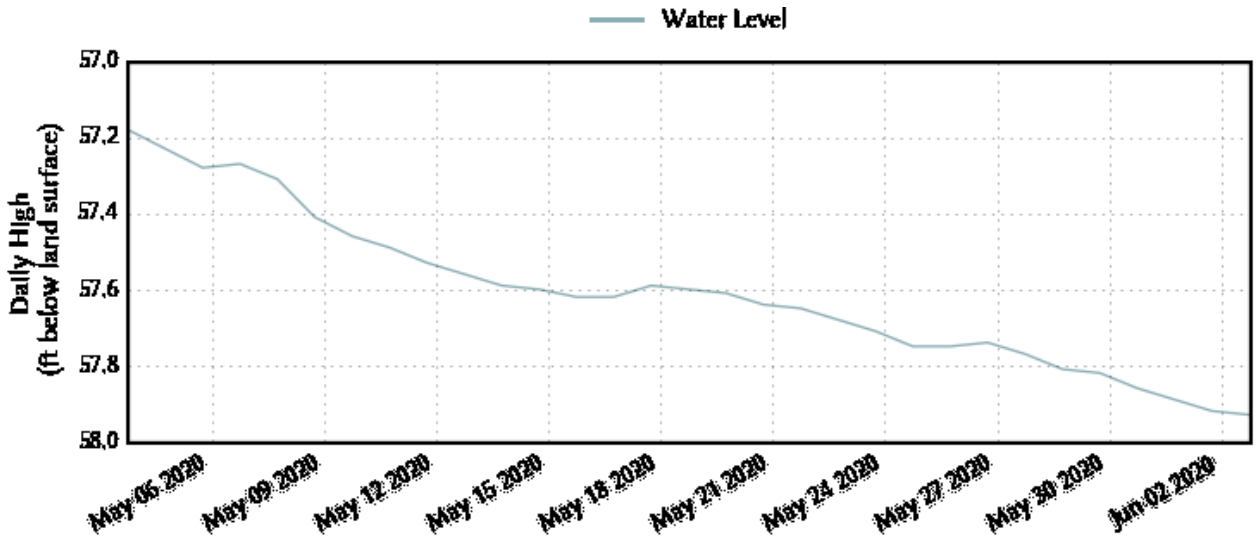
Period Of Record



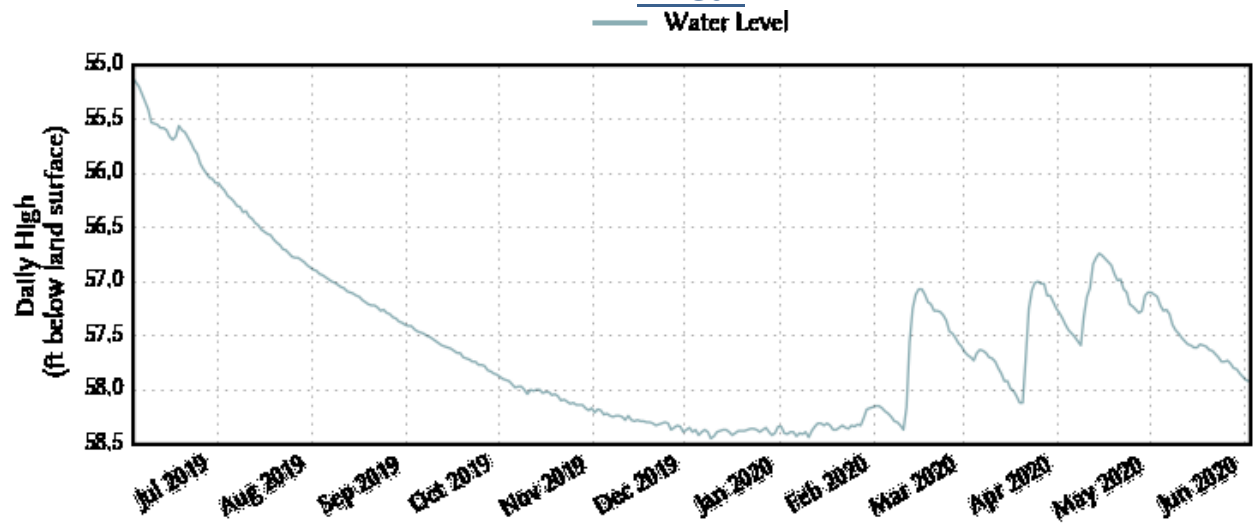
May 2020

Continuous Monitoring Well # 5803702
(Gault Site - Williamson County)
Edwards Aquifer

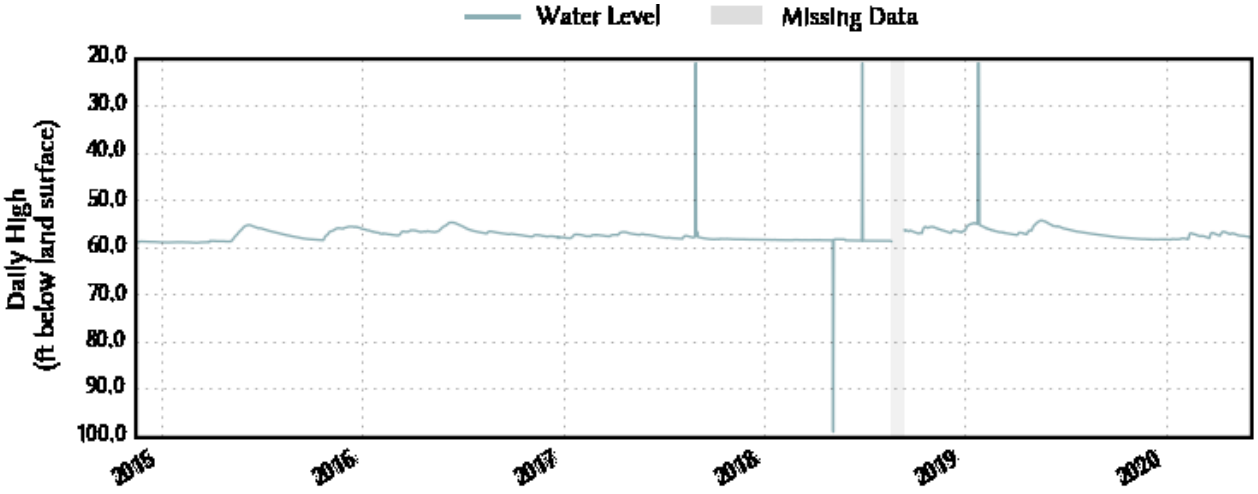
Last 30 Days



1 Year



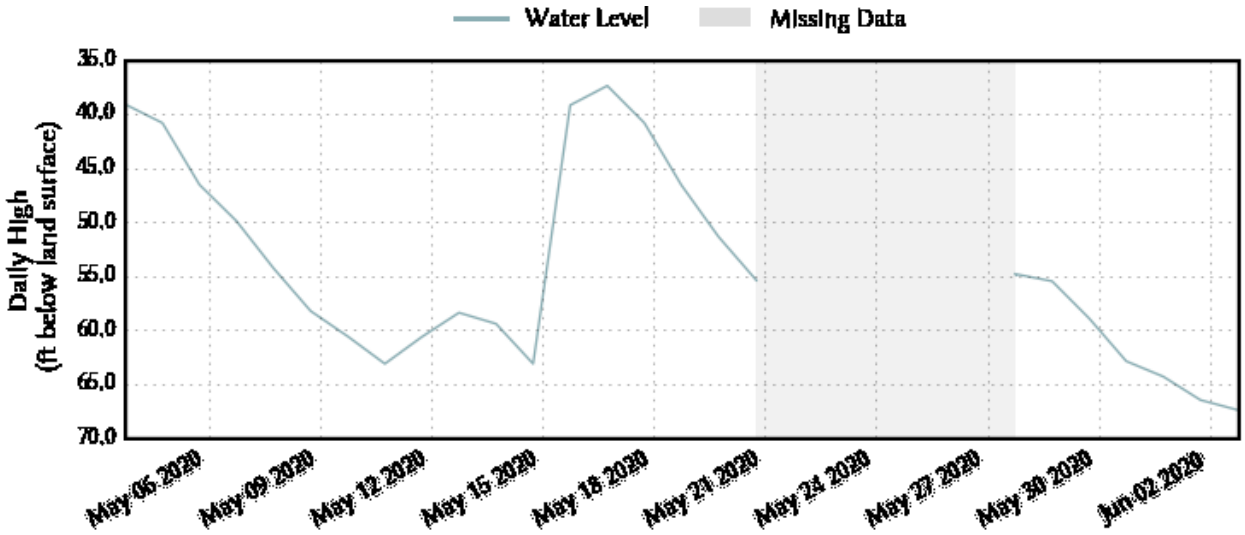
Period Of Record



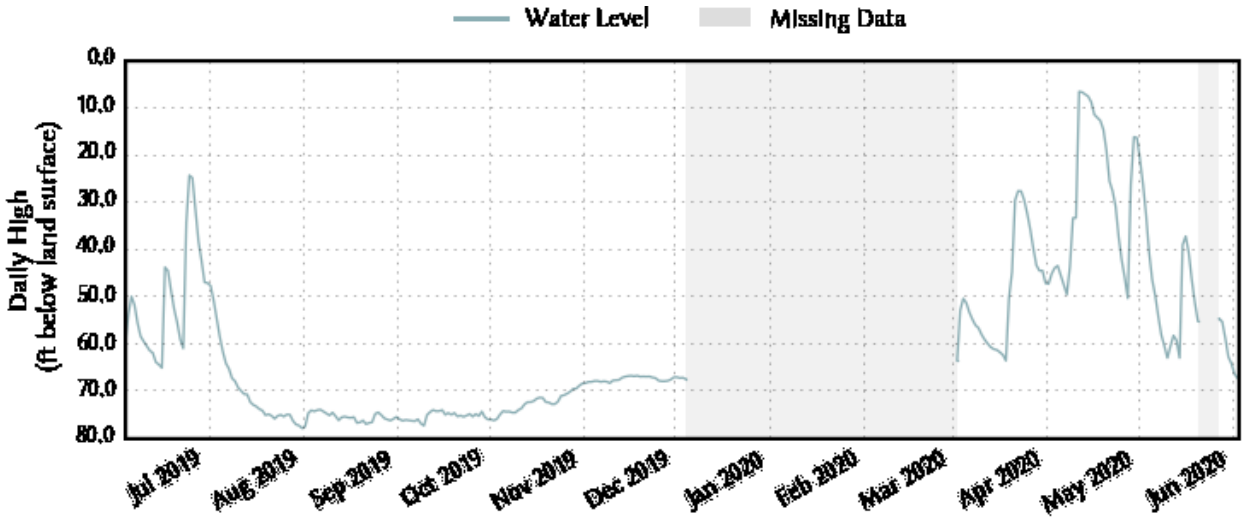
May 2020

Continuous Monitoring Well # 5804628
(Salado Cemetery)
Edwards Aquifer

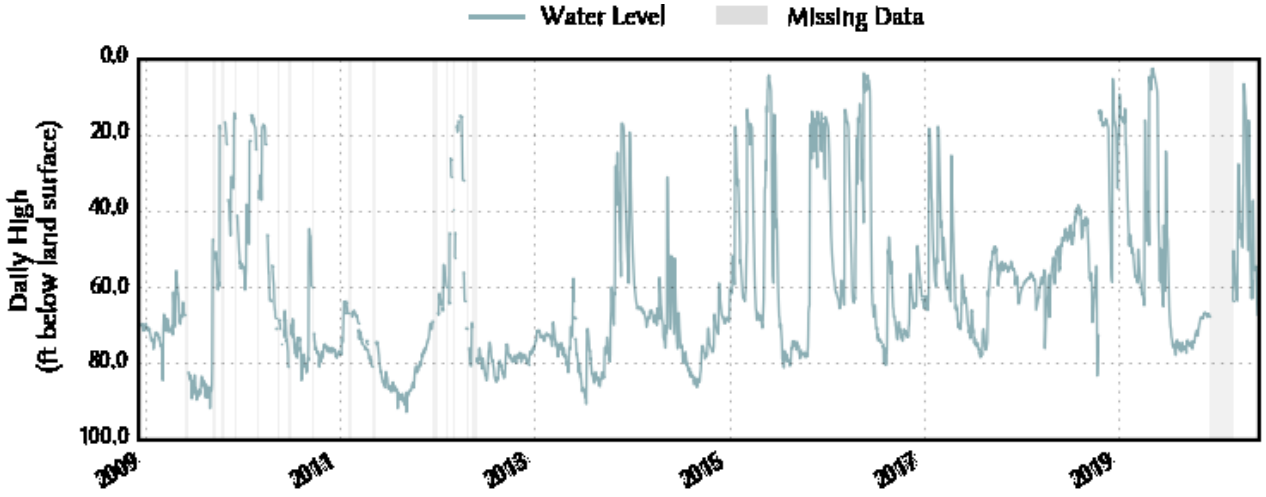
Last 30 Days



1 Year



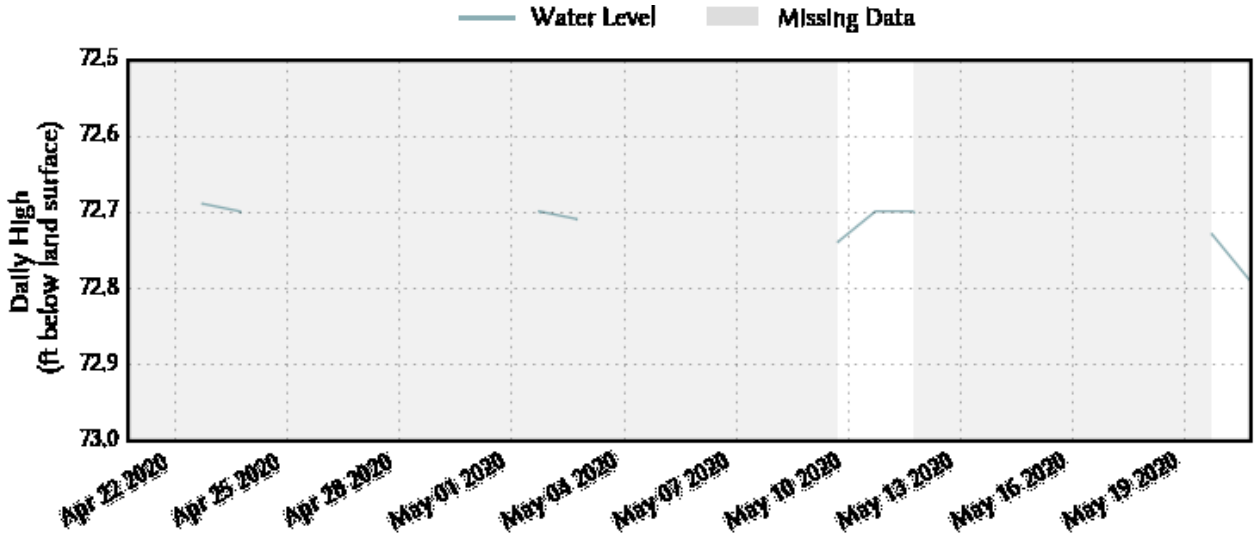
Period Of Record



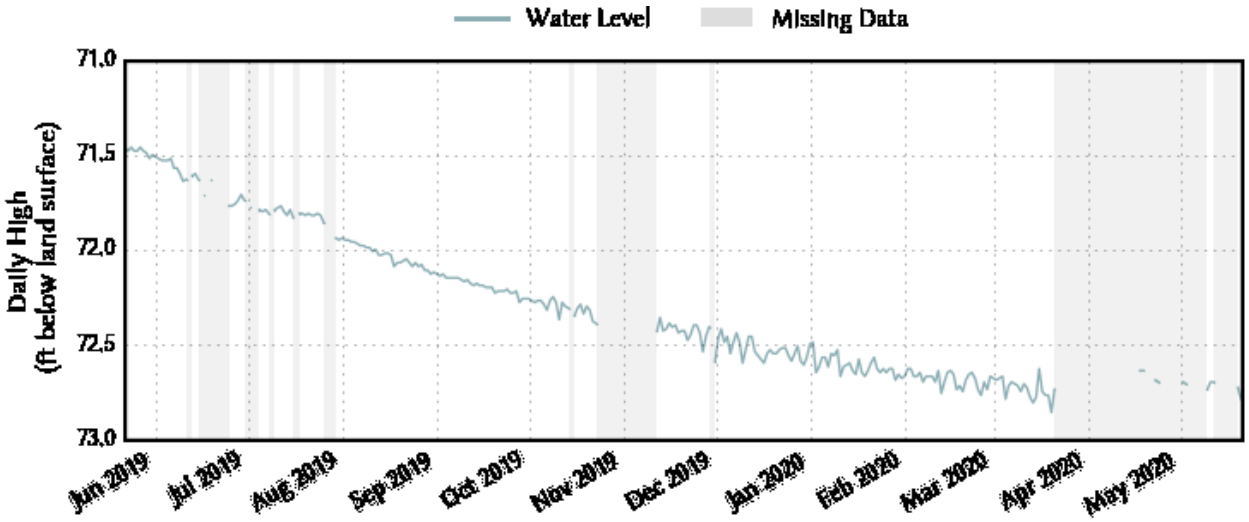
May 2020

Continuous Monitoring Well # 5804702
(FM 2843 - Patterson's Crossing - Salado Creek)
Edwards Aquifer

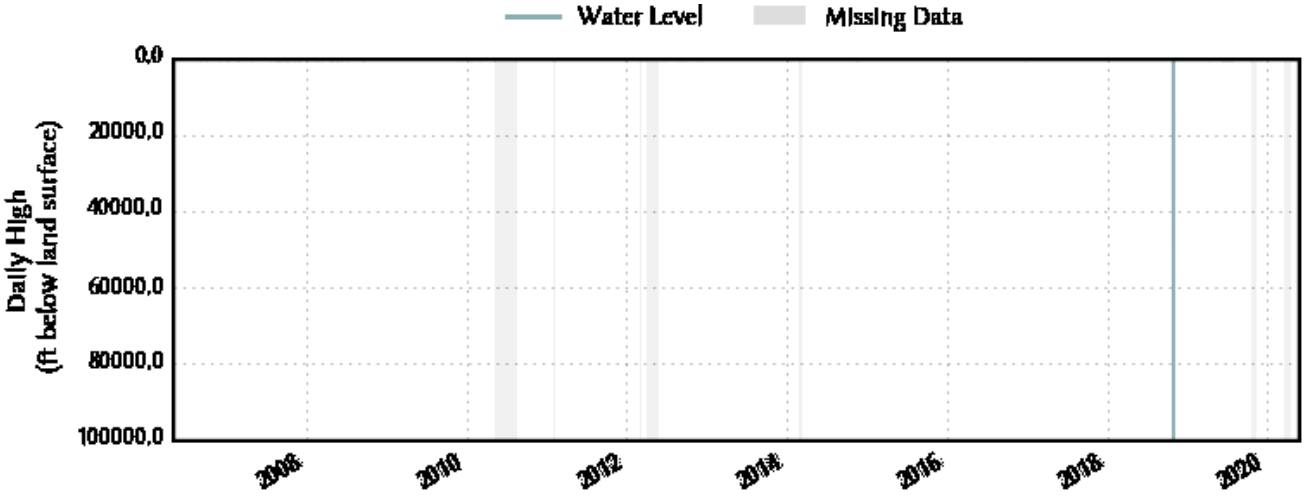
Last 30 Days



1 Year



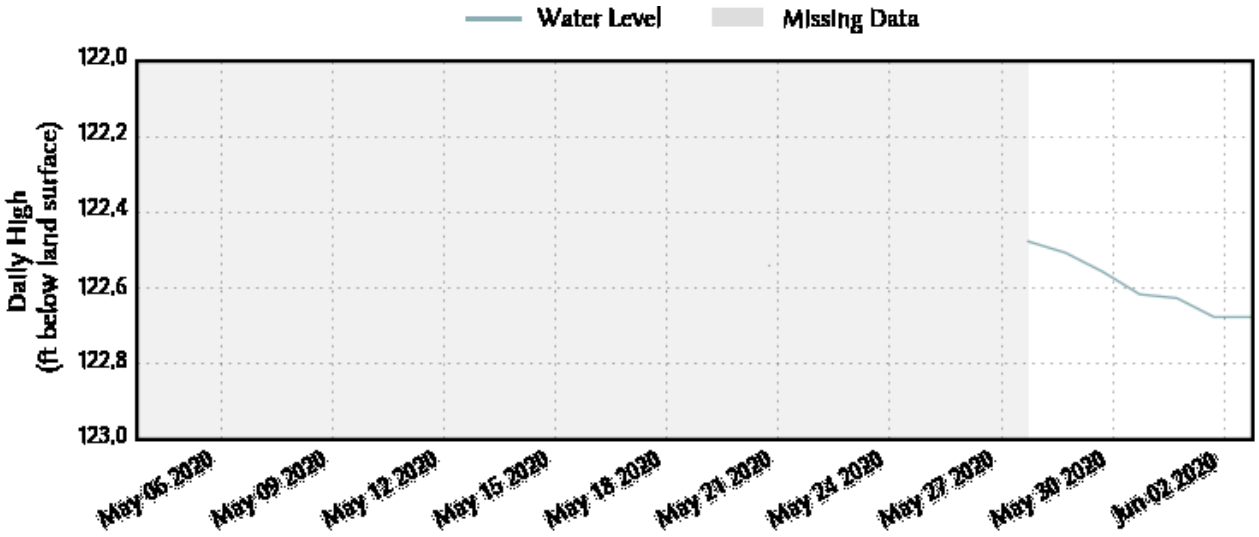
Period Of Record



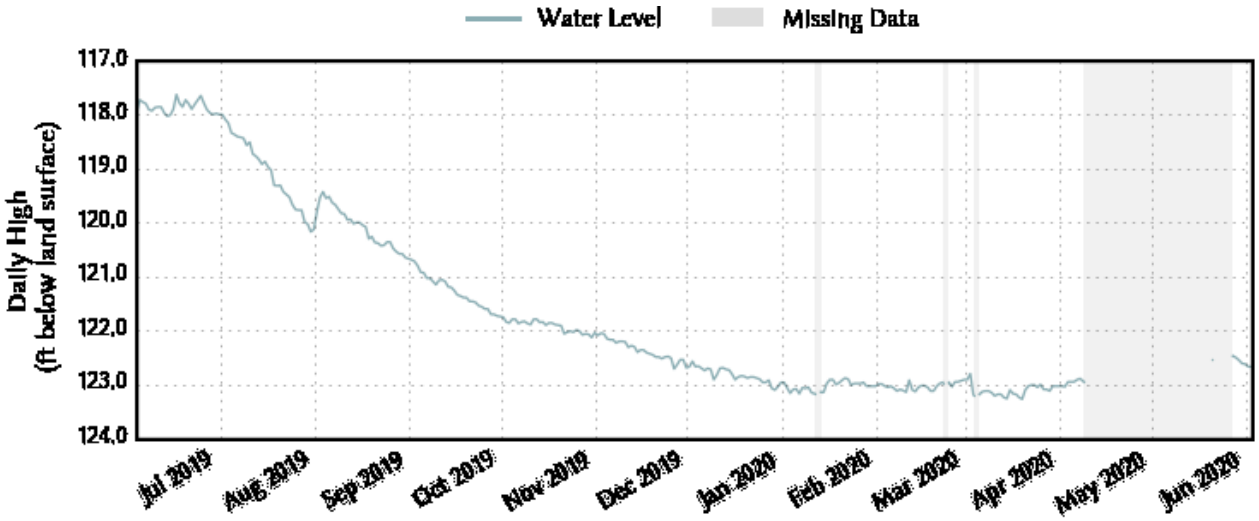
May 2020

Continuous Monitoring Well # 5804816
(IH-35 Rest Stop - West)
Edwards Aquifer

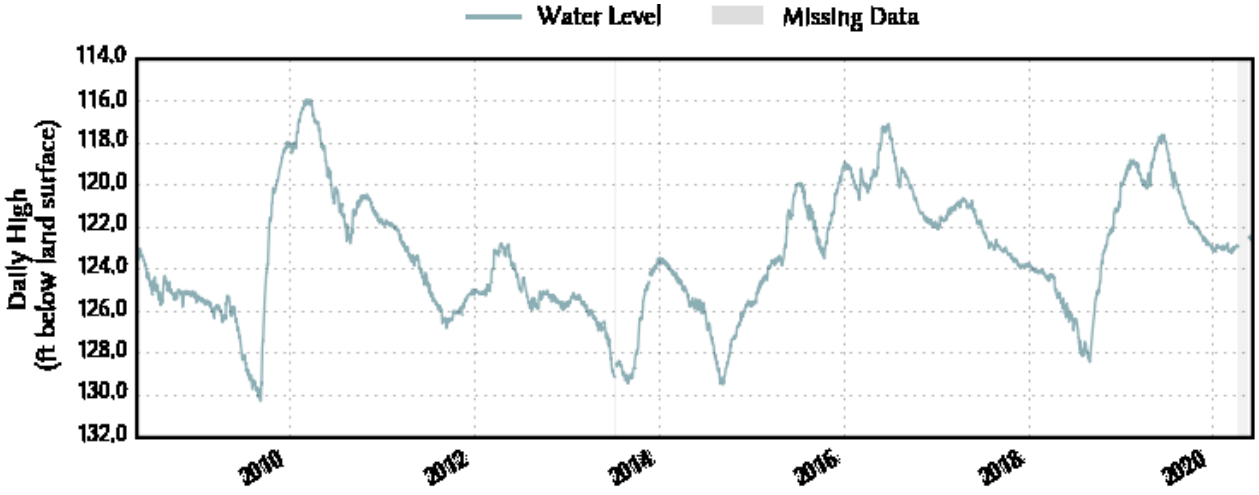
Last 30 Days

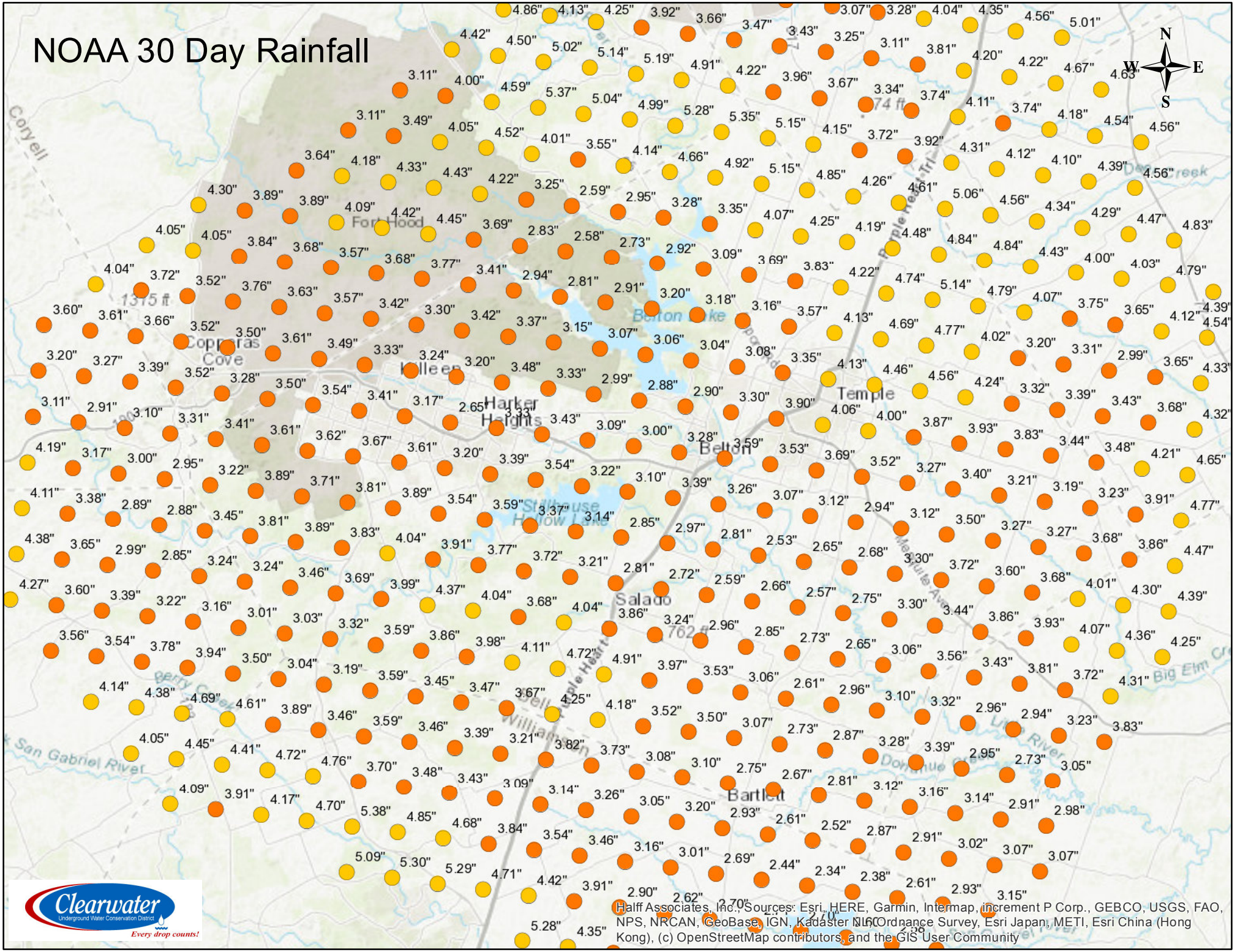


1 Year

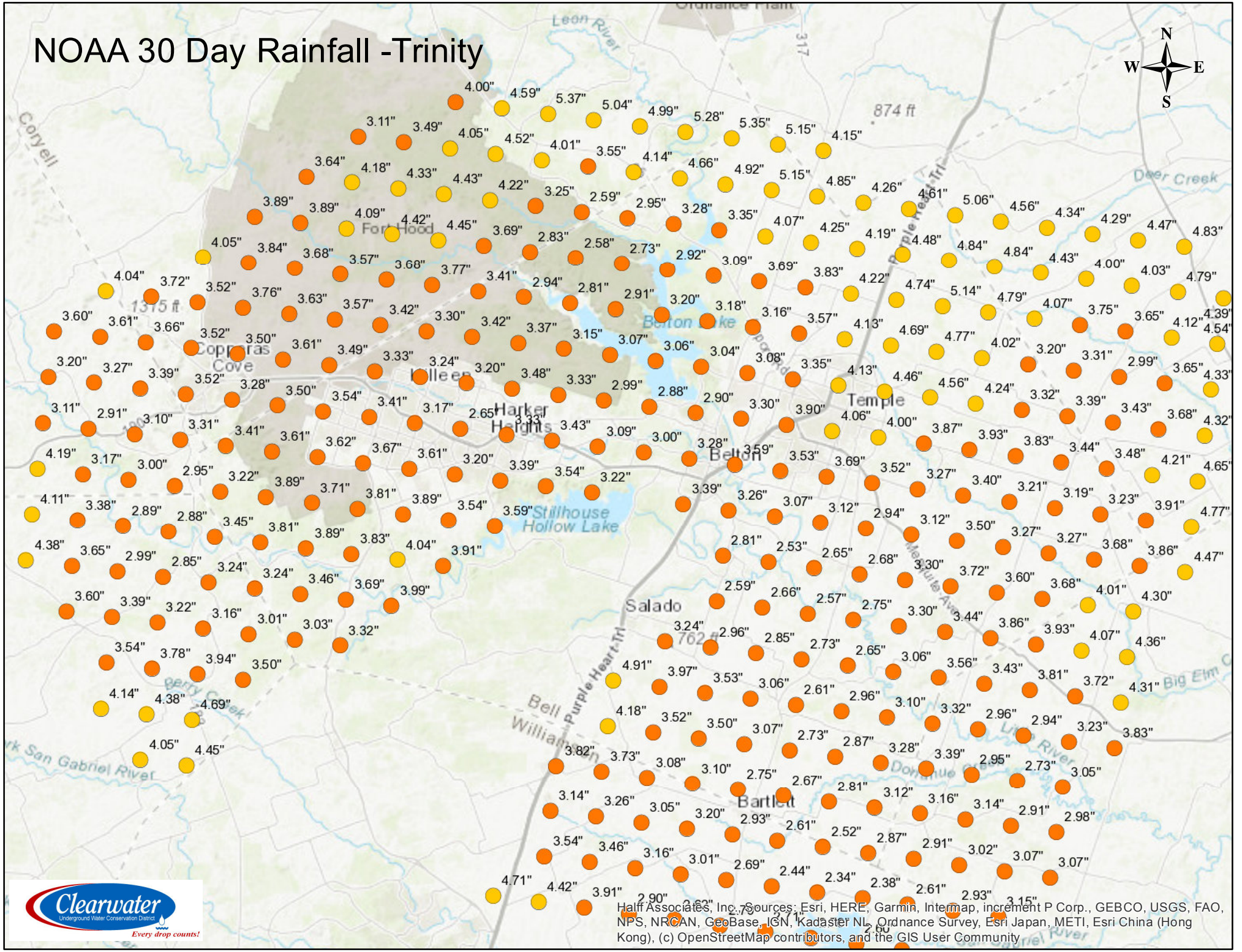


Period Of Record



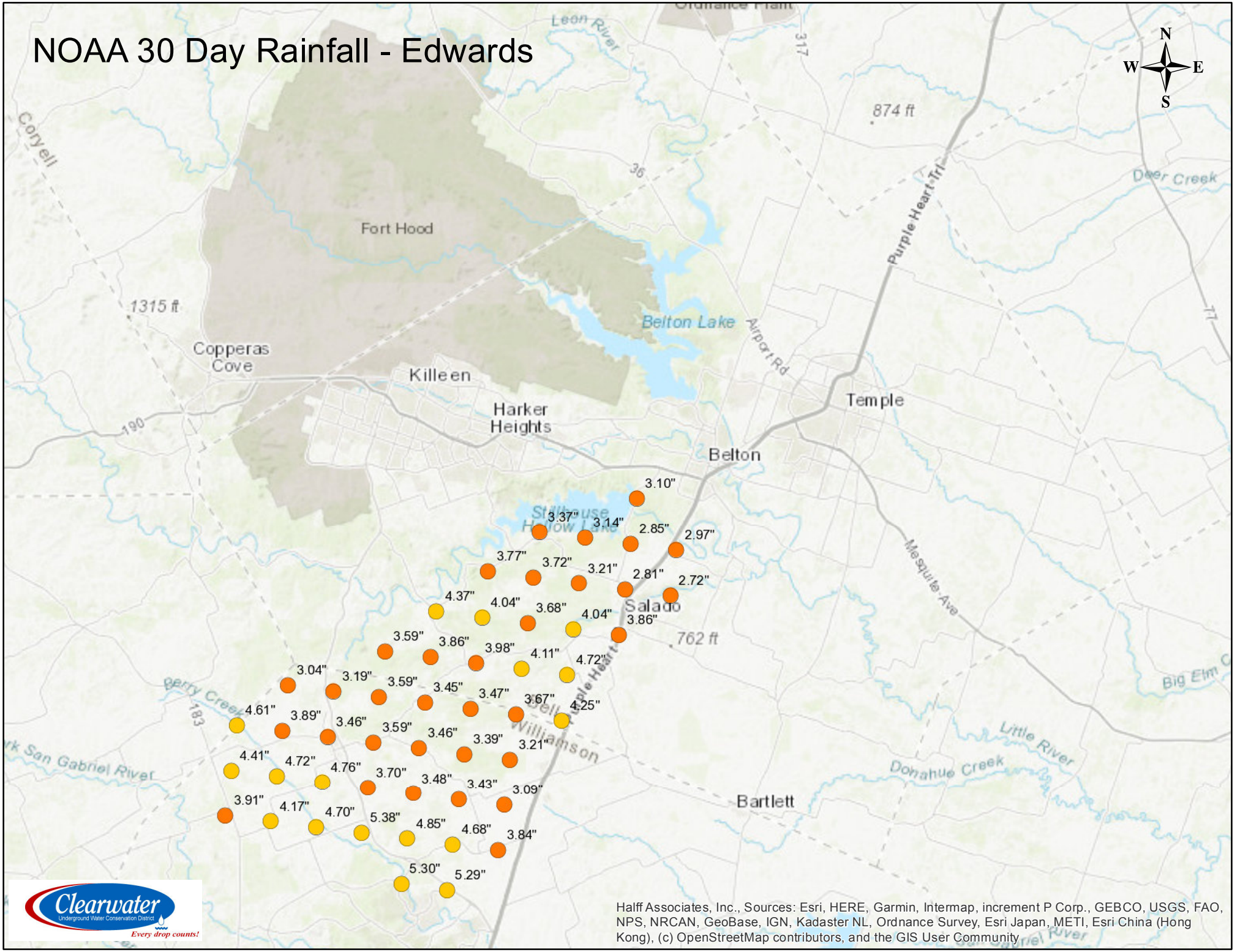

NOAA 30 Day Rainfall
N
W
E
S
Fort Hood
Copperas Cove
Killeen
Harker Heights
Belton
Temple
Salado
Bartlett
Clearwater
Underground Water Conservation District
Every drop counts!
Halff Associates, Inc., Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

NOAA 30 Day Rainfall -Trinity



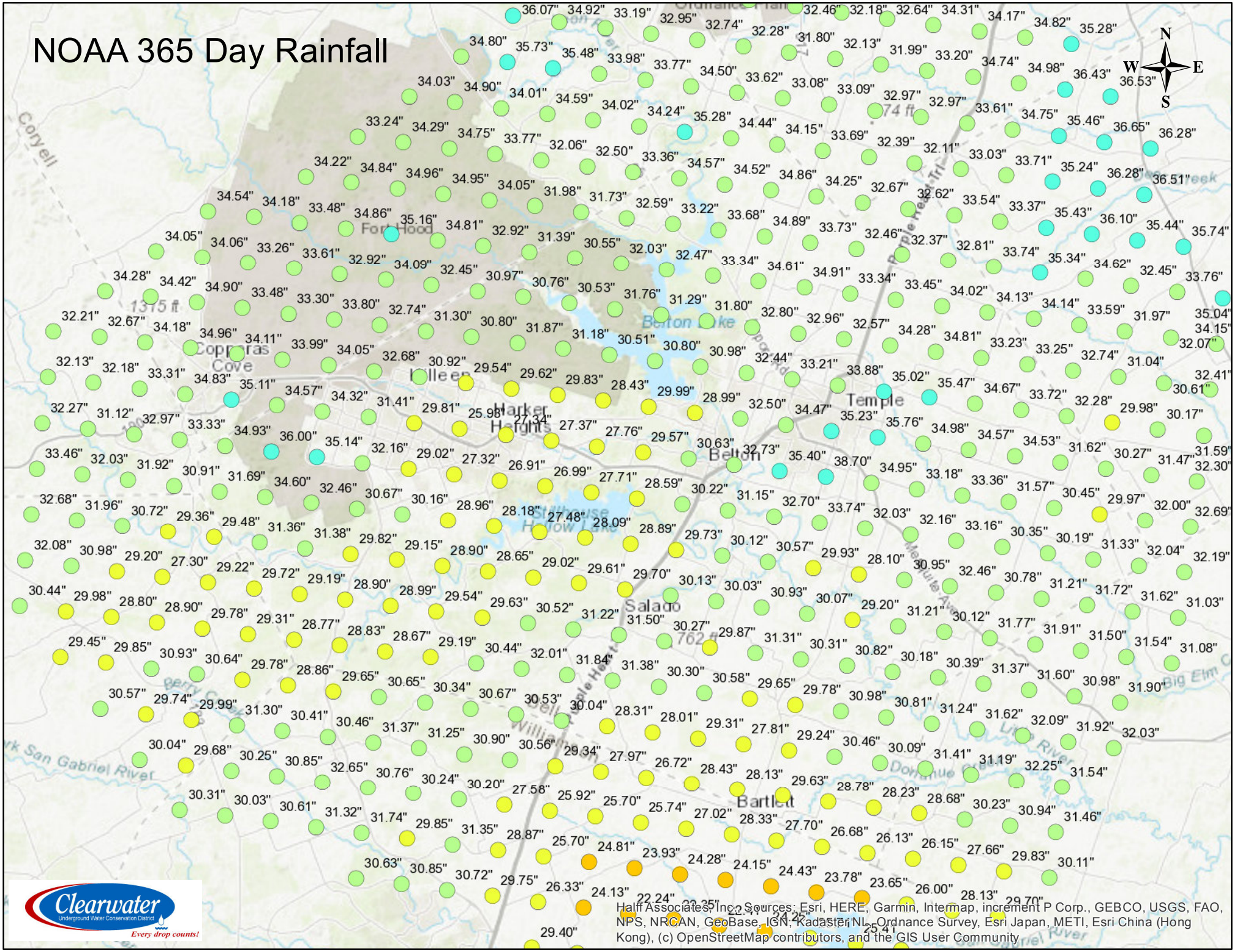
Clearwater Underground Water Conservation District
Every drop counts!

NOAA 30 Day Rainfall - Edwards



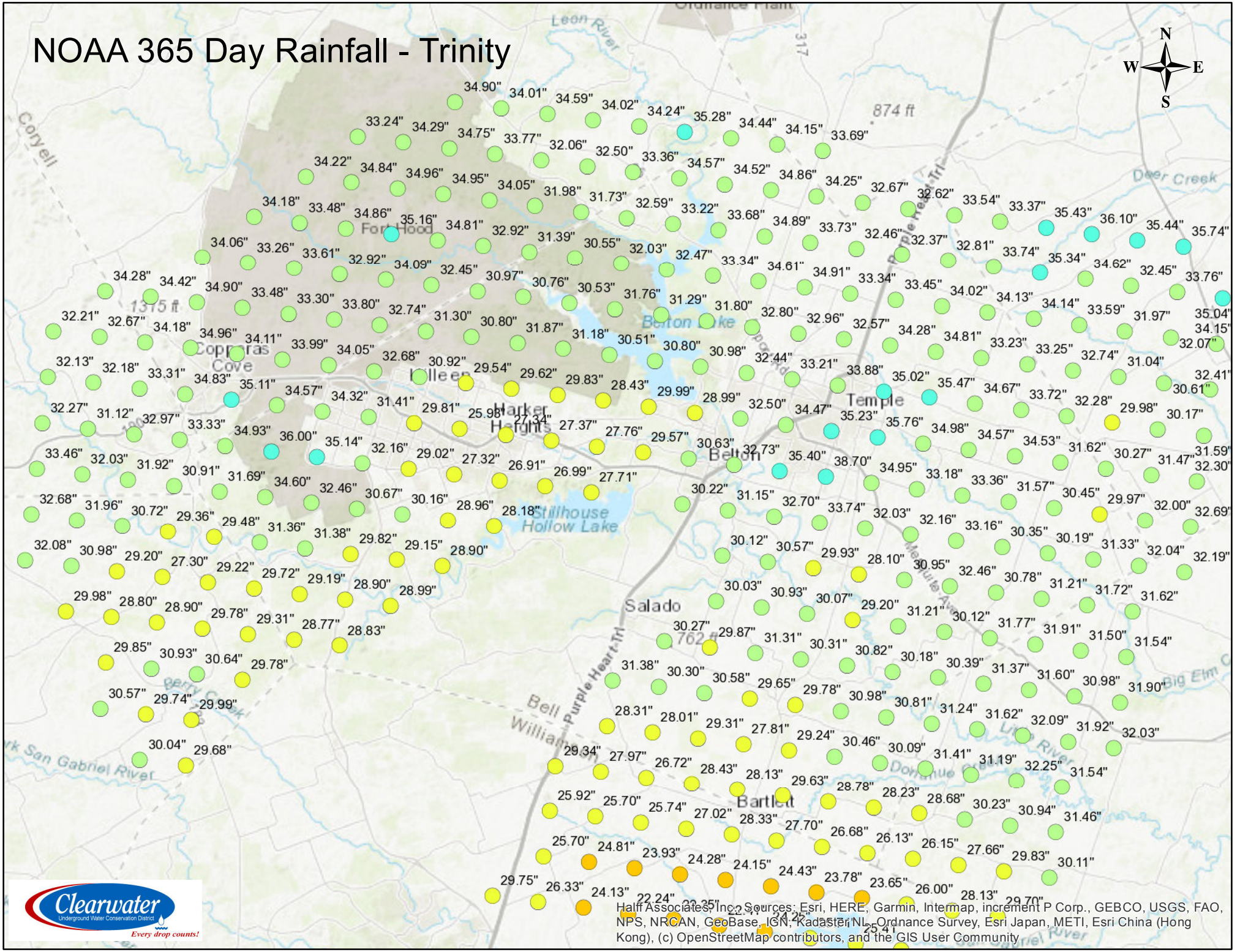
Clearwater Underground Water Conservation District
Every drop counts!

NOAA 365 Day Rainfall



Clearwater Underground Water Conservation District
Every drop counts!

NOAA 365 Day Rainfall - Trinity



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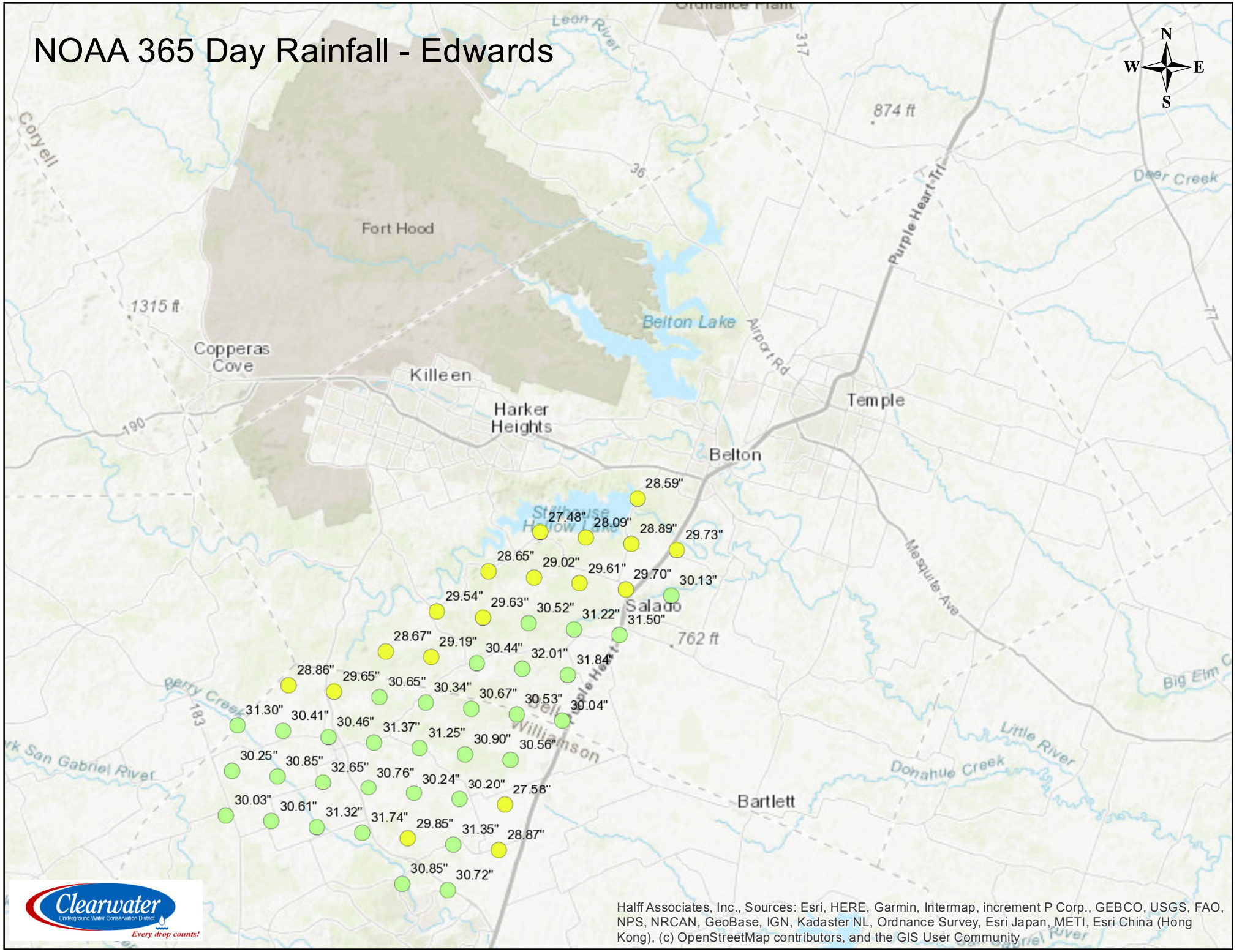
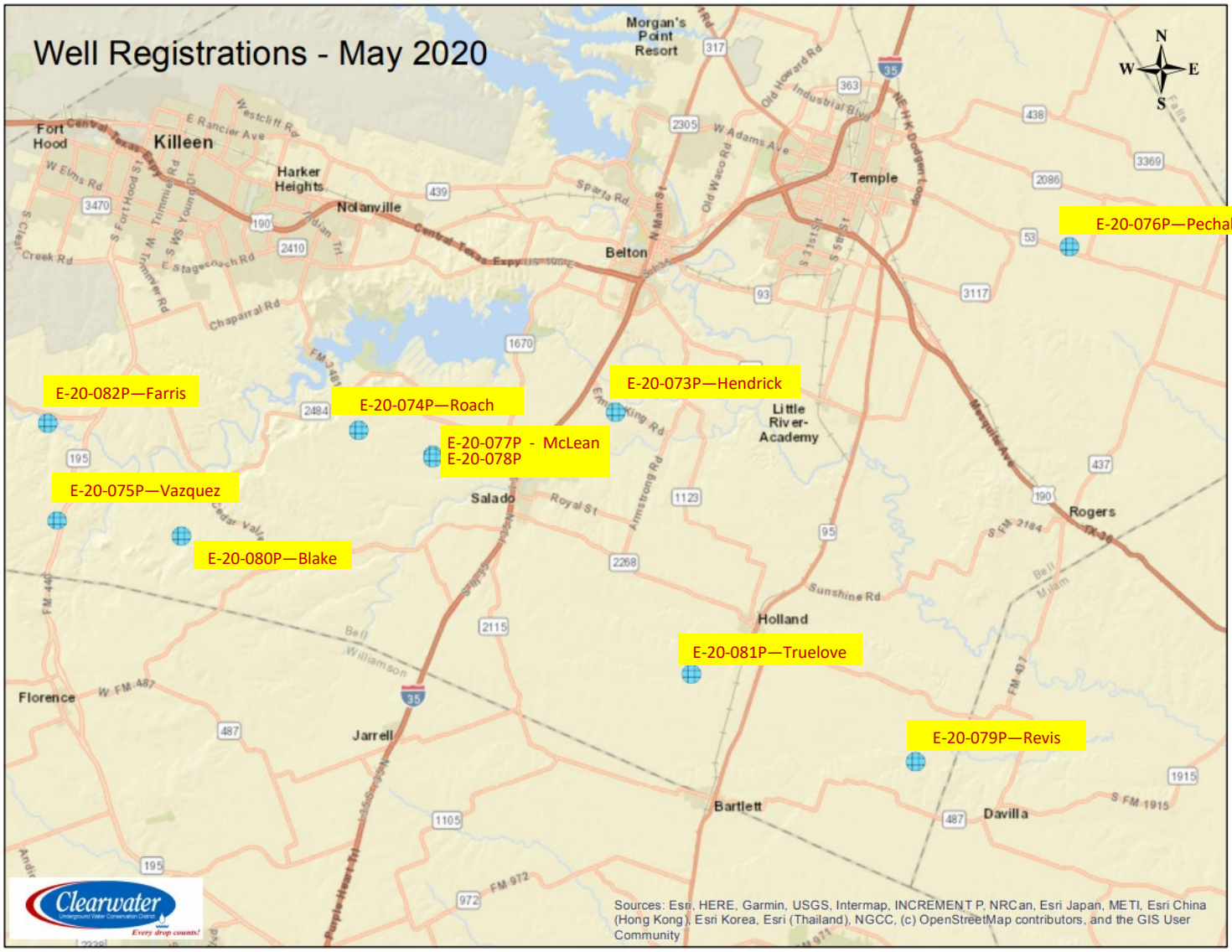
NOAA 365 Day Rainfall - Edwards



Clearwater Underground Water Conservation District
Every drop counts!



Well #	Owner	Address	City	Aquifer	Depth	Use	Status
E-20-073P	Clayton Hendricks	1007 Elmer King Rd	Belton	Undeclared	200	Domestic	Proposed
E-20-074P	Terry & Linda Roach	12386 Crows Ranch Rd	Salado	Undeclared	900	Domestic	Active
E-20-075P	Javier Vazquez	1330 Shady Loop 2	Killeen	Undeclared	520	Domestic	Proposed
E-20-076P	Edwin Pechal	10834 State HWY 53	Temple	Undeclared	41	Domestic	Capped
E-20-077P	Jimmy McLean	PO Box 297	Lometa	Undeclared	41	Lvstk/Plrty	Capped
E-20-078P	Jimmy McLean	PO Box 297	Lometa	Undeclared	41	Domestic	Capped
E-20-079P	Larry Reavis	20694 Post Oak Rd	Bartlett	Undeclared	50	Domestic	Active
E-20-080P	Brian Blake	18229 Stillman Valley Rd	Killeen	Undeclared	750	Domestic	Proposed
E-20-081P	Tim Truelove	19301 Romberg Rd	Holland	Undeclared	40	Domestic	Proposed
E-20-082P	Greg Farris	1519 Bellwood Lake Dr	Richmond	Undeclared	475	Domestic	Proposed

Well Registration Totals

Year	Exempt Wells		Non-Exempt Wells			Monitor Wells		Total
	Grandfathered	New	Grandfathered	Class 1	Class 2	Water	Envr	
2002 - 2019	4352	1013	104	33	52	25	121	**5700**
2020 - Jan	4	1	0	0	0	0	0	**5**
Feb	0	4	0	1	1	0	0	**6**
Mar	0	0	0	0	4	1	0	**5**
Apr	60	2	0	0	0	0	0	**62**
May	0	10	0	0	0	0	0	**10**
June								**0**
July								**0**
Aug								**0**
Sept								**0**
Oct								**0**
Nov								**0**
Dec								**0**
Total 2020	**64**	**17**	**0**	**1**	**5**	**1**	**0**	**88**
Totals	**4416**	**1030**	**104**	**34**	**57**	**26**	**121**	**5788**

Adjustments

Adjustment Type	Exempt Wells		Non-Exempt Wells			Monitor Wells		Total
	Grandfathered	New	Grandfathered	Class 1	Class 2	Water	Envr	
2002-Present	**4416**	**1030**	**104**	**34**	**57**	**26**	**121**	**5788**
Never Drilled	N/A	-27	N/A	-3	-4	0	-1	-35
Plugged	-203	-42	-18	-2	-1	-2	-53	-321
Totals	**4213**	**961**	**86**	**29**	**52**	**24**	**67**	**5432**