Hays Trinity Groundwater Conservation District

Year End Monitoring Data Review

December 17, 2014

What do we do?

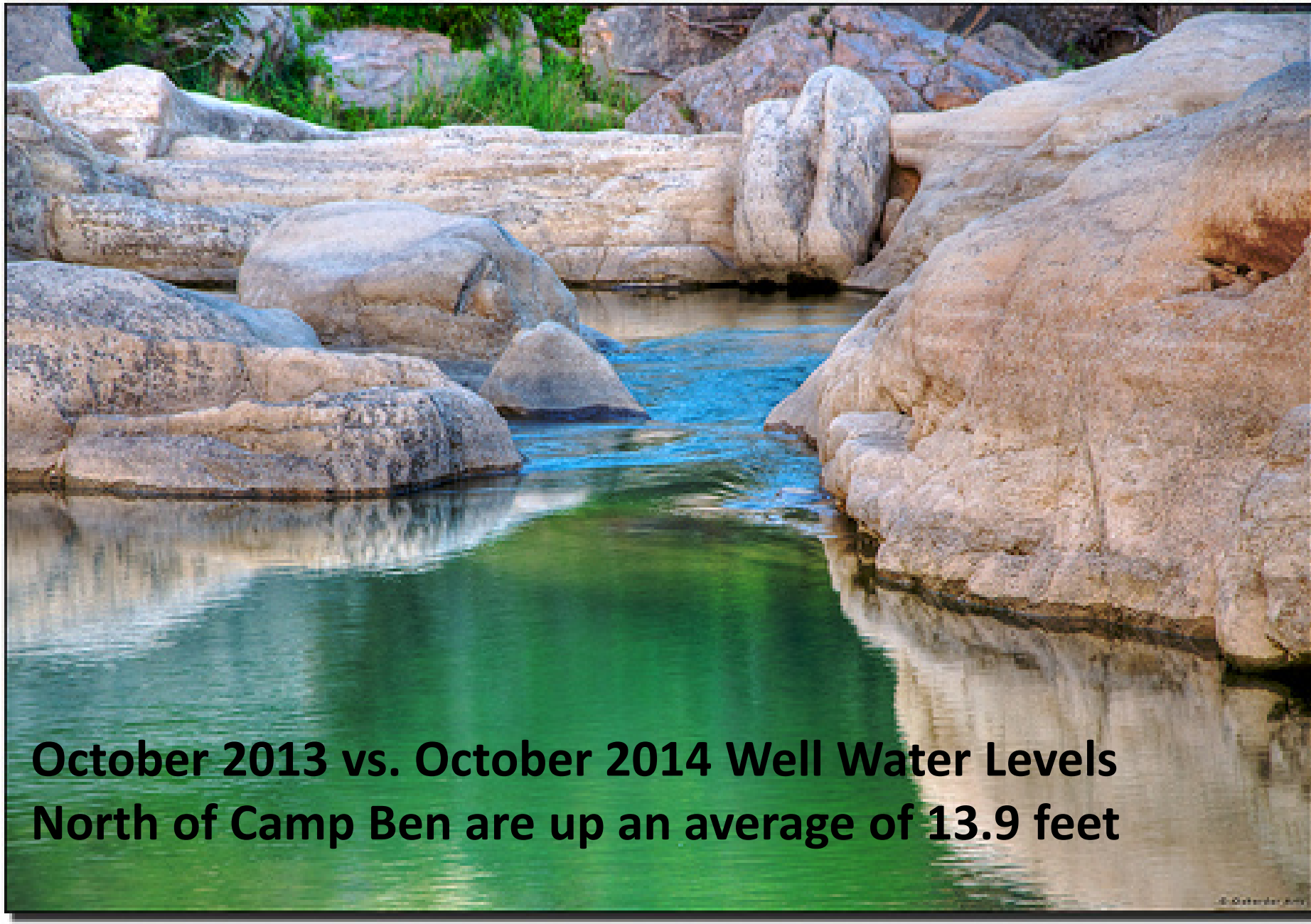
- The District manages new well construction including business and commercial well permits.
- The District is charged to gather information needed to make sound decisions and provide information to citizens and local agencies.

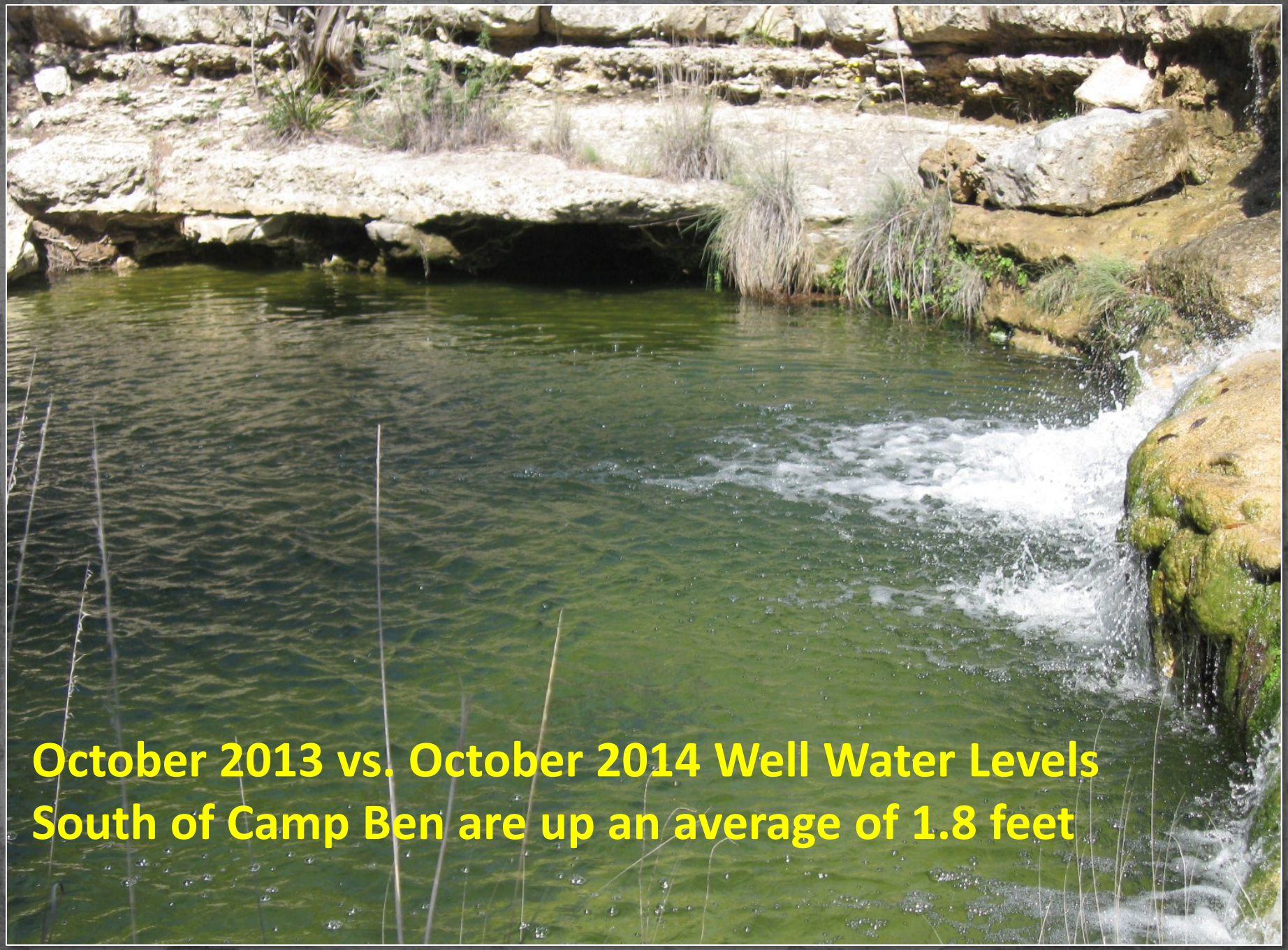
How do we do it?

- Part of our responsibility is to record water level data throughout western Hays County.
- We have 45 monitoring wells each with its own hydrograph and rainfall comparisons.
- Wells are monitored monthly and data collected is uploaded to the District's website for the public's review

October 2013 vs. October 2014 Water Levels

Well Name	Oct 2013 Water Level	Oct 2014 Water Level	Water Level Variance (- equals well is up)
Camp Ben McCulloch	-158.7	-95.4	-63.3
Woodcreek 23	-130.3	-130	-0.3
Juneau	-272	-272.5	0.5
Byrum Dry Cypress	-178.9	-181.4	2.5
Still Well #6 - Main	-191.2	-187.6	-3.6
Sabino Ranch	-111.8	-116.6	4.8
WC Maint 2	-48.4	-47.9	-0.5
HCP3	-120.1	-120.4	0.3
Camp Young Judaea	-41.9	-41.4	-0.5
Wizard	-351.6	-310.5	-41.1
Still Well #4 - 1st WM	-182.9	-183.5	0.6
Still Well #1 - WH	-84.7	-85.4	0.7
Lost Springs Ranch	-191	-184.7	-6.3
Schmidt	-250.01	-227.4	-22.61
O'Neill Ranch Road	-223.6	-219	-4.6
McMeans	-217	-215.9	-1.1
Gumbert Windmill	-53.6	-45.2	-8.4
Cox	-246.6	-236.6	-10
Curtis Johnson	-215.2	-107.2	-108
Jack Brown	-412.1	-382.5	-29.6
Henly Church	-378.2	-361.4	-16.8
Whit Hanks	-190.61	-177.87	-12.74
Grolnic	-449.5	-447.3	-2.2
Broun	-241.9	-195.4	-46.5
Storm Ranch Toenail	-309.2	-306.4	-2.8
Storm Ranch Windmill	-212.8	-214.7	1.9
Downing	-352	-337.8	-14.2
Mount Baldy	-122.55	-121.01	-1.54
Graham	-35.4	-35.4	0
Hermosa Paloma	-410.2	-468.6	58.4
Hills of Texas Estates	-395.7	-316.4	-79.3
Tull	-160.4	-163.2	2.8
Summer Mountain Ranch	-202	-229.2	27.2
Roberts	-391.6	-392	0.4
Box Canyon Well	-253.2	-238.3	-14.9
Whisenant & Lyle	-639.23	-636.01	-3.22
Slopes of Nutty Brown	-49.4	-48.6	-0.8
Fitzhugh Corners	-551.3	-537.2	-14.1
Glenn	-354.4	-349.6	-4.8
Hegemier	-240	-235.4	-4.6
WC Arapahoe	-206.2	-209.6	3.4


October 2013 vs. October 2014 Well Water Levels
North of Camp Ben are up an average of 13.9 feet


October 2013 vs. October 2014 Well Water Levels
South of Camp Ben are up an average of 1.8 feet

Rainfall Totals – 2013-2014

NCDC Station	Month	2013 Rainfall Amount	2014 Rainfall Amount
DRIPPING SPRINGS 6 E	1	3.62	0.42
	2	0.41	0.51
	3	1.15	0.52
	4	2.96	2.42
	5	3.5	5.85
	6	0.19	2.83
	7	4.09	2.27
	8	0.46	0.69
	9	7.69	7.21
	10	14.7	1.6
Jan-Oct Total Rainfall		38.77	24.32

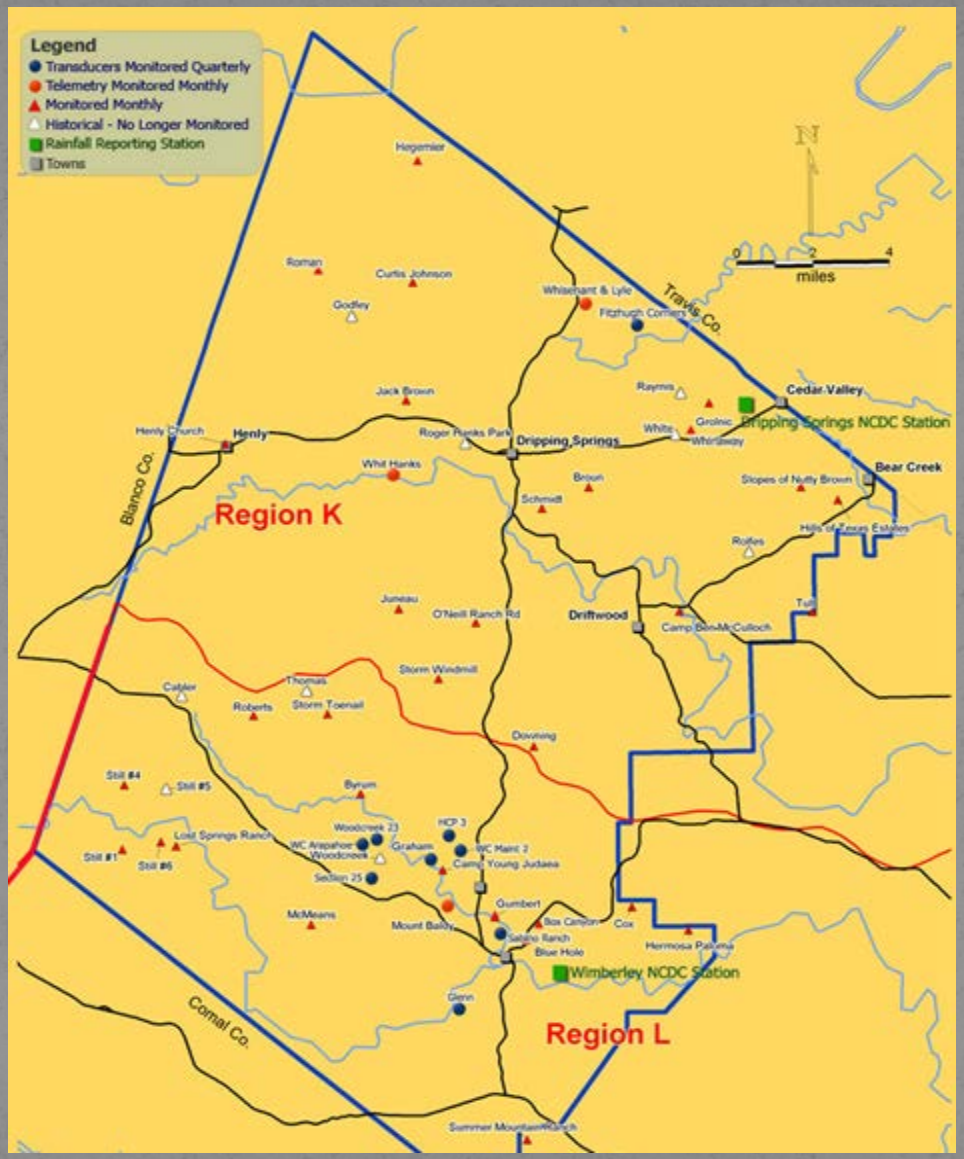
NCDC Station	Month	2013 Rainfall Amount	2014 Rainfall Amount
WIMBERLEY 1 NW	1	3.49	0.28
	2	0.52	0.49
	3	1.06	1.19
	4	2.08	0.33
	5	3.98	7.91
	6	1.48	1.52
	7	3.39	0.05
	8	0.59	0.39
	9	5.46	3.67
	10	17.9	1.56
Jan-Oct Total Rainfall		39.95	17.39

January – October 2014 Rainfall totals:

Dripping Springs: 24.32 inches

Wimberley: 17.39 inches

Monitoring Well Locations



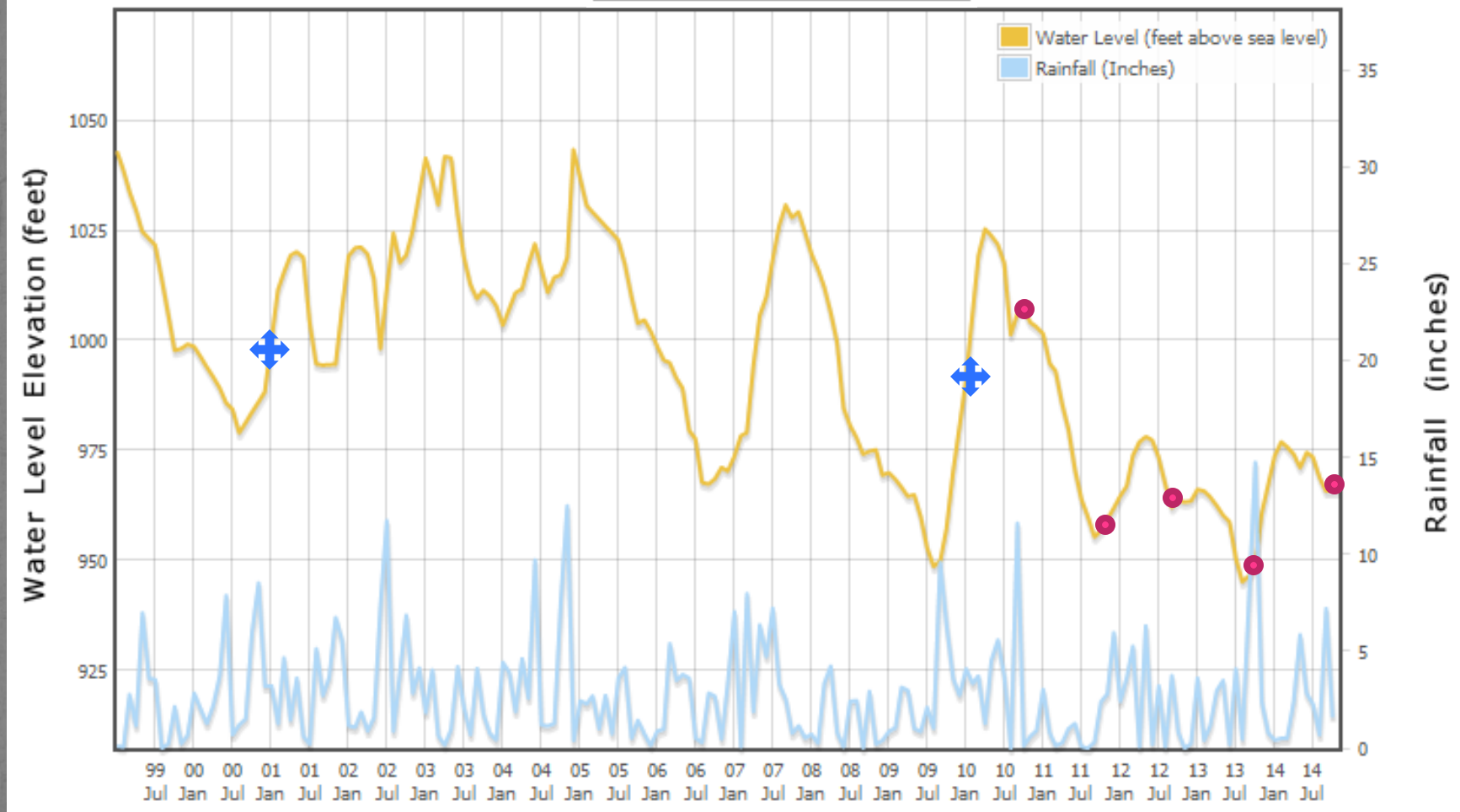
Henly Church

30° 11' 46" NORTH
98° 12' 45" WEST

HTGCD District Boundary Population

2001: 24,187
2010: 36,519

Total Well Depth: 460
Elevation: 1325.8920



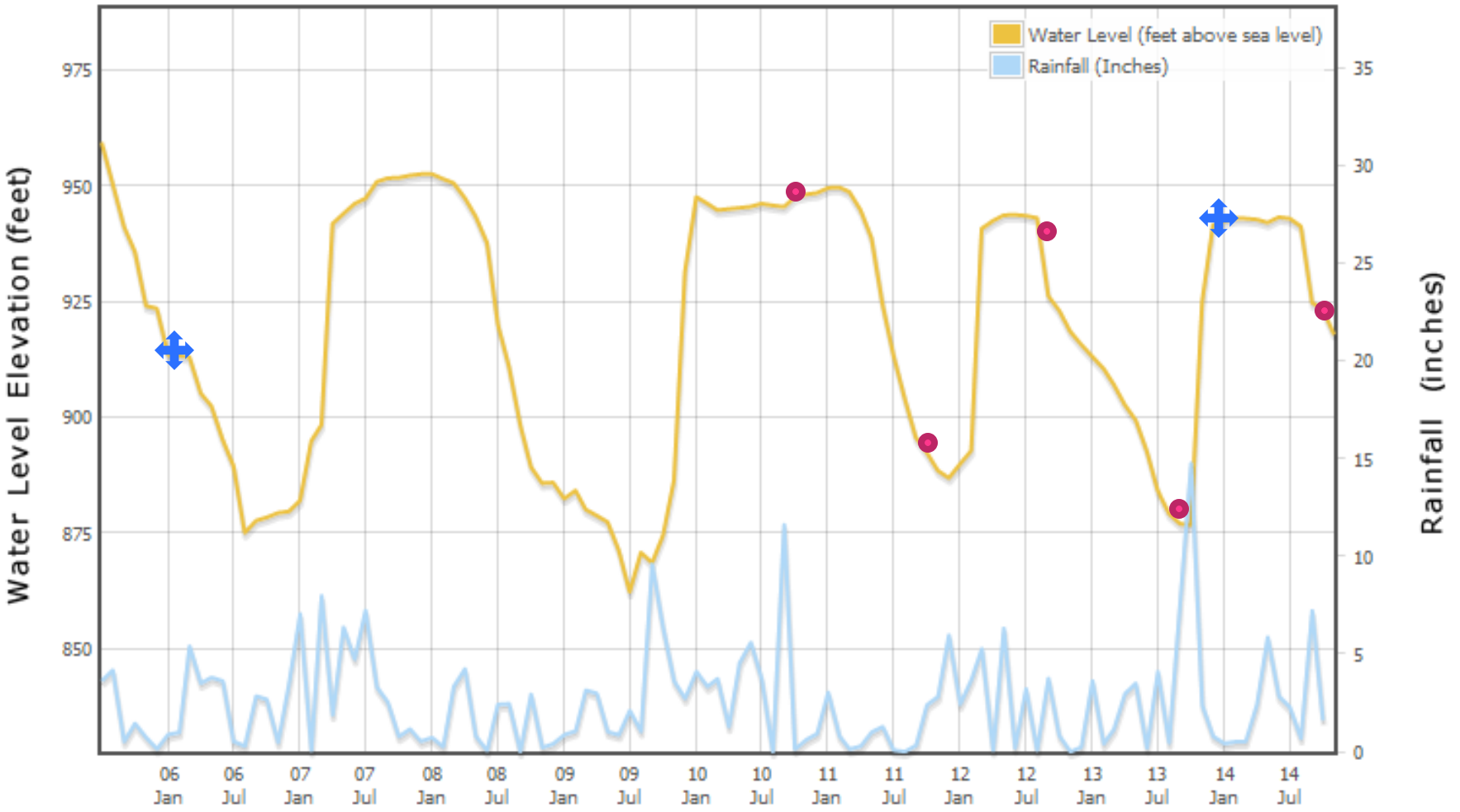
Broun

30° 10' 42" NORTH
98° 03' 12" WEST

HTGCD District Boundary
Population

2001: 24,187
2010: 36,519

Total Well Depth: 280
Elevation: 1117.7200



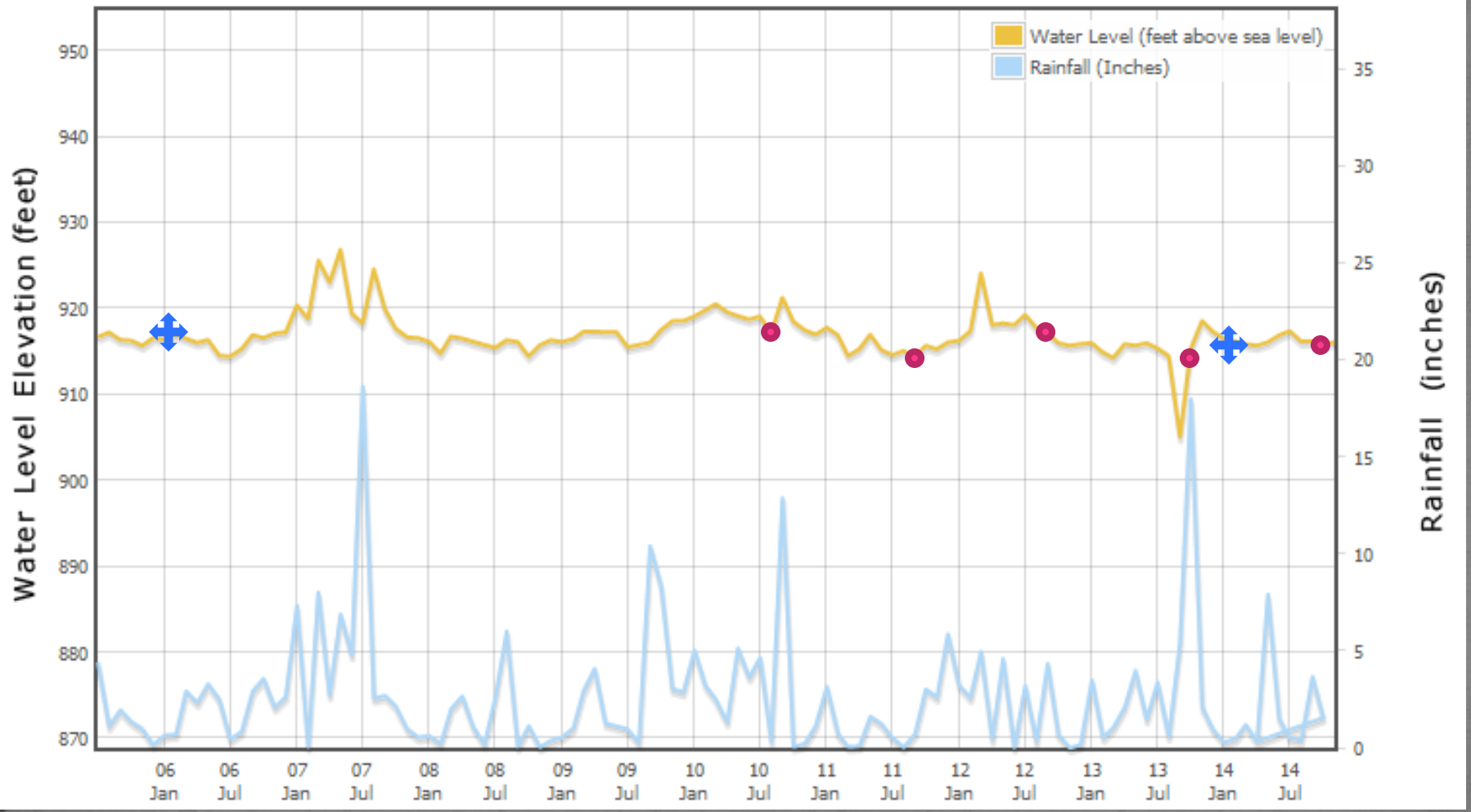
Camp Young Judaea

30° 01' 46" NORTH
98° 07' 08" WEST

HTGCD District Boundary
Population

2001: 24,187
2010: 36,519

Total Well Depth: 250
Elevation: 955.2574



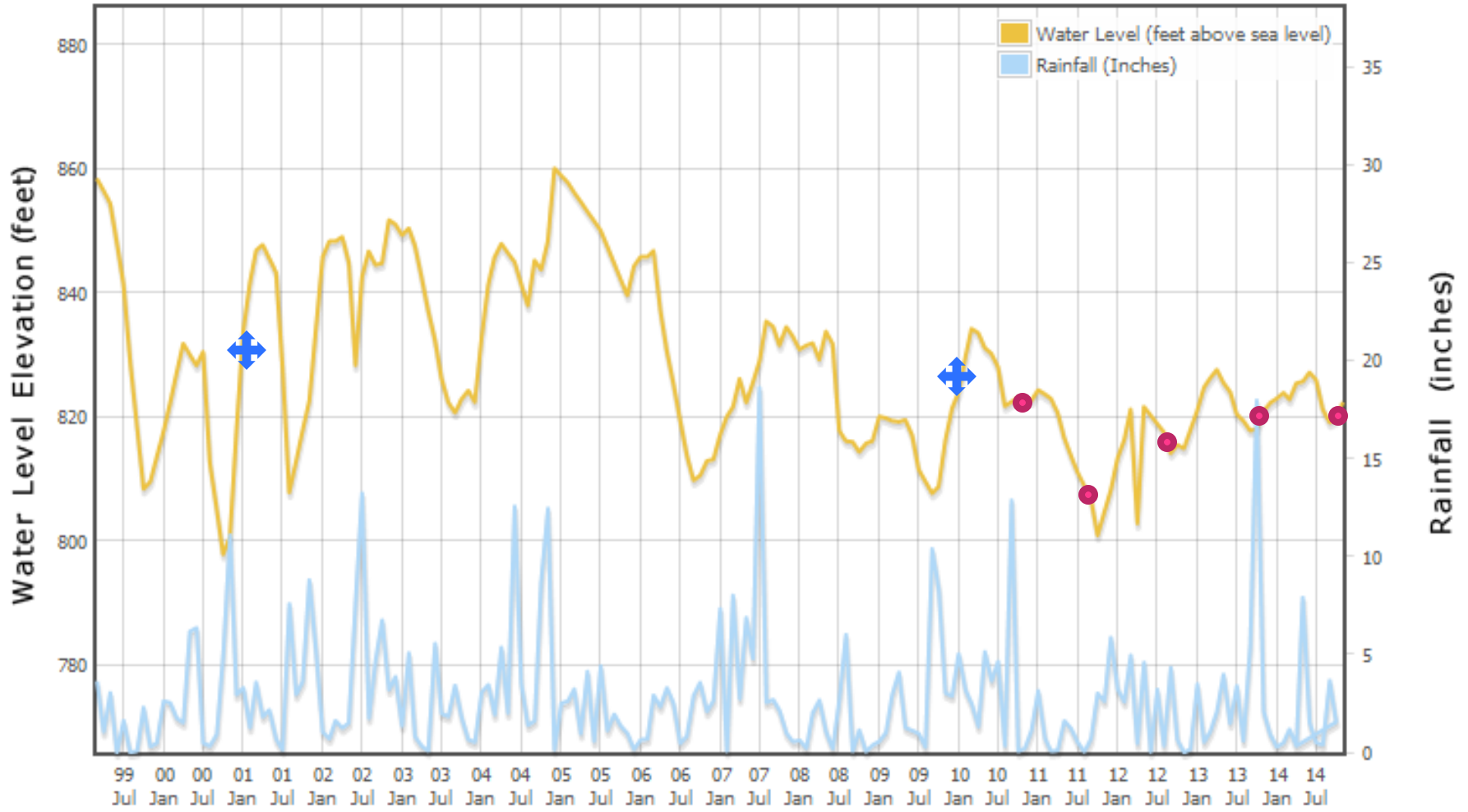
Mount Baldy

30° 00' 57" NORTH
98° 07' 01" WEST

HTGCD District Boundary
Population

2001: 24,187
2010: 36,519

Total Well Depth: 400
Elevation: 938.6330



Drought Management

Discharge Flow Rate	30 Day Mean	60 Day Mean	Alarm Trigger	Critical Trigger	Emergency Trigger
Region K					
Pedernales Rv nr Johnson City, TX (08153500) as of 2014-12-16	62.1	47.16	31.6	10.2	2.23
Days with flow Above Stage Trigger			0	42	60+
Days with flow Below Stage Trigger			11	0	0
Onion Ck nr Driftwood, TX (08158700) as of 2014-12-16	18.91	9.66			
Region L					
Blanco Rv at Wimberley, TX (08171000) as of 2014-12-16	18.1	15.17	28.5	14.5	9.28
Days with flow Above Stage Trigger			0	25	43
Days with flow Below Stage Trigger			24	0	0
Jacobs Well Spg nr Wimberley, TX (08170990) as of 2014-12-16	0.7	0.64			

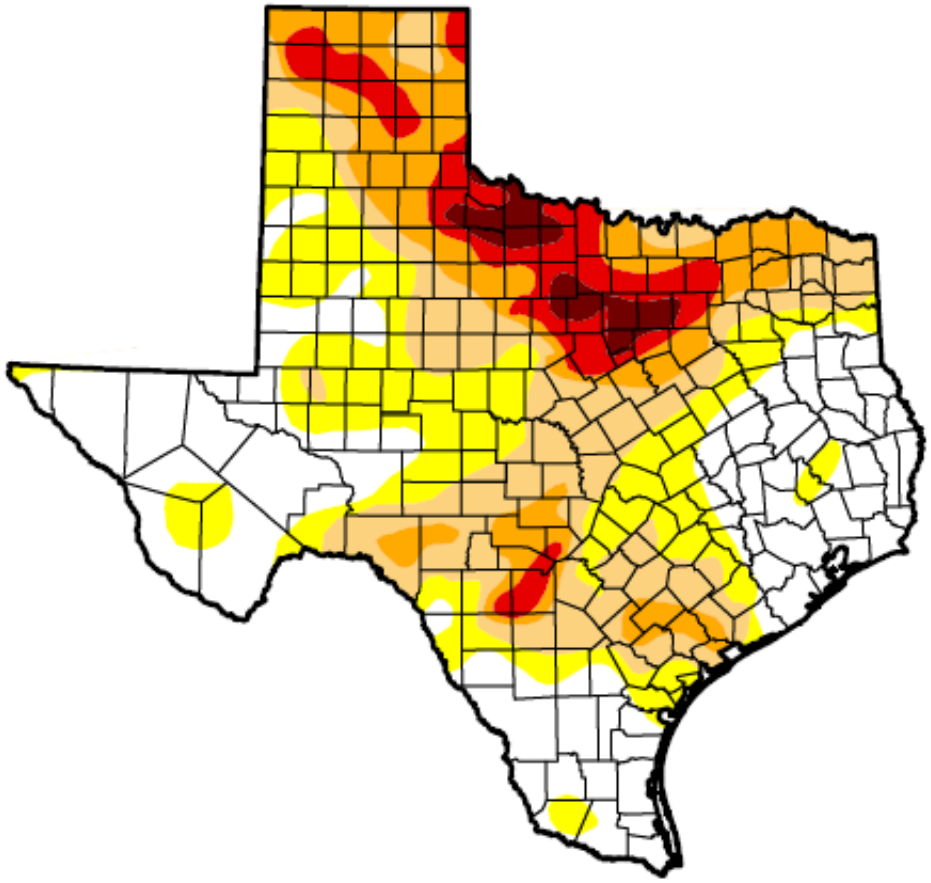
Drought Stage

- As of December 17, 2014, the District continues to be within drought stage Critical. To permit holders, 30% curtailment in their production is required.
- Domestic and Agricultural wells are exempt from District production curtailments, but are encouraged to reduce during drought times.

Drought Triggers

- The District uses three drought triggers: The Pedernales River, the Blanco River and the Palmer Drought Severity Index
- To move back to drought stage Alarm, the two rivers must flow for 60 consecutive days above the drought stage trigger.
- Also reviewed are the drought conditions indicated within the Palmer Drought Severity Index for our area.

U.S. Drought Monitor
Texas



December 9, 2014

(Released Thursday, Dec. 11, 2014)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	33.63	66.37	43.39	23.32	10.05	2.57
Last Week 12/2/2014	34.05	65.95	43.29	22.05	9.50	2.57
3 Months Ago 9/9/2014	13.77	86.23	57.62	36.26	13.87	1.54
Start of Calendar Year 12/31/2013	28.48	71.52	43.84	21.15	5.82	0.79
Start of Water Year 9/30/2014	28.92	71.08	48.95	29.54	11.26	2.69
One Year Ago 12/10/2013	25.73	74.27	44.89	20.83	5.70	0.96

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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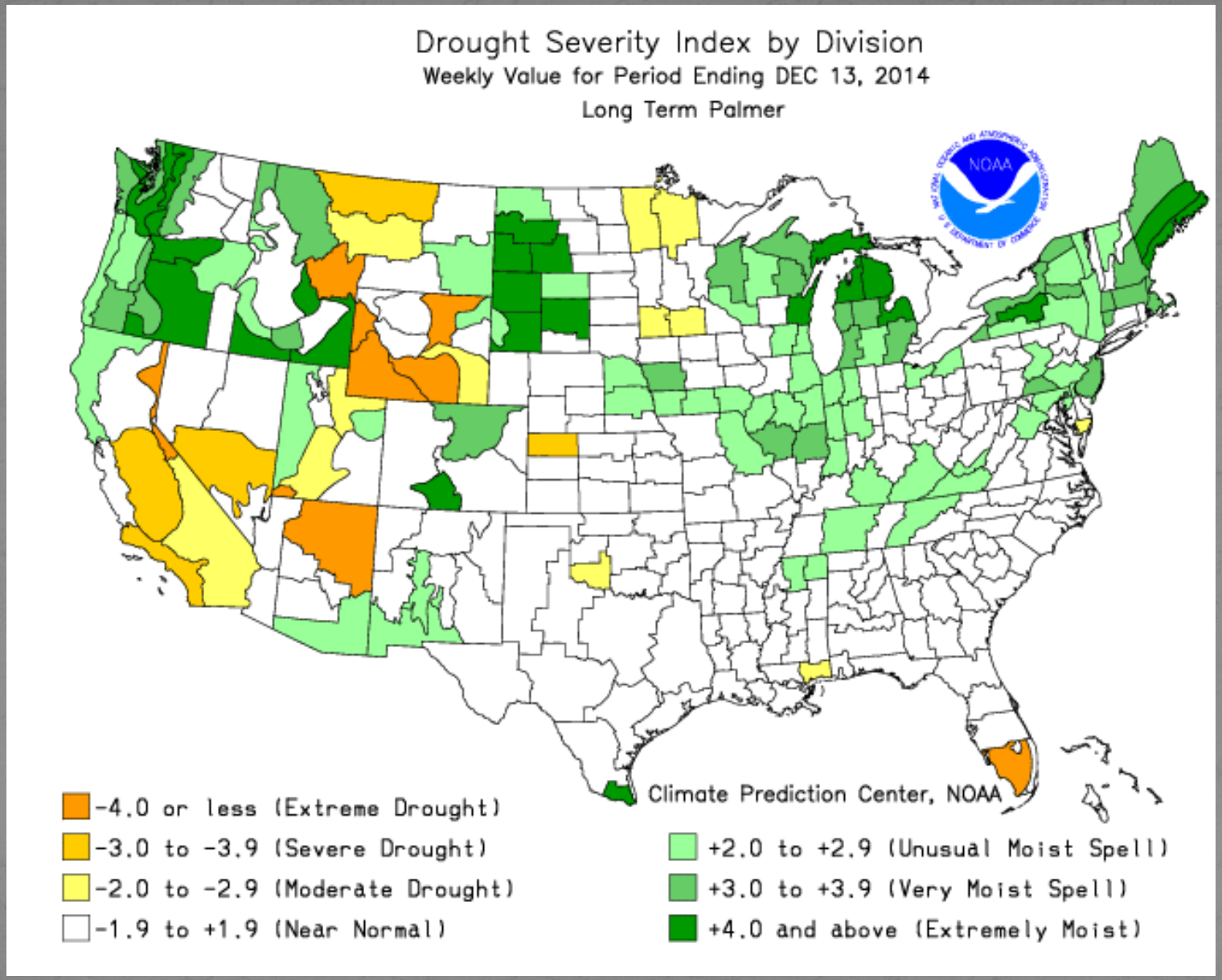
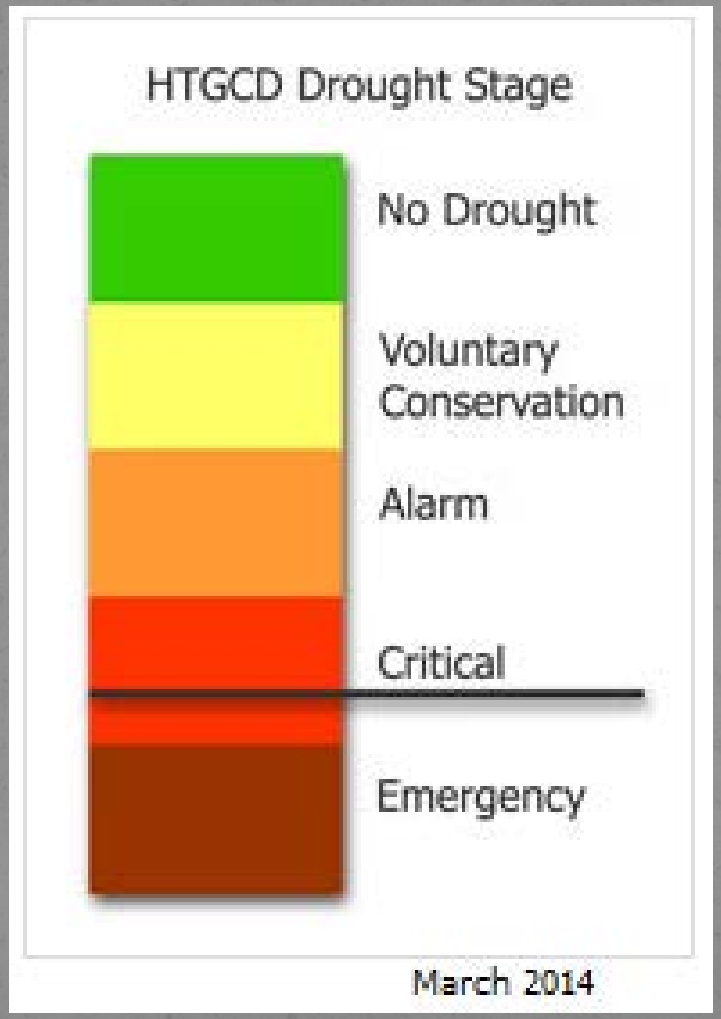

Drought Severity Index by Division
Weekly Value for Period Ending DEC 13, 2014
Long Term Palmer
NOAA
Climate Prediction Center, NOAA
-4.0 or less (Extreme Drought)
-3.0 to -3.9 (Severe Drought)
-2.0 to -2.9 (Moderate Drought)
-1.9 to +1.9 (Near Normal)
+2.0 to +2.9 (Unusual Moist Spell)
+3.0 to +3.9 (Very Moist Spell)
+4.0 and above (Extremely Moist)

HTGCD Drought Stage



How can the District help you?

- Please go to our website, www.haysgroundwater.com and check out our Water Level Monitoring map and see how close you live to one of our monitoring wells.
- You may be able to compare our historic well level data to your well level.

Thank you!

- My Information:
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- Website: www.haysgroundwater.com