

HYDROLOGIC DATA BRIEF FOR THE EDWARDS AQUIFER

September 18, 2013

Prepared by:
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Chief Technical Officer
Edwards Aquifer Authority

September 18, 2013

Current Water Levels & Springflows

Well or Spring	Current Reading	Trend over last 10 days
J-27*	836.5 msl (9/18)	+0.18 ft
J-17	635.4 msl (9/18)	+1.77 ft
Comal Springs	118 cfs (9/17)	+5 cfs
San Marcos Springs	104 cfs (9/17)	+3 cfs

*Calculated from East Uvalde well water elevation

UVALDE COUNTY RAINFALL (in inches) for 2013

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Monthly Rainfall (2013)	1.41	0.00	0.03	1.71	2.39	4.89	0.44	0.53				
Monthly Historical Avg	1.13	1.24	1.32	2.36	3.16	2.83	1.95	2.16	2.60	2.57	1.41	1.34
Difference	0.28	-1.24	-1.29	-0.65	-0.77	2.06	-1.51	-1.63				

Historical Yearly Average	24.07
Total for January - August 2013	11.40
Historical Average January - August	16.15
Total Difference for Year to Date	-4.75

Data from EAA rain gauge UV033 located 4.4 miles south of the City of Uvalde.

MEDINA COUNTY RAINFALL (in inches) for 2013

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Monthly Rainfall (2013)	1.61	0.12	0.16	1.06	3.26	4.48	0.64	0.12				
Monthly Historical Avg	1.43	1.94	1.53	2.66	3.79	3.38	1.88	2.76	3.00	3.03	1.73	1.43
Difference	0.18	-1.82	-1.37	-1.60	-0.53	1.10	-1.24	-2.64				

Historical Yearly Average	28.56
Total for January - August 2013	11.45
Historical Average January - August	19.37
Total Difference for Year to Date	-7.92

Data from National Weather Service (NWS) rainfall station at Hondo Airport.

BEXAR COUNTY RAINFALL (in inches) for 2013

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Monthly Rainfall (2013)	2.83	0.10	0.95	1.57	13.19	2.02	0.73	0.85				
Monthly Historical Avg	1.56	1.70	1.77	2.74	3.53	3.17	2.17	2.37	3.33	2.82	2.13	1.78
Difference	1.27	-1.60	-0.82	-1.17	9.66	-1.15	-1.44	-1.52				

Historical Yearly Average	29.07
Total for January - August 2013	22.24
Historical Average January - August	19.01
Total Difference for Year to Date	3.23

Data from NWS rainfall station located at San Antonio International Airport.

COMAL COUNTY RAINFALL (in inches) for 2013

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Monthly Rainfall (2013)	2.04	0.01	0.58	1.09	6.74	0.74	2.88	0.73				
Monthly Historical Avg	2.36	2.09	1.92	2.68	4.86	4.64	2.02	2.16	3.39	3.84	2.79	2.75
Difference	-0.32	-2.08	-1.34	-1.59	1.88	-3.90	0.86	-1.43				

Historical Yearly Average	35.50
Total for January - August 2013	14.81
Historical Average January - August	22.73
Total Difference for Year to Date	-7.92

Data from NWS rainfall station located at San Antonio International Airport.

HAYS COUNTY RAINFALL (in inches) for 2013

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Monthly Rainfall (2013)	2.56	0.06	0.55	2.02	0.78	0.08	0.50	0.00				
Monthly Historical Avg	2.00	2.93	1.84	3.29	3.68	3.56	1.77	2.31	4.52	3.61	2.23	2.01
Difference	0.56	-2.87	-1.29	-1.27	-2.90	-3.48	-1.27	-2.31				

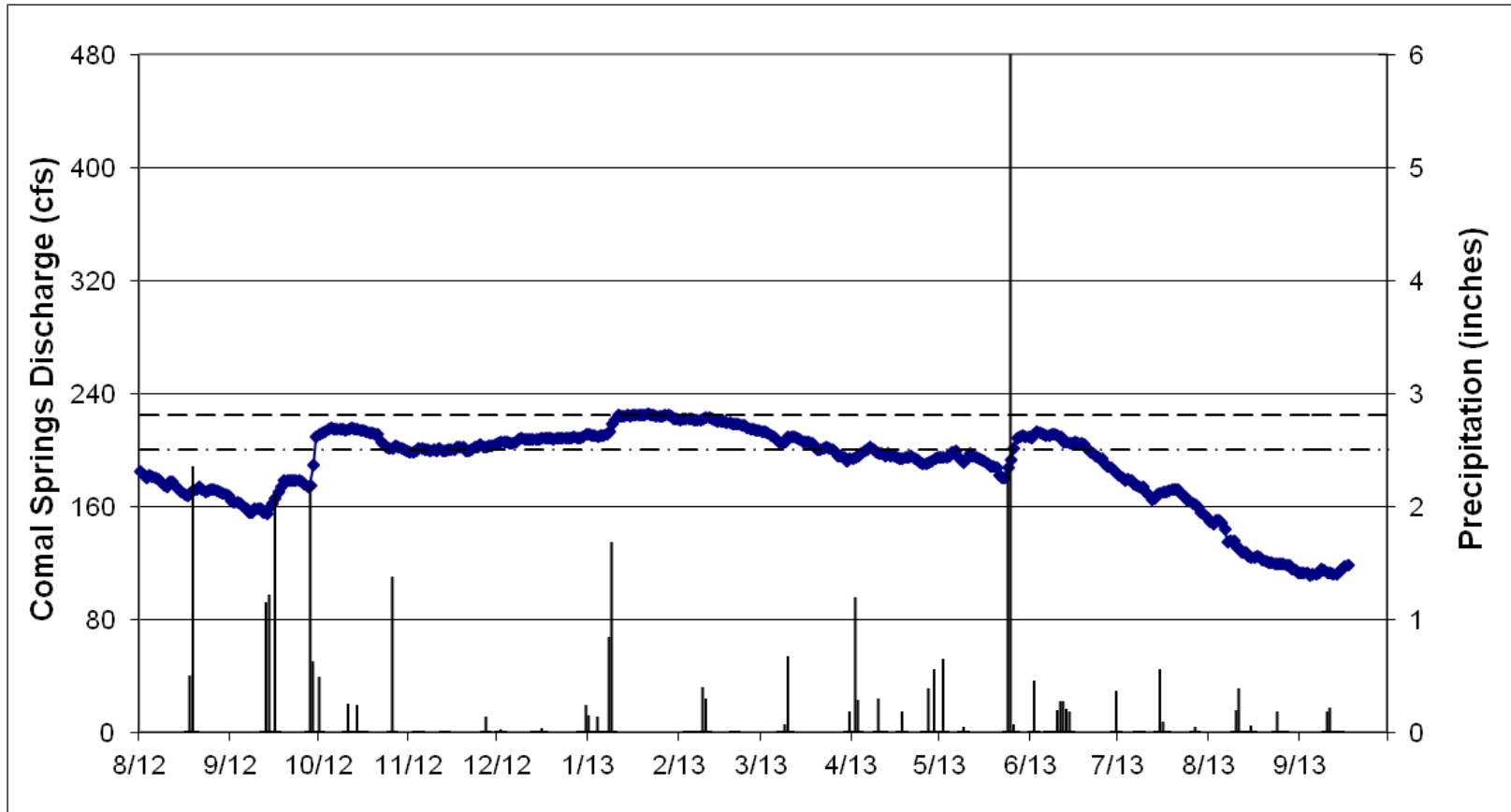
Historical Yearly Average	33.75
Total for January - August 2013	6.55
Historical Average January - August	21.38
Total Difference for Year to Date	-14.83

Data provided by EAA rain gauge HA158 located 0.25 miles west of Bobcat Stadium. FAA Rainfall Station: San Marcos Airport - out of service.
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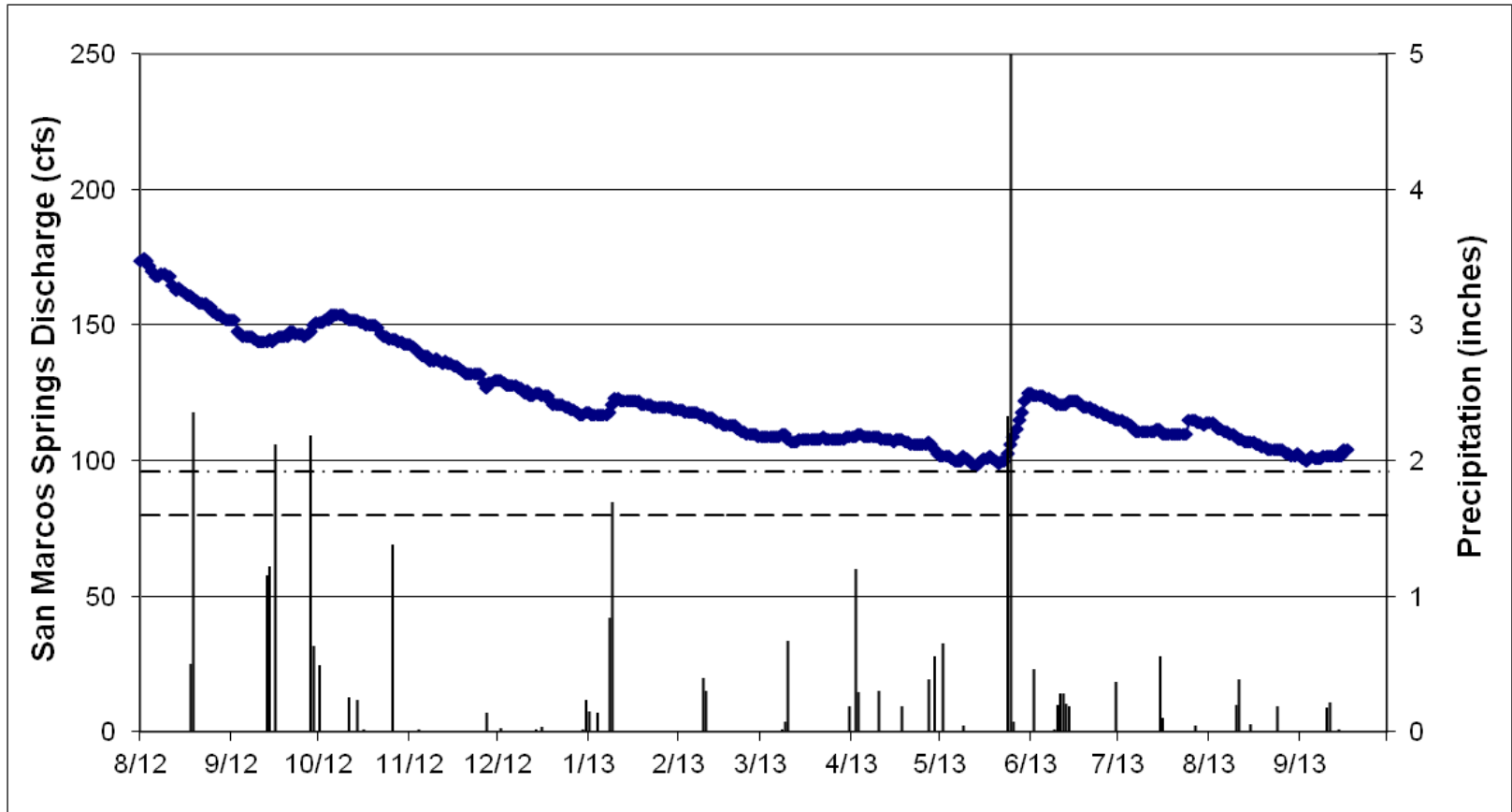
Well J-17 Water Level to Date (09-18-2013)



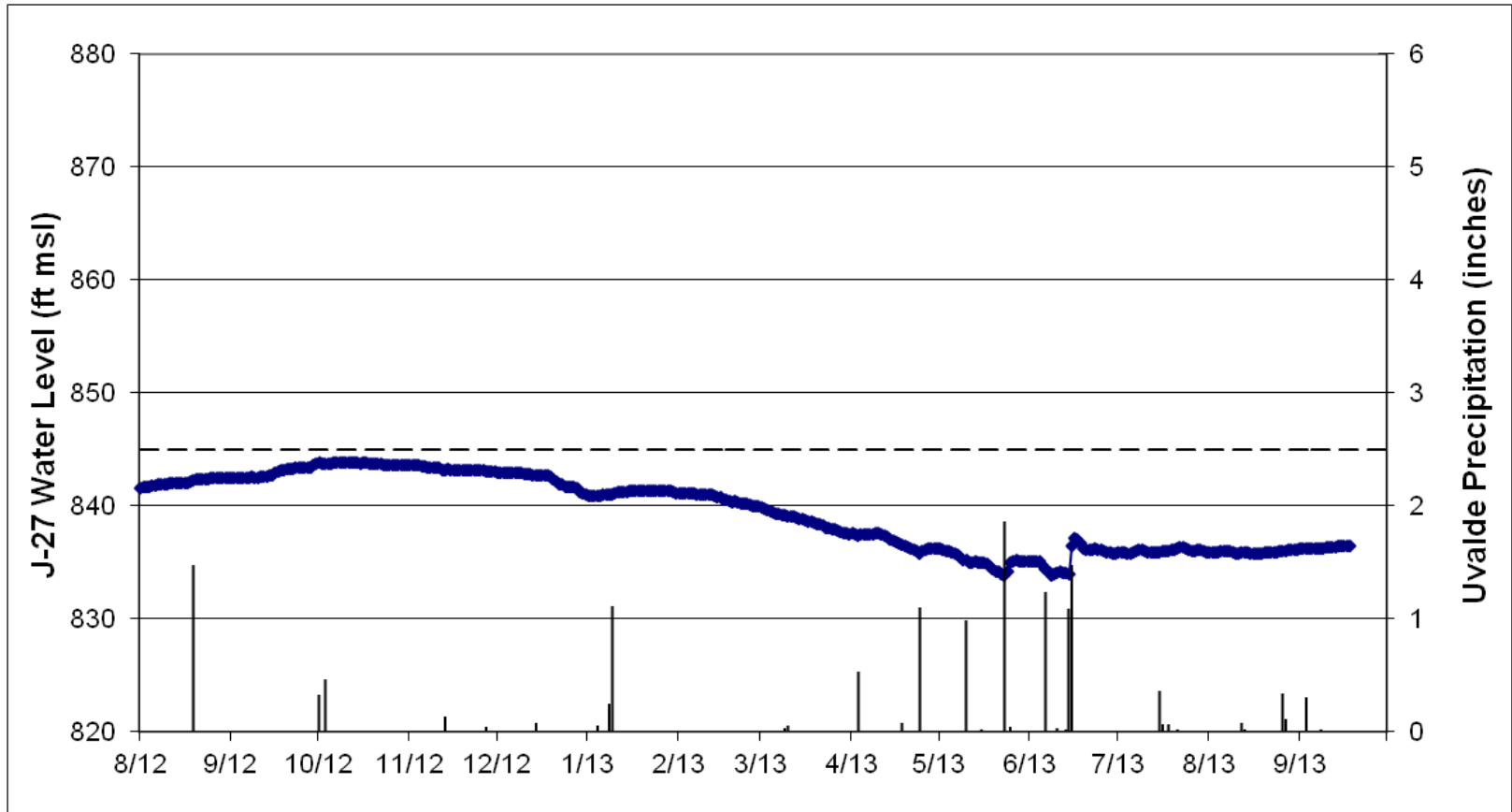
Comal Springs Discharge to Date (09-18-2013)



San Marcos Springs Discharge to Date (09-18-2013)



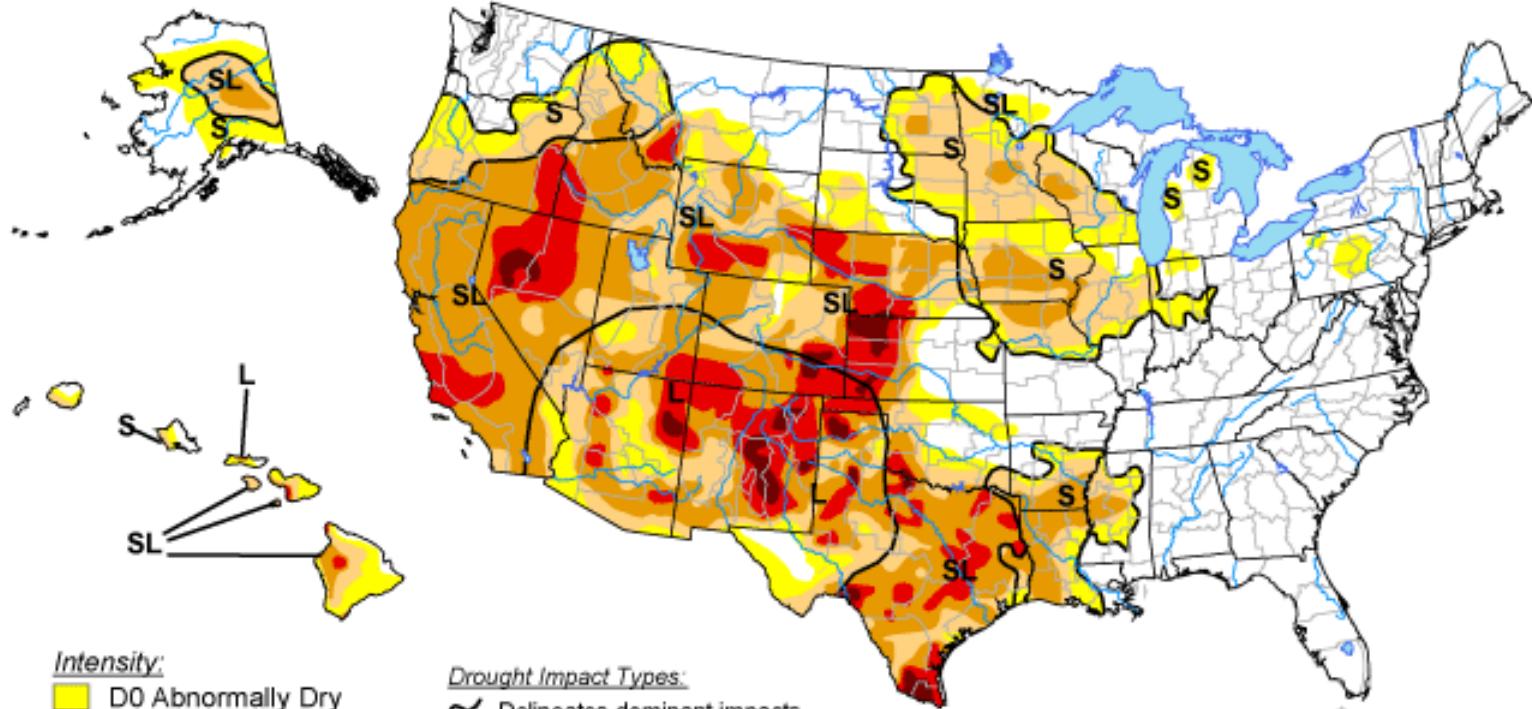
Well J-27 Water Level to Date (09-18-2013)








U.S. Drought Monitor

September 3, 2013


Valid 7 a.m. EDT



Intensity:

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

Drought Impact Types:

-  Delineates dominant impacts
- S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months (e.g. hydrology, ecology)

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

<http://droughtmonitor.unl.edu/>



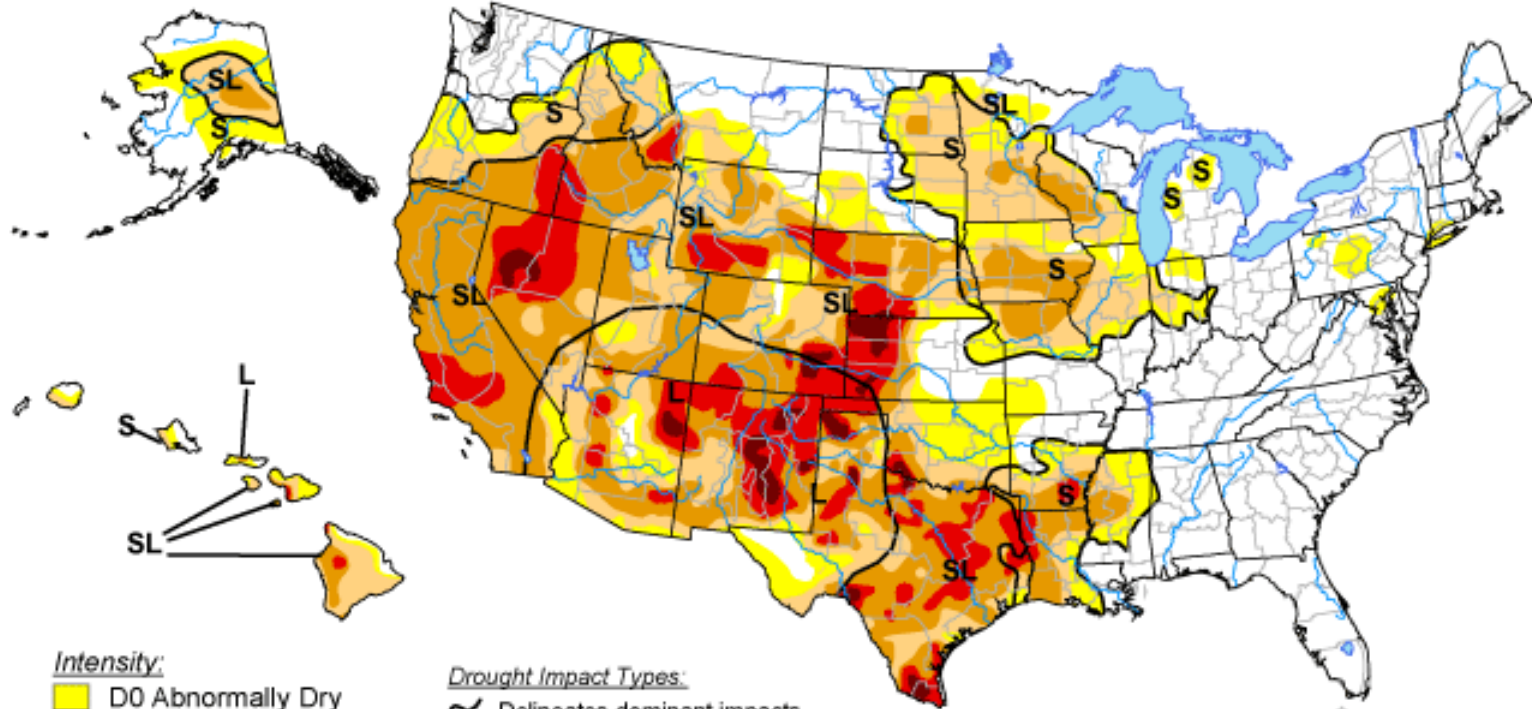
Released Thursday, September 5, 2013

Author: David Miskus, NOAA/NWS/NCEP/CPC






U.S. Drought Monitor

September 10, 2013


Valid 7 a.m. EDT



Intensity:

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

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

<http://droughtmonitor.unl.edu/>



Released Thursday, September 12, 2013

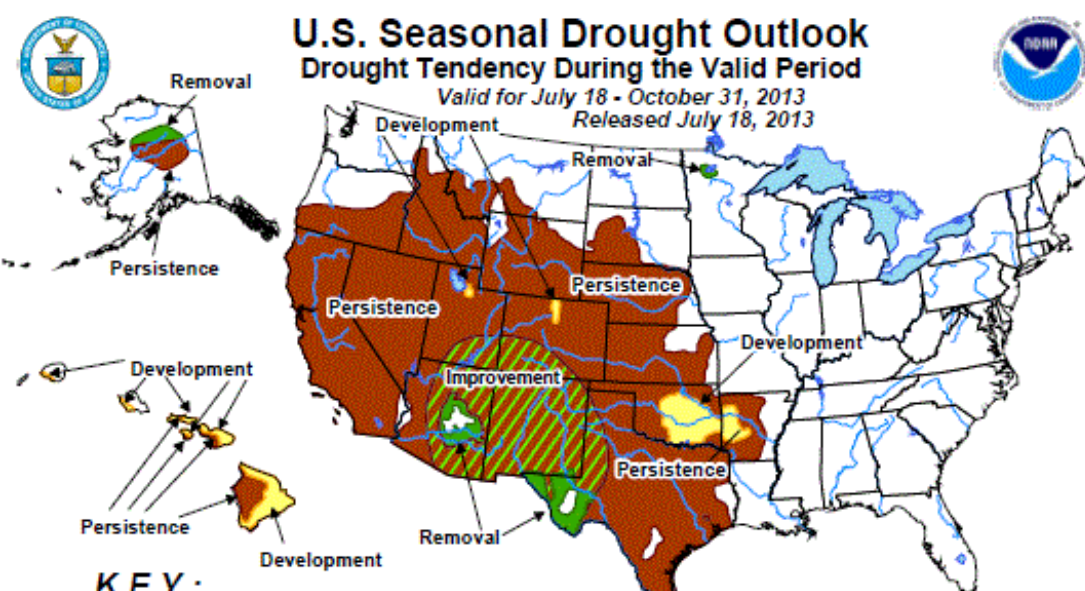
Author: Anthony Artusa, NOAA/NWS/NCEP/CPC

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for July 18 - October 31, 2013
Released July 18, 2013

July 18 – October 31

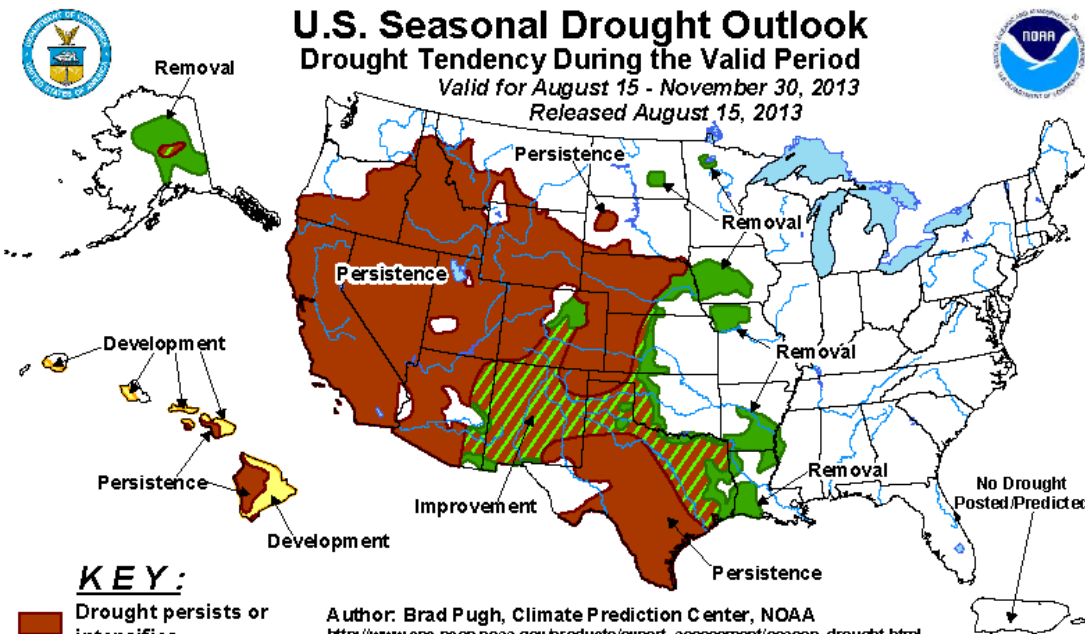


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for August 15 - November 30, 2013
Released August 15, 2013

August 15 – November 20



Seasonal Drought Outlook

Prediction: ENSO neutral

KEY:

- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

Author: Brad Pugh, Climate Prediction Center, NOAA
http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.html

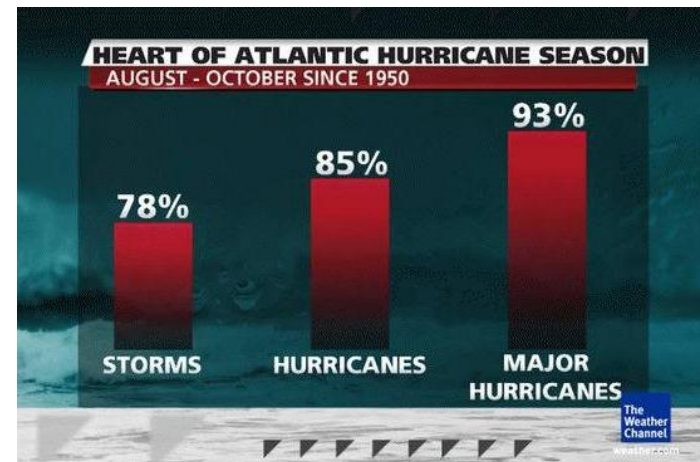
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor.

NOTE: The Green and Brown hatched areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The Green areas imply drought removal by the end of the period (D0 or none)

NOAA Atlantic Hurricane Season Outlook Update

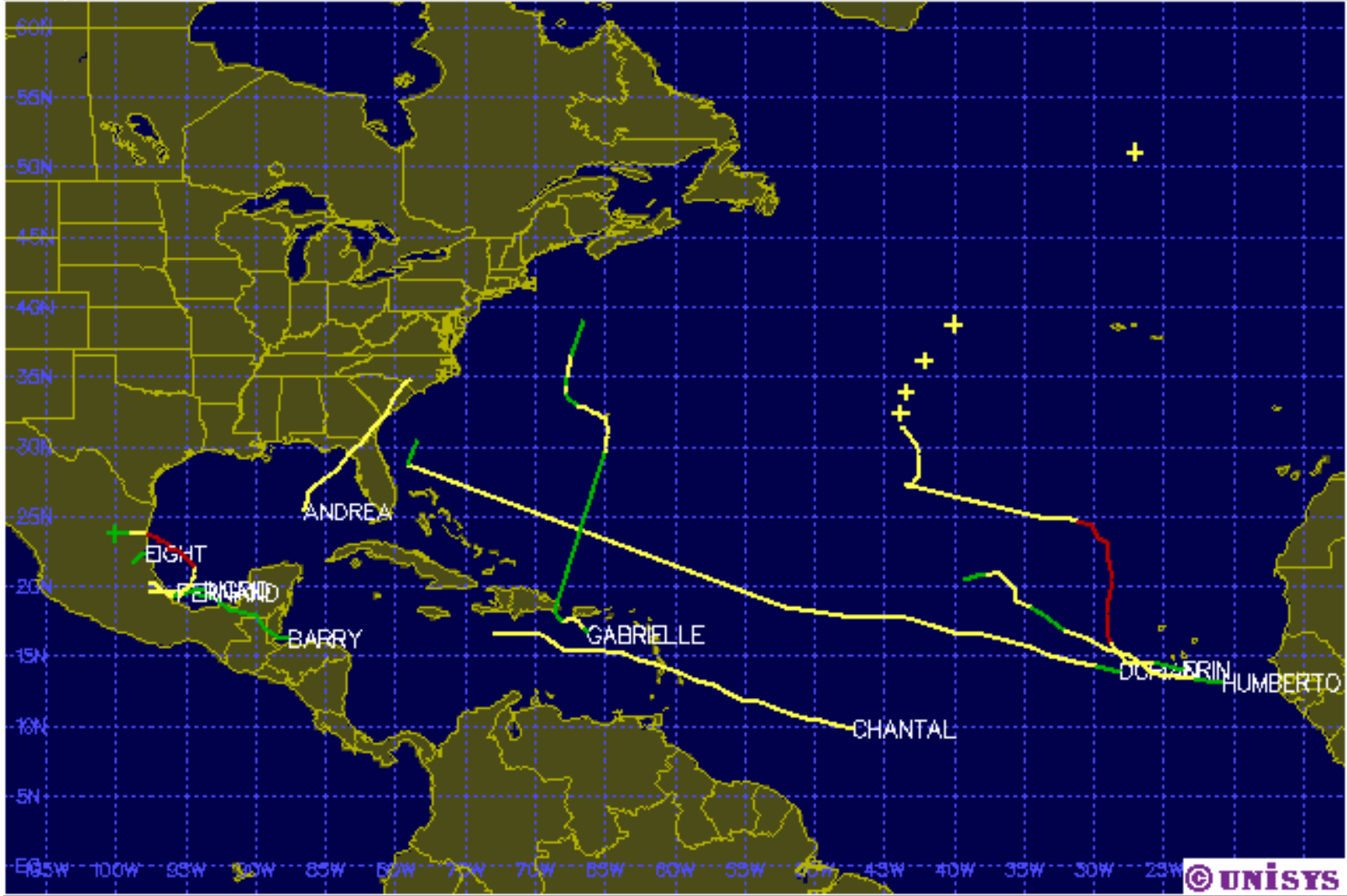
Issued August 8, 2013

- NOAA continues to call for a 70% chance for an above-normal season, possibly very active.
- Conditions are expected to persist throughout the peak months (August-October) of the hurricane season. Historical peak is August 30 to September 12.
- 70% probability for the following events for the entire 2013 Atlantic season:
 - 13-19 Named Storms (9 so far)
 - 6-9 Hurricanes
 - 3-5 Major Hurricanes
- Probability of landfall in Texas is 43% compared to 33% on average.
- ENSO-neutral is predicted through the Northern Hemisphere winter 2013-14, which is favorable for hurricane activity.
- "It's tough to make predictions, especially about the future". (Yogi Berra)



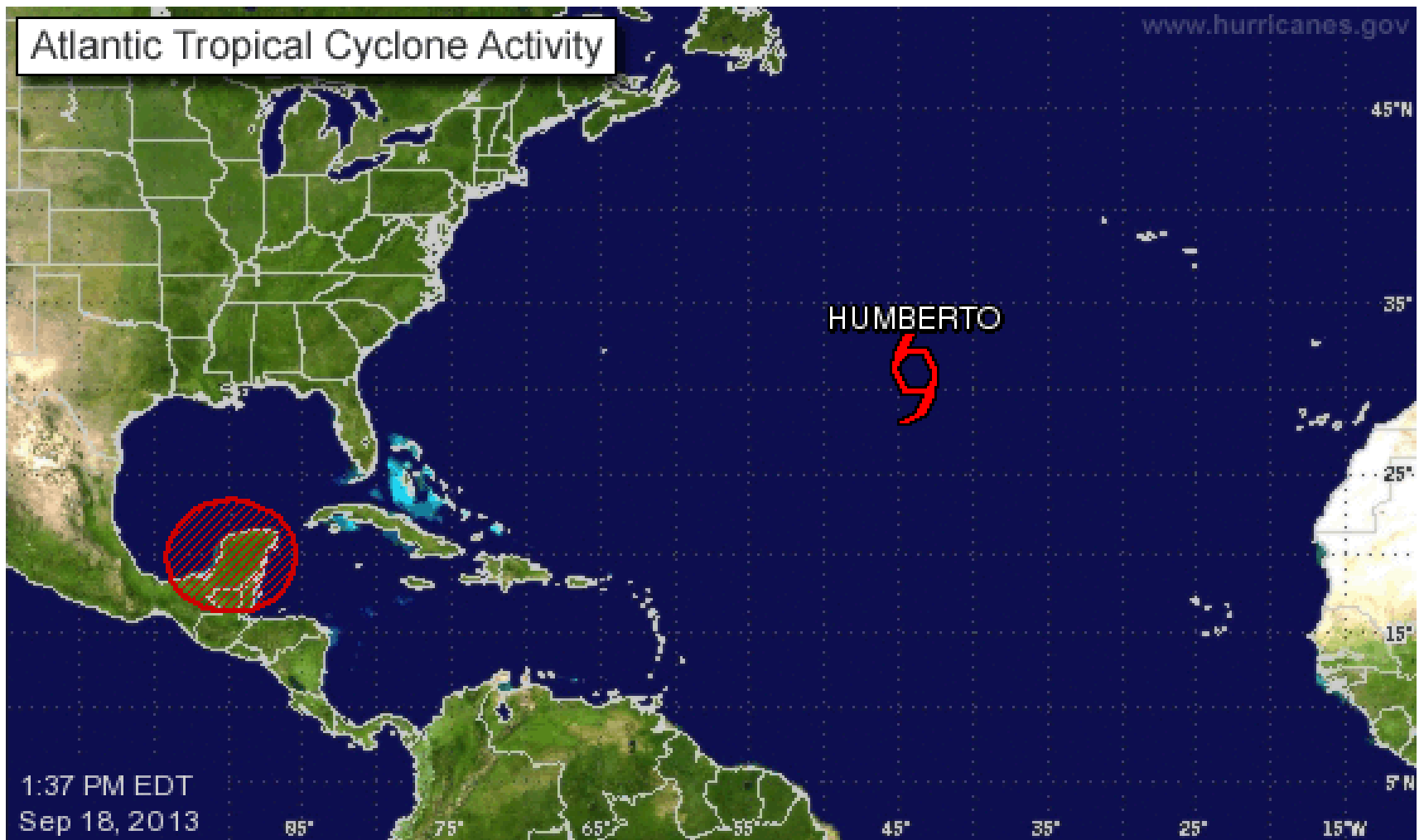
Tropical Storm Tracks

Year 2013



Atlantic Tropical Cyclone Activity

www.hurricanes.gov



1:37 PM EDT
Sep 18, 2013

48-hour formation potential: ■ Low <30% ■ Medium 30-50% ■ High >50%

Precipitation Totals Forecast Wednesday through Monday

