Drought Update

May 2015

Mark Wentzel
Surface Water Resources Division
Water Science and Conservation

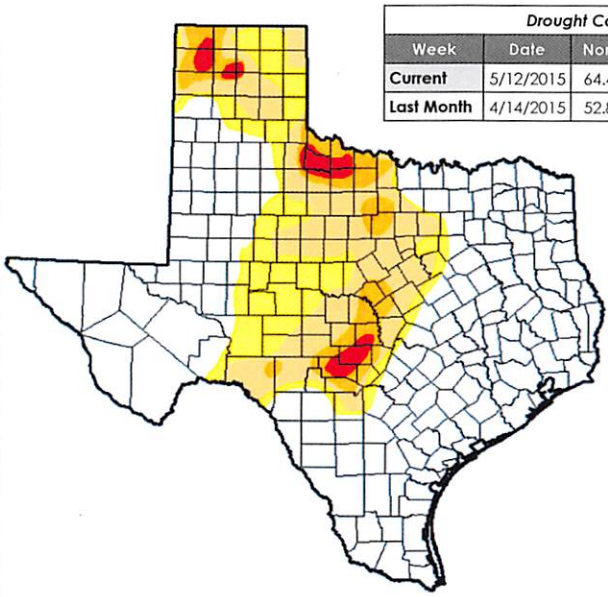
U.S. Drought Monitor

Texas

May 12, 2015
(Released Thursday, May. 14, 2015)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

Week	Date	None	D0	D1	D2	D3	D4
Current	5/12/2015	64.42	12.83	15.06	5.76	1.93	0.00
Last Month	4/14/2015	52.88	11.87	10.60	9.74	11.57	3.34



Intensity:

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

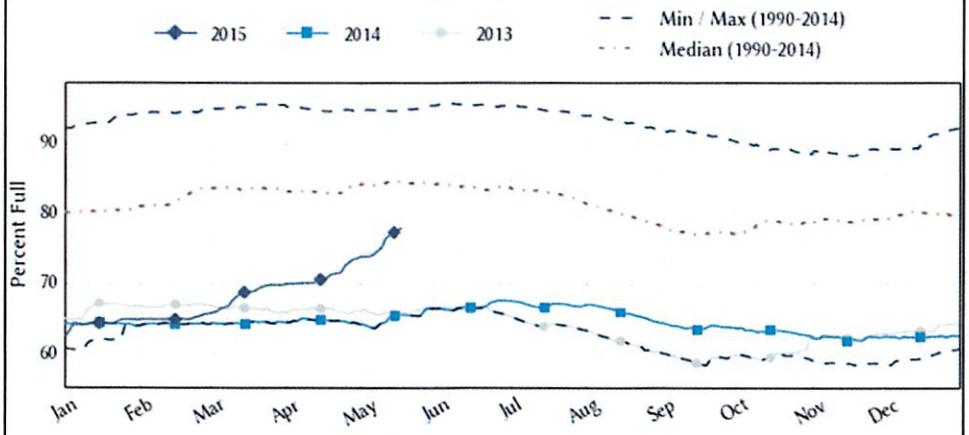
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Brian Fuchs
National Drought Mitigation Center

http://droughtmonitor.unl.edu/

RESERVOIR CONSERVATION STORAGE DATA

Storage for May 18, 2015: 24.6 Million acre-ft (78.0%)
Conservation capacity: 31.5 Million acre-ft



Water Data for Texas

Texas Water Development Board

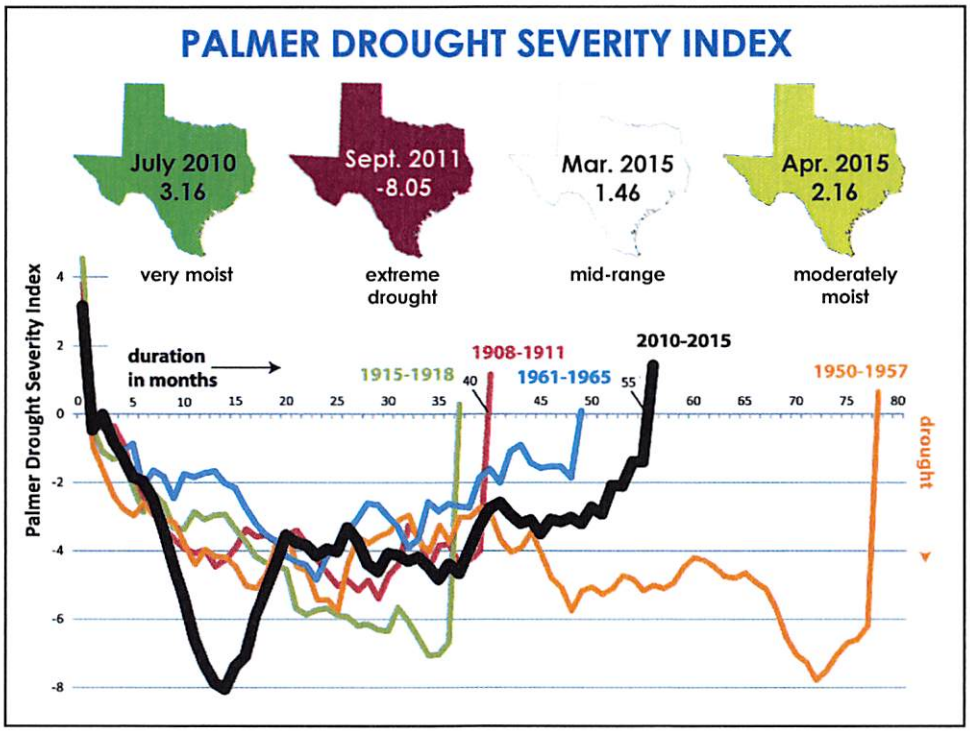
Q: Are we still in drought?

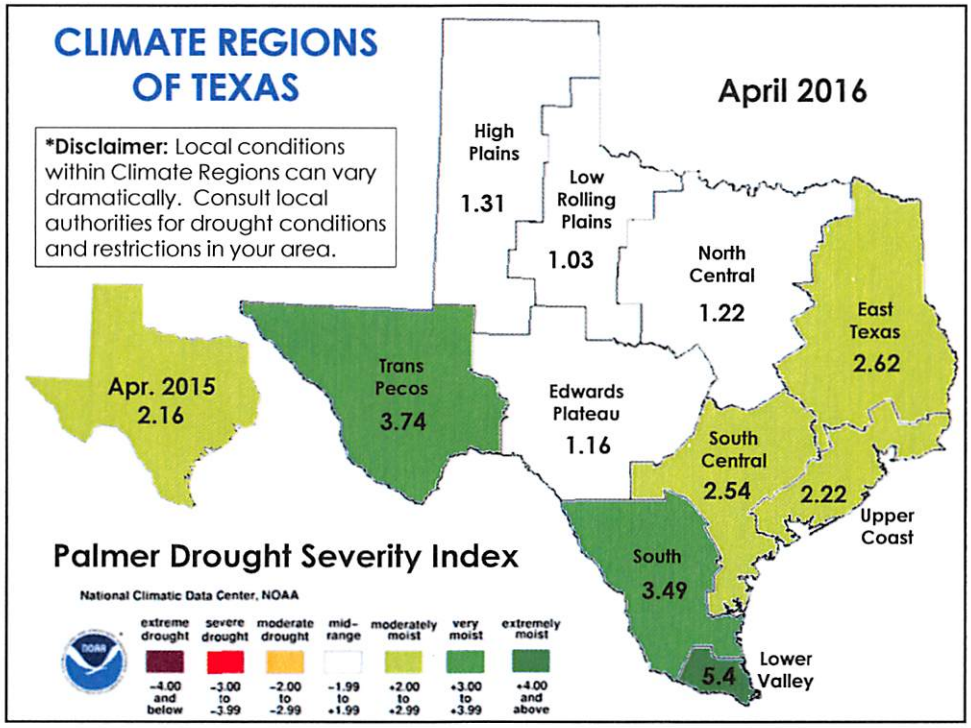
A: "It depends on what your definition of '~~is~~' is."
Former US President

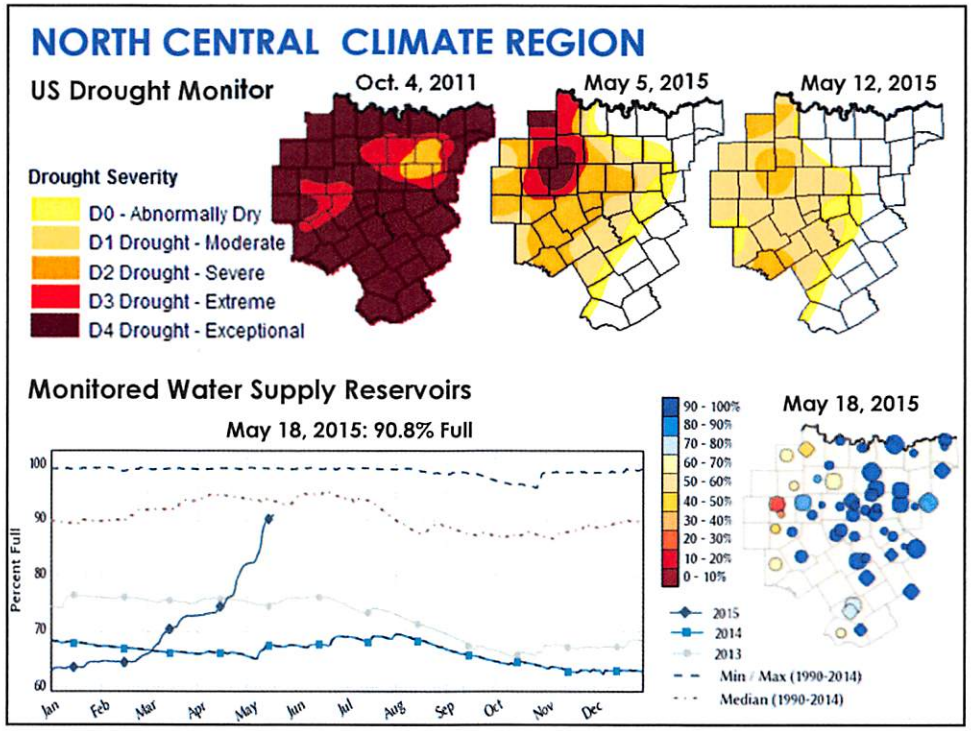
'drought'

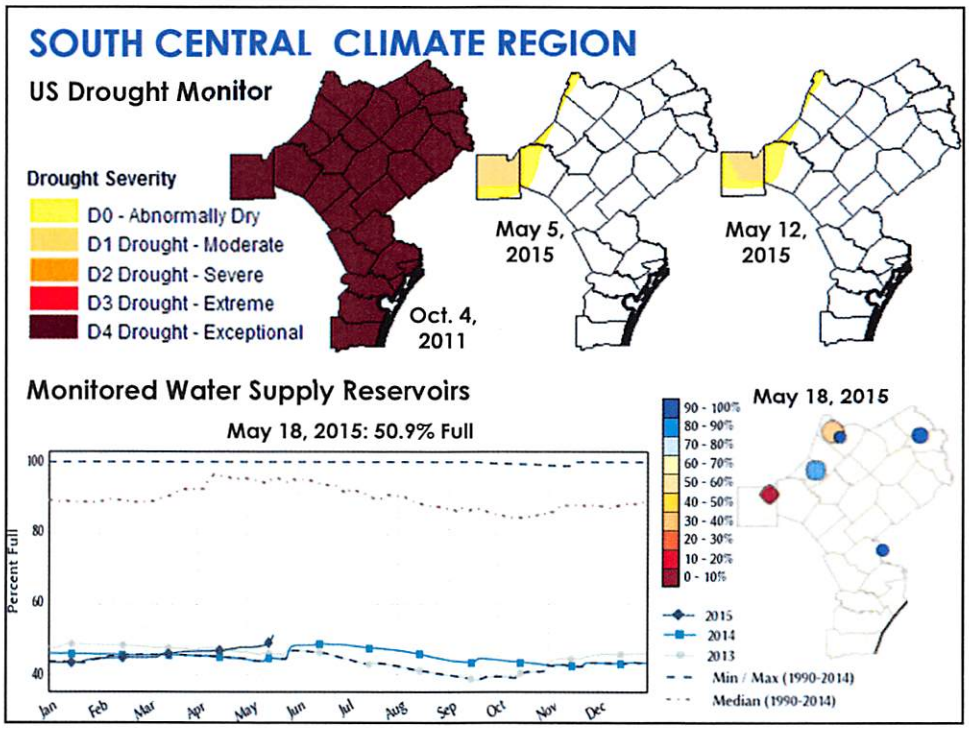
A: "Texas is no longer in drought,
but drought is still in Texas."
Texas State Climatologist

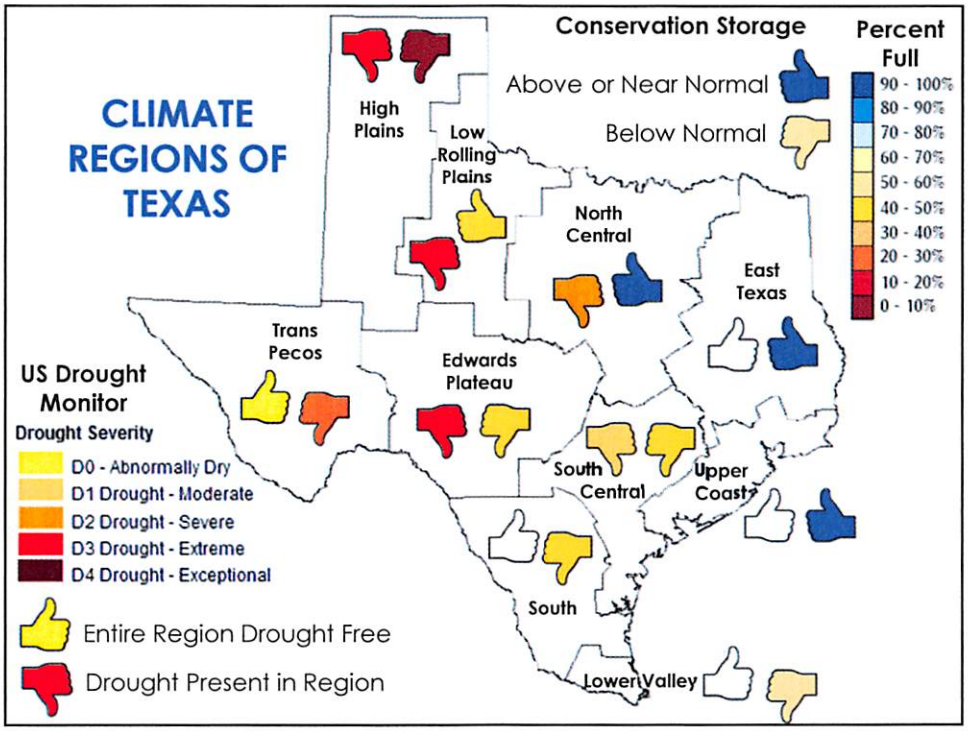
A: We are no longer in a state-wide drought,
but we still have localized drought conditions.

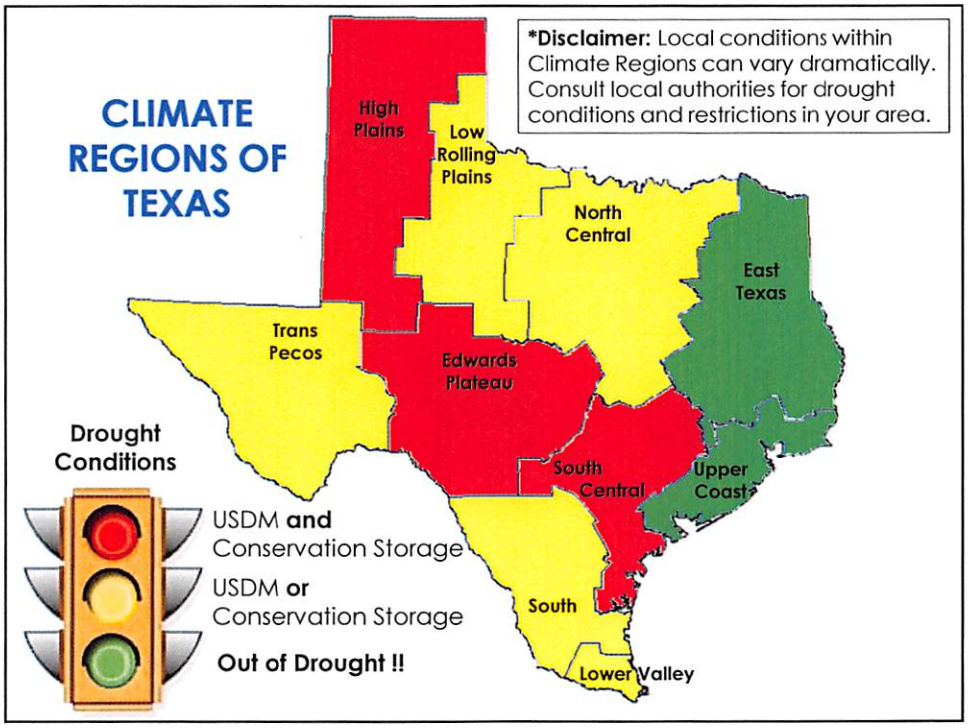

PALMER DROUGHT SEVERITY INDEX
July 2010
3.16
very moist
Sept. 2011
-8.05
extreme drought
Mar. 2015
1.46
mid-range
Apr. 2015
2.16
moderately moist
Palmer Drought Severity Index
duration in months
1915-1918
1908-1911
1961-1965
2010-2015
1950-1957
drought

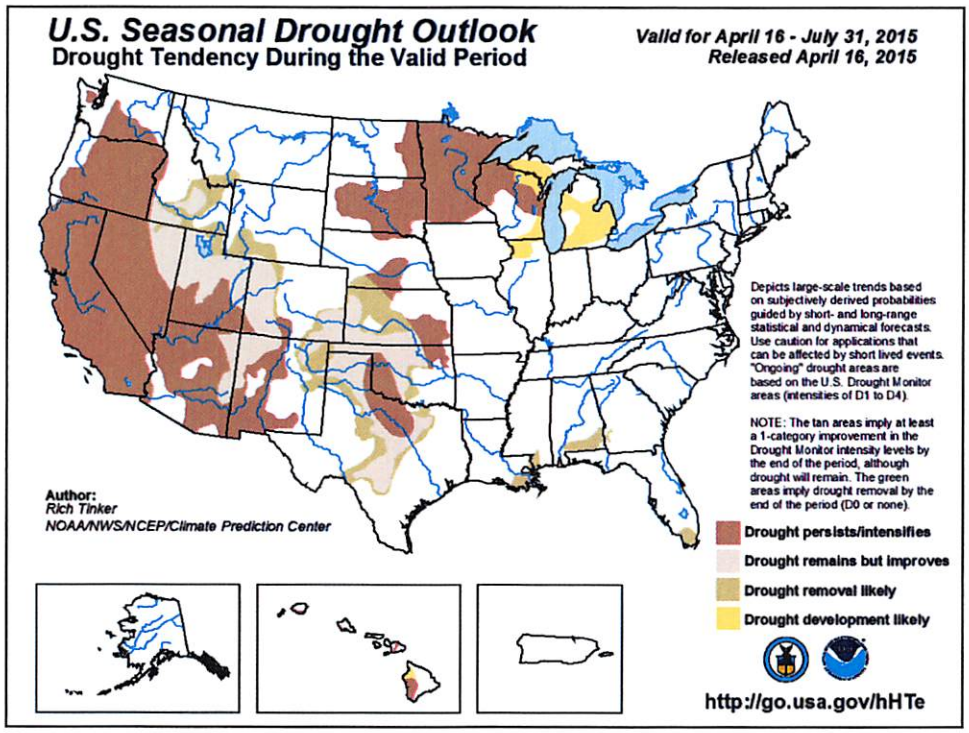

CLIMATE REGIONS OF TEXAS
April 2016
*Disclaimer: Local conditions within Climate Regions can vary dramatically. Consult local authorities for drought conditions and restrictions in your area.
High Plains
1.31
Low Rolling Plains
1.03
North Central
1.22
East Texas
2.62
Apr. 2015
2.16
Trans Pecos
3.74
Edwards Plateau
1.16
South Central
2.54
2.22
Upper Coast
South
3.49
5.4
Lower Valley
Palmer Drought Severity Index
National Climatic Data Center, NOAA
extreme drought
severe drought
moderate drought
mid-range
moderately moist
very moist
extremely moist
-4.00 and below
-3.00 to -3.99
-2.00 to -2.99
-1.99 to +1.99
+2.00 to +2.99
+3.00 to +3.99
+4.00 and above

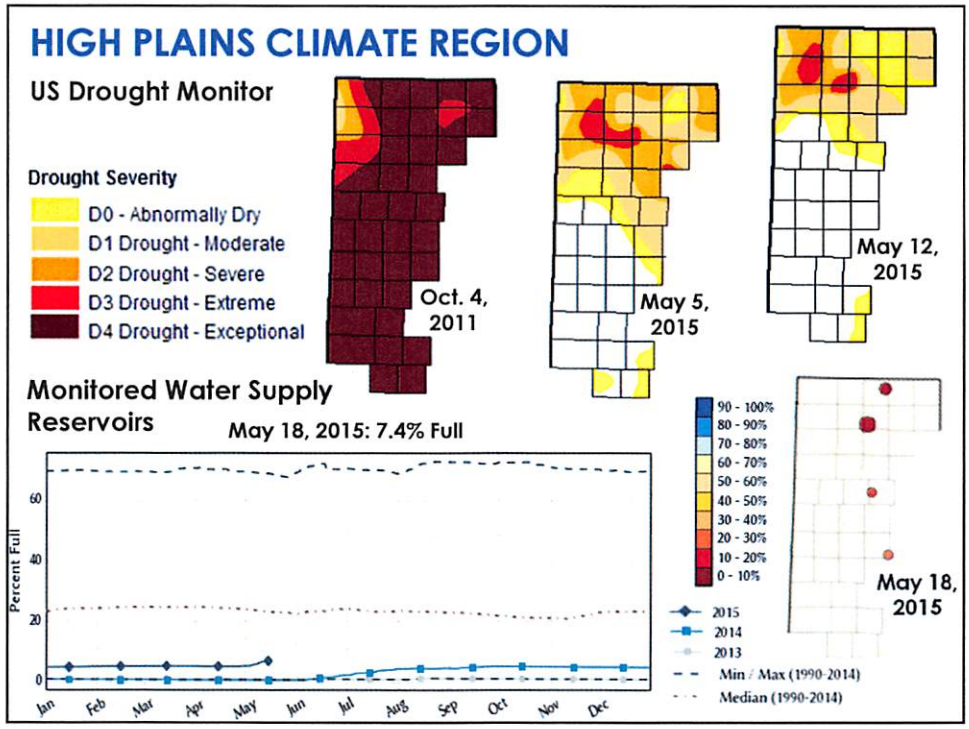

NORTH CENTRAL CLIMATE REGION
US Drought Monitor
Oct. 4, 2011
May 5, 2015
May 12, 2015
Drought Severity
D0 - Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Monitored Water Supply Reservoirs
May 18, 2015: 90.8% Full
Percent Full
100
90
80
70
60
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
May 18, 2015
90 - 100%
80 - 90%
70 - 80%
60 - 70%
50 - 60%
40 - 50%
30 - 40%
20 - 30%
10 - 20%
0 - 10%
2015
2014
2013
Min / Max (1990-2014)
Median (1990-2014)

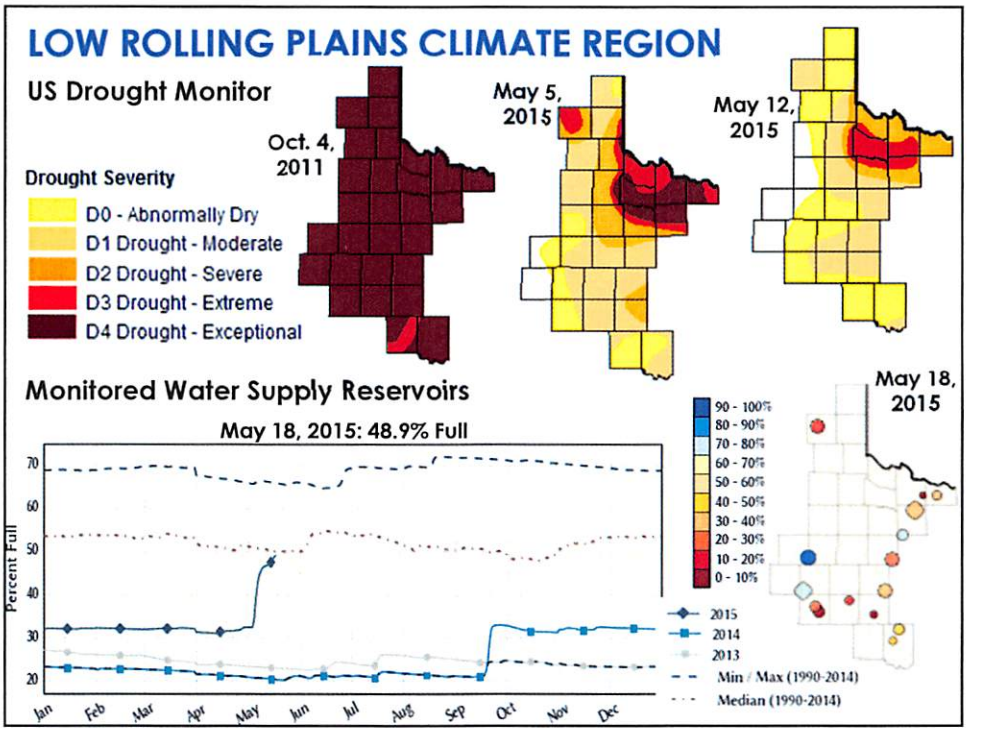

SOUTH CENTRAL CLIMATE REGION
US Drought Monitor
Drought Severity
D0 - Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Oct. 4, 2011
May 5, 2015
May 12, 2015
Monitored Water Supply Reservoirs
May 18, 2015: 50.9% Full
Percent Full
100
80
60
40
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
May 18, 2015
90 - 100%
80 - 90%
70 - 80%
60 - 70%
50 - 60%
40 - 50%
30 - 40%
20 - 30%
10 - 20%
0 - 10%
2015
2014
2013
Min / Max (1990-2014)
Median (1990-2014)

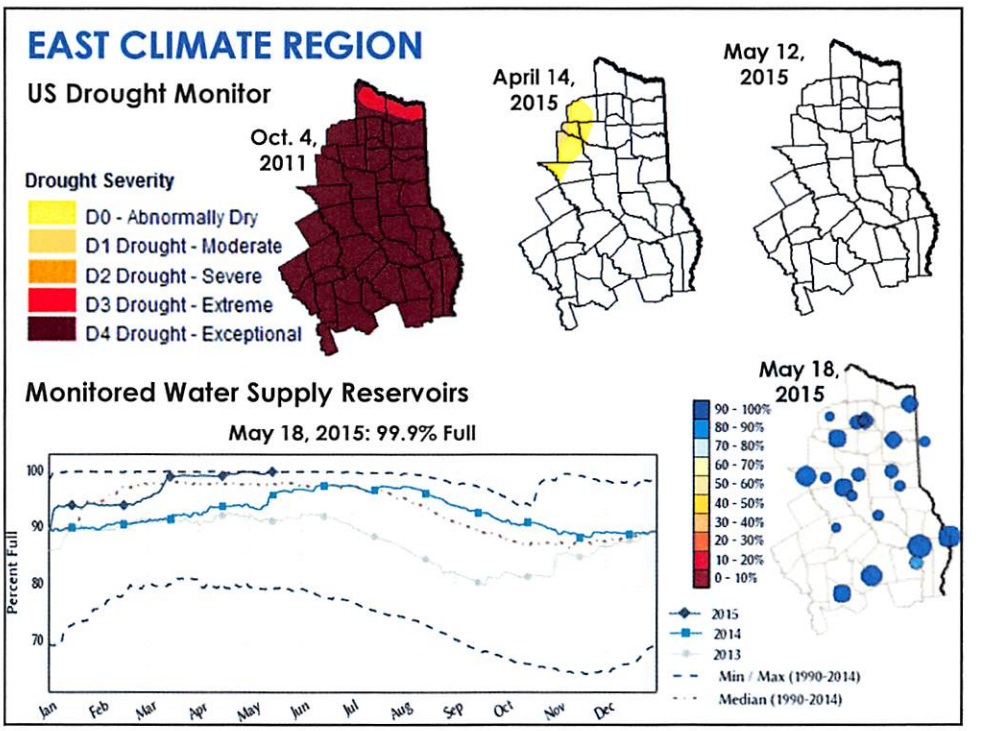

CLIMATE REGIONS OF TEXAS
Conservation Storage
Above or Near Normal
Below Normal
Percent Full
90 - 100%
80 - 90%
70 - 80%
60 - 70%
50 - 60%
40 - 50%
30 - 40%
20 - 30%
10 - 20%
0 - 10%
High Plains
Low Rolling Plains
North Central
East Texas
Trans Pecos
Edwards Plateau
South Central
Upper Coast
South
Lower Valley
US Drought Monitor
Drought Severity
D0 - Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Entire Region Drought Free
Drought Present in Region

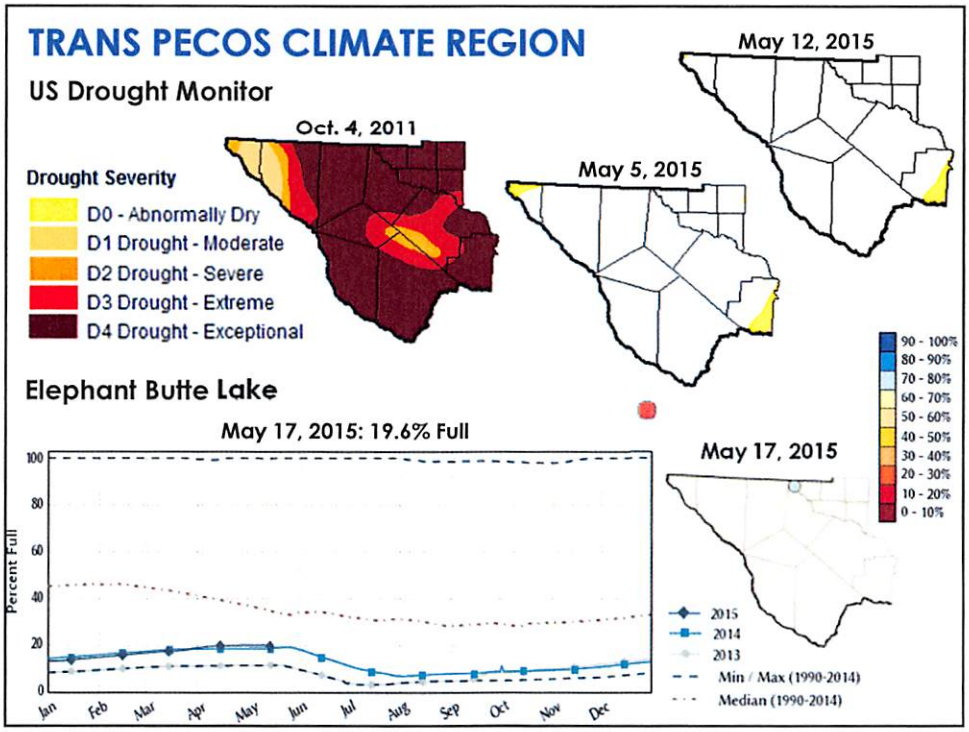

CLIMATE REGIONS OF TEXAS
*Disclaimer: Local conditions within Climate Regions can vary dramatically. Consult local authorities for drought conditions and restrictions in your area.
High Plains
Low Rolling Plains
North Central
East Texas
Trans Pecos
Edwards Plateau
South Central
Upper Coast
South
Lower Valley
Drought Conditions
USDM and Conservation Storage
USDM or Conservation Storage
Out of Drought !!

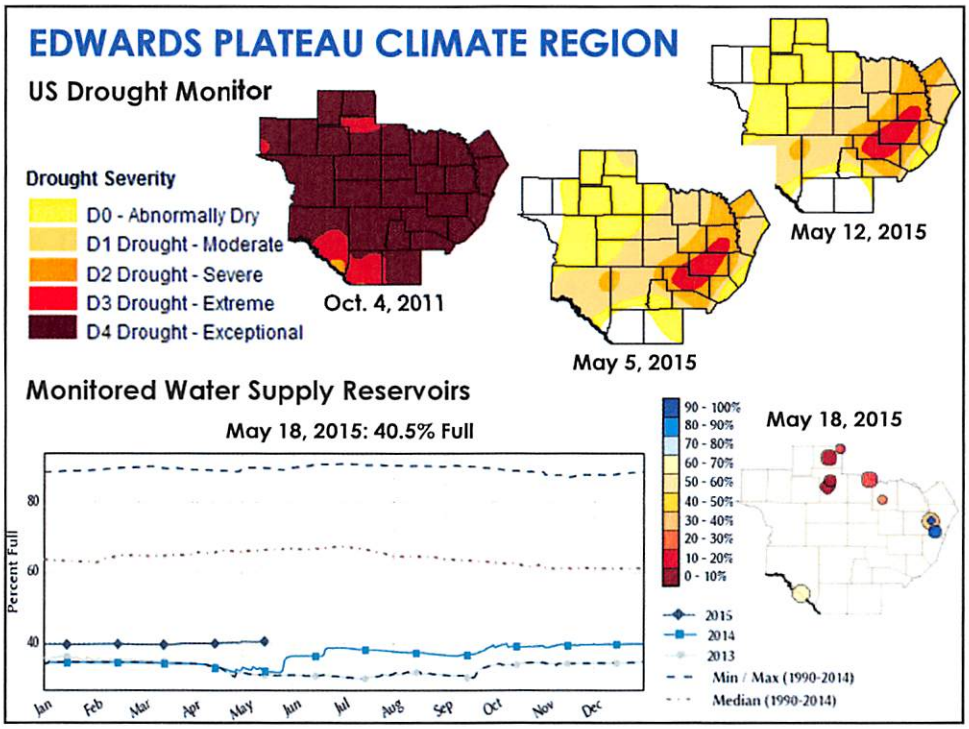

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for April 16 - July 31, 2015
Released April 16, 2015
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).
NOTE: The tan 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).
Author:
Rich Tinker
NOAA/NWS/NCEP/Climate Prediction Center
Drought persists/intensifies
Drought remains but improves
Drought removal likely
Drought development likely
http://go.usa.gov/hHTe

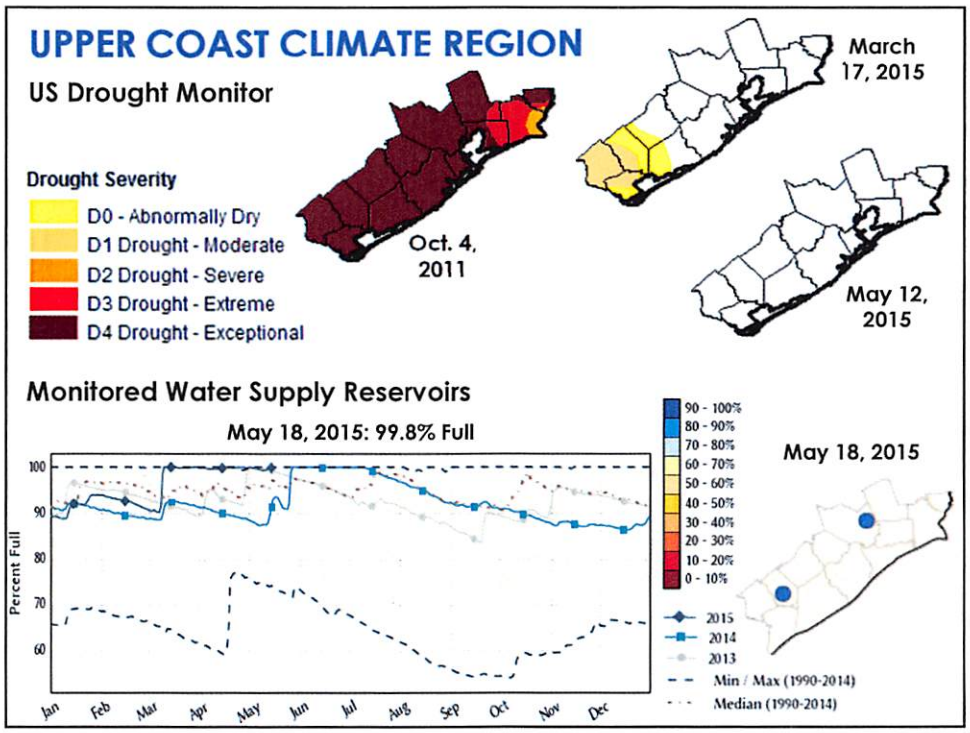

HIGH PLAINS CLIMATE REGION
US Drought Monitor
Drought Severity
D0 - Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Oct. 4, 2011
May 5, 2015
May 12, 2015
Monitored Water Supply Reservoirs
May 18, 2015: 7.4% Full
Percent Full
0
20
40
60
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
90 - 100%
80 - 90%
70 - 80%
60 - 70%
50 - 60%
40 - 50%
30 - 40%
20 - 30%
10 - 20%
0 - 10%
May 18, 2015
2015
2014
2013
Min / Max (1990-2014)
Median (1990-2014)

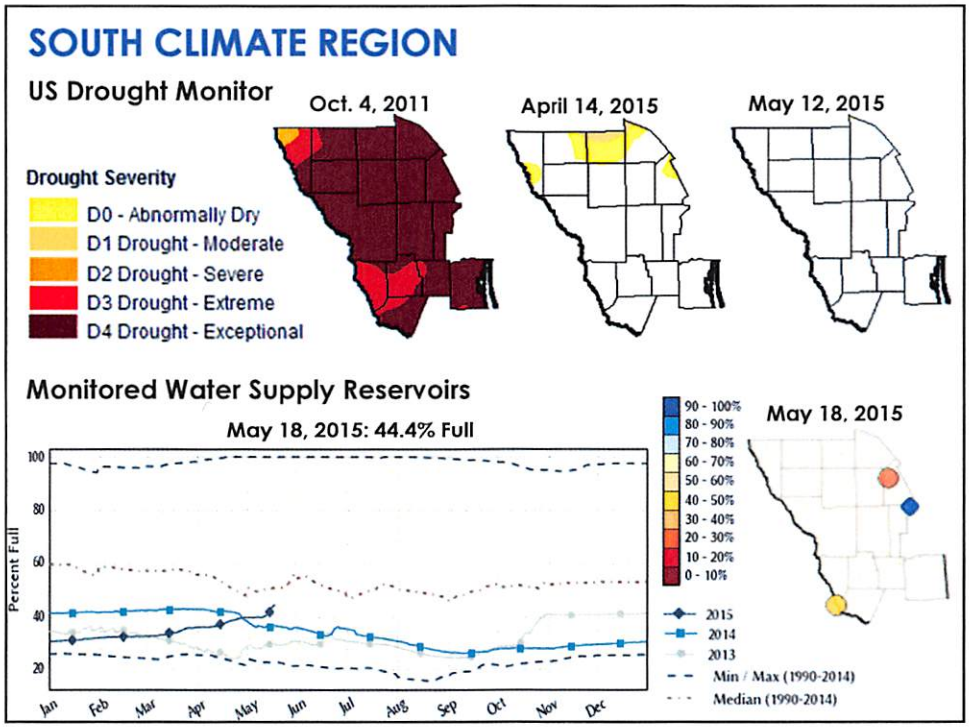

LOW ROLLING PLAINS CLIMATE REGION
US Drought Monitor
Oct. 4, 2011
May 5, 2015
May 12, 2015
Drought Severity
D0 - Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Monitored Water Supply Reservoirs
May 18, 2015: 48.9% Full
Percent Full
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
May 18, 2015
90 - 100%
80 - 90%
70 - 80%
60 - 70%
50 - 60%
40 - 50%
30 - 40%
20 - 30%
10 - 20%
0 - 10%
2015
2014
2013
Min / Max (1990-2014)
Median (1990-2014)

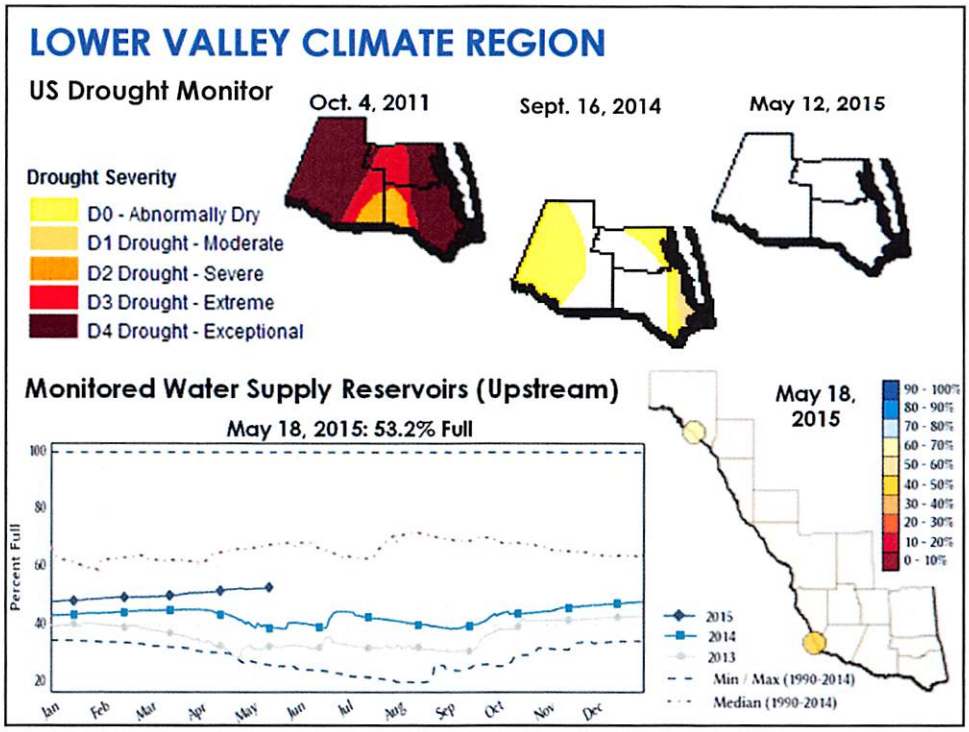

EAST CLIMATE REGION
US Drought Monitor
Oct. 4, 2011
April 14, 2015
May 12, 2015
Drought Severity
D0 - Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Monitored Water Supply Reservoirs
May 18, 2015: 99.9% Full
Percent Full
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
May 18, 2015
90 - 100%
80 - 90%
70 - 80%
60 - 70%
50 - 60%
40 - 50%
30 - 40%
20 - 30%
10 - 20%
0 - 10%
2015
2014
2013
Min / Max (1990-2014)
Median (1990-2014)


TRANS PECOS CLIMATE REGION
US Drought Monitor
Oct. 4, 2011
May 5, 2015
May 12, 2015
Drought Severity
D0 - Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Elephant Butte Lake
May 17, 2015: 19.6% Full
Percent Full
100
80
60
40
20
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
May 17, 2015
90 - 100%
80 - 90%
70 - 80%
60 - 70%
50 - 60%
40 - 50%
30 - 40%
20 - 30%
10 - 20%
0 - 10%
2015
2014
2013
Min / Max (1990-2014)
Median (1990-2014)


EDWARDS PLATEAU CLIMATE REGION
US Drought Monitor
Drought Severity
D0 - Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Oct. 4, 2011
May 5, 2015
May 12, 2015
Monitored Water Supply Reservoirs
May 18, 2015: 40.5% Full
Percent Full
80
60
40
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
90 - 100%
80 - 90%
70 - 80%
60 - 70%
50 - 60%
40 - 50%
30 - 40%
20 - 30%
10 - 20%
0 - 10%
May 18, 2015
2015
2014
2013
Min / Max (1990-2014)
Median (1990-2014)


UPPER COAST CLIMATE REGION
US Drought Monitor
Drought Severity
D0 - Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Oct. 4, 2011
March 17, 2015
May 12, 2015
Monitored Water Supply Reservoirs
May 18, 2015: 99.8% Full
Percent Full
100
90
80
70
60
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
90 - 100%
80 - 90%
70 - 80%
60 - 70%
50 - 60%
40 - 50%
30 - 40%
20 - 30%
10 - 20%
0 - 10%
May 18, 2015
2015
2014
2013
Min / Max (1990-2014)
Median (1990-2014)


SOUTH CLIMATE REGION
US Drought Monitor
Oct. 4, 2011
April 14, 2015
May 12, 2015
Drought Severity
D0 - Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Monitored Water Supply Reservoirs
May 18, 2015: 44.4% Full
Percent Full
100
80
60
40
20
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
90 - 100%
80 - 90%
70 - 80%
60 - 70%
50 - 60%
40 - 50%
30 - 40%
20 - 30%
10 - 20%
0 - 10%
May 18, 2015
2015
2014
2013
Min / Max (1990-2014)
Median (1990-2014)


LOWER VALLEY CLIMATE REGION
US Drought Monitor
Oct. 4, 2011
Sept. 16, 2014
May 12, 2015
Drought Severity
D0 - Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Monitored Water Supply Reservoirs (Upstream)
May 18, 2015: 53.2% Full
Percent Full
100
80
60
40
20
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2015
2014
2013
Min / Max (1990-2014)
Median (1990-2014)
May 18, 2015
90 - 100%
80 - 90%
70 - 80%
60 - 70%
50 - 60%
40 - 50%
30 - 40%
20 - 30%
10 - 20%
0 - 10%