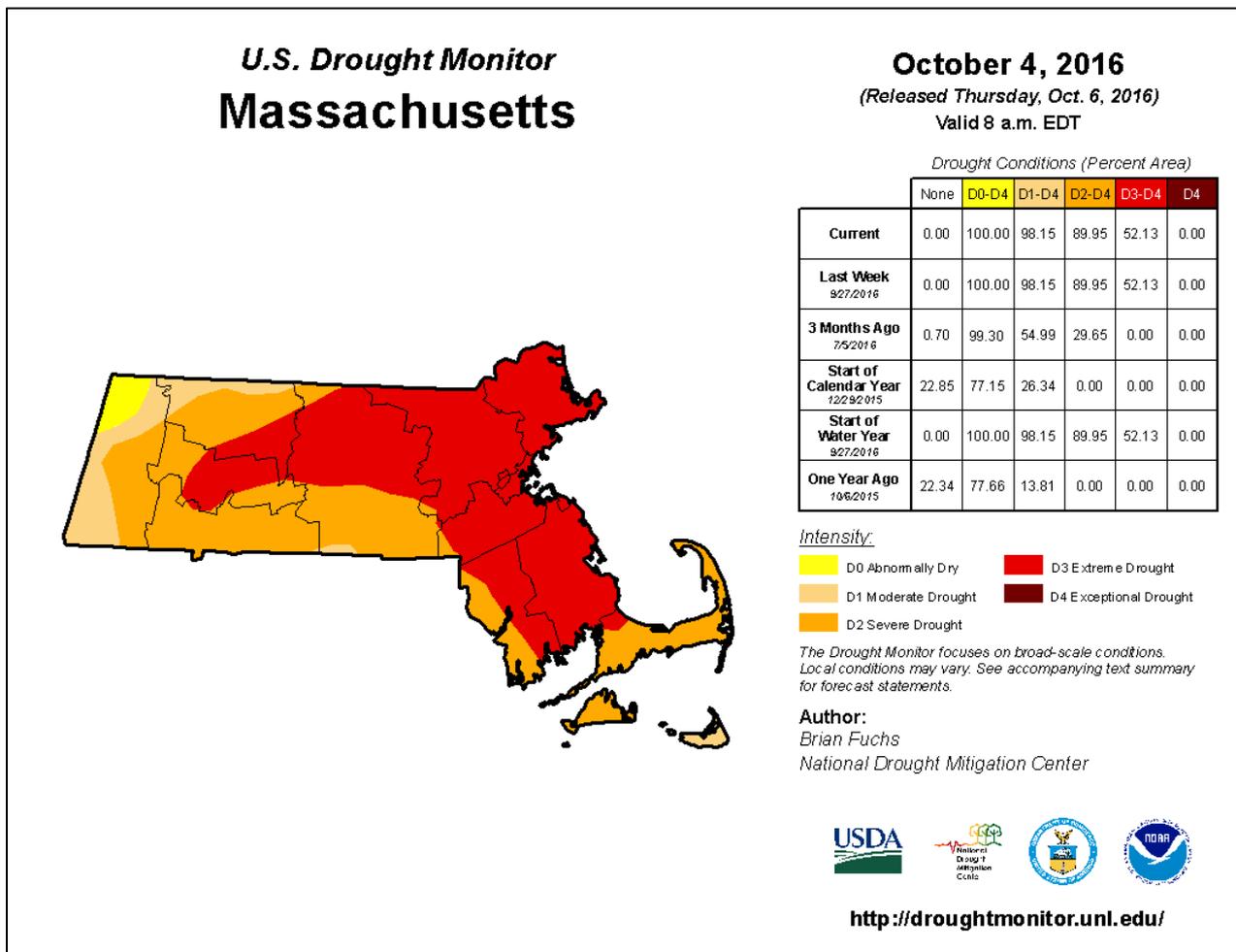


Northeast Drought Outlook Forum

Brad Rippey, USDA Meteorologist, Washington, D.C.

U.S. Drought Monitor Overview – Elements & Impact Tracking



**University of Massachusetts at Boston
Boston, Massachusetts, October 11, 2016**

U.S. Drought Monitor Facts

- Assembled weekly by one of a dozen authors.
- Assisted by more than 400 regional and state experts, some of whom are in the room.
- Authors look at several dozen weather (and related) variables, ranked historically, in making the weekly drought assessment for each area.
- Other (e.g. public) drought information can be submitted by various channels, including the Drought Impact Reporter and CoCoRaHS.

Contact Information

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Maps And Data

Supplemental Info

About USDM

USDM News

United States Drought Monitor

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General Contact Information

Please let us know what you do and don't like about this web site, as well as your ideas about how it could be more useful to you. Contact us:

DroughtMonitor@unl.edu

The Drought Monitor
National Drought Mitigation Center
P.O. Box 830988
Lincoln, NE 68583-0988
402-472-6707 - voice
402-472-2946 - fax

U.S. Drought Monitor Authors

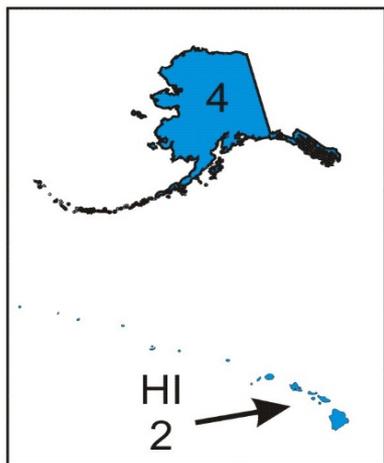
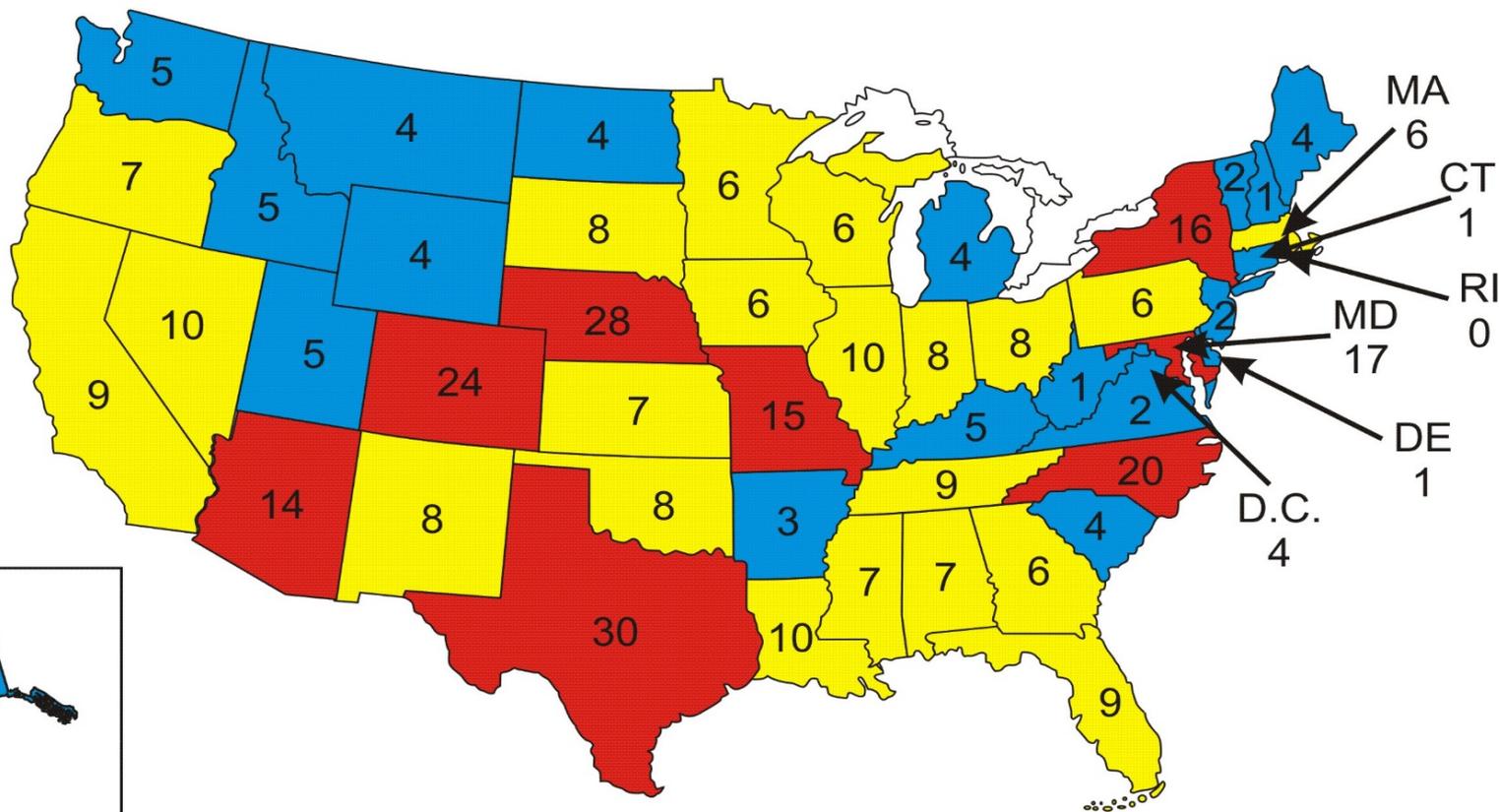
For more information about the U.S. Drought Monitor map, please contact:

- [Anthony Artusa](#), National Oceanic and Atmospheric Administration, (301) 683-3408
- [Deborah Bathke](#), National Drought Mitigation Center, (402) 472-6199
- [Jessica Blunden](#), National Centers for Environmental Information, (828) 271-4620
- [Chris Fenimore](#), National Centers for Environmental Information, (828) 271-4146
- [Brian Fuchs](#), National Drought Mitigation Center, (402) 472-6775
- [Richard Heim](#), National Centers for Environmental Information, (828) 271-4682
- [Eric Luebehusen](#), U.S. Department of Agriculture, (202) 720-3361
- [David Miskus](#), National Oceanic and Atmospheric Administration, (301) 683-3453
- [Brad Rippey](#), U.S. Department of Agriculture, (202) 720-2397
- [Matthew Rosencrans](#), Climate Prediction Center, (301) 683-3413
- [David Simeral](#), Western Regional Climate Center, (775) 674-7132
- [Mark Svoboda](#), National Drought Mitigation Center, (402) 472-8238
- [Richard Tinker](#), Climate Prediction Center, (301) 683-3411

<http://droughtmonitor.unl.edu/AboutUSDM/ContactUs.aspx>

USDM Listserve Subscribers

(as of August 24, 2016)

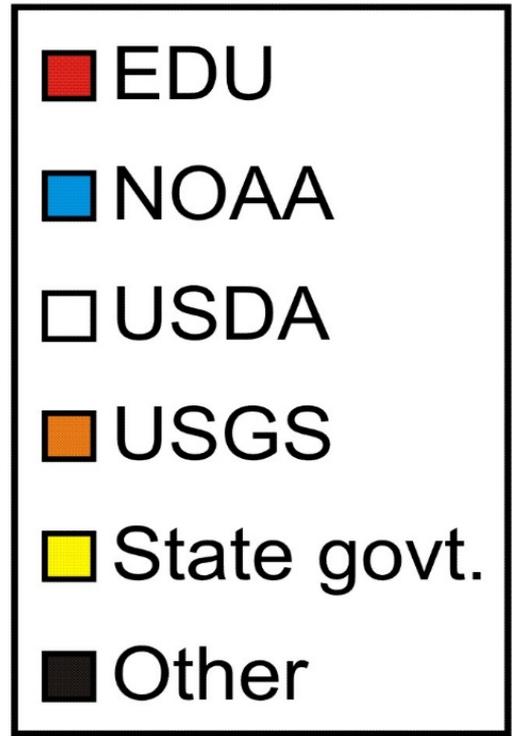
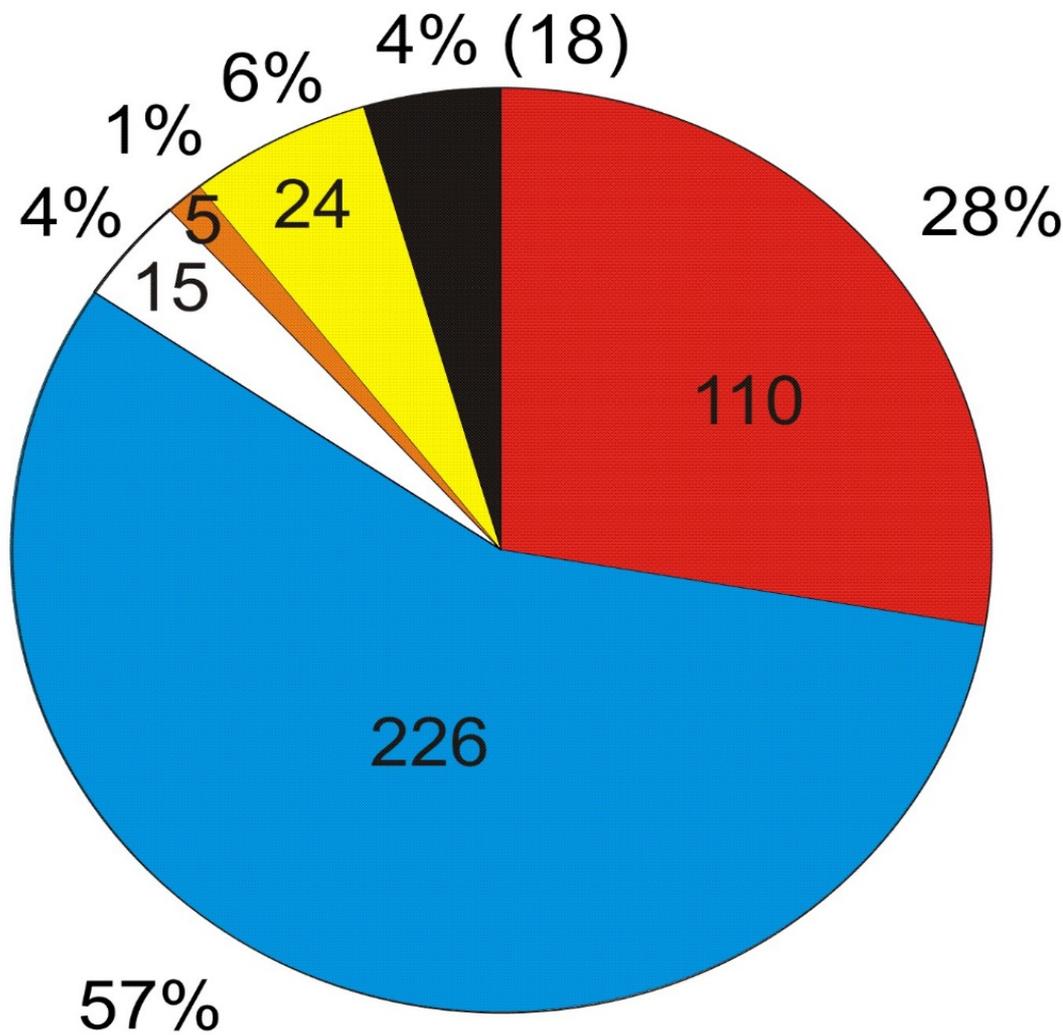


- 1-5 participants
- 6-10 participants
- 11+ participants

Total: 394 (does not include 2 participants from Canada and 2 participants from Brazil)

USDM Listserve Subscribers

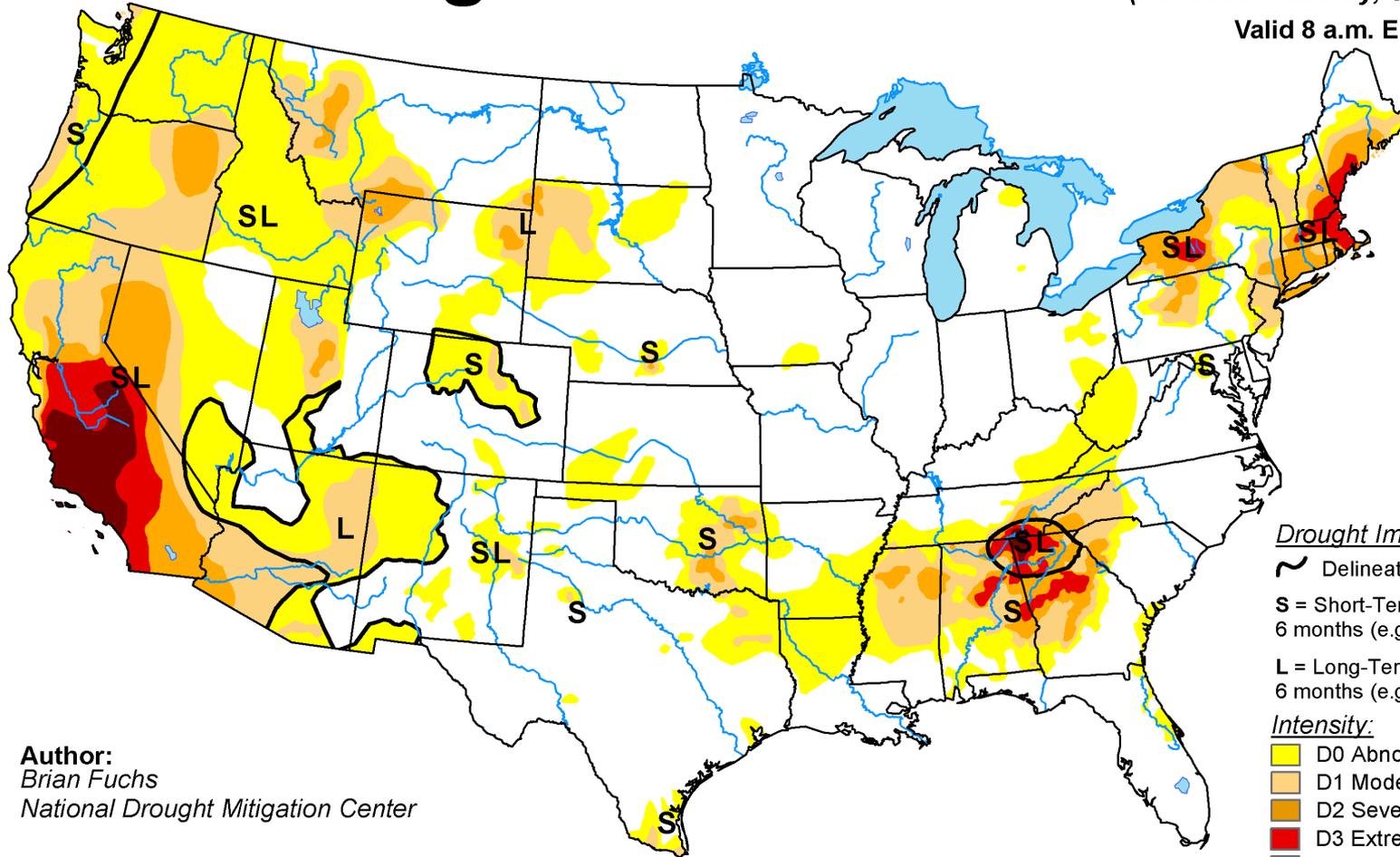
(as of August 24, 2016)



U.S. Drought Monitor

October 4, 2016
(Released Thursday, Oct. 6, 2016)

Valid 8 a.m. EDT



Author:
Brian Fuchs
National Drought Mitigation Center

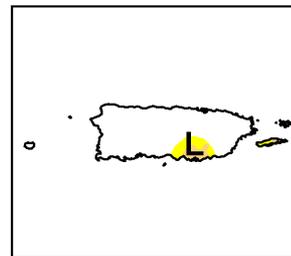
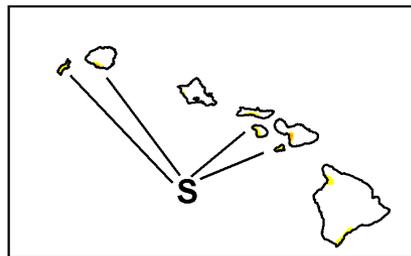
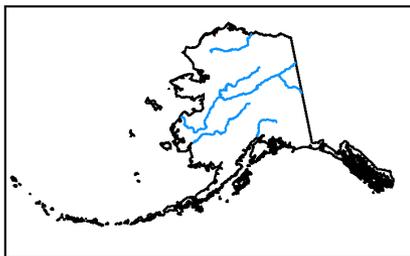
Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- Yellow: D0 Abnormally Dry
- Light Orange: D1 Moderate Drought
- Dark Orange: D2 Severe Drought
- Red: D3 Extreme Drought
- Dark Red: D4 Exceptional Drought

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



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

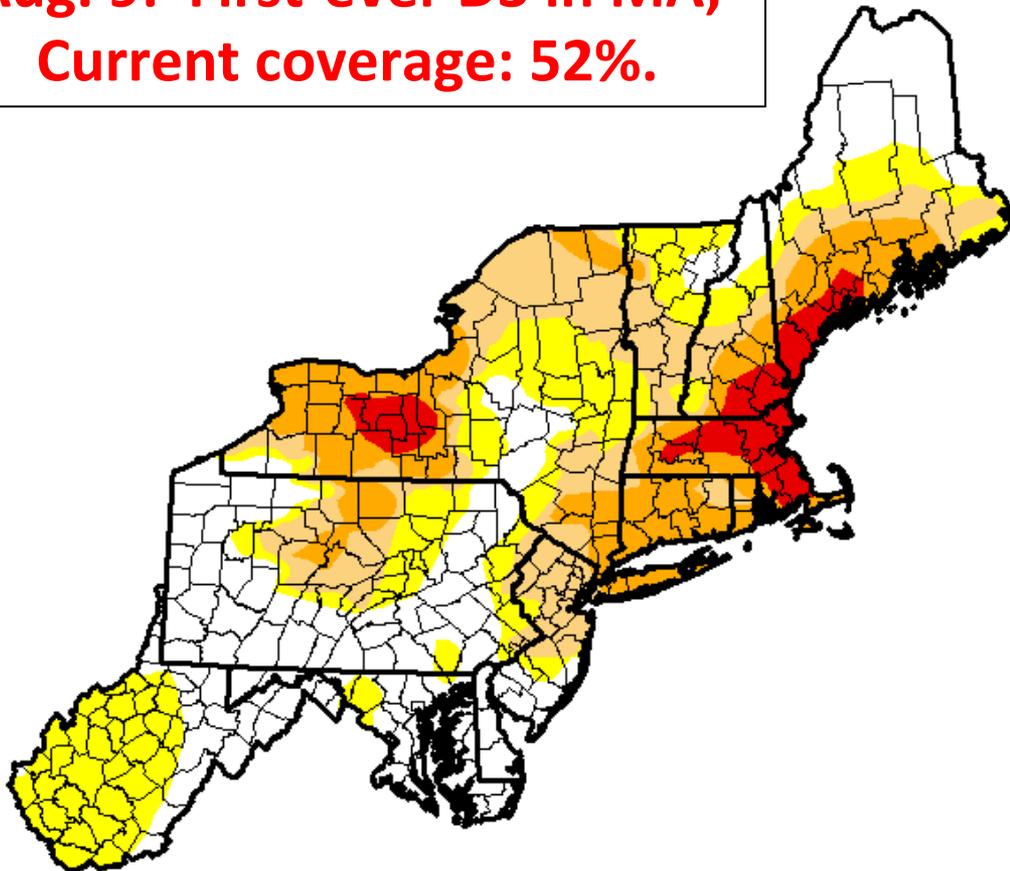
U.S. Drought Monitor Northeast

October 4, 2016

(Released Thursday, Oct. 6, 2016)

Valid 8 a.m. EDT

**Aug. 9: First-ever D3 in MA;
Current coverage: 52%.**



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	34.88	65.12	40.99	21.98	5.61	0.00
Last Week 9/27/2016	21.72	78.28	40.32	19.59	6.68	0.00
3 Months Ago 7/5/2016	34.35	65.65	20.82	1.82	0.00	0.00
Start of Calendar Year 1/22/2015	62.10	37.90	6.60	0.00	0.00	0.00
Start of Water Year 9/27/2016	21.72	78.28	40.32	19.59	6.68	0.00
One Year Ago 10/6/2015	71.27	28.73	5.78	0.00	0.00	0.00

Intensity:



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

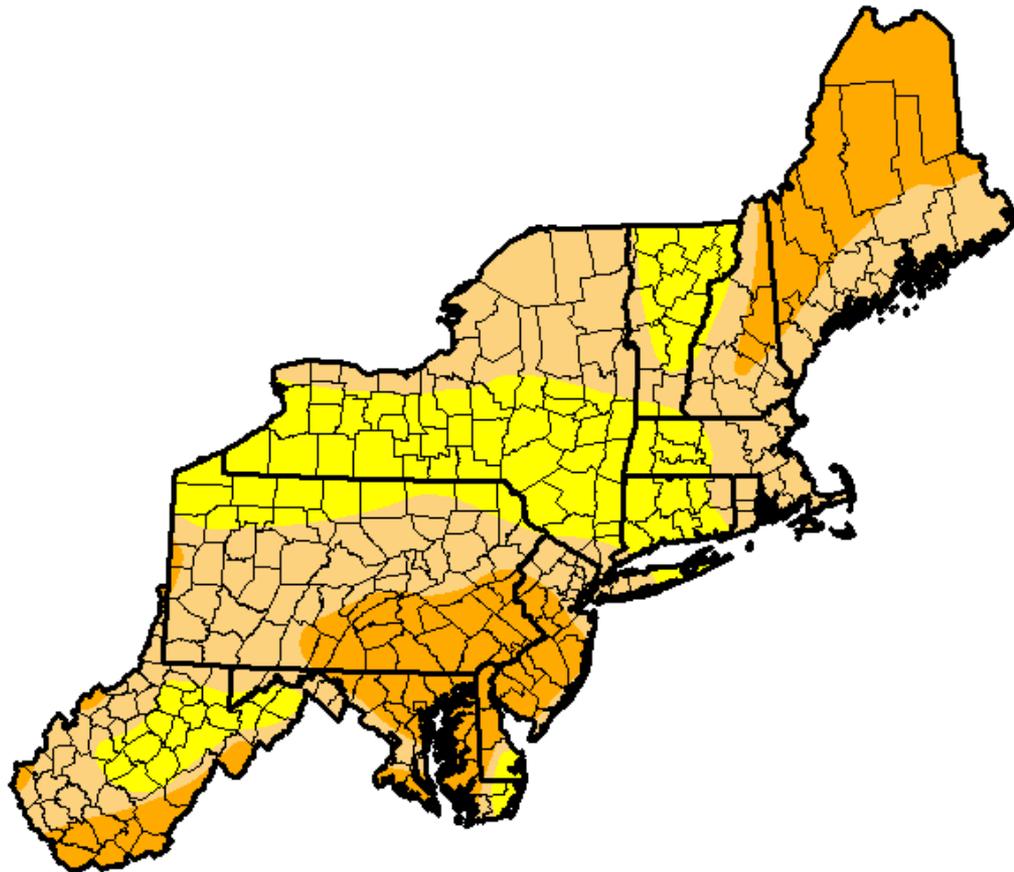


41% of Northeast in Drought

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

U.S. Drought Monitor Northeast

September 10, 2002
(Released Thursday, Sep. 12, 2002)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

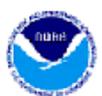
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	70.46	26.61	0.00	0.00
Last Week 9/3/2002	12.33	87.67	42.15	17.96	0.00	0.00
3 Months Ago 6/11/2002	62.20	37.80	14.41	3.55	0.00	0.00
Start of Calendar Year 1/1/2002	22.26	77.74	51.46	26.77	9.35	0.00
Start of Water Year 9/25/2001	45.60	54.40	30.32	12.85	0.00	0.00
One Year Ago 9/11/2001	84.11	15.89	4.18	0.61	0.00	0.00

Intensity:



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

Author:
Douglas Le Comte
CPC/NOAA



70% of Northeast in Drought

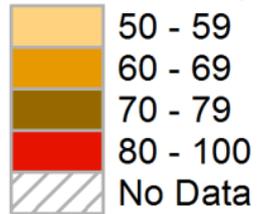
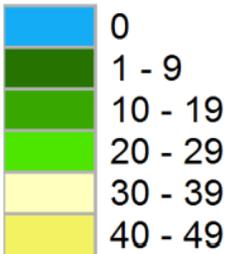
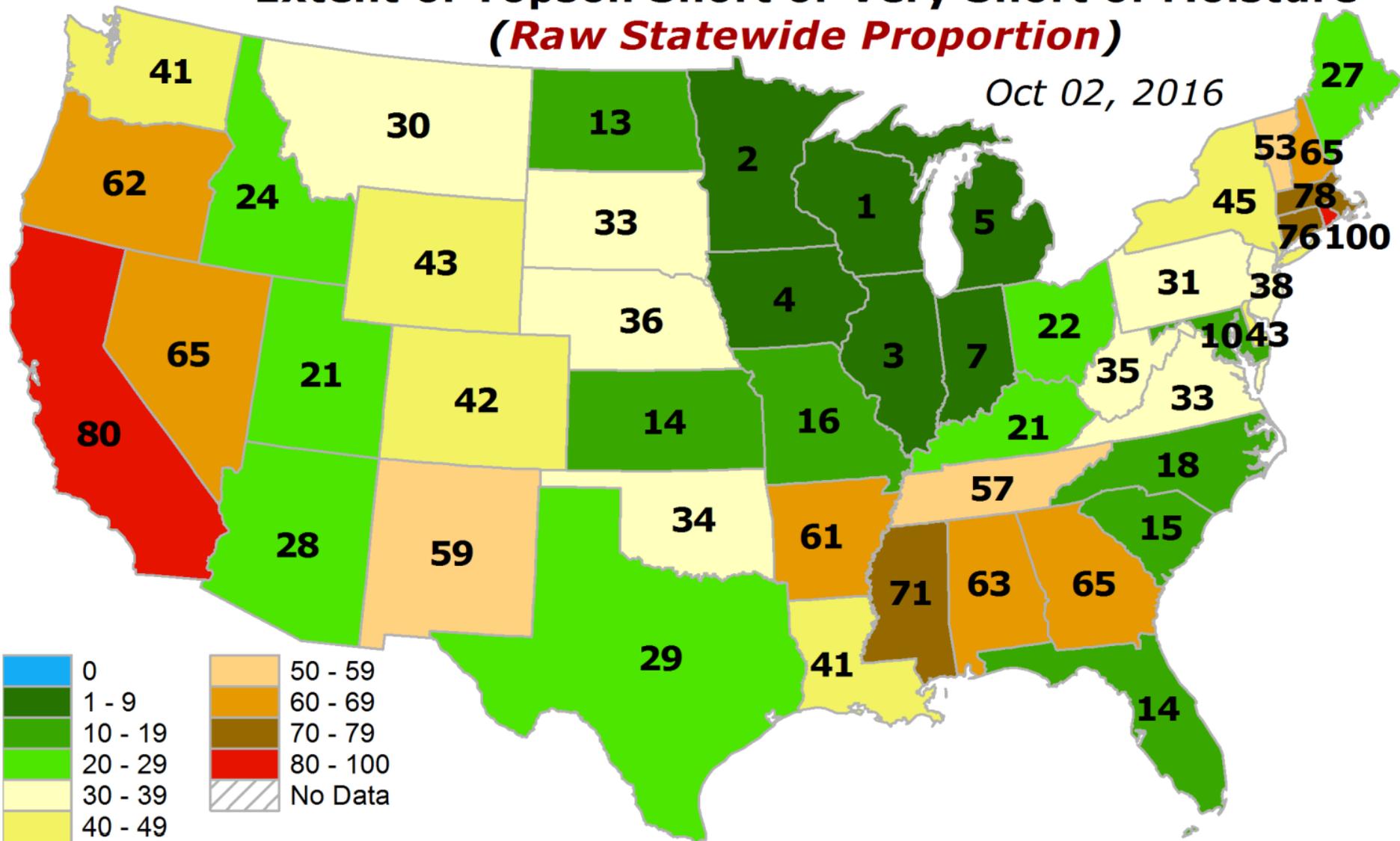
<http://droughtmonitor.unl.edu/>

Percentiles and the U.S. Drought Monitor

- Advantages of percentiles:
 - Can be applied to any parameter
 - Can be used for any length of data record
 - Helps to put drought in historical perspective
- D4, Exceptional Drought:  once per 50 to 100 years
- D3, Extreme Drought:  once per 20 to 50 years
- D2, Severe Drought:  once per 10 to 20 years
- D1, Moderate Drought:  once per 5 to 10 years
- D0, Abnormally Dry:  once per 3 to 5 years

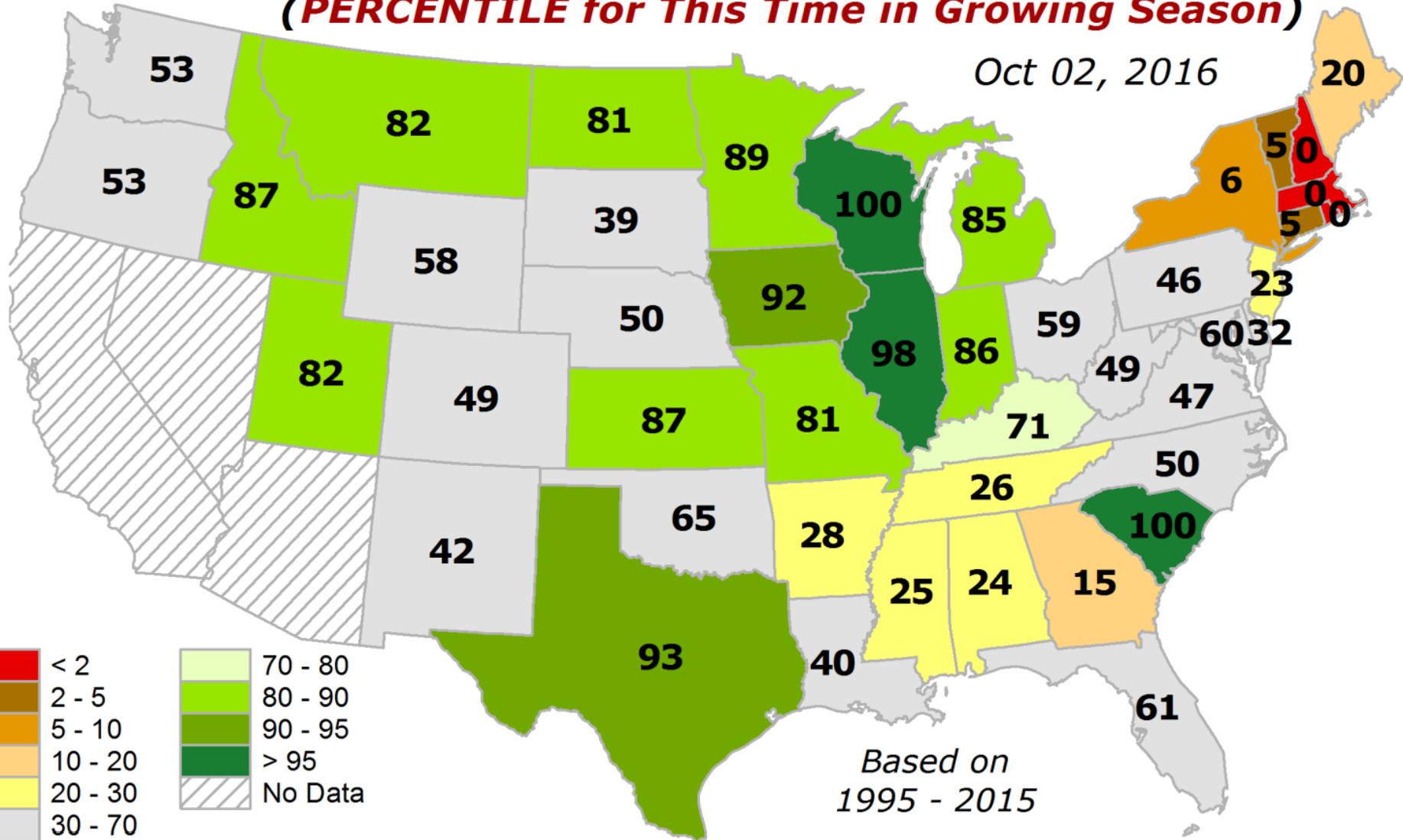
Extent of Topsoil Short or Very Short of Moisture (*Raw Statewide Proportion*)

Oct 02, 2016



Extent of Topsoil Short or Very Short of Moisture (*PERCENTILE for This Time in Growing Season*)

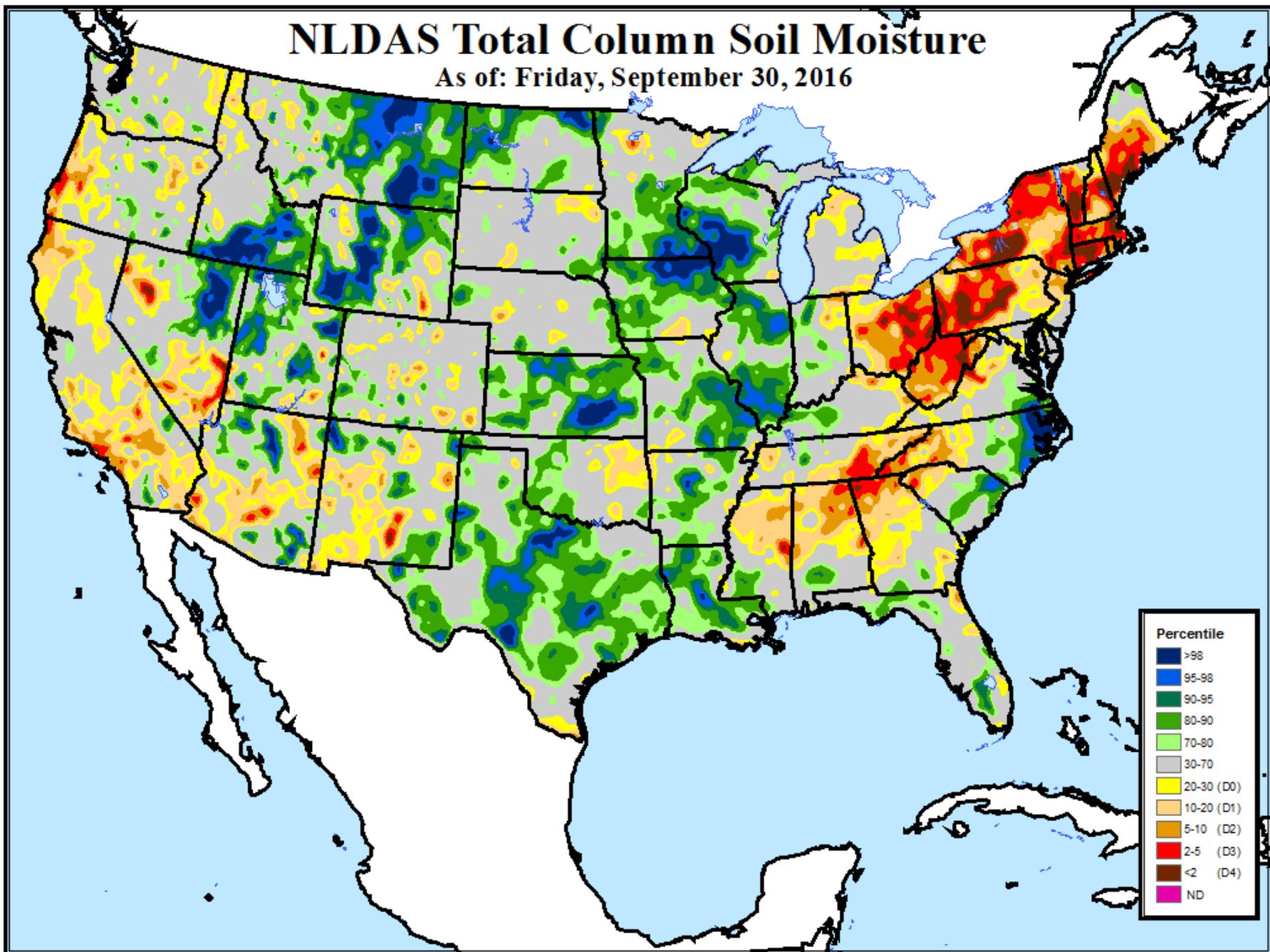
Oct 02, 2016



Based on
1995 - 2015

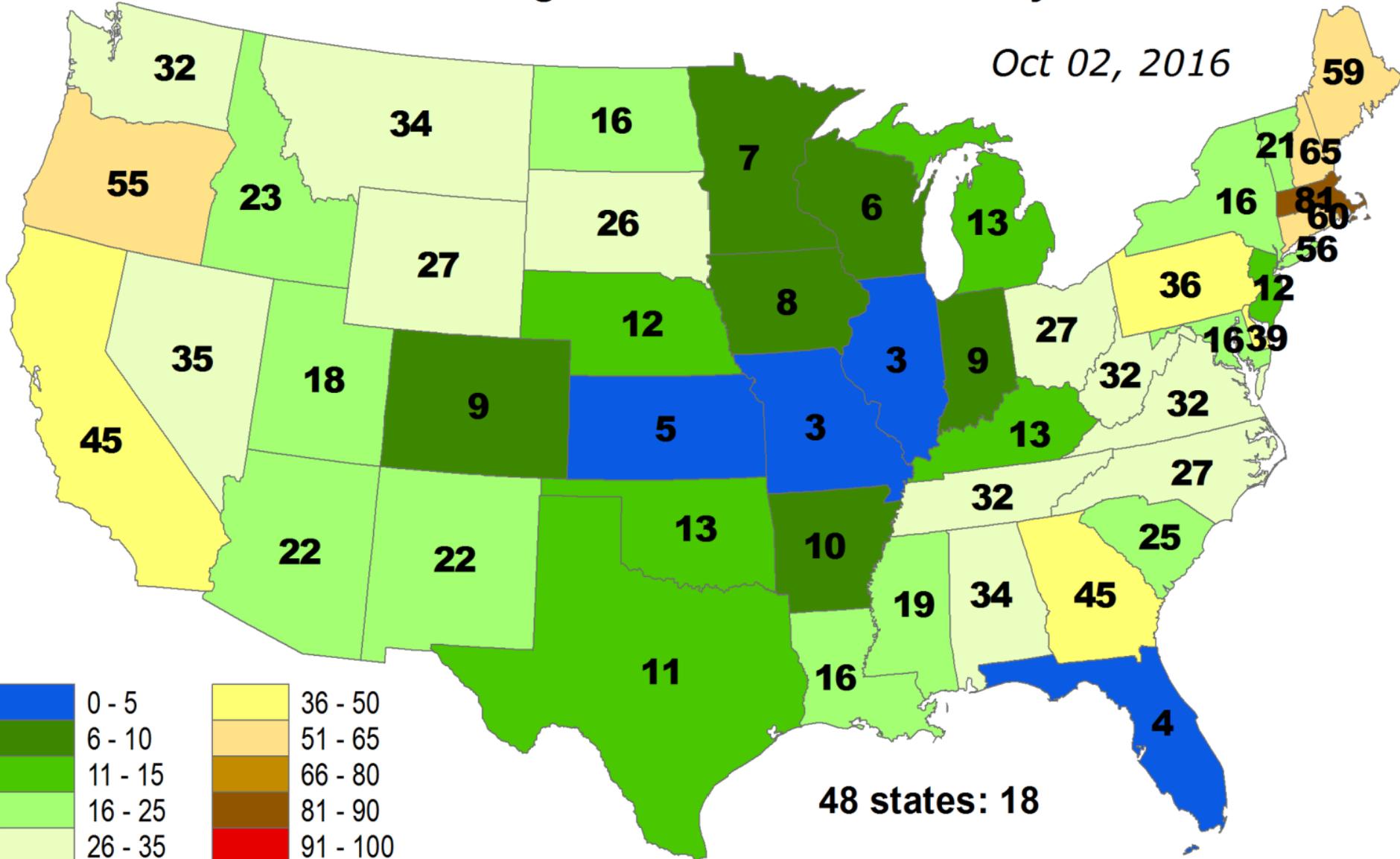
NLDAS Total Column Soil Moisture

As of: Friday, September 30, 2016



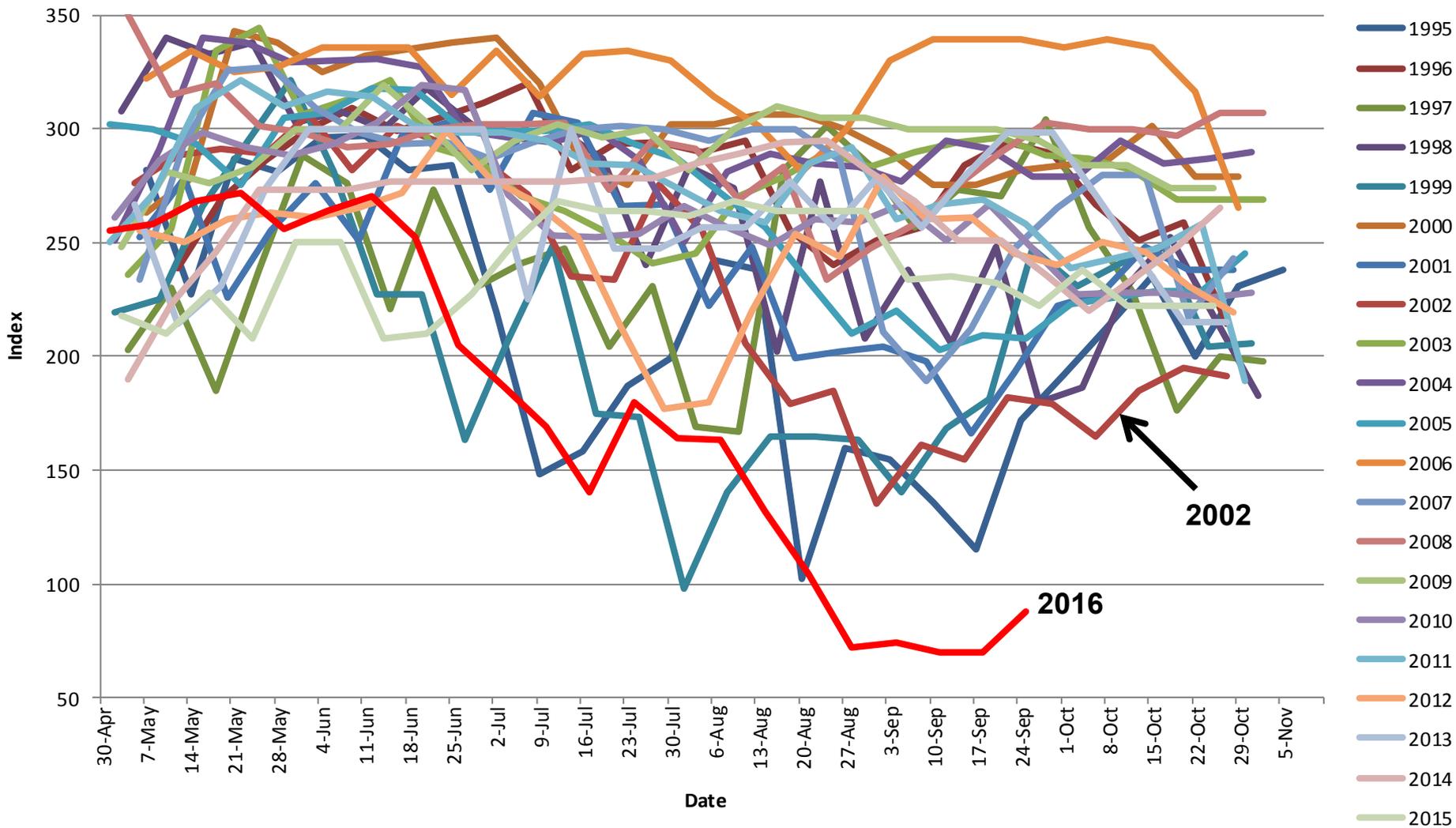
Percent of Pasture & Range Land in "Poor" or "Very Poor" Condition

Oct 02, 2016



48 states: 18

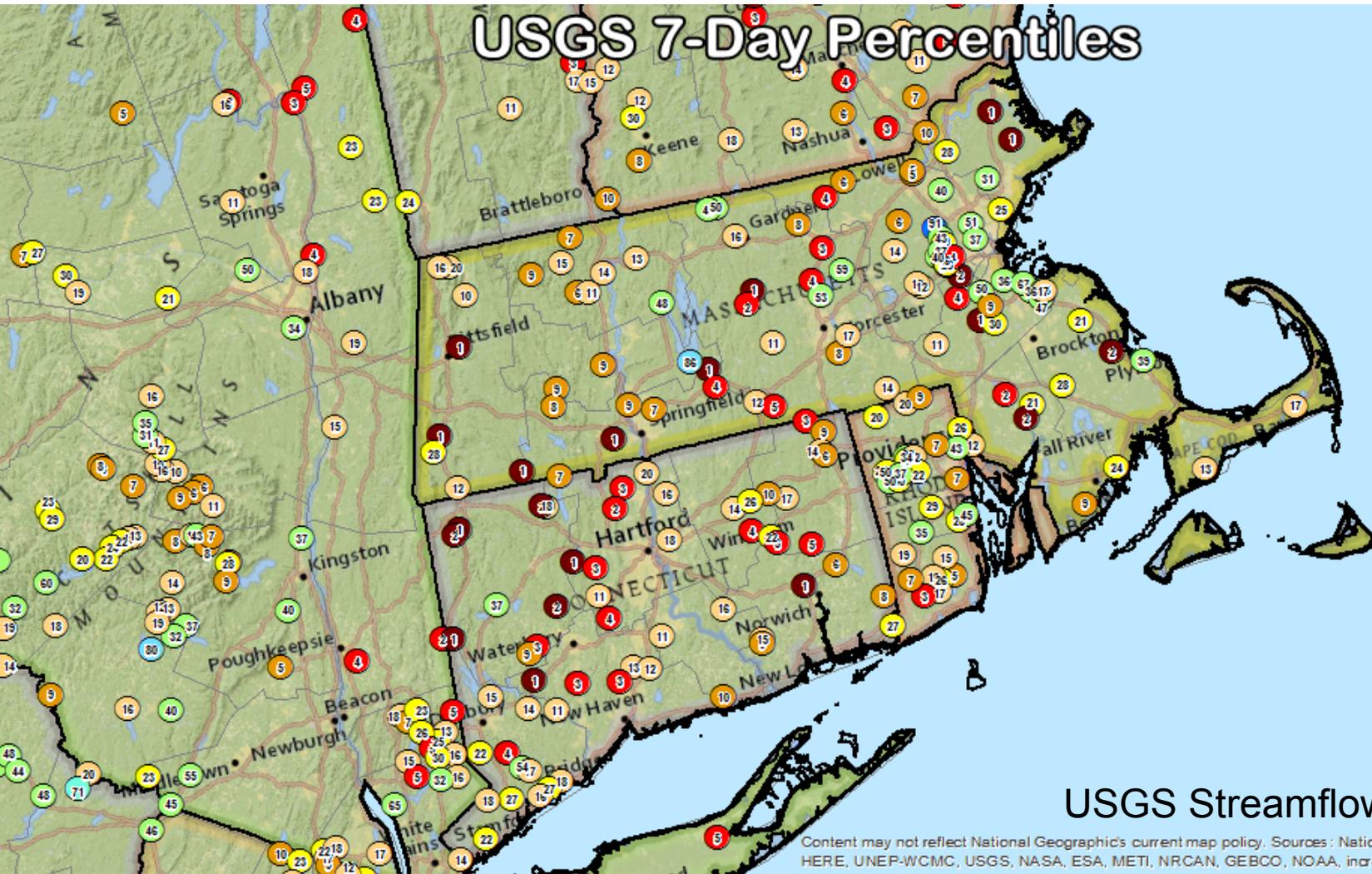
MA PASTURE AND RANGE Condition Index



Based on NASS crop progress data.

Index Weighting: Excellent = 4; Good = 3; Fair = 2; Poor = 1; Very Poor = 0

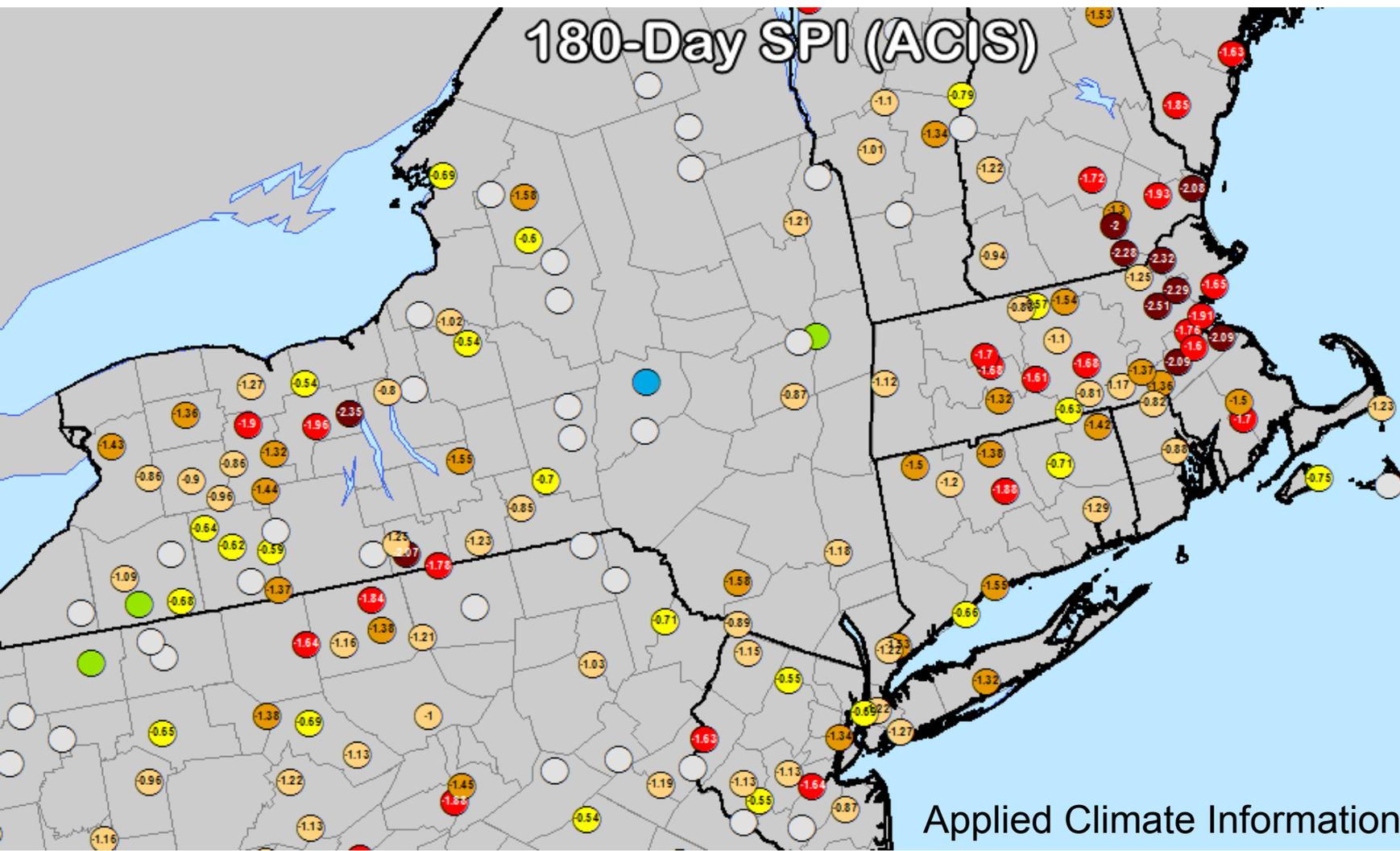
USGS 7-Day Percentiles



USGS Streamflow Percentiles

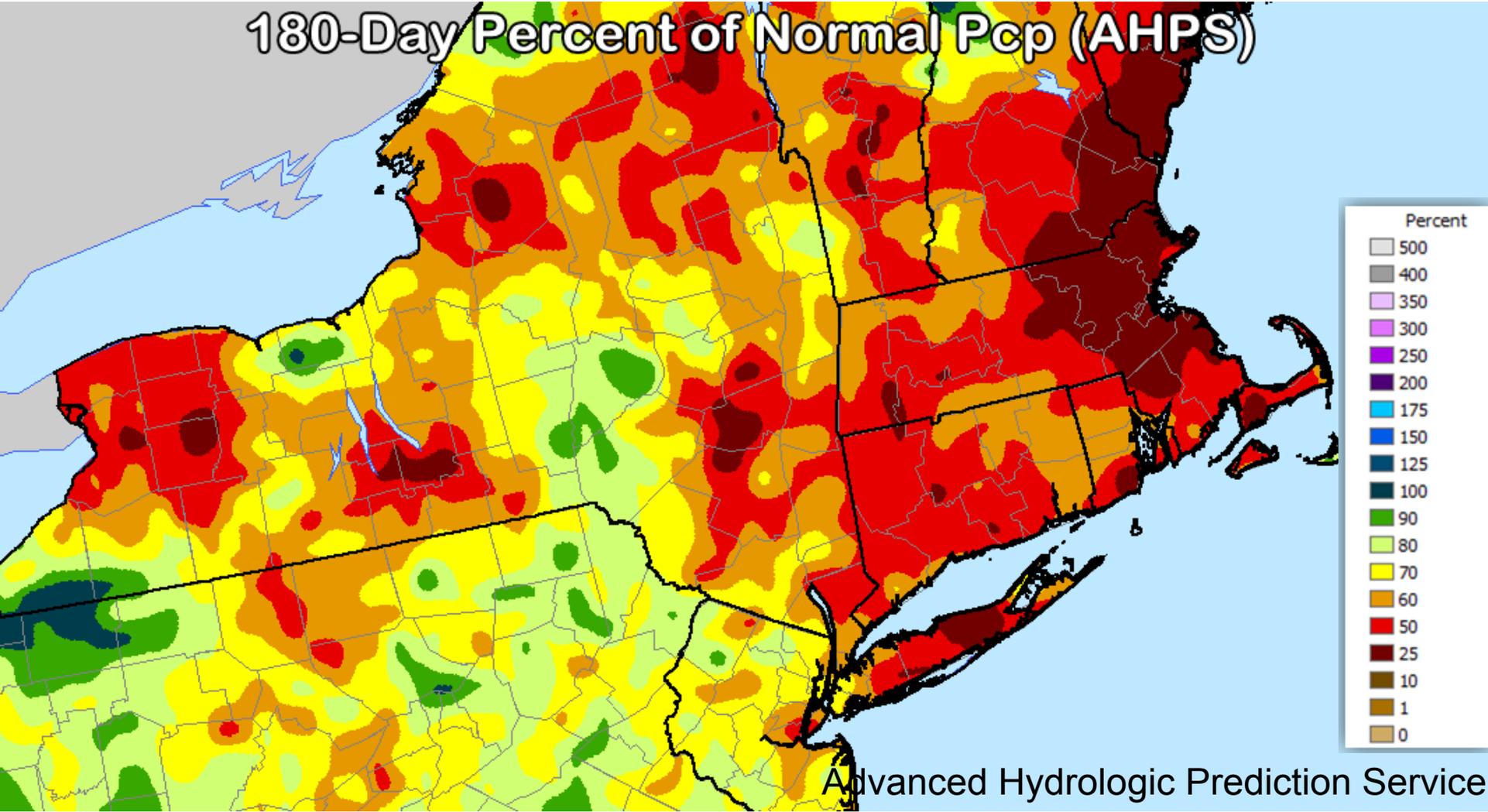
Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

180-Day SPI (ACIS)

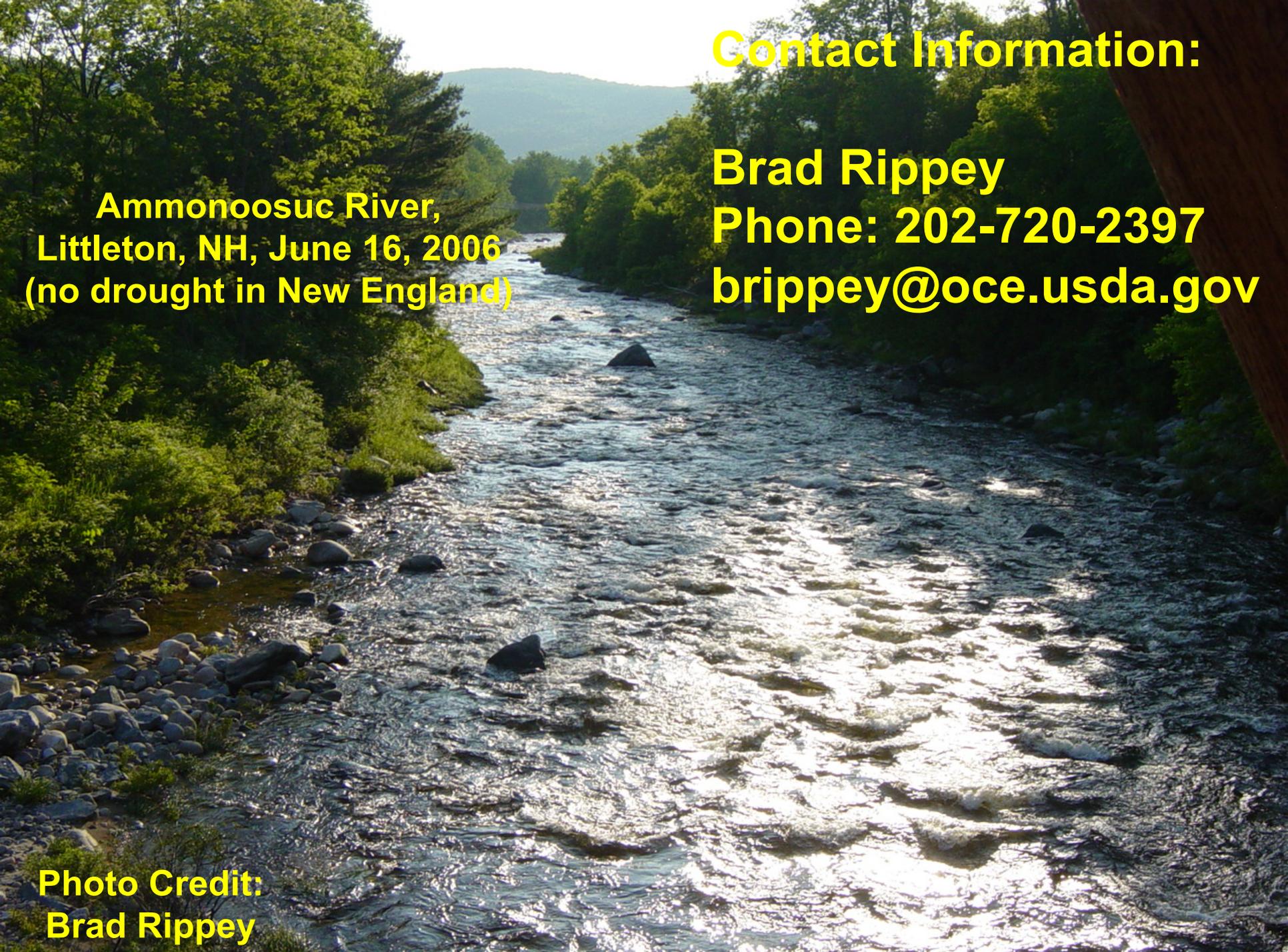


Applied Climate Information System

180-Day Percent of Normal Pcp (AHPS)



Advanced Hydrologic Prediction Service



**Ammonoosuc River,
Littleton, NH, June 16, 2006
(no drought in New England)**

Contact Information:

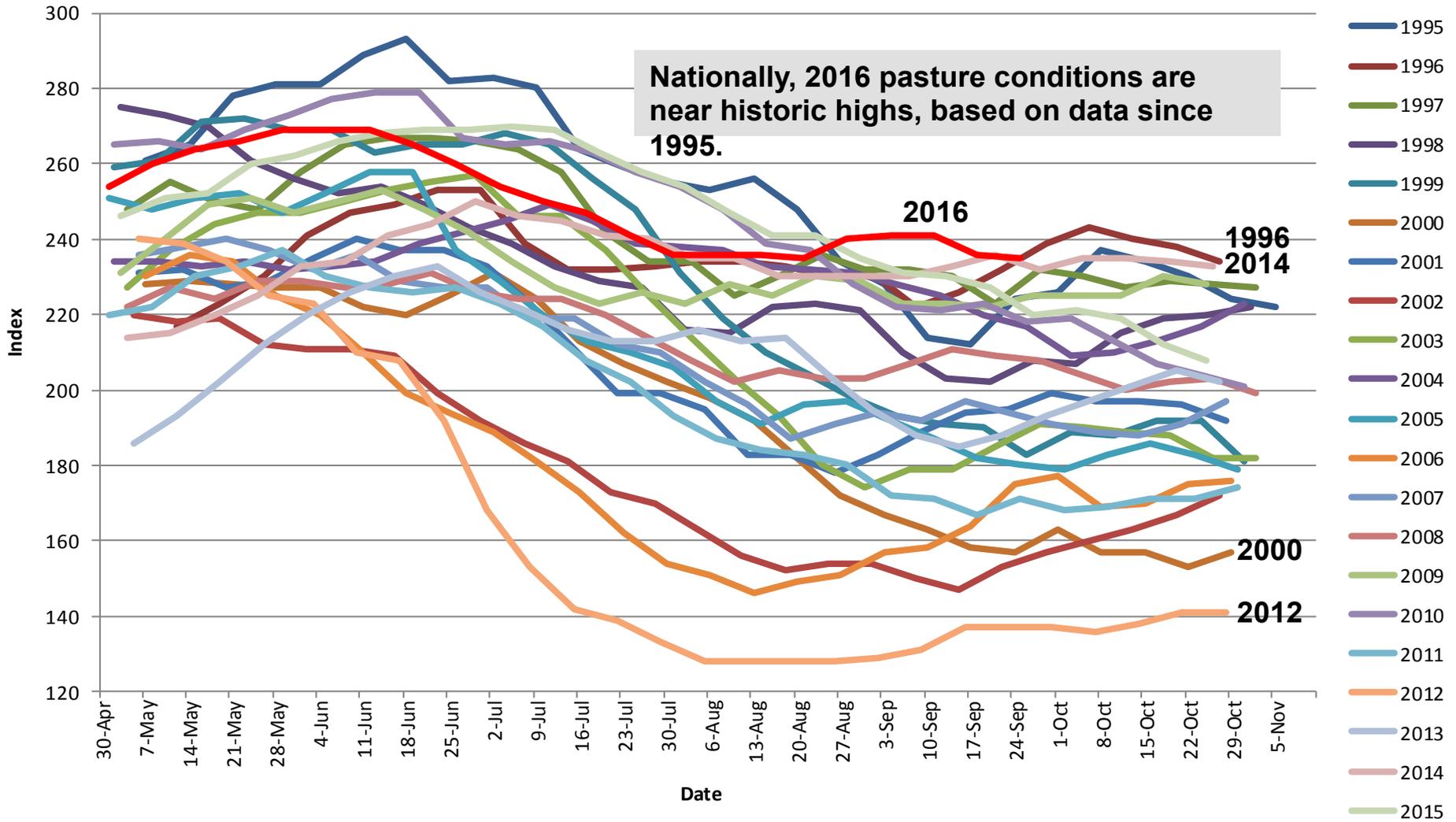
Brad Rippey

Phone: 202-720-2397

brippy@oce.usda.gov

**Photo Credit:
Brad Rippey**

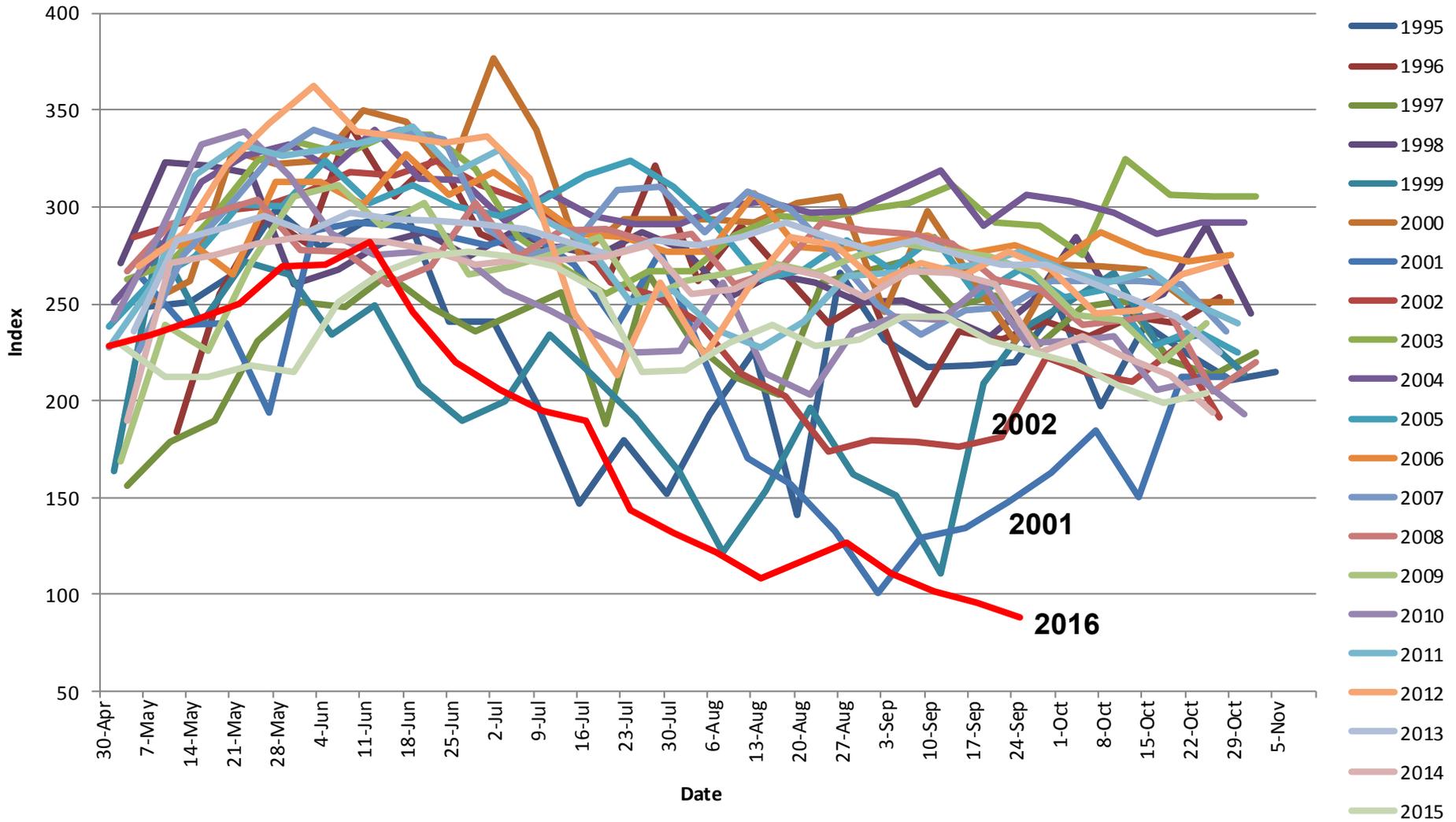
U.S. PASTURE AND RANGE Condition Index



Based on NASS crop progress data.

Index Weighting: Excellent = 4; Good = 3; Fair = 2; Poor = 1; Very Poor = 0

NH PASTURE AND RANGE Condition Index



Based on NASS crop progress data.

Index Weighting: Excellent = 4; Good = 3; Fair = 2; Poor = 1; Very Poor = 0