Midwest and Great Plains Climate & Drought Outlook 17 October 2019

Laura Edwards
SD State Climatologist
SDSU Extension
Aberdeen, SD
laura.edwards@sdstate.edu
605-626-2870
@SDSUclimate

Missouri River at Rulo, NE. Photo courtesy: Mike Wilson

United States Department of Agriculture
Midwest Climate Hub

General Information

- **Providing climate services to the Central Region**
  - Collaboration Activity Between:
    - State Climatologists/American Association of State Climatologists
    - National Oceanic and Atmospheric Administration
    - USDA Climate Hubs
    - Midwest and High Plains Regional Climate Centers
    - National Drought Mitigation Center

- **Next Regular Climate/Drought Outlook Webinar**
  - November 21, 2019 (1 PM CDT): Presenter Pat Guinan, Missouri State Climatologist, University of Missouri

- **Access to Future Climate Webinars and Information**
- HPRCC: https://hprcc.unl.edu/webinars.php

- MRCC: http://mrcc.illinois.edu/multimedia/webinars.jsp

- **Open for questions at the end**

Agenda

- Recent Conditions
- Impacts
- Outlooks
  - 1-3 months
  - Winter season

Corn in snow, near Aberdeen, SD.
Photo by Laura Edwards, 10/13/19

 |

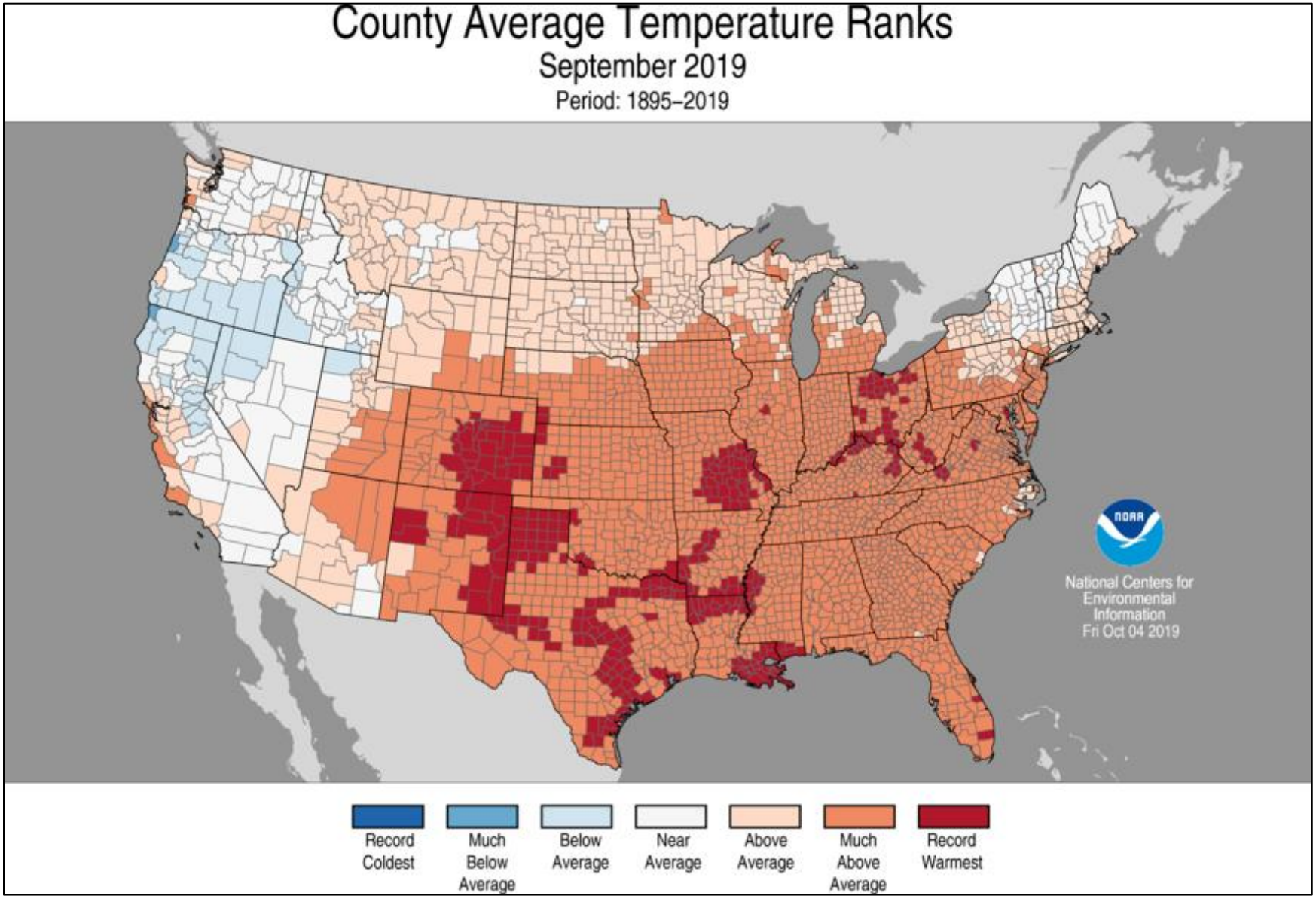
A look back

Recent Conditions

Mature soybeans near Aberdeen, SD
Photo by Laura Edwards, 10/13/19

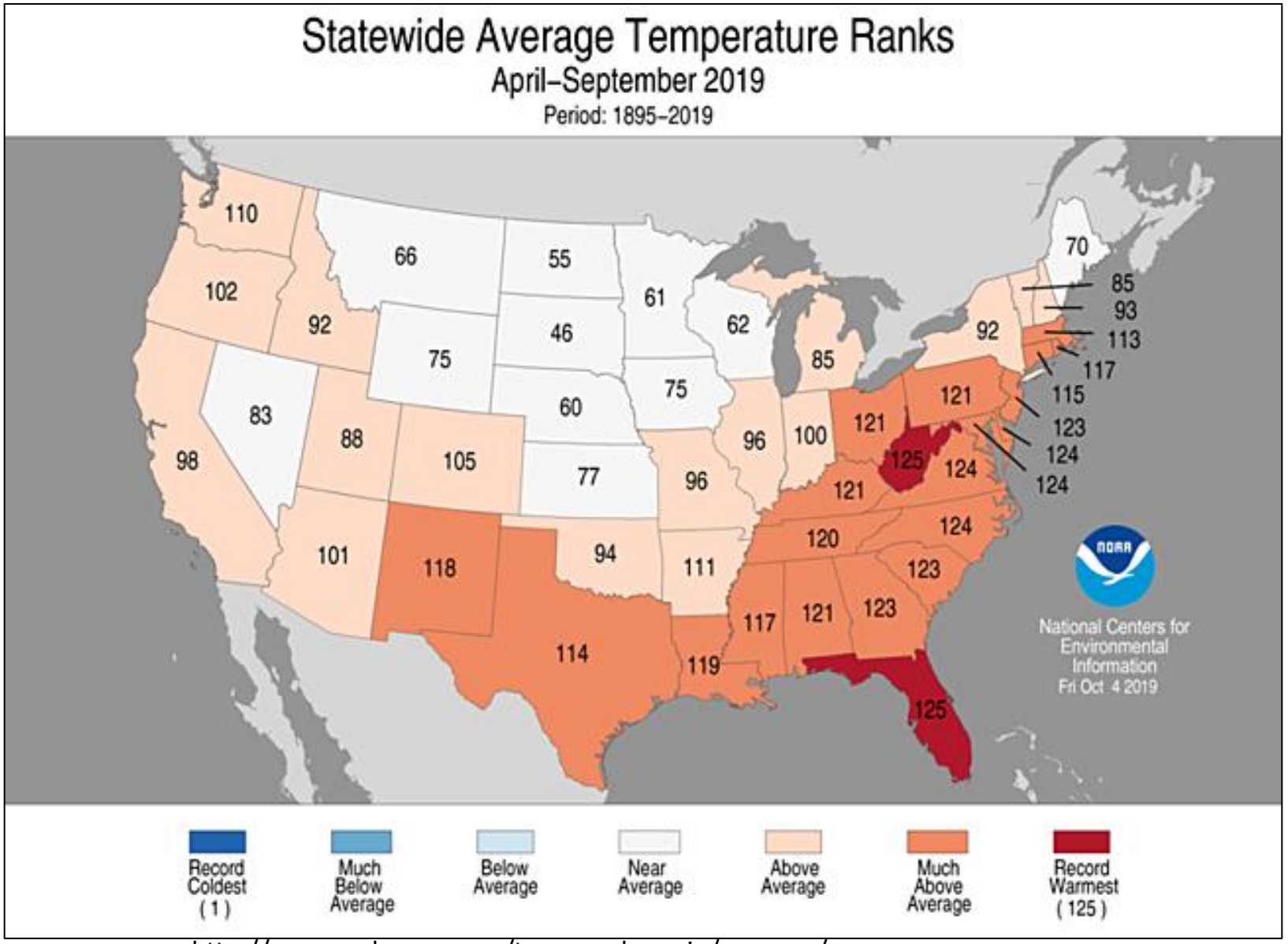
 |

September Temperature Ranks



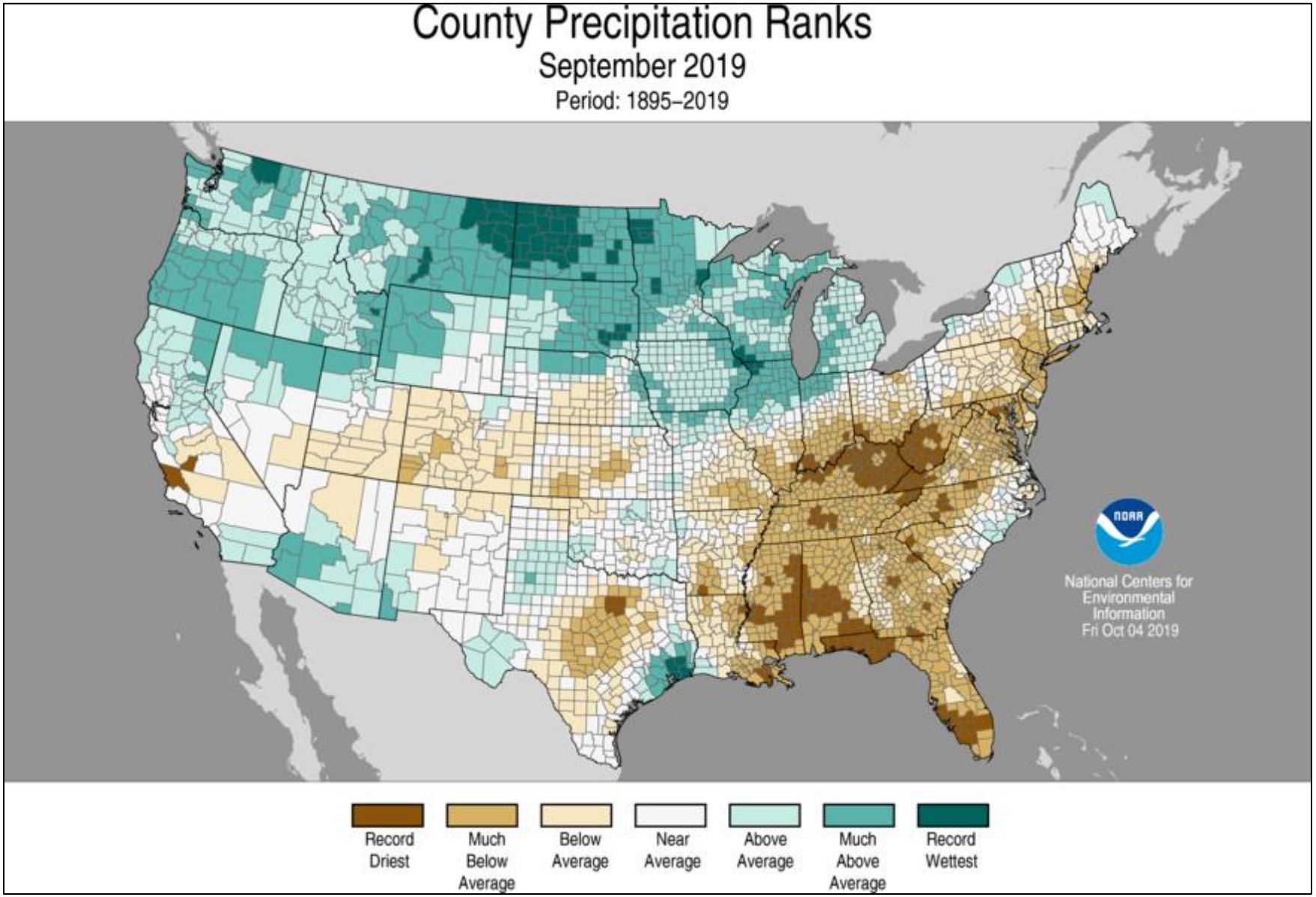
http://www.ncdc.noaa.gov/temp-and-precip/us-maps/

Growing Season Temperature Ranks



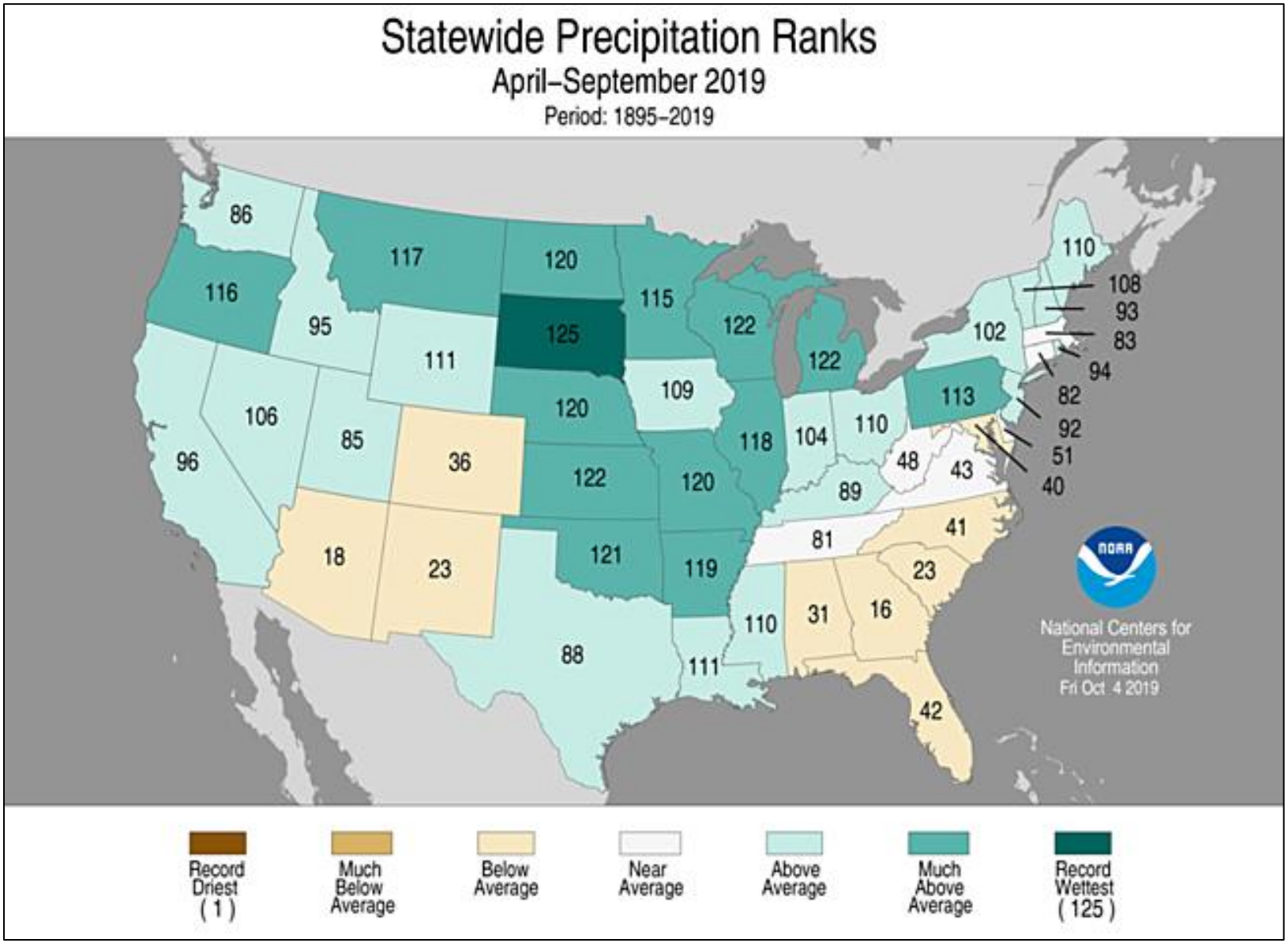
http://www.ncdc.noaa.gov/temp-and-precip/us-maps/

September Precipitation Ranks



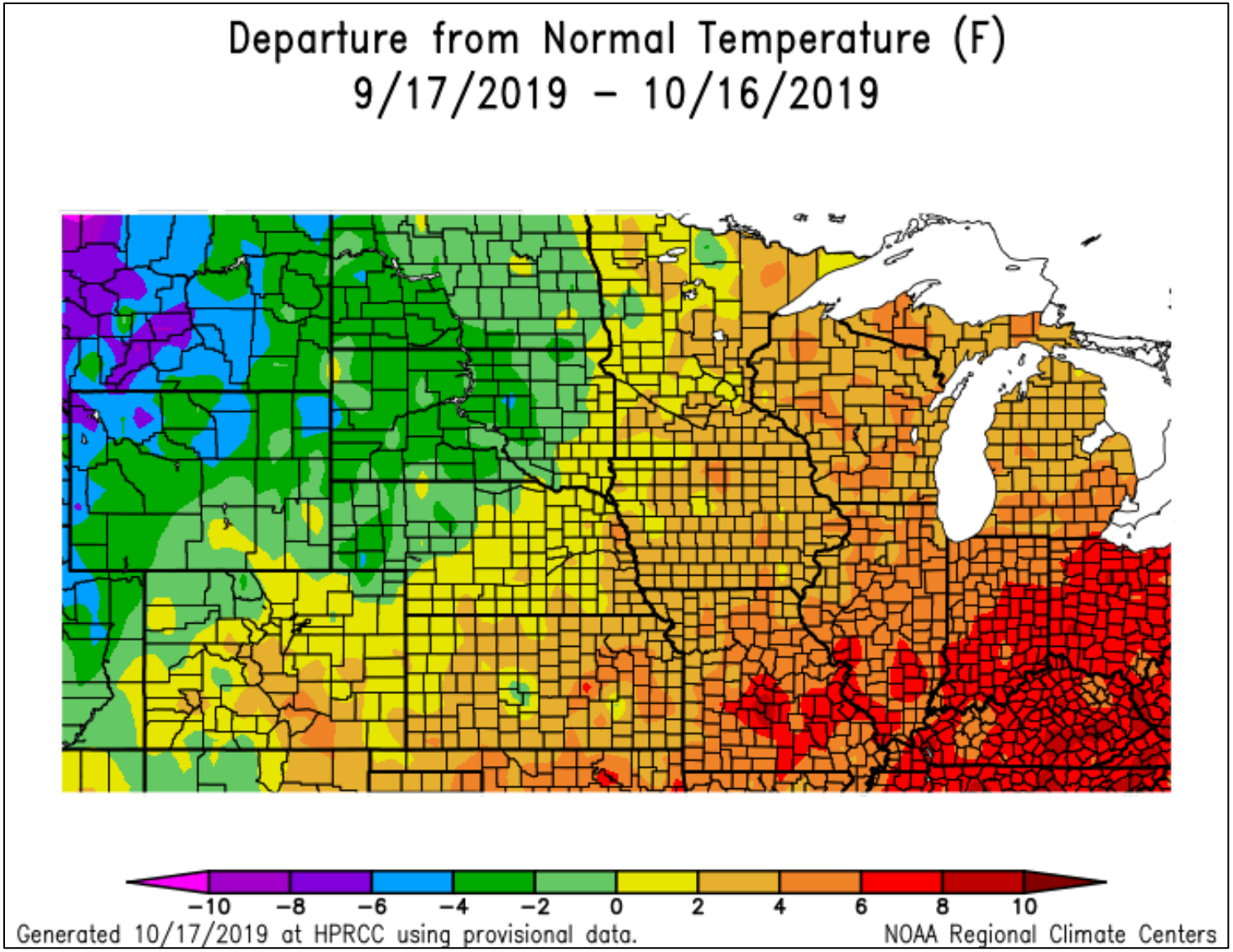
http://www.ncdc.noaa.gov/temp-and-precip/us-maps/

Growing Season Precipitation Ranks



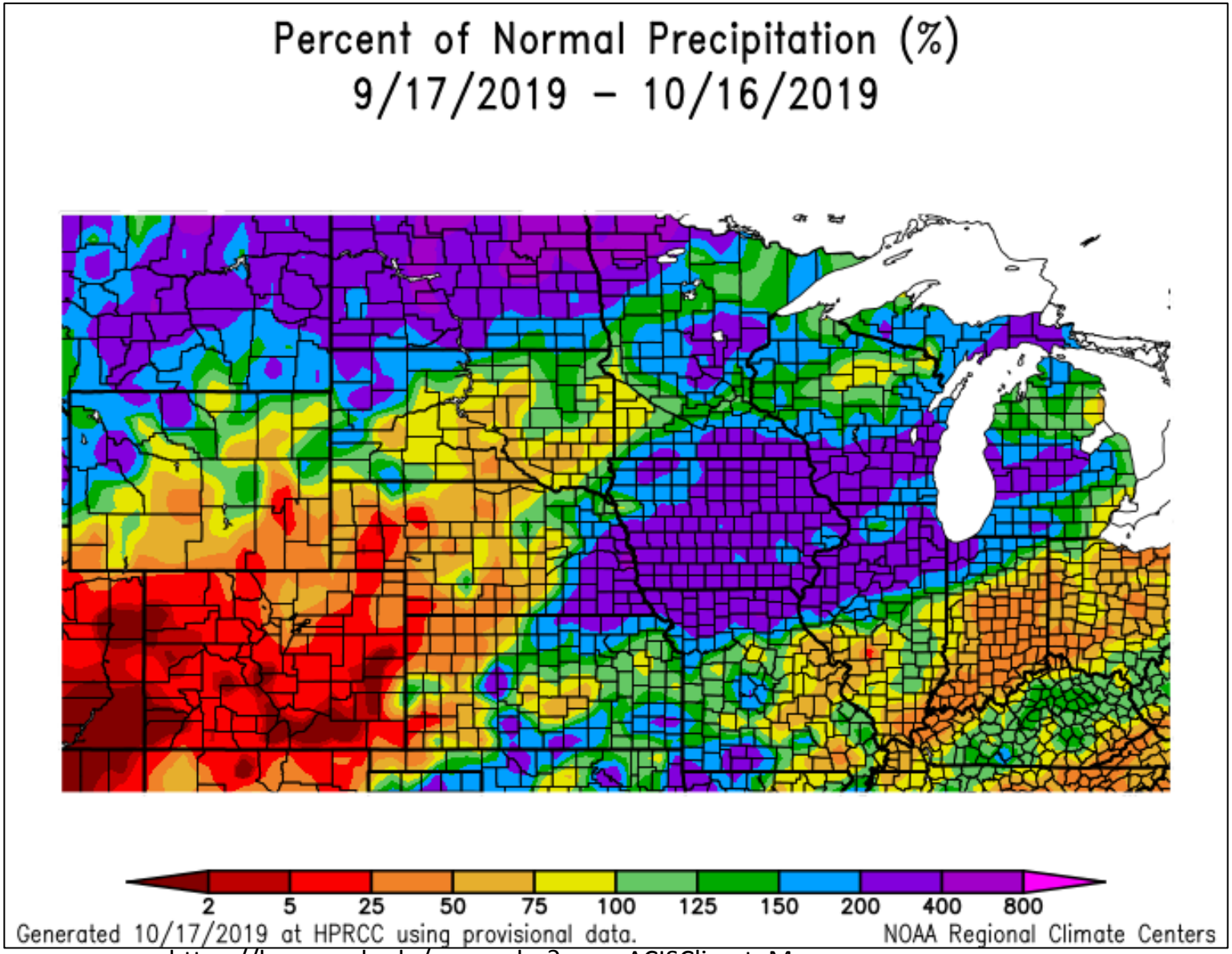
http://www.ncdc.noaa.gov/temp-and-precip/us-maps/

Last 30 Days



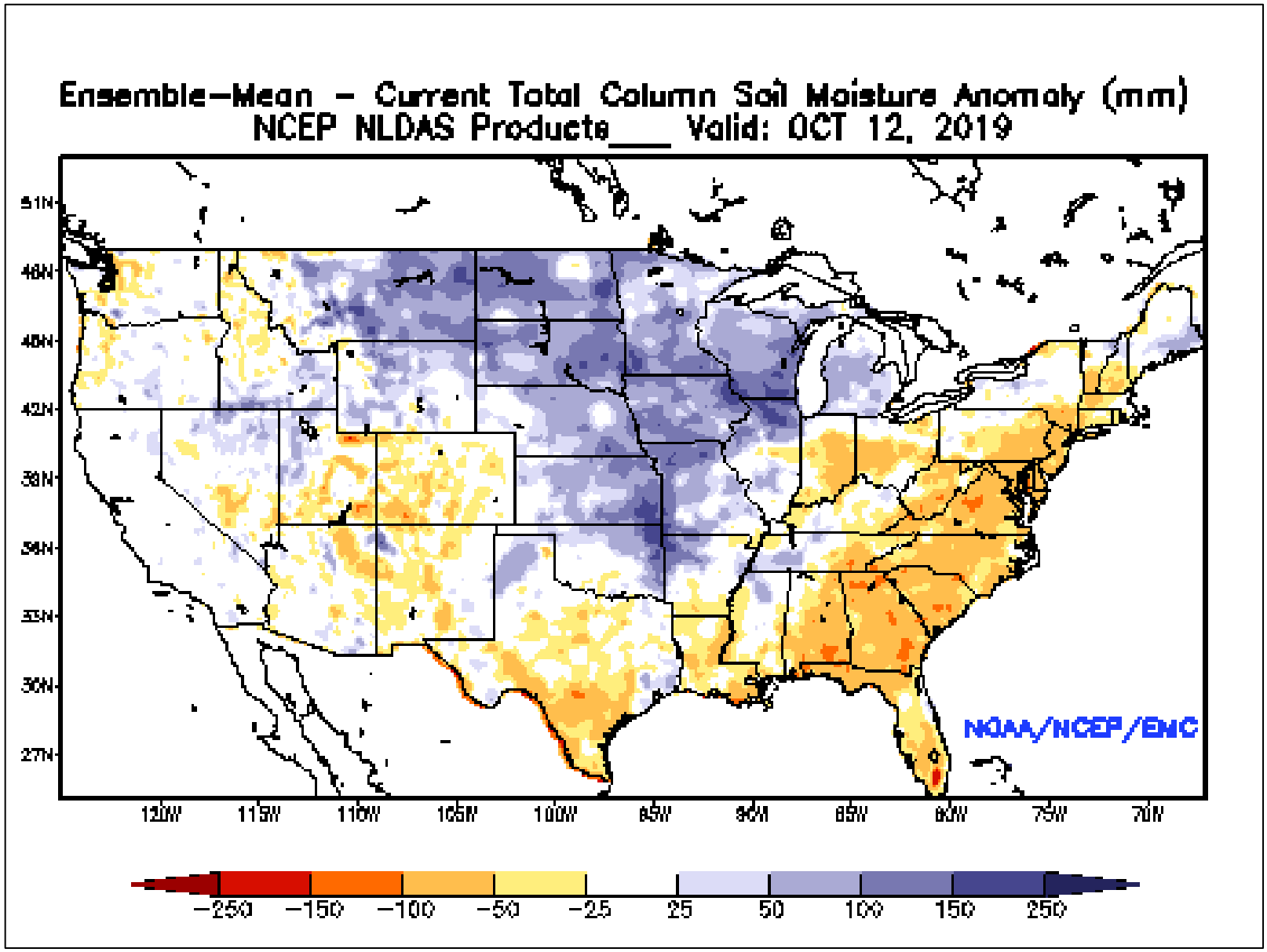
https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

Last 30 Days



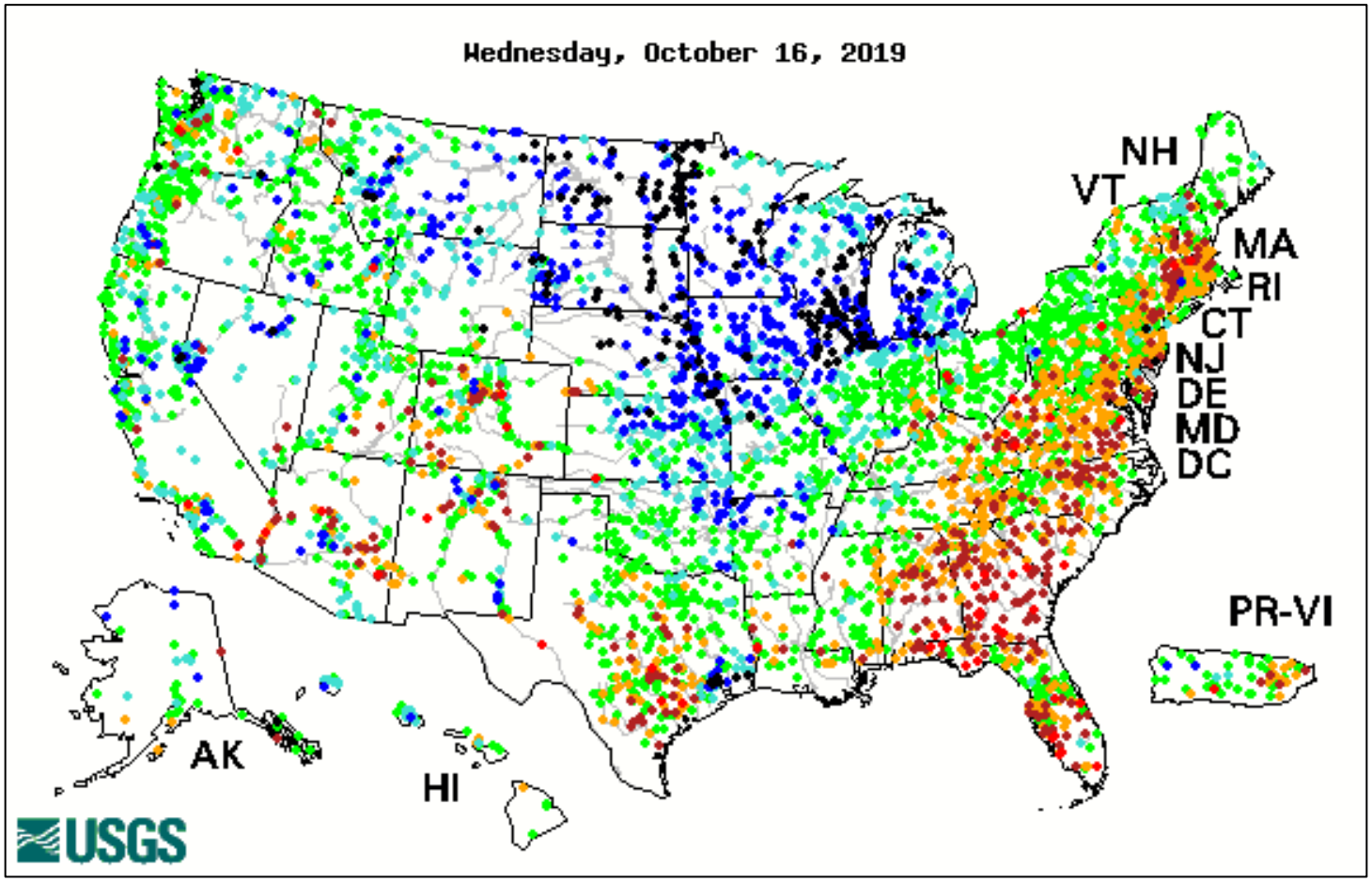
https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

Modeled Soil Moisture



http://www.emc.ncep.noaa.gov/mmb/nldas/drought/

28-day Average Streamflow

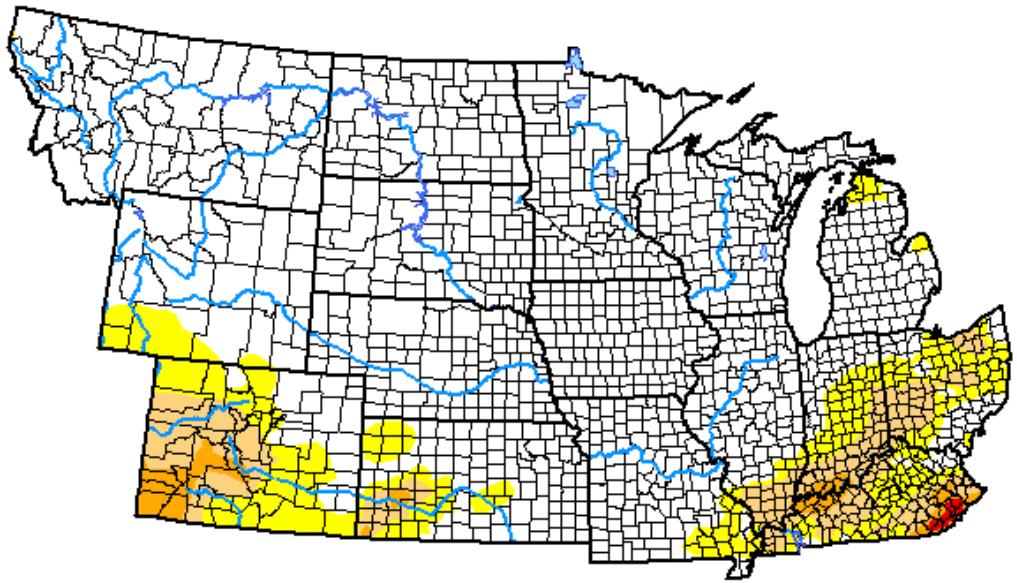


Explanation - Percentile classes						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

http://waterwatch.usgs.gov/index.php?id=pa07d

U.S. Drought Monitor

NWS Central Region



October 15, 2019

(Released Thursday, Oct. 17, 2019)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	80.40	19.60	8.44	1.91	0.14	0.00
Last Week *10-08-2019*	80.47	19.53	8.22	1.65	0.04	0.00
3 Months Ago *07-16-2019*	95.54	4.46	0.70	0.06	0.00	0.00
Start of Calendar Year *01-01-2019*	85.98	14.02	8.17	5.23	2.44	1.01
Start of Water Year *10-01-2019*	79.05	20.95	8.02	2.19	0.14	0.00
One Year Ago *10-16-2018*	76.90	23.10	11.40	6.36	3.55	1.23

Intensity:

- None
- 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:

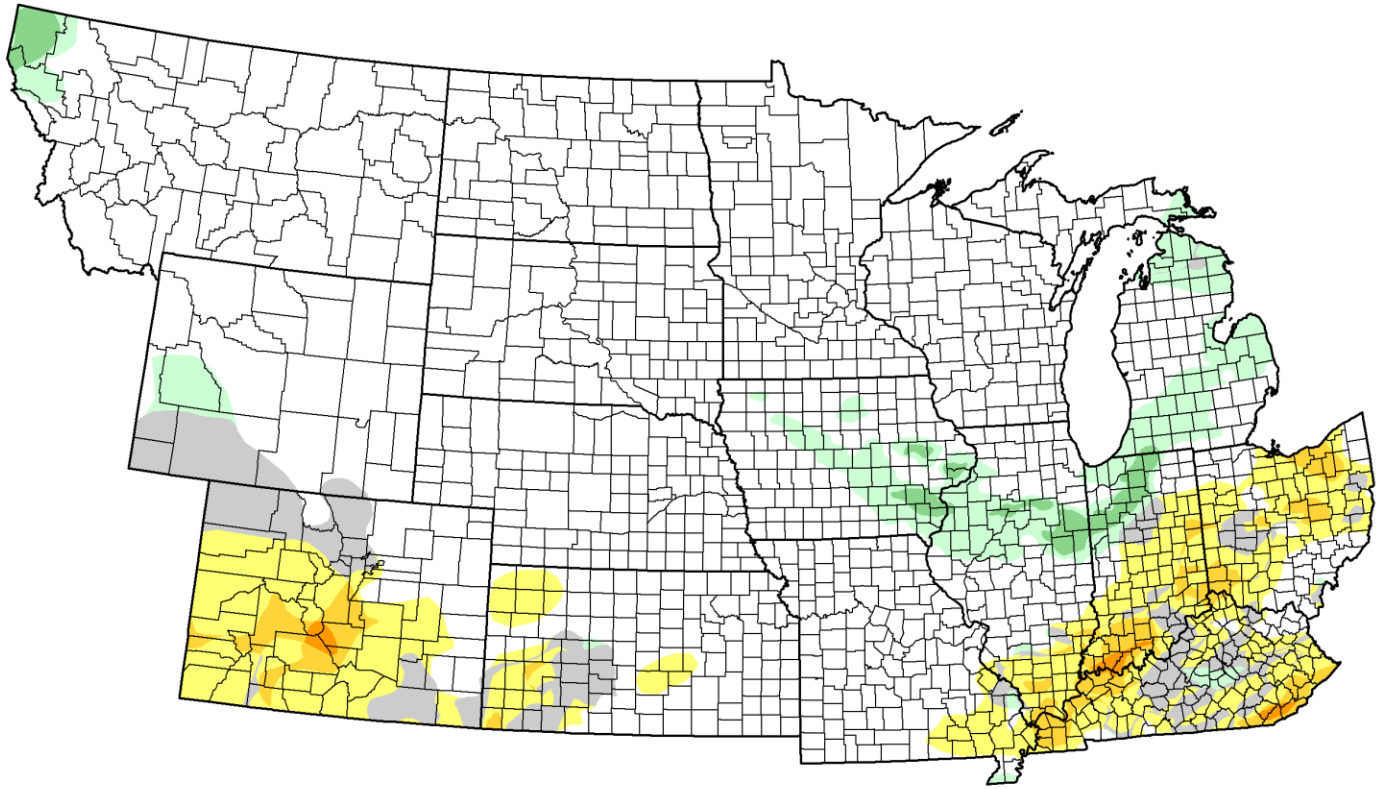
Richard Heim

NCEI/NOAA

droughtmonitor.unl.edu

U.S. Drought Monitor Class Change - NWS Central Region

1 Month



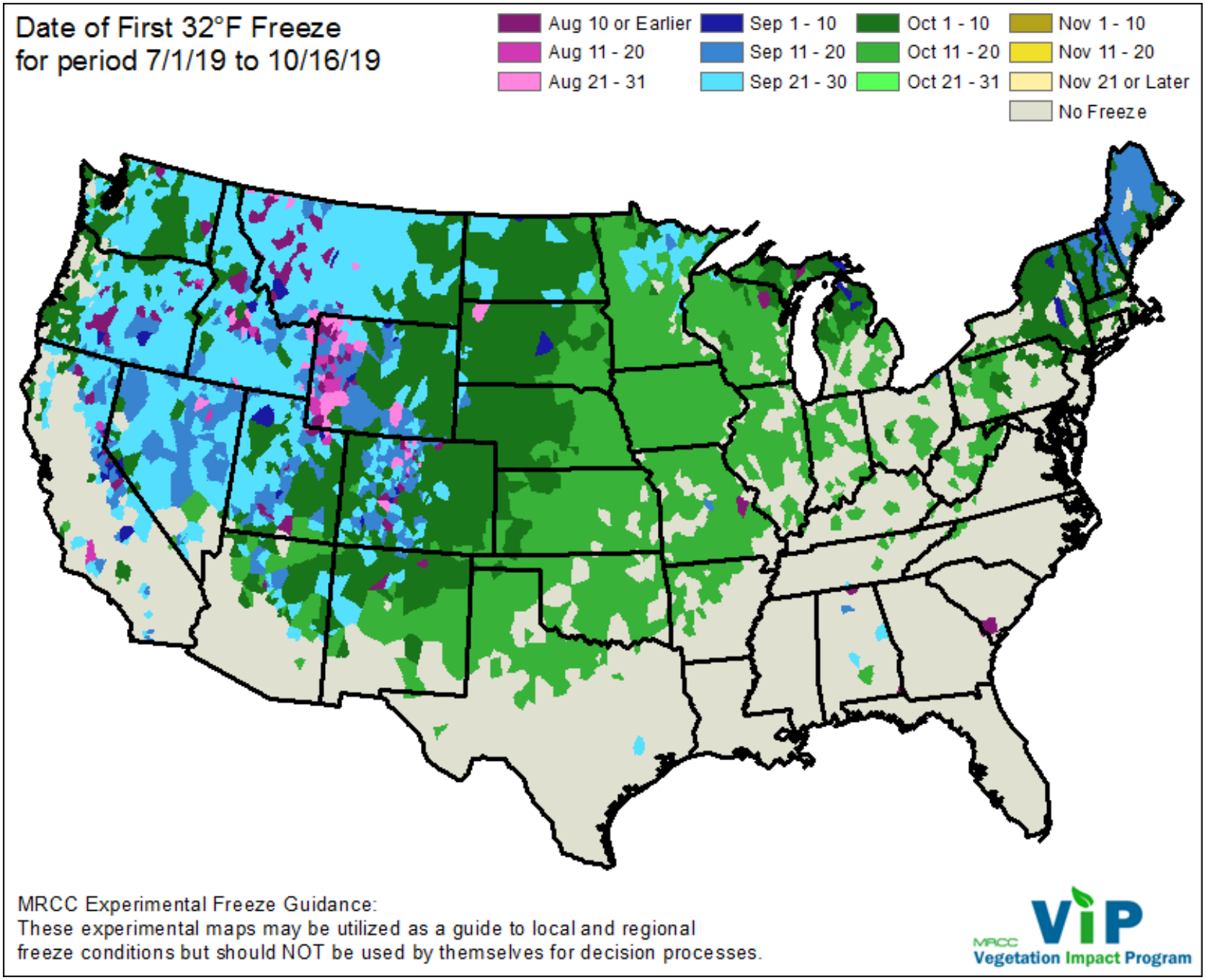
- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

October 15, 2019
compared to
September 17, 2019

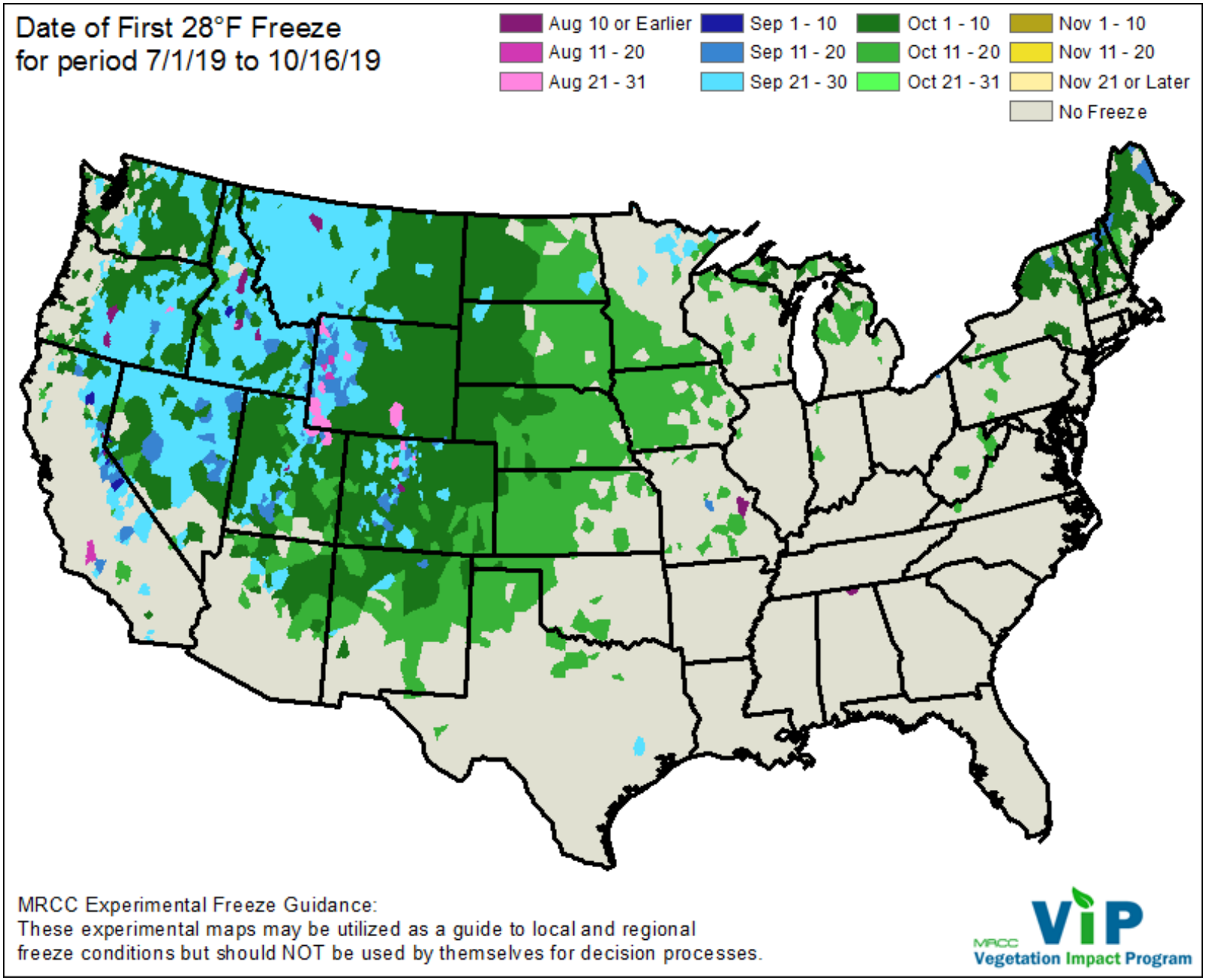
droughtmonitor.unl.edu

Impacts

COLD AND HIGH WATER



https://mrcc.illinois.edu/VIP/frz_maps/freeze_maps.html

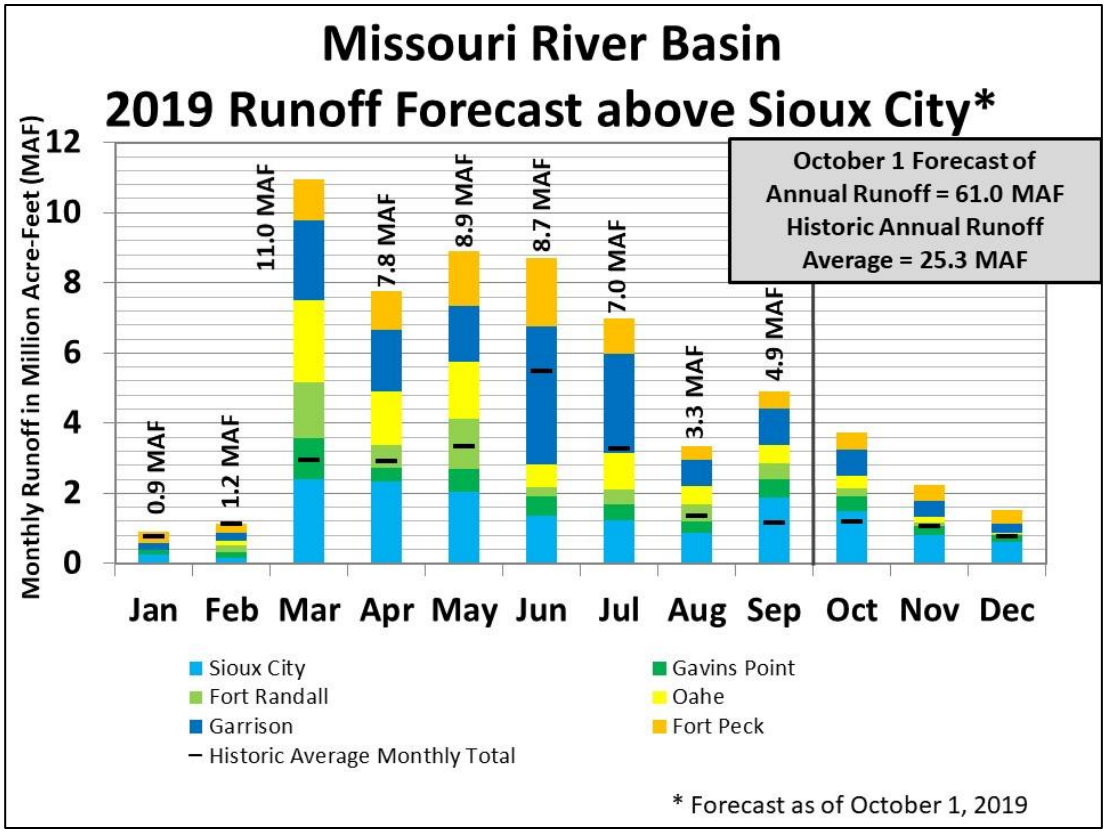


https://mrcc.illinois.edu/VIP/frz_maps/freeze_maps.html

Missouri River

Missouri Mainstem Reservoir Status (as of 10/10/19):

- Sept runoff from eastern SD rivers was record high in September, 16x average and twice the previous record. These are unregulated: James, Vermilion and Big Sioux.
- 2019 estimated annual runoff is 61.0 million acre-feet. Would equal 2011 record year.
- October runoff systemwide is expected to be 3x average. High releases will continue to evacuate water before freeze-up.



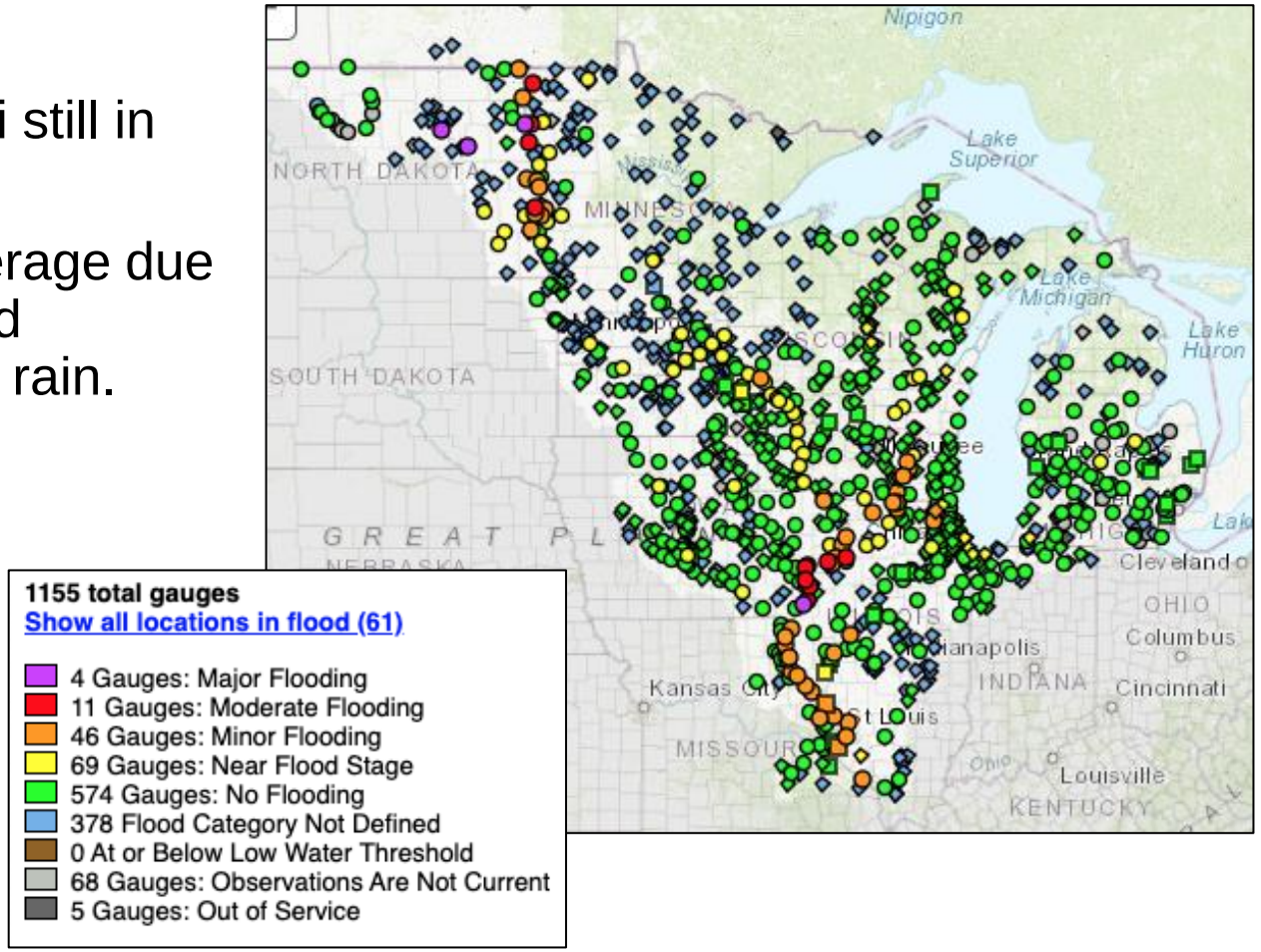
http://www.nwd-mr.usace.army.mil/rcc/reports/pdfs/weeklyupdate_previous.pdf

 |

North Central Region

Mainstem Missisippi still in flood stage.

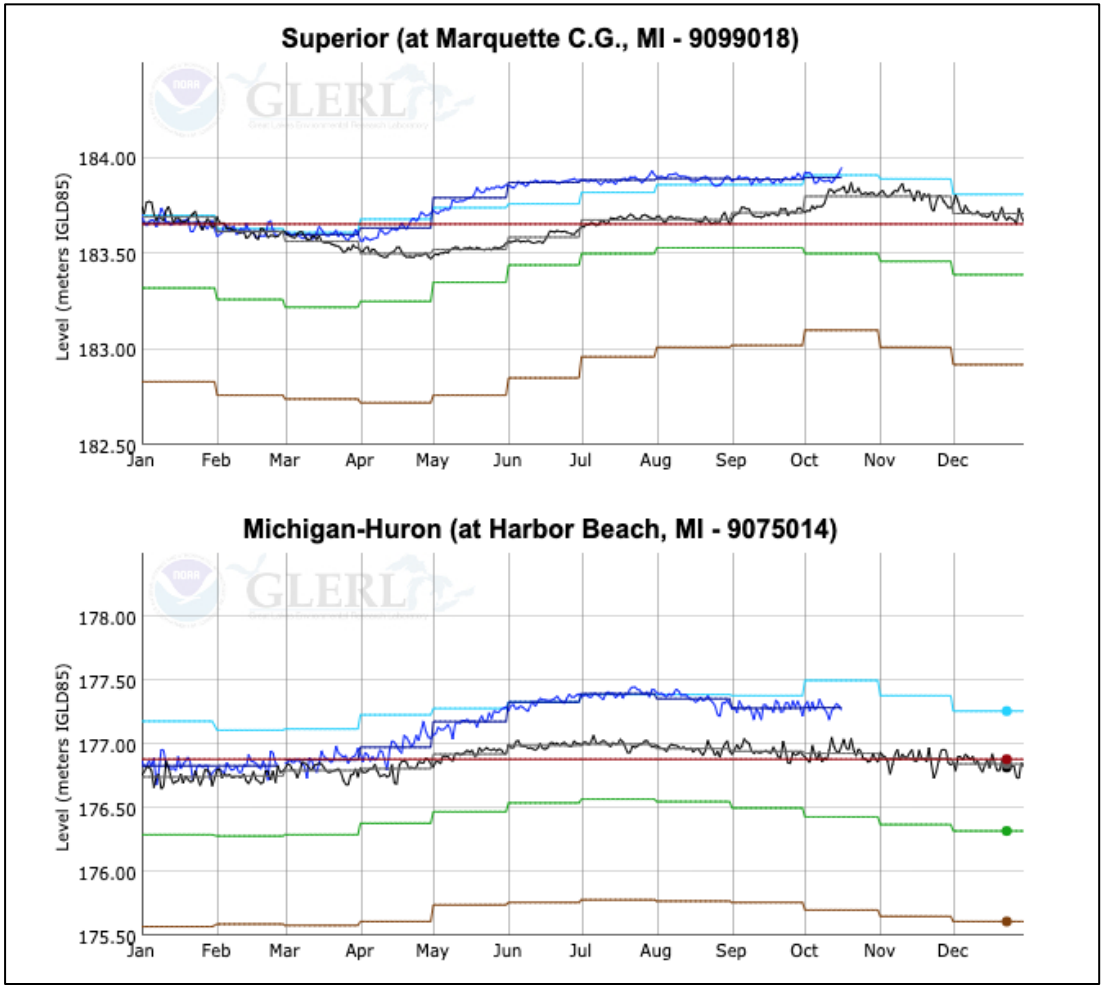
Ohio River near average due to dry conditions and drought, with recent rain.



https://water.weather.gov/ahps/region.php?rfc=ncrfc#

 |

Great Lakes Water Level

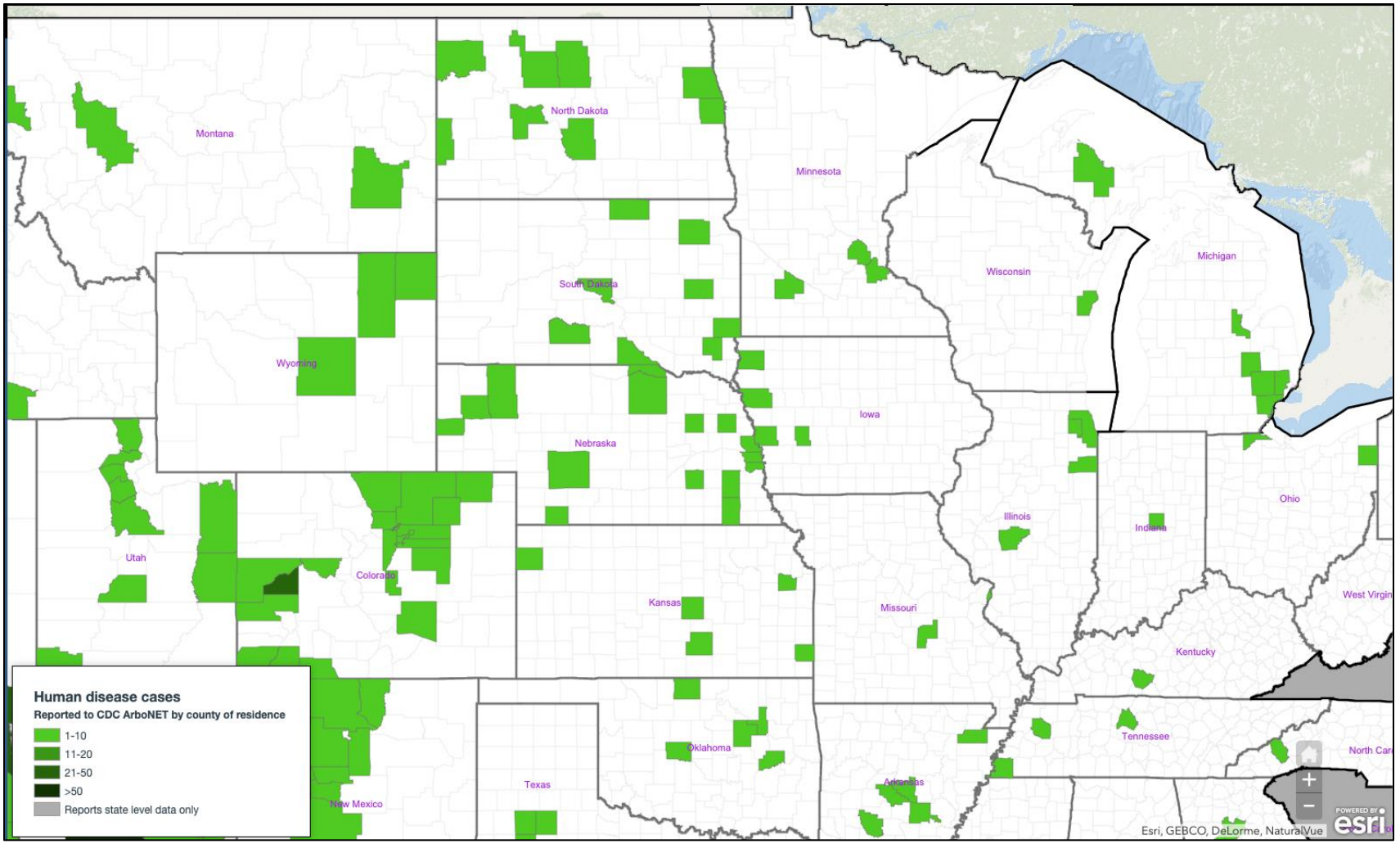


- High water in many lakes in Minnesota, South Dakota as well

https://www.glerl.noaa.gov/data/wlevels/levels.html#observations

 |

Very low year for West Nile Virus



https://wwwn.cdc.gov/arbonet/Maps/ADB_Diseases_Map/index.html

 |

Looking Ahead

OUTLOOKS

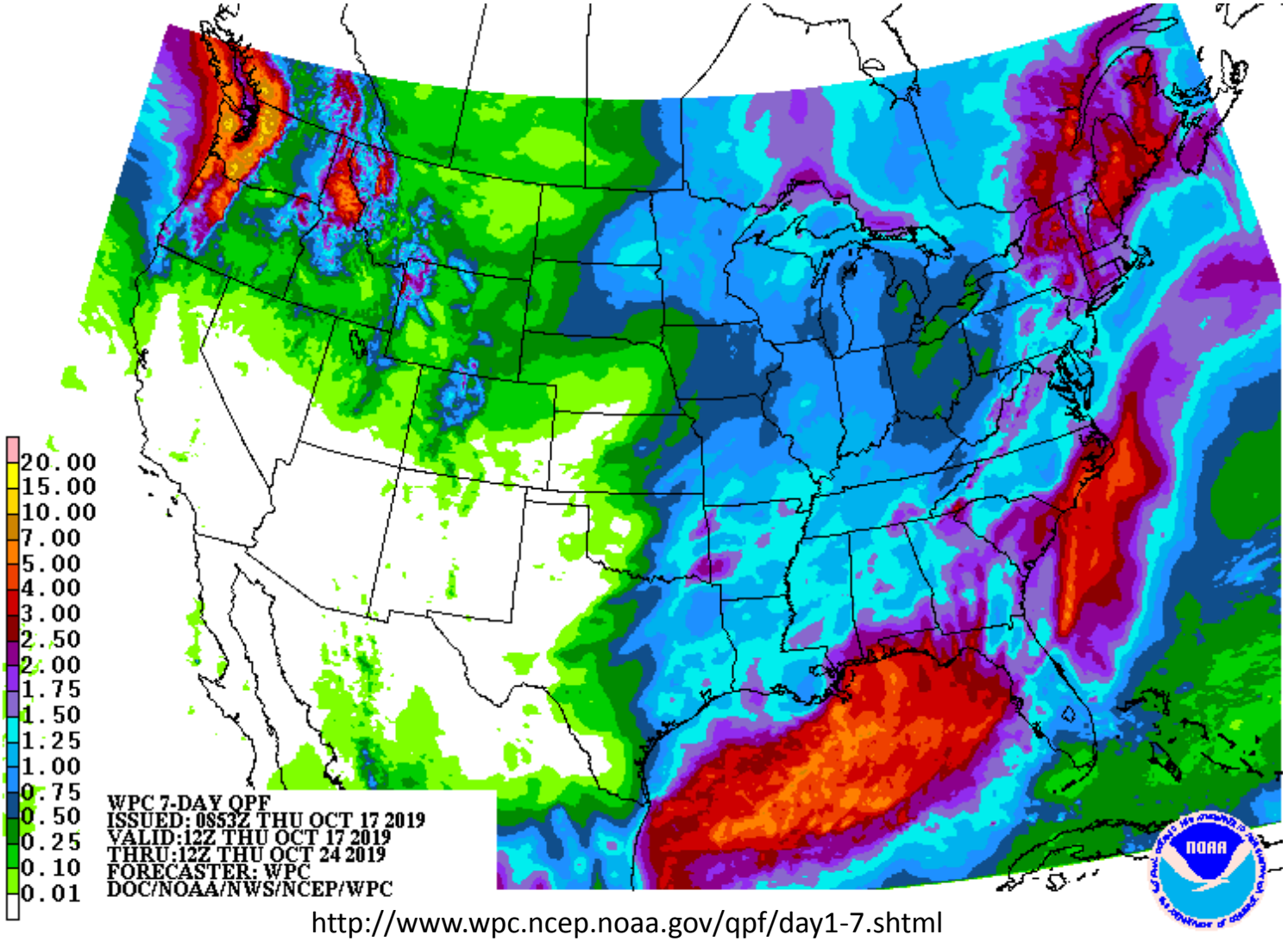
Climate Outlooks

- 7-day precipitation forecast
- 8-14 day outlook
- November temperature and precipitation
- Winter season temperature and precipitation

 |

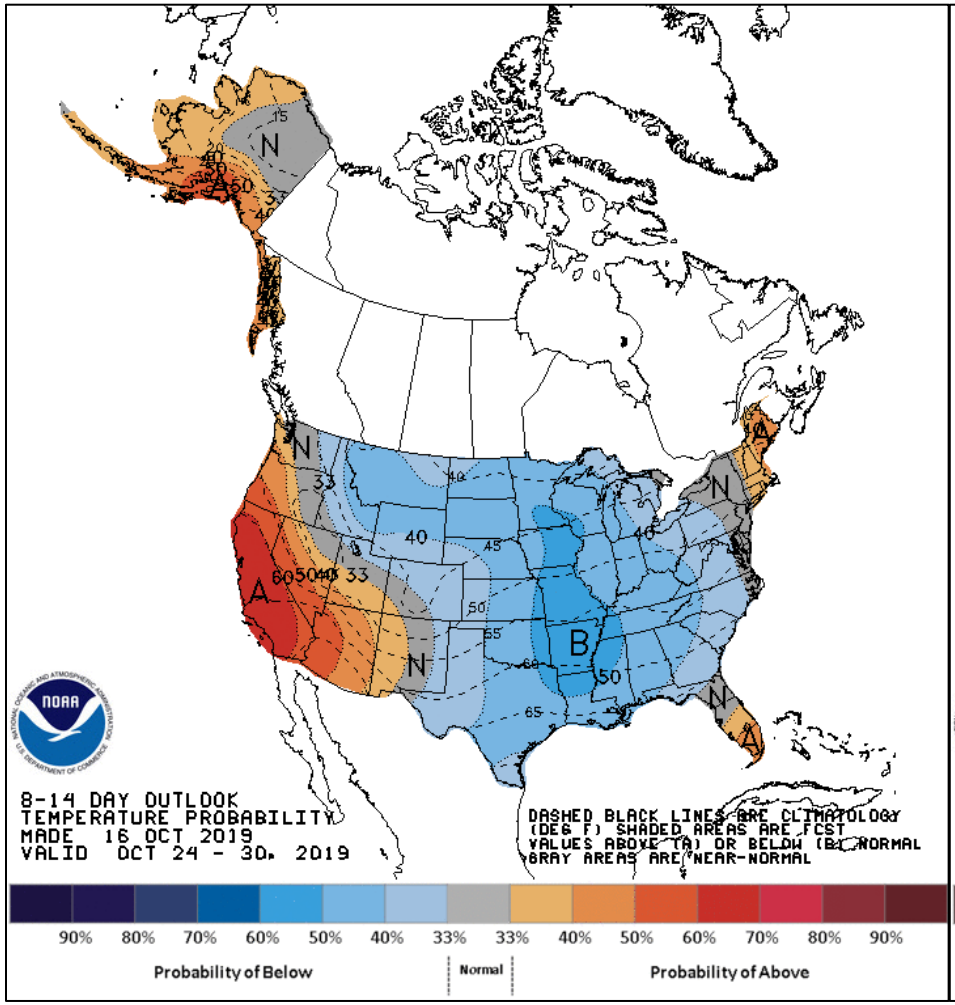
7-day Quantitative Precipitation Forecast

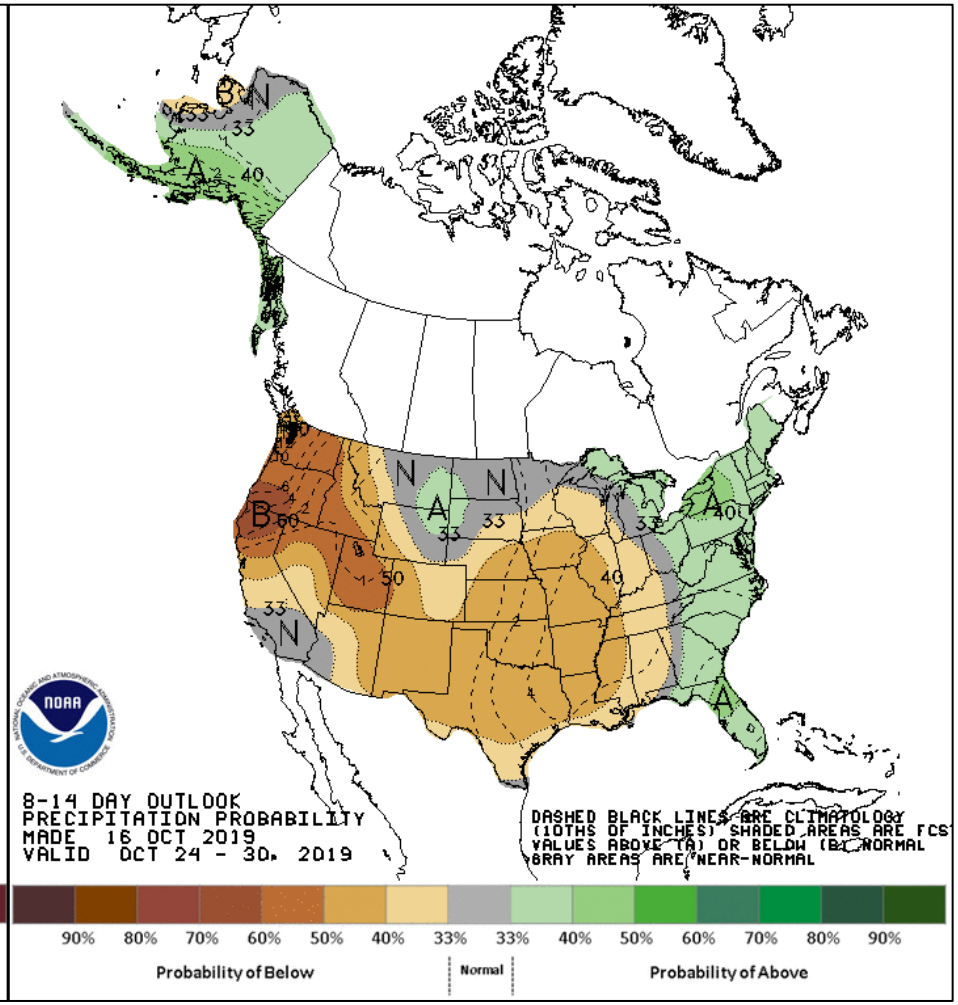
Valid: 17 Oct – 24 Oct



http://www.wpc.ncep.noaa.gov/qpf/day1-7.shtml

8-14 Day Outlook



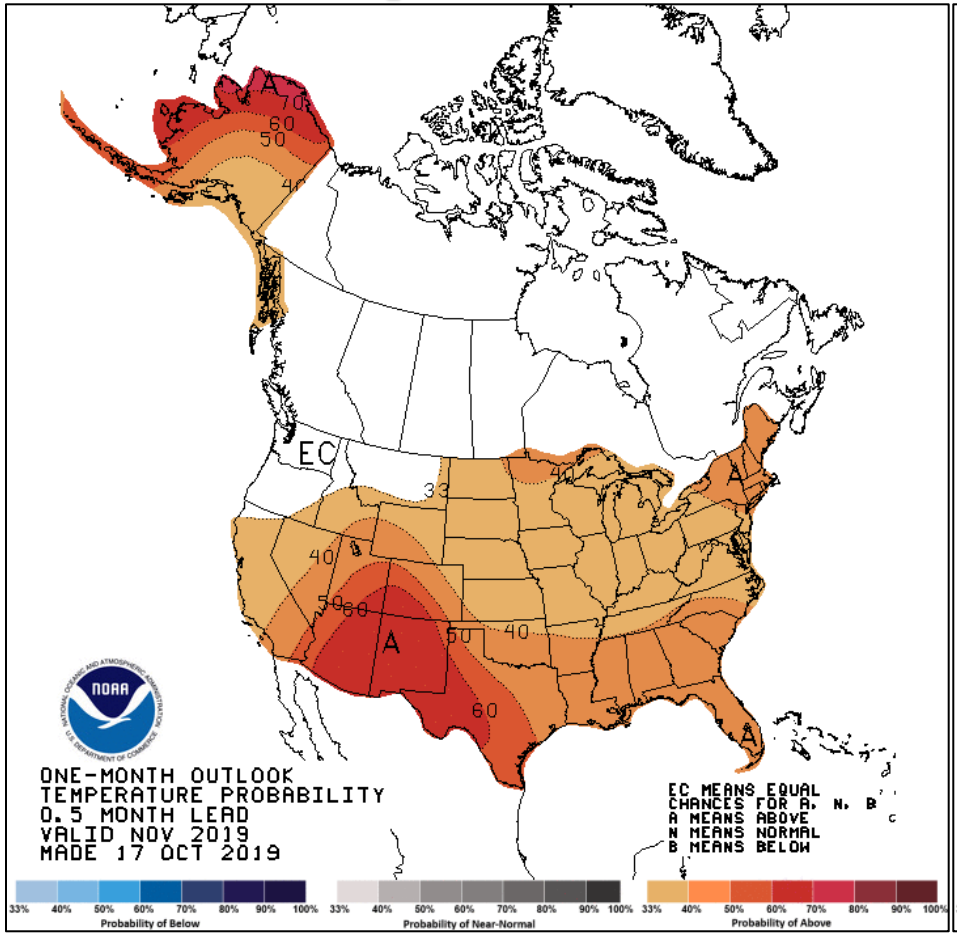


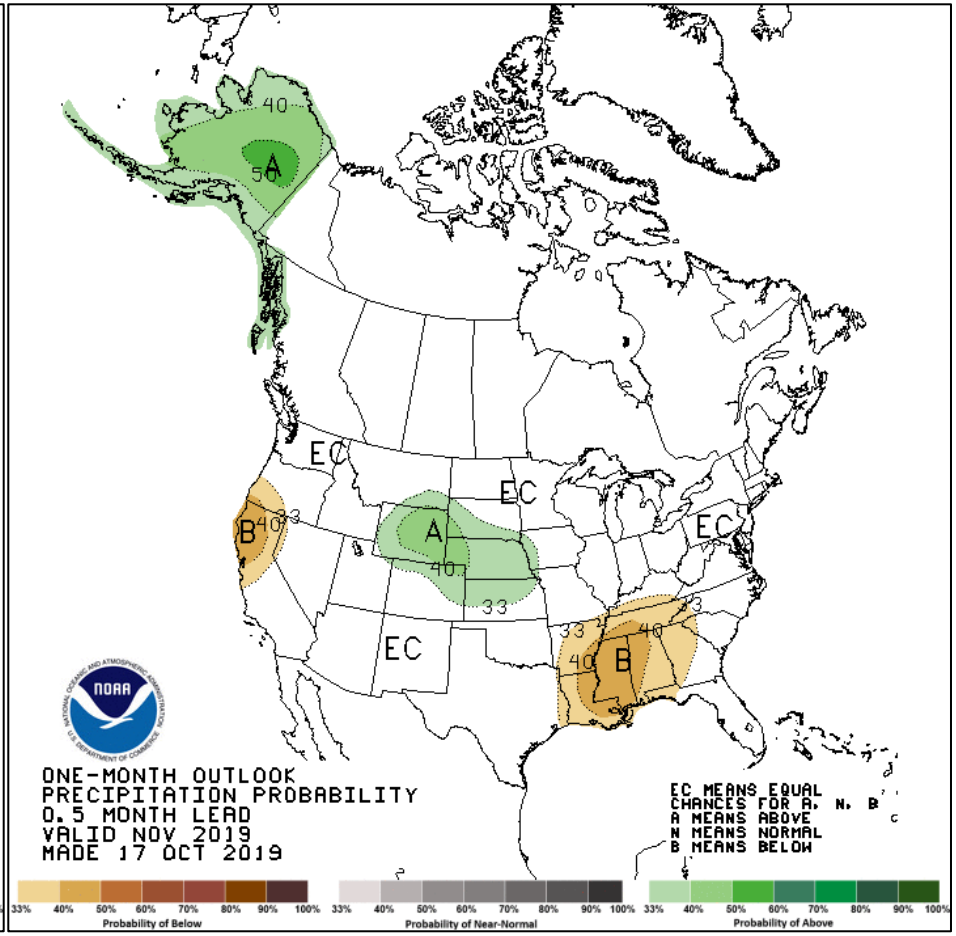
Temperature **Precipitation**

http://www.cpc.ncep.noaa.gov/products/predictions/814day/index.php

 |

November Temperature and Precipitation Outlooks



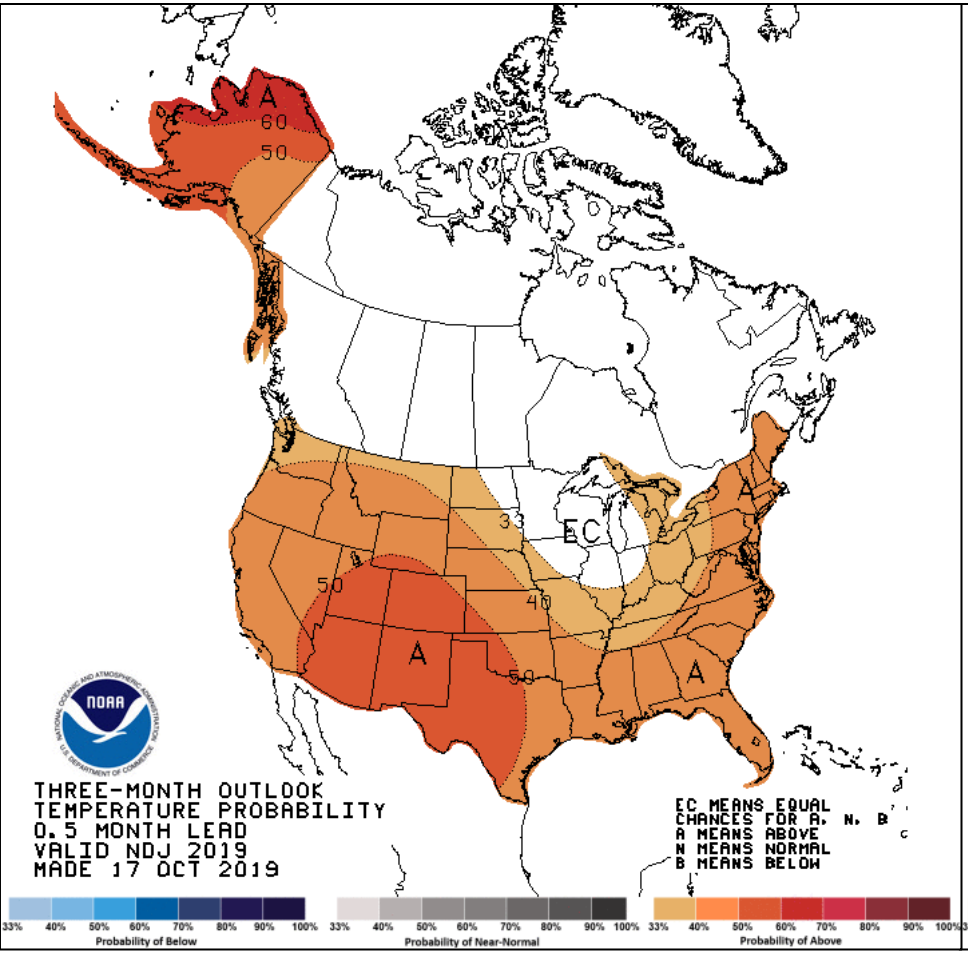


Temperature **Precipitation**

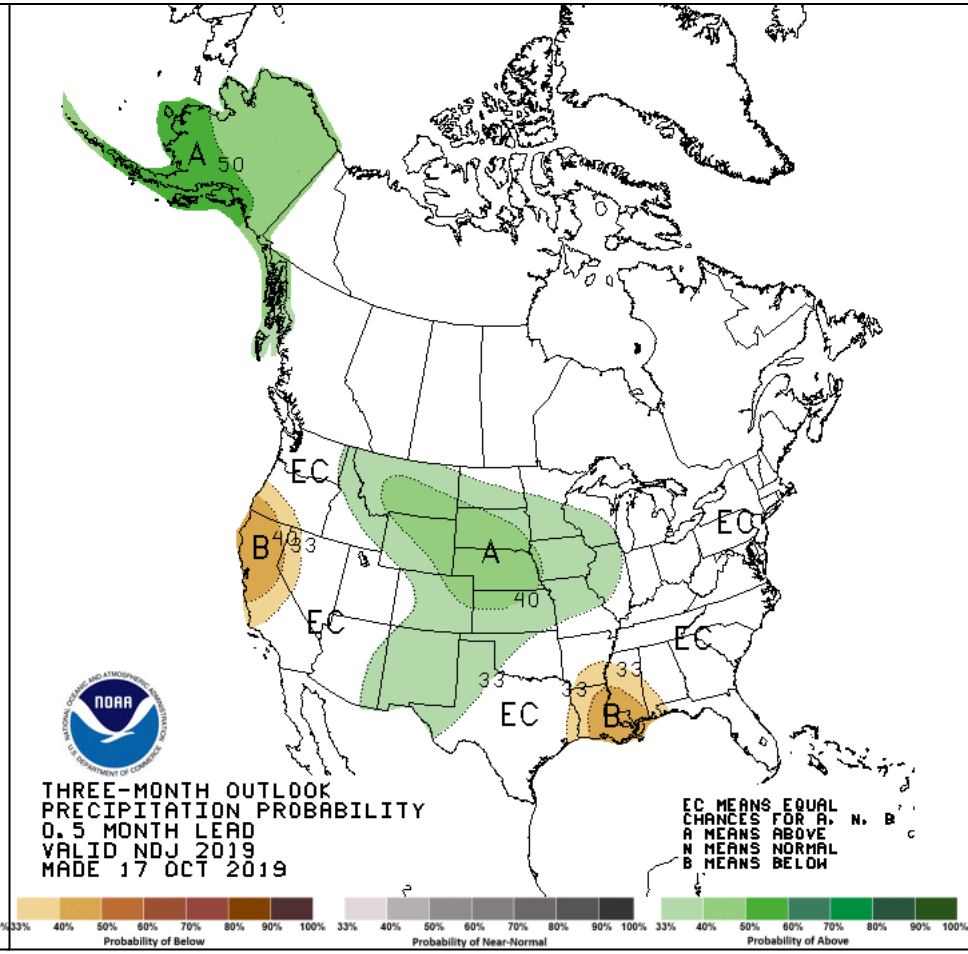
http://www.cpc.ncep.noaa.gov/products/predictions/30day/

 |

3 Month Temperature and Precipitation Outlooks, Nov-Jan



Temperature

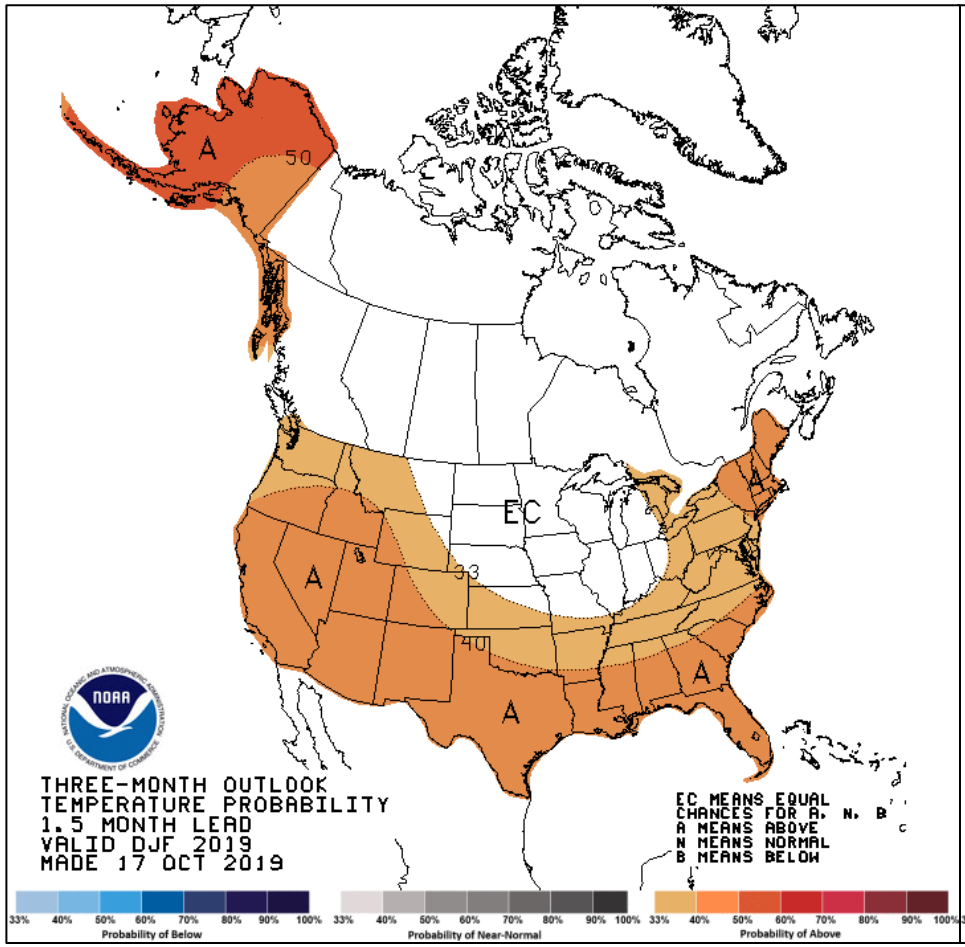


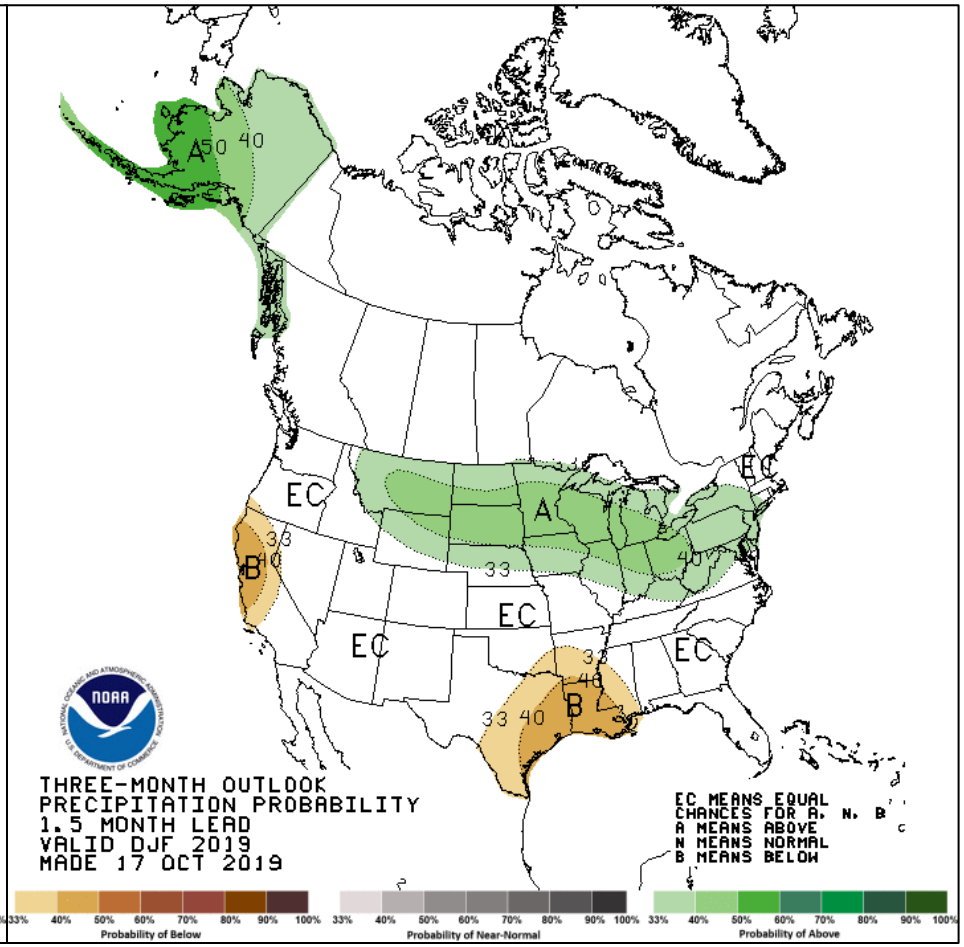
Precipitation

http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=2

 |

3 Month Temperature and Precipitation Outlooks, Dec-Feb





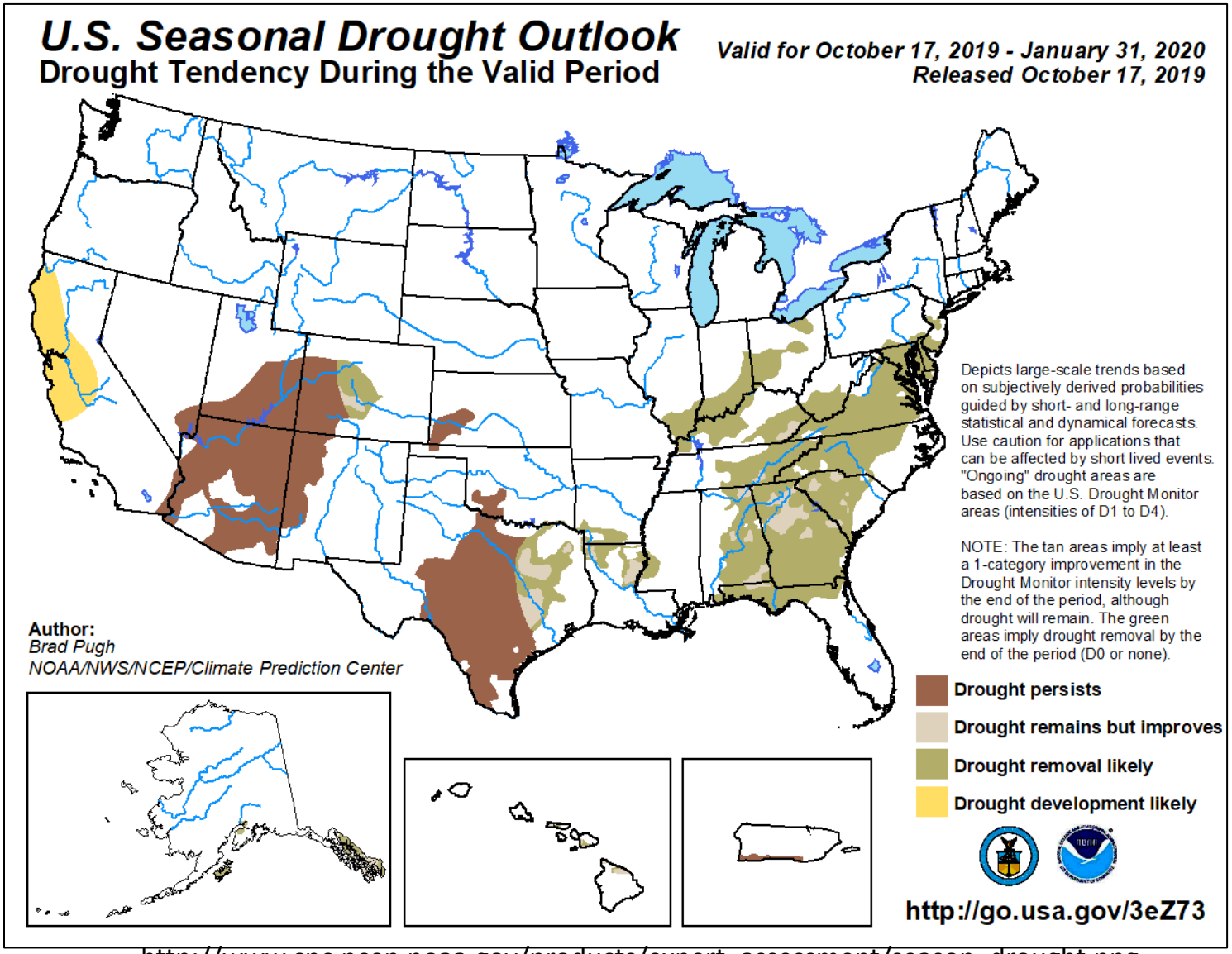
Temperature **Precipitation**

http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=2

 |

Seasonal Drought Outlook

SDSU Extension



http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.png

 |

Further Information - Partners

- **Today's and Past Recorded Presentations:**
- http://mrcc.isws.illinois.edu/webinars.htm
  http://www.hprcc.unl.edu
- NOAA's National Climatic Data Center: www.ncdc.noaa.gov
  - Monthly climate reports (U.S. & Global): www.ncdc.noaa.gov/sotc/
- NOAA's Climate Prediction Center: www.cpc.ncep.noaa.gov
- Climate Portal: www.climate.gov
- U.S. Drought Portal: www.drought.gov
- National Drought Mitigation Center: http://drought.unl.edu/
- State climatologists
  - http://www.stateclimate.org
- Regional climate centers
  - http://mrcc.isws.illinois.edu
  - http://www.hprcc.unl.edu

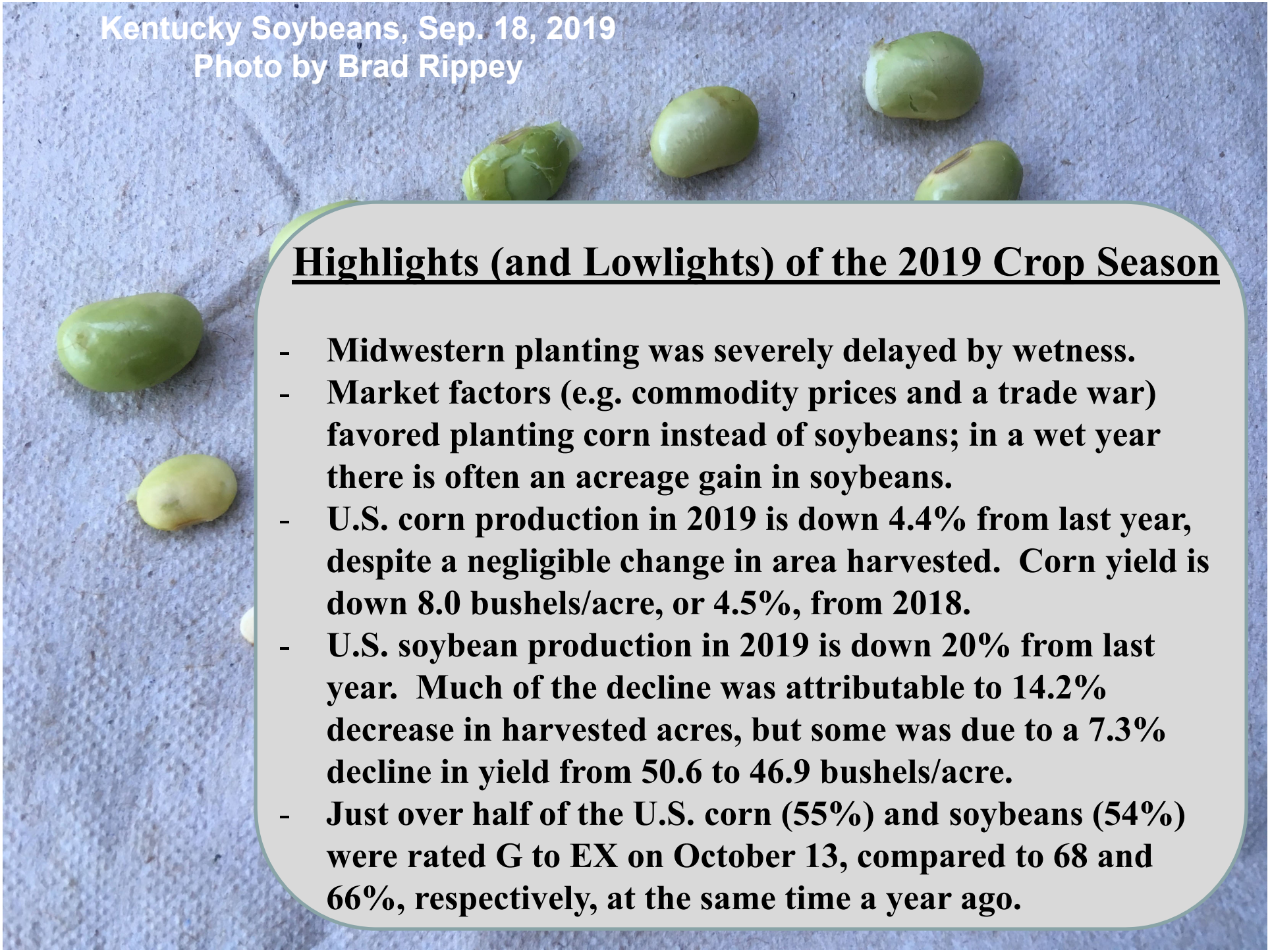
Thank You and Questions?

- Questions:
  - **Climate:**
  - Laura Edwards: laura.edwards@sdstate.edu, 605-626-2870
  - Dennis Todey: dennis.todey@ars.usda.gov , 515-294-2013
  - Doug Kluck: doug.kluck@noaa.gov, 816-994-3008
  - Mike Timlin: mtimlin@illinois.edu; 217-333-8506
  - Natalie Umphlett: numphlett2@unl.edu_ ; 402 472-6764
  - Brian Fuchs: bfuchs2@unl.edu 402 472-6775

  - **Weather:**
  - crhroc@noaa.gov

North-Central U.S. Agricultural Update, Oct. 17, 2019

Soybean Field in Warren Co., KY, Sep. 18, 2019. Photo by B. Rippey, USDA.



Highlights (and Lowlights) of the 2019 Crop Season

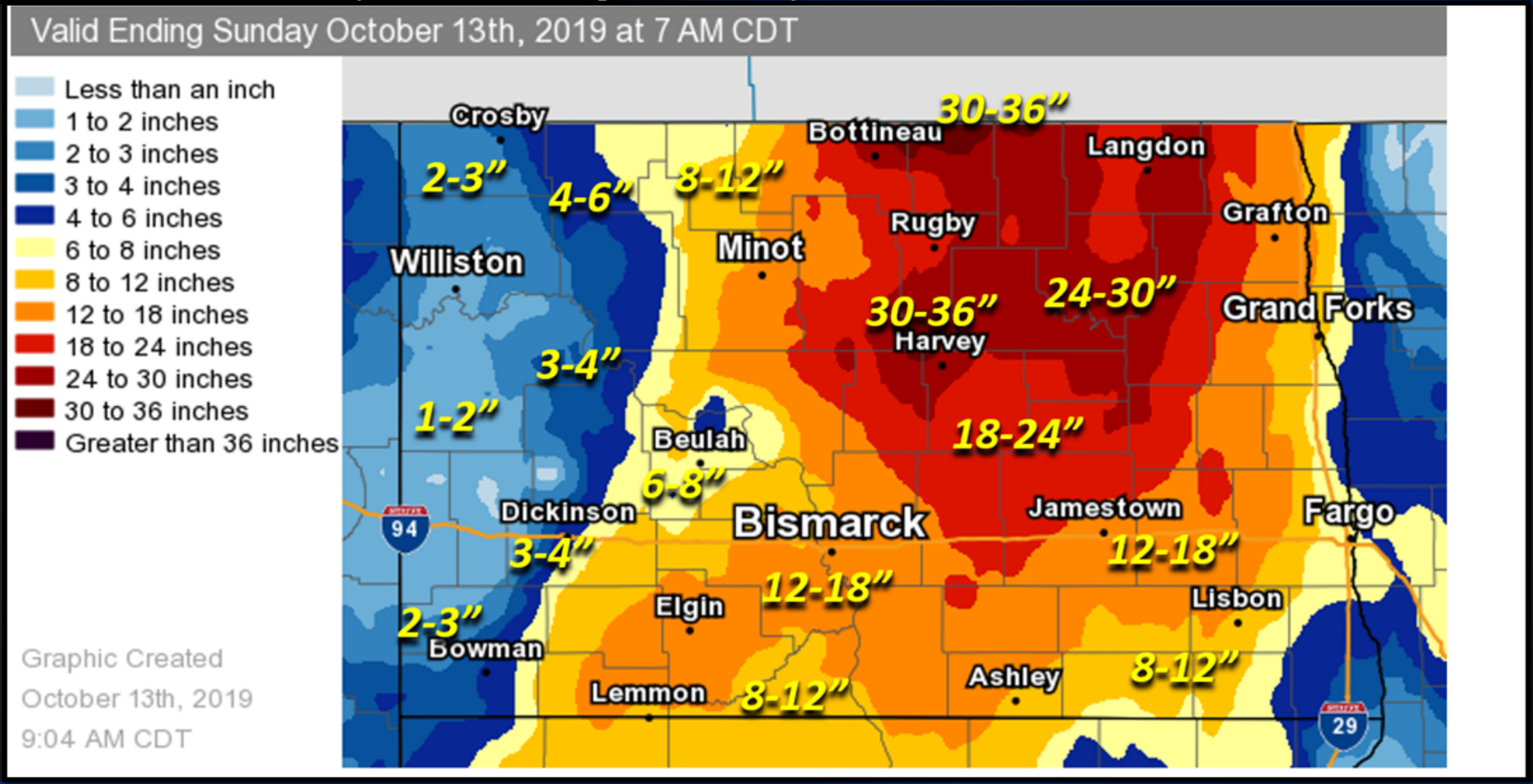
- **Midwestern planting was severely delayed by wetness.**
- **Market factors (e.g. commodity prices and a trade war) favored planting corn instead of soybeans; in a wet year there is often an acreage gain in soybeans.**
- **U.S. corn production in 2019 is down 4.4% from last year, despite a negligible change in area harvested. Corn yield is down 8.0 bushels/acre, or 4.5%, from 2018.**
- **U.S. soybean production in 2019 is down 20% from last year. Much of the decline was attributable to 14.2% decrease in harvested acres, but some was due to a 7.3% decline in yield from 50.6 to 46.9 bushels/acre.**
- **Just over half of the U.S. corn (55%) and soybeans (54%) were rated G to EX on October 13, compared to 68 and 66%, respectively, at the same time a year ago.**

Aberdeen, SD, Oct. 10, 2019. Photo by L. Edwards, Extension State Climatologist.

Observed Total Snowfall Amounts (Oct 10th – Oct 13th, 2019)

Weather Forecast Office
Bismarck, ND

Here are all the storm total snowfall reports we received through 7AM CDT Sunday, October 13th, 2019



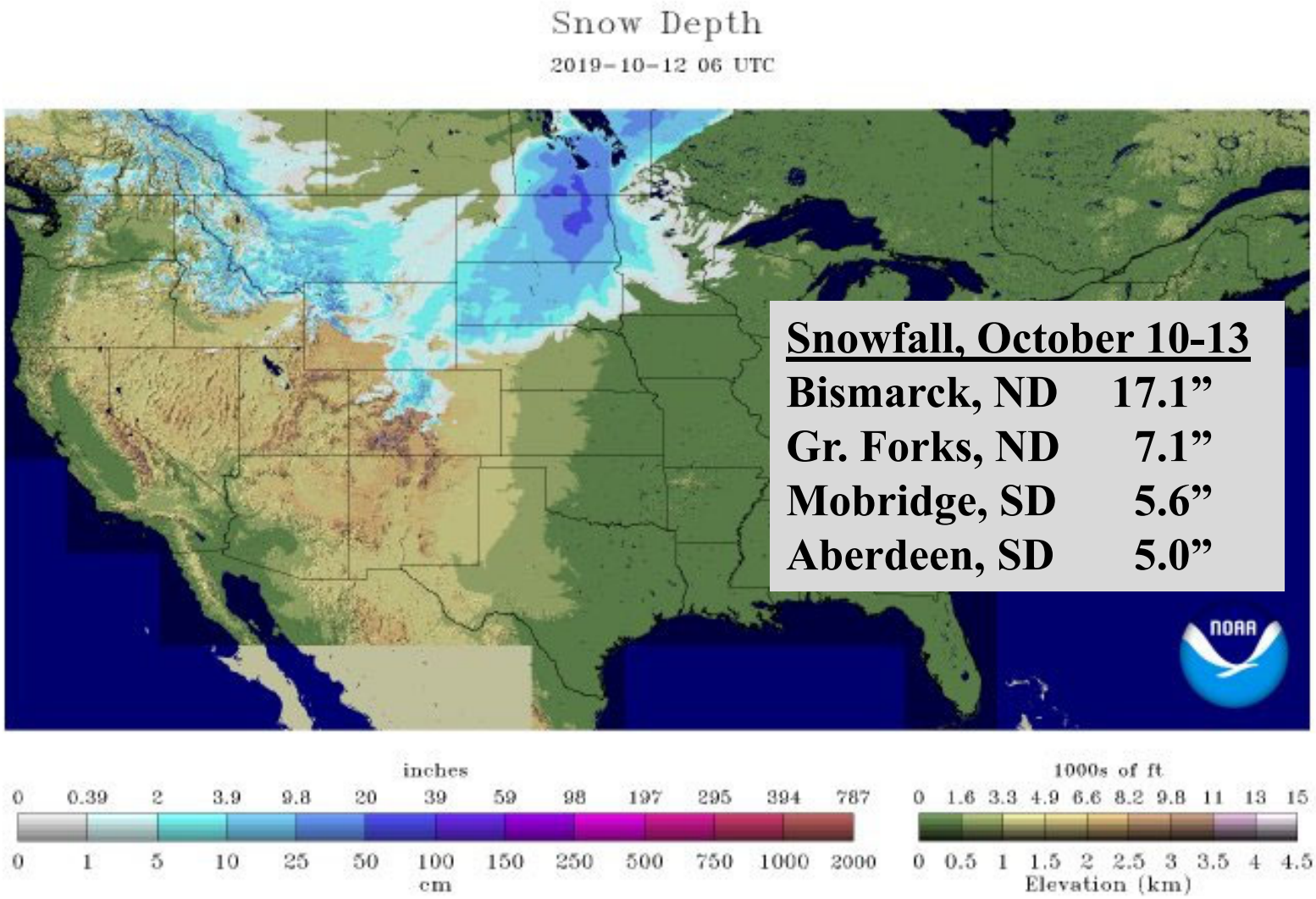
NWSBismarck

weather.gov/bis

Snow Depth, October 12, 2019

National Snow Analysis 2018-2019

OWP | OFFICE OF WATER PREDICTION



USDA United States Department of Agriculture

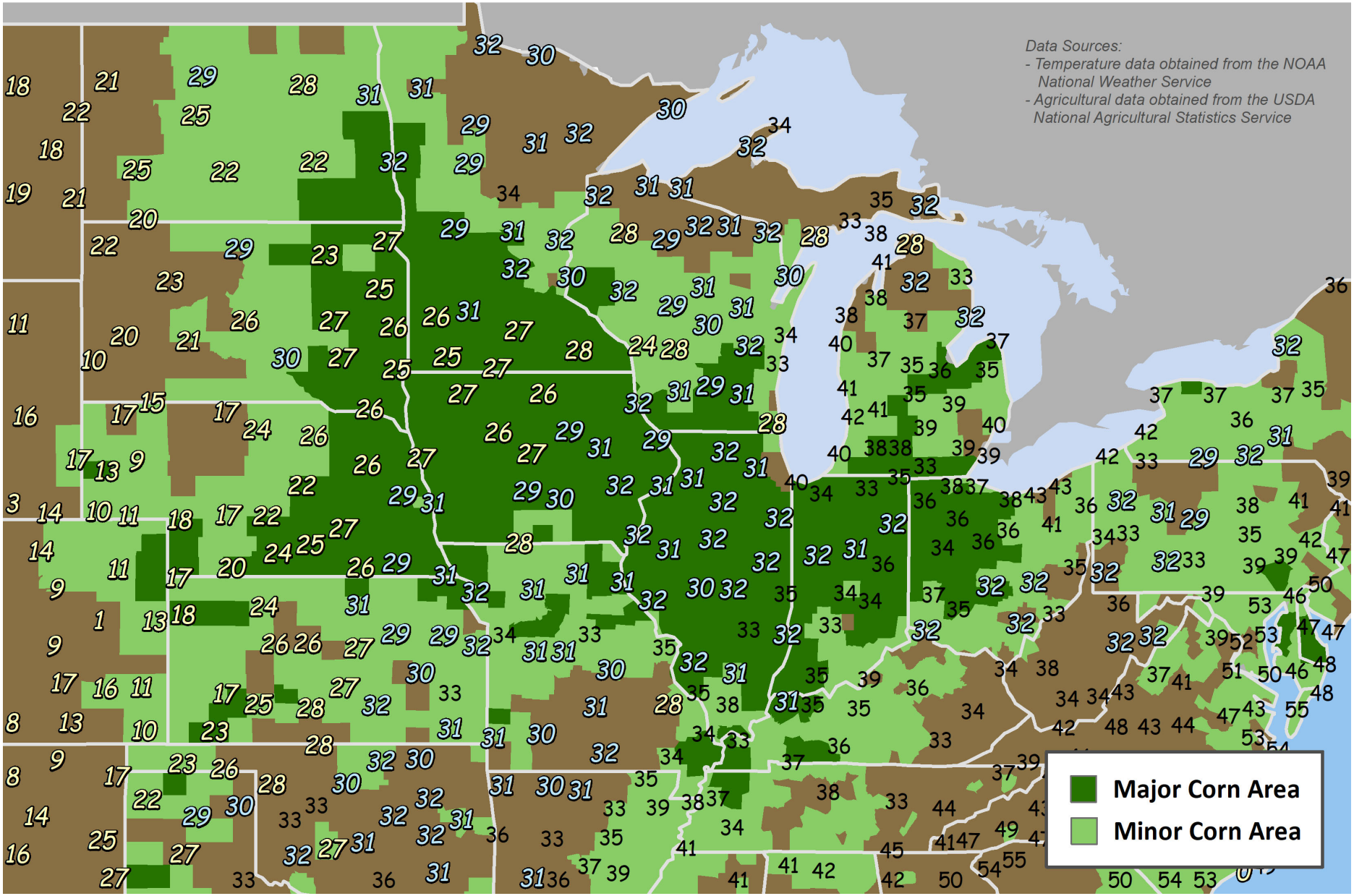
This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)

Growing Season Ends in Parts of the Midwest

Extreme Minimum Temperatures (°F)

October 11 - 14, 2019

(Updated - Oct 15, 2019)

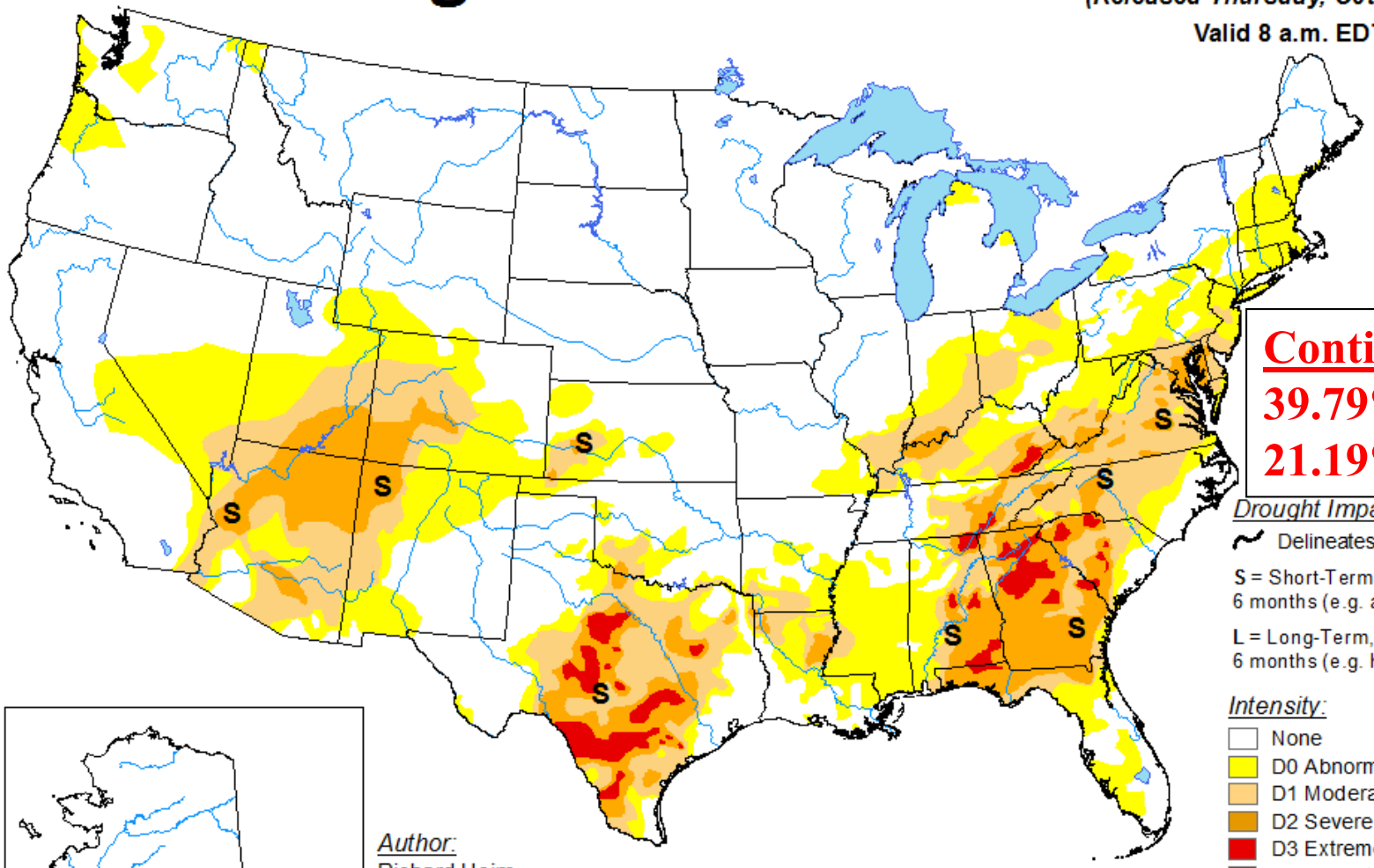


U.S. Drought Monitor

October 15, 2019

(Released Thursday, Oct. 17, 2019)

Valid 8 a.m. EDT



Contiguous U.S.

39.79% D0 – D4

21.19% D1 – D4

Drought Impact Types:

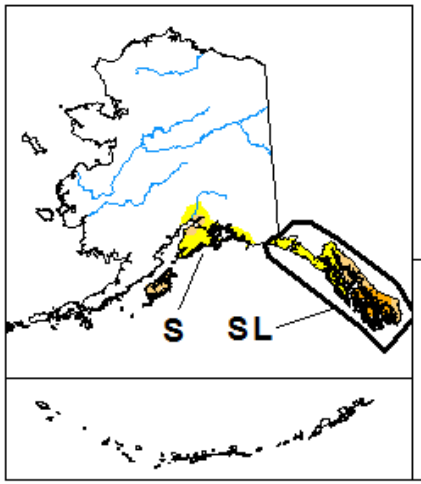
Delineates dominant impacts

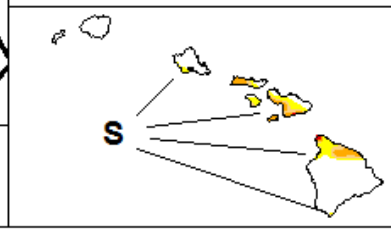
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

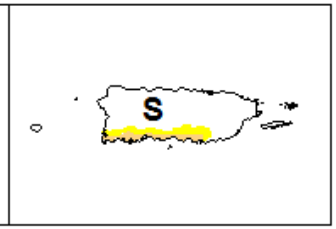
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought





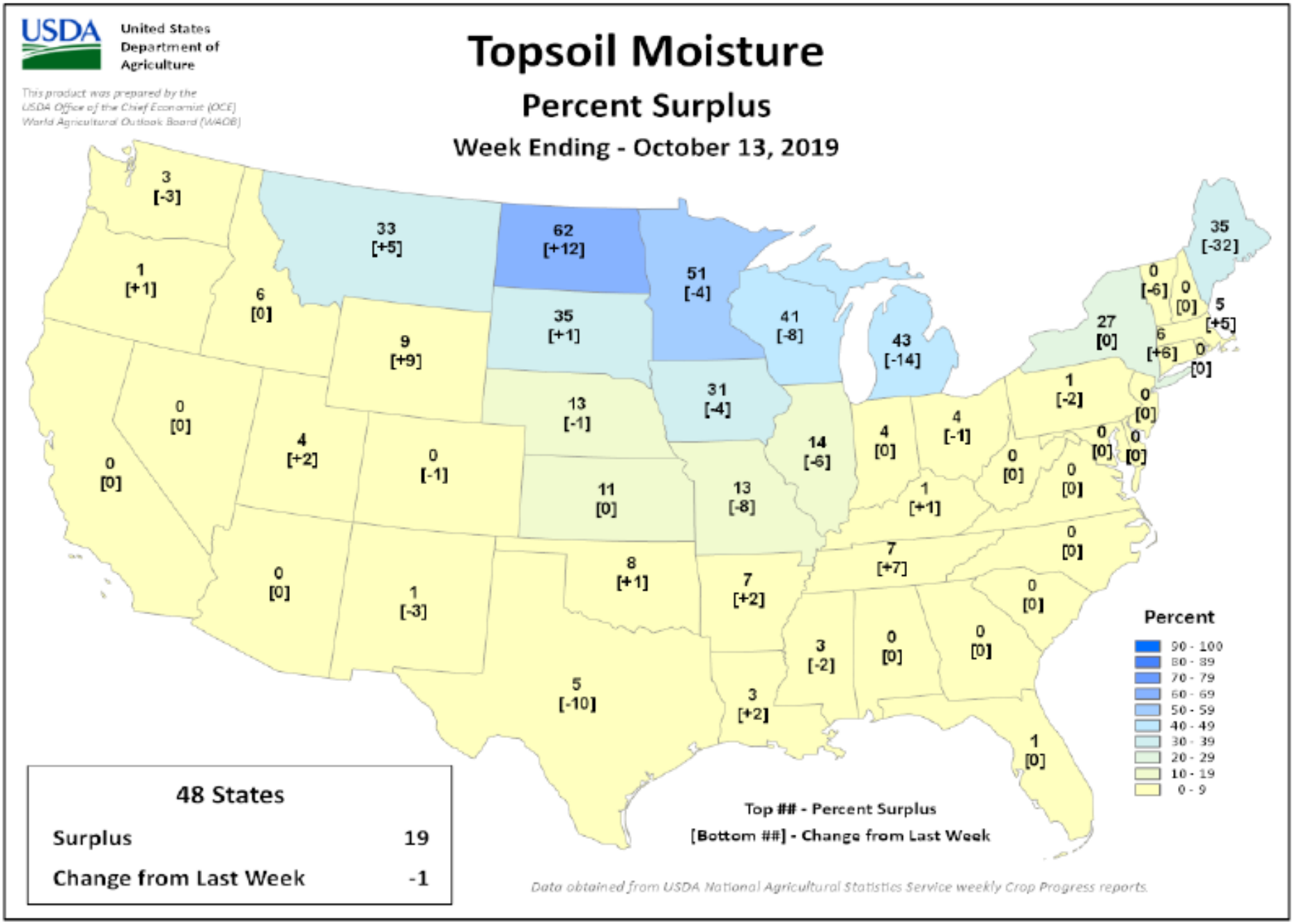


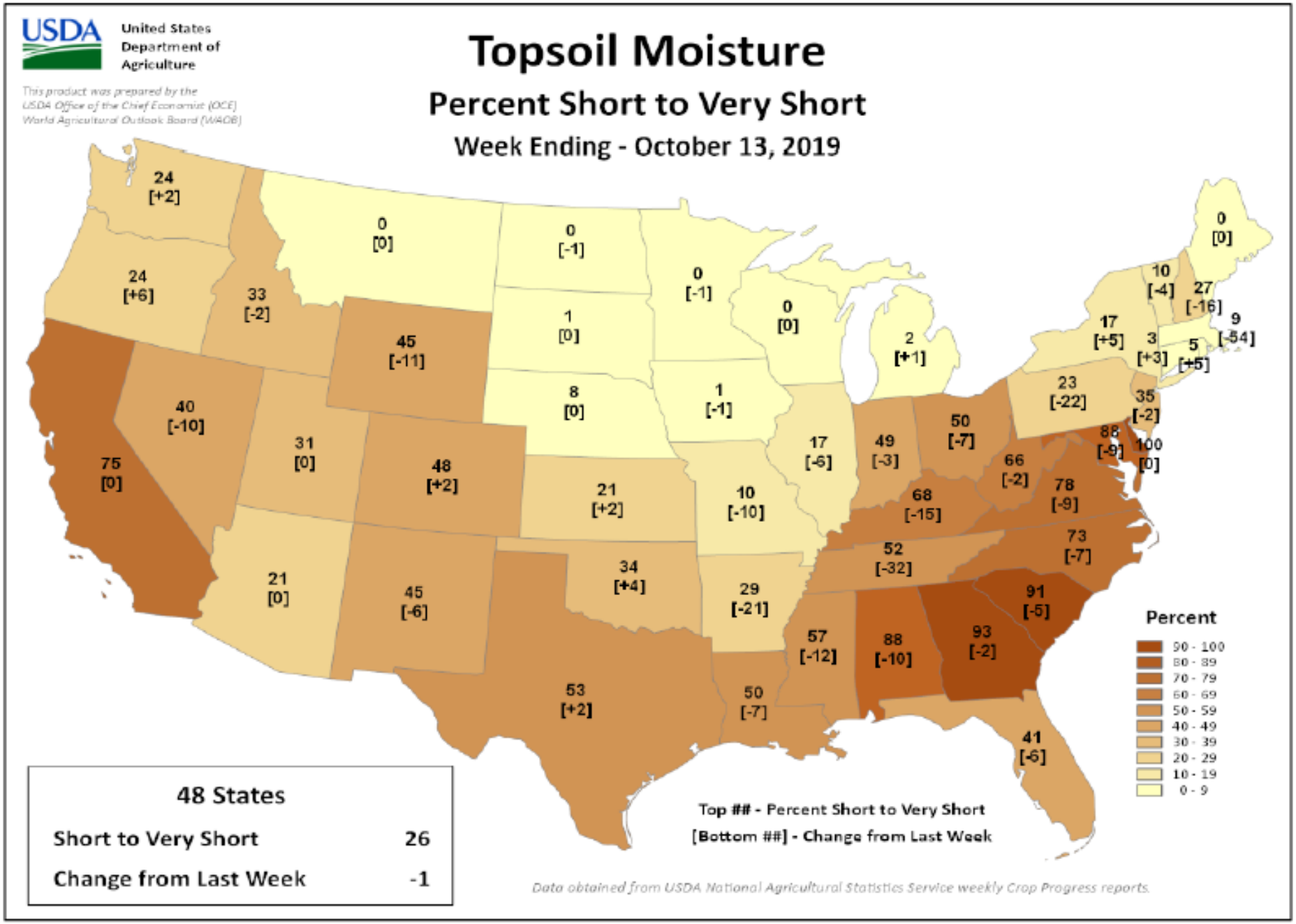
Author:
Richard Heim
NCEI/NOAA

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

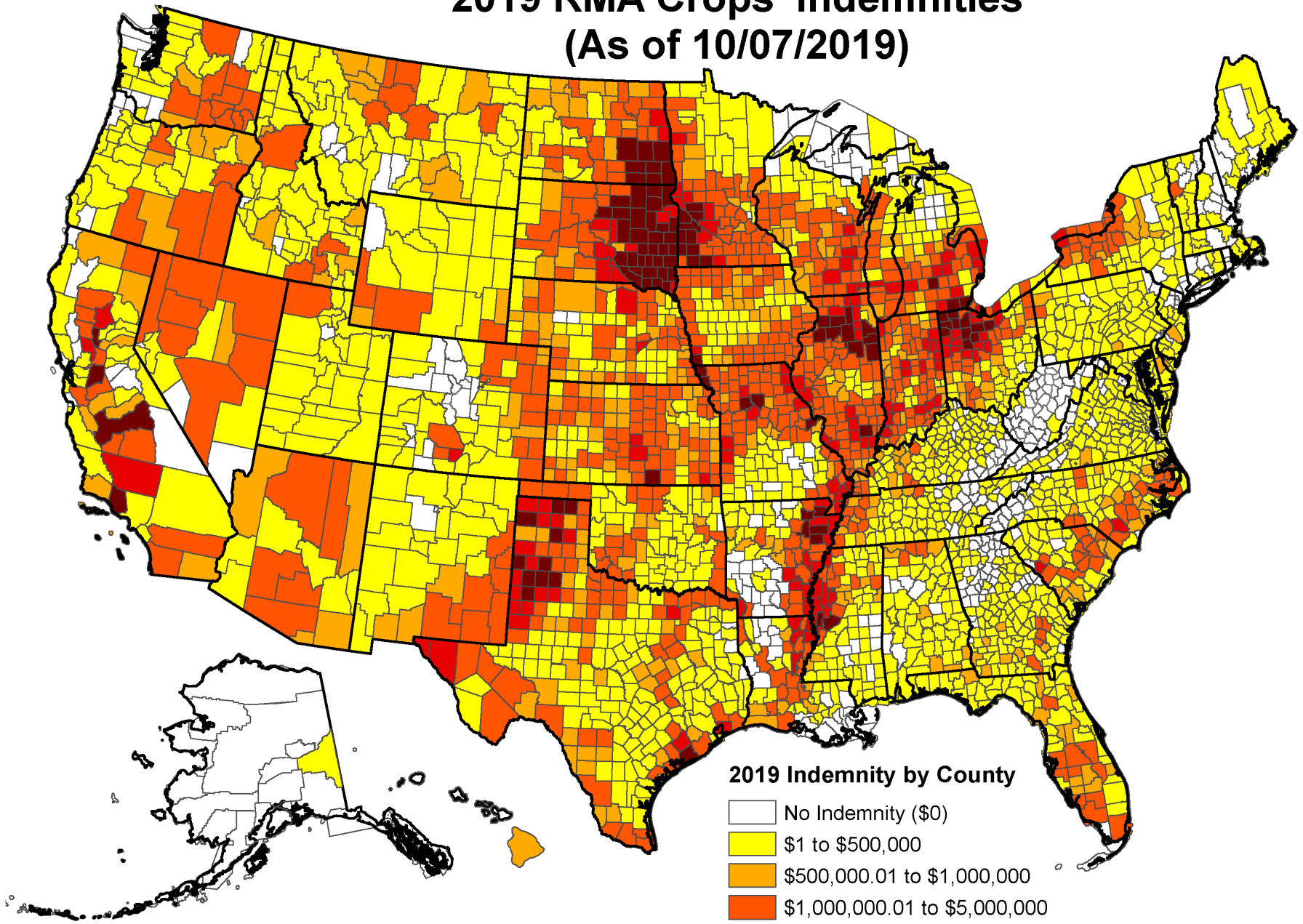
USDA NDMC

droughtmonitor.unl.edu


USDA
United States Department of Agriculture
This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)
Topsoil Moisture
Percent Surplus
Week Ending - October 13, 2019
3 [-3]
1 [+1]
6 [0]
33 [+5]
62 [+12]
51 [-4]
35 [+1]
41 [-8]
43 [-14]
9 [+9]
13 [-1]
31 [-4]
14 [-6]
0 [0]
4 [+2]
0 [-1]
11 [0]
13 [-8]
4 [0]
4 [-1]
0 [0]
1 [+1]
0 [0]
0 [0]
0 [0]
1 [-3]
8 [+1]
7 [+2]
7 [+7]
0 [0]
0 [0]
3 [-2]
0 [0]
0 [0]
5 [-10]
3 [+2]
1 [0]
35 [-32]
0 [-6]
0 [0]
5 [+5]
27 [0]
6 [+6]
0 [0]
1 [-2]
0 [0]
0 [0]
0 [0]
0 [0]
Percent
90 - 100
80 - 89
70 - 79
60 - 69
50 - 59
40 - 49
30 - 39
20 - 29
10 - 19
0 - 9
Top ## - Percent Surplus
[Bottom ##] - Change from Last Week
48 States
Surplus 19
Change from Last Week -1
Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

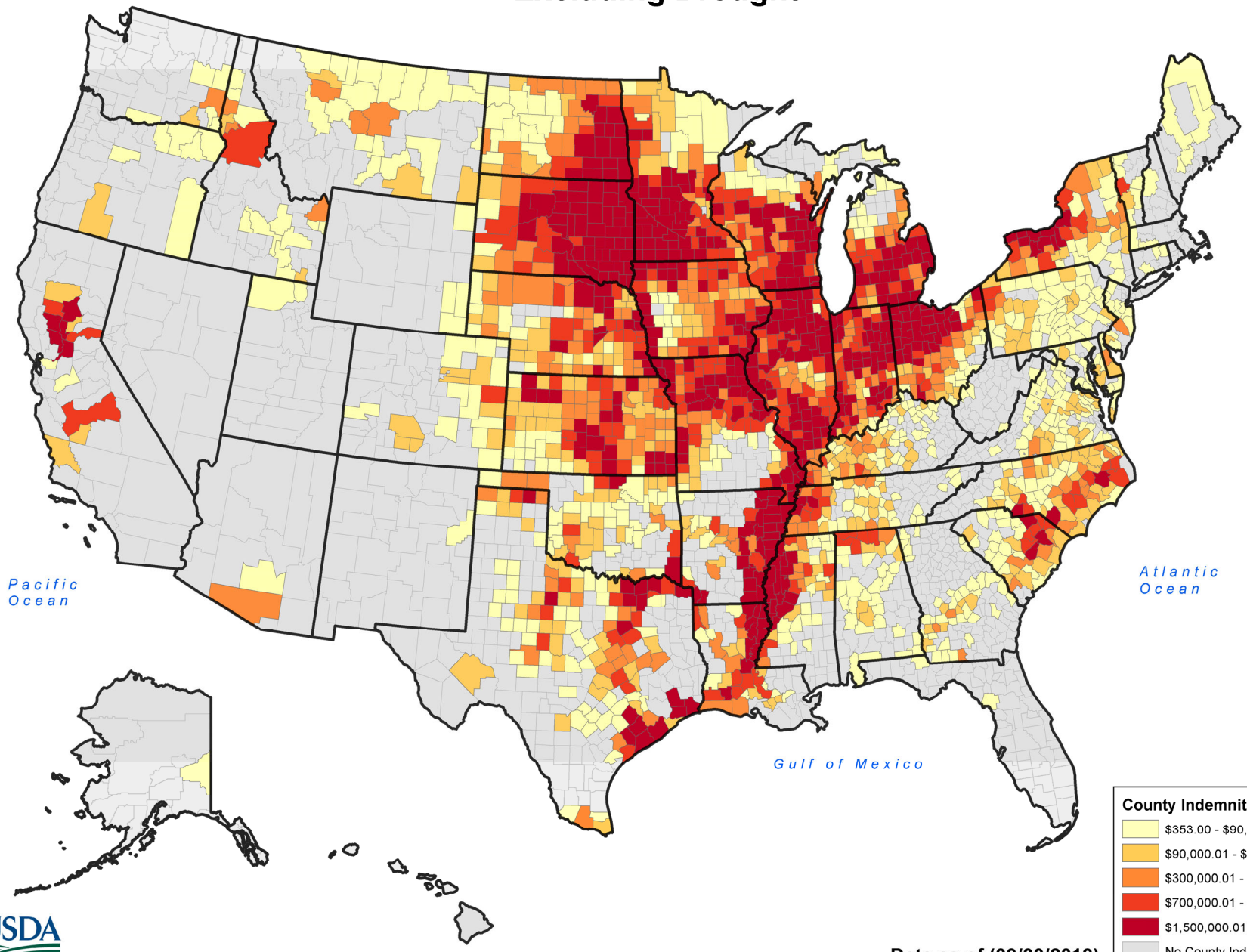

USDA
United States Department of Agriculture
This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)
Topsoil Moisture
Percent Short to Very Short
Week Ending - October 13, 2019
24 [+2]
24 [+6]
33 [-2]
0 [0]
45 [-11]
40 [-10]
75 [0]
31 [0]
21 [0]
0 [-1]
1 [0]
8 [0]
48 [+2]
45 [-6]
0 [-1]
0 [0]
1 [-1]
21 [+2]
34 [+4]
53 [+2]
2 [+1]
17 [-6]
10 [-10]
29 [-21]
50 [-7]
49 [-3]
68 [-15]
52 [-32]
57 [-12]
88 [-10]
50 [-7]
23 [-22]
17 [+5]
10 [-4]
27 [-16]
3 [+3]
9 [-54]
5 [+5]
0 [0]
35 [-2]
88 [-9]
100 [0]
66 [-2]
78 [-9]
73 [-7]
91 [-5]
93 [-2]
41 [-6]
Percent
90 - 100
80 - 89
70 - 79
60 - 69
50 - 59
40 - 49
30 - 39
20 - 29
10 - 19
0 - 9
Top ## - Percent Short to Very Short
[Bottom ##] - Change from Last Week
48 States
Short to Very Short 26
Change from Last Week -1
Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

2019 RMA Crops' Indemnities
(As of 10/07/2019)



RMA USDA Risk Management Agency

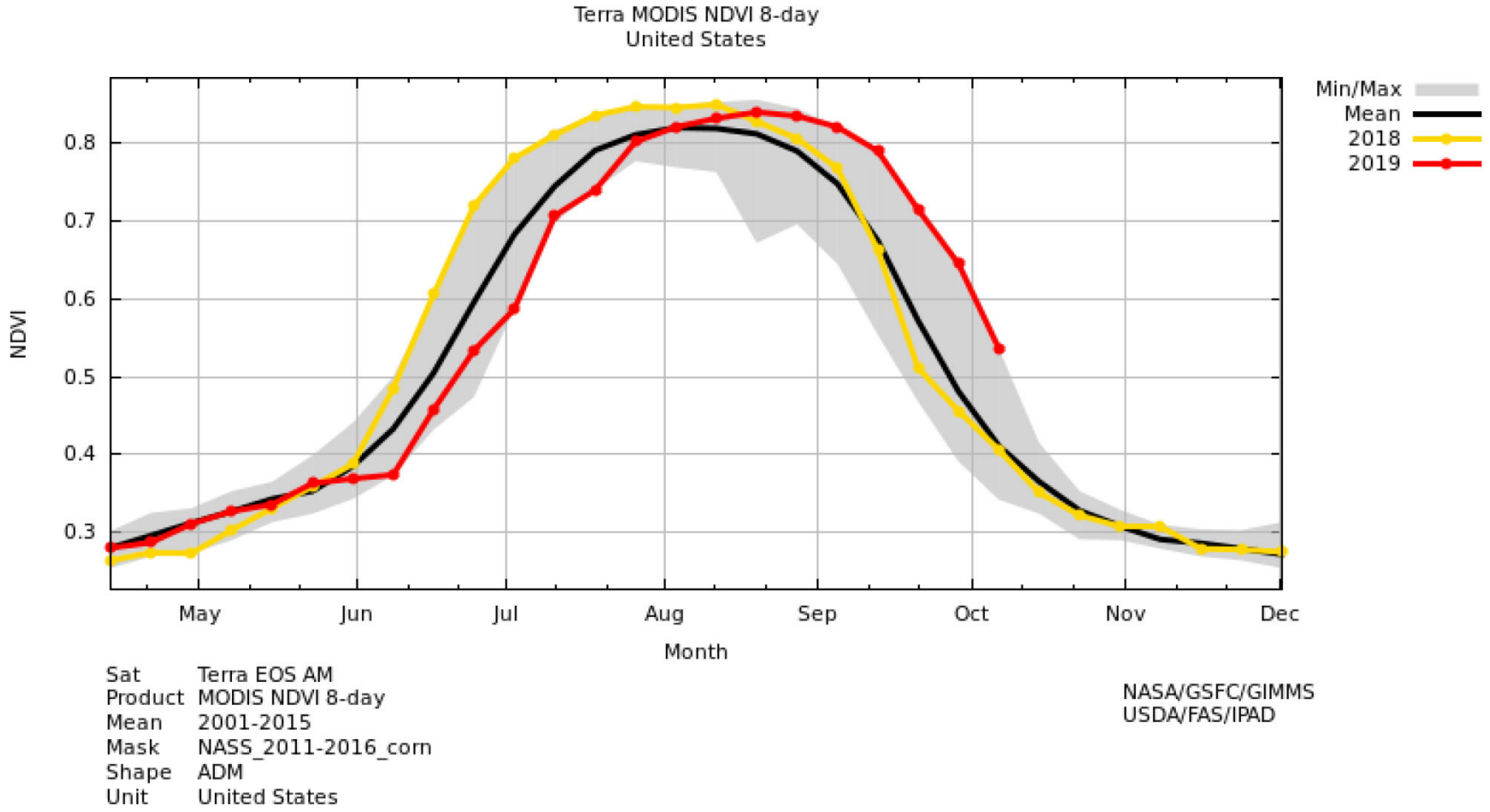
2019 Risk Management Agency Prevented Planting Claims Excluding Drought



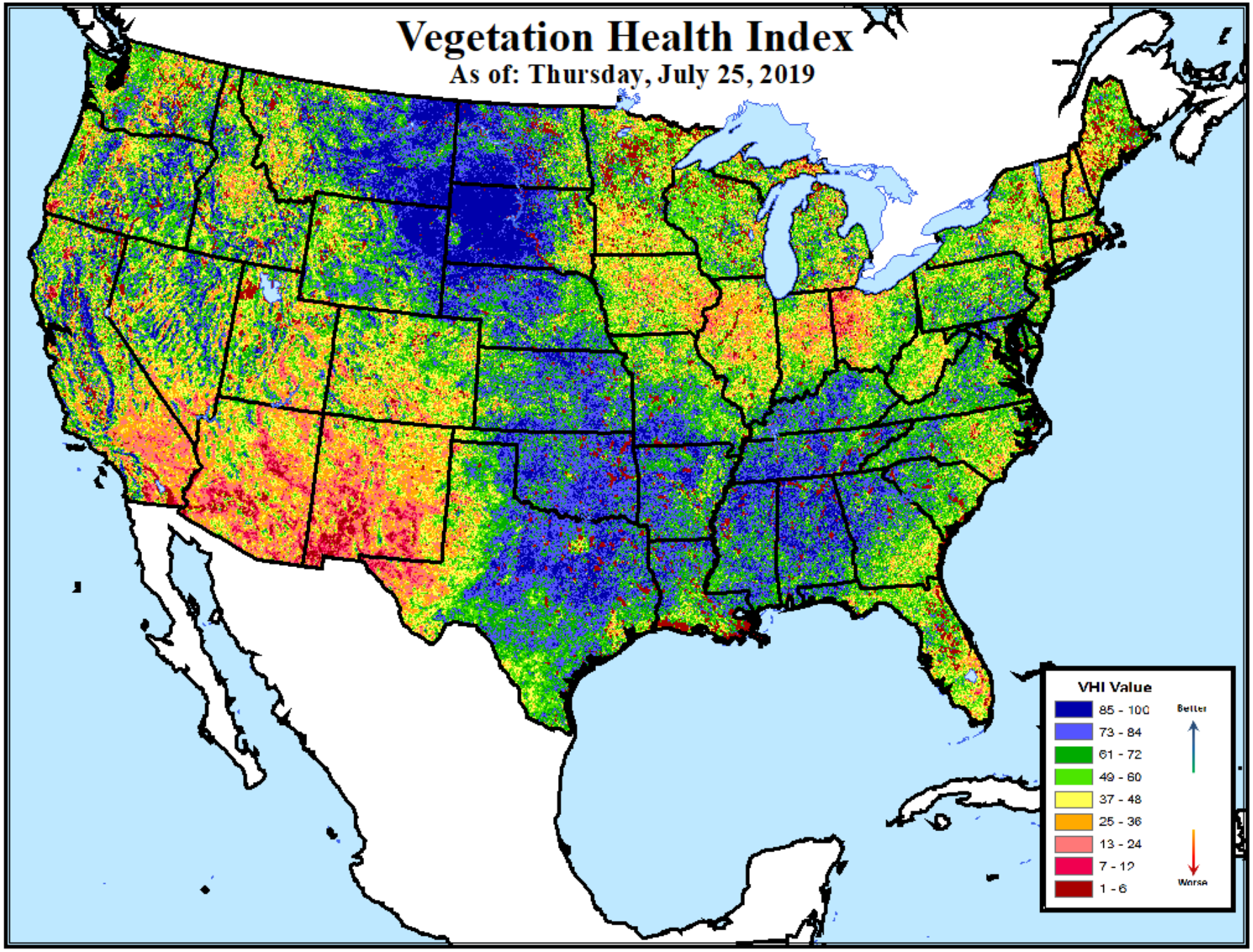
USDA

Data as of (09/30/2019)

Normalized Difference Vegetation Index (NDVI)



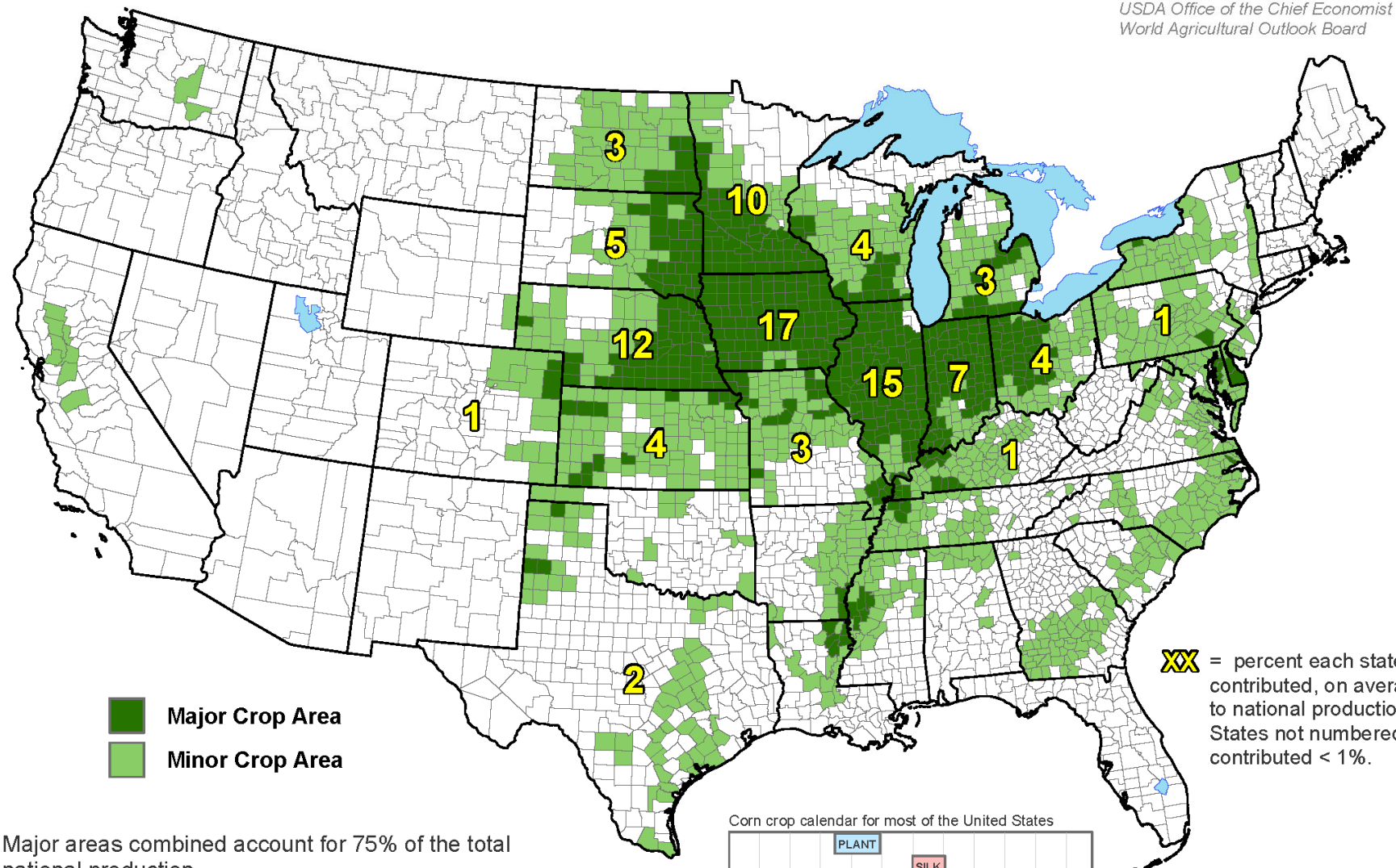
USDA-NASS
10-10-19


Vegetation Health Index
As of: Thursday, July 25, 2019
VHI Value
85 - 100
73 - 84
61 - 72
49 - 60
37 - 48
25 - 36
13 - 24
7 - 12
1 - 6
Better
Worse

United States: Corn

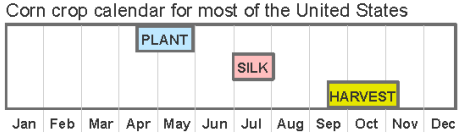
United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS survey data from 2010 to 2014.

Corn crop calendar for most of the United States

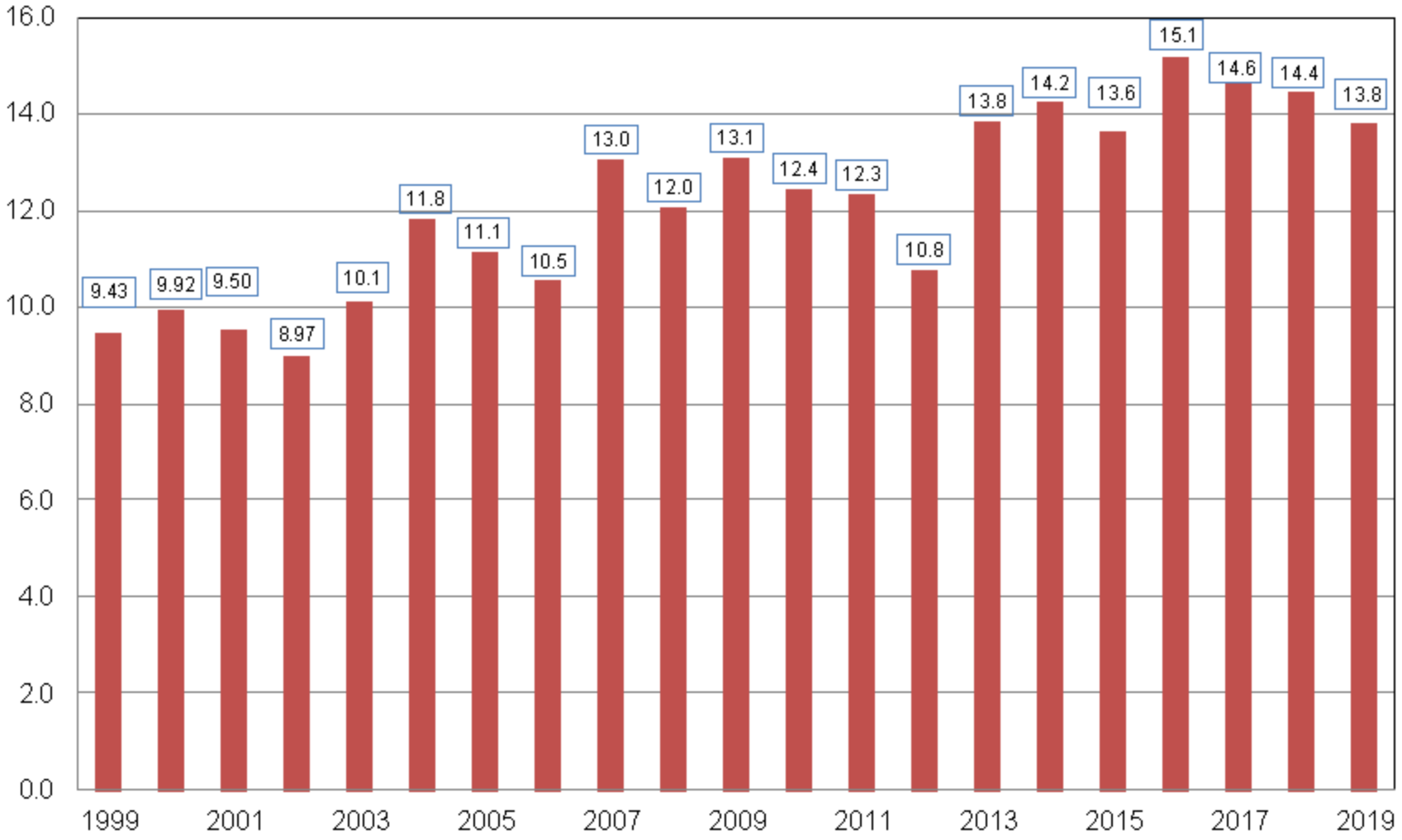


The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

Corn for Grain Production

United States

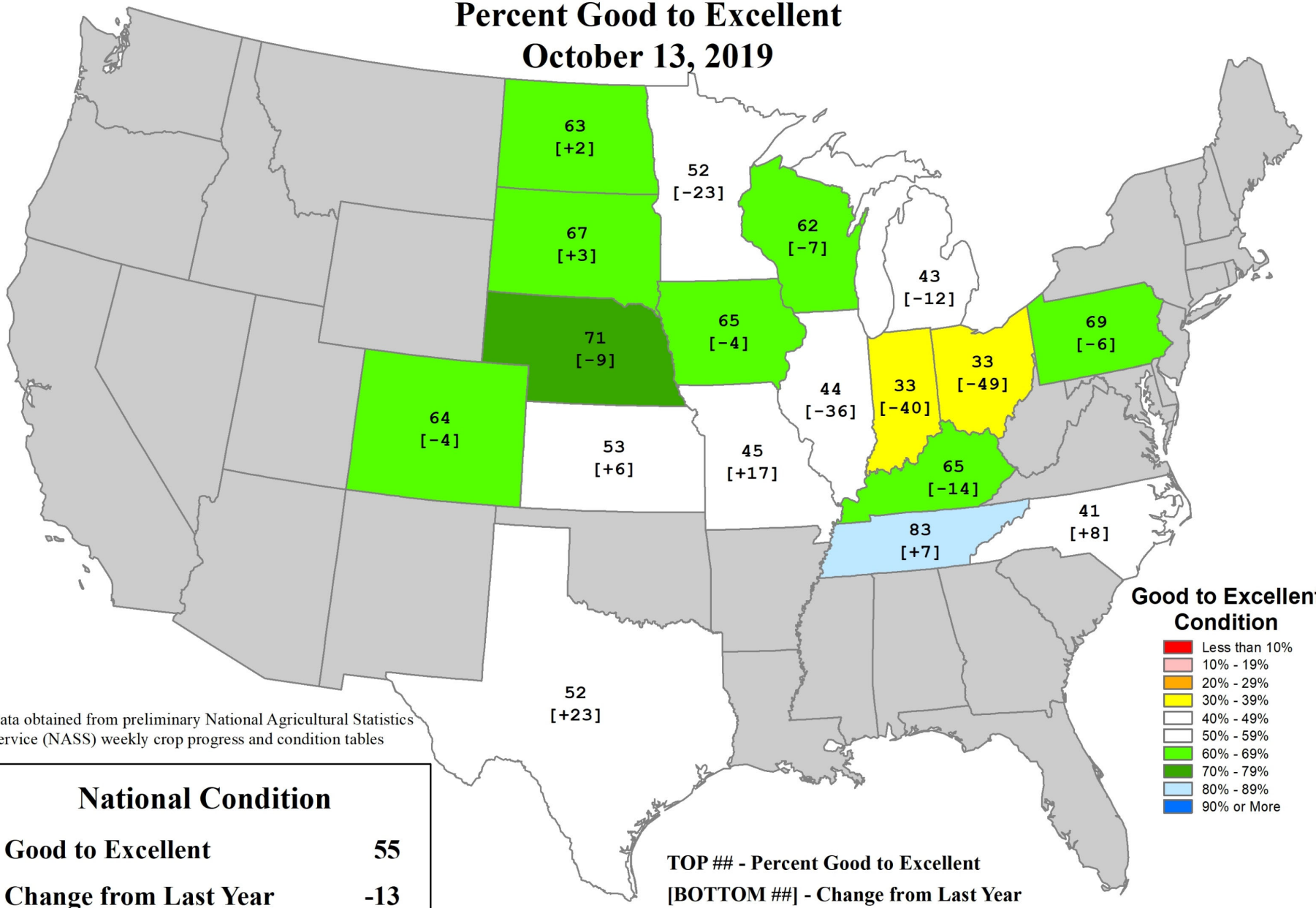
Billion Bushels



USDA-NASS
10-10-19

U.S. Corn Conditions

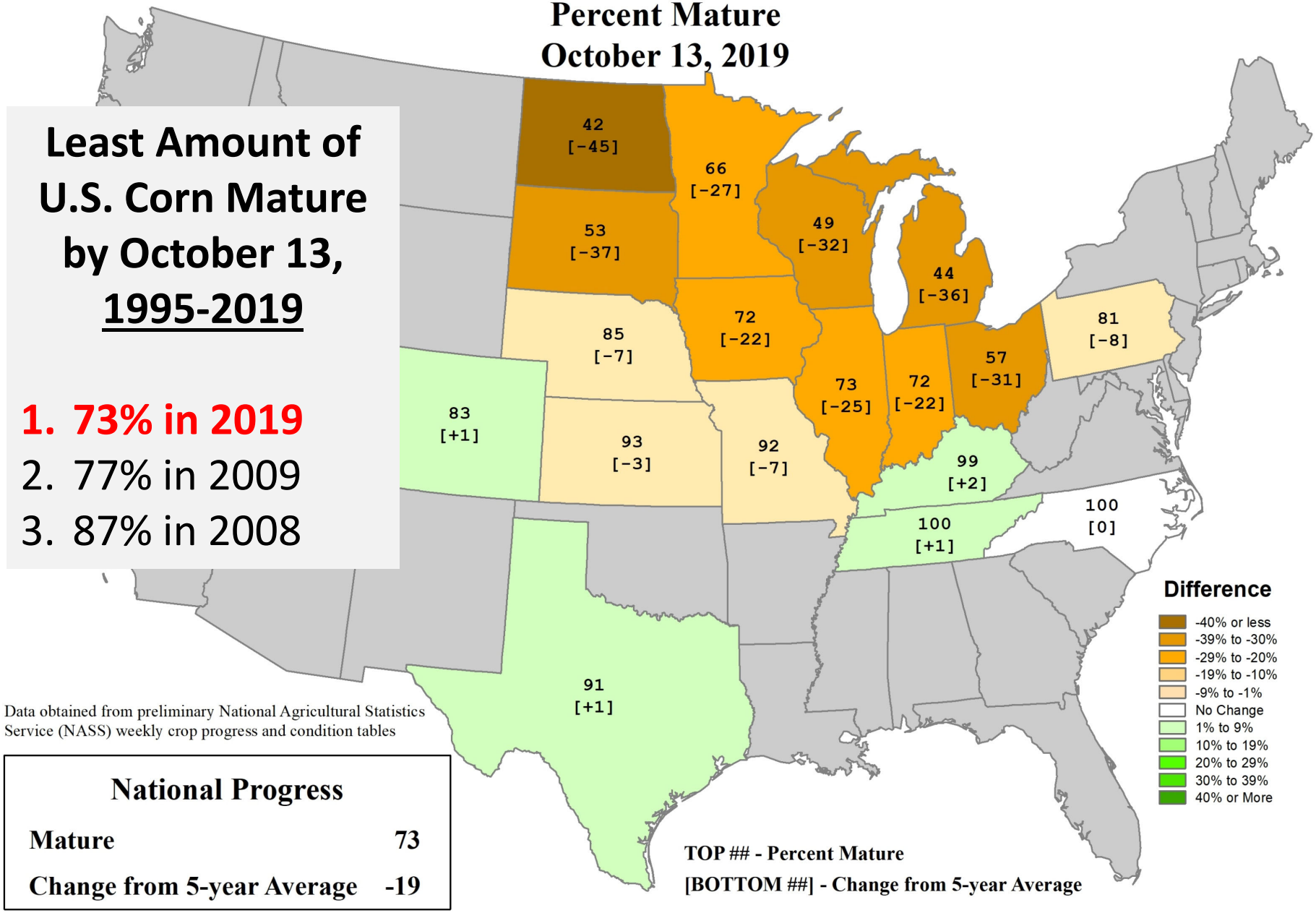
Percent Good to Excellent
October 13, 2019



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Condition	
Good to Excellent	55
Change from Last Year	-13

U.S. Corn Progress

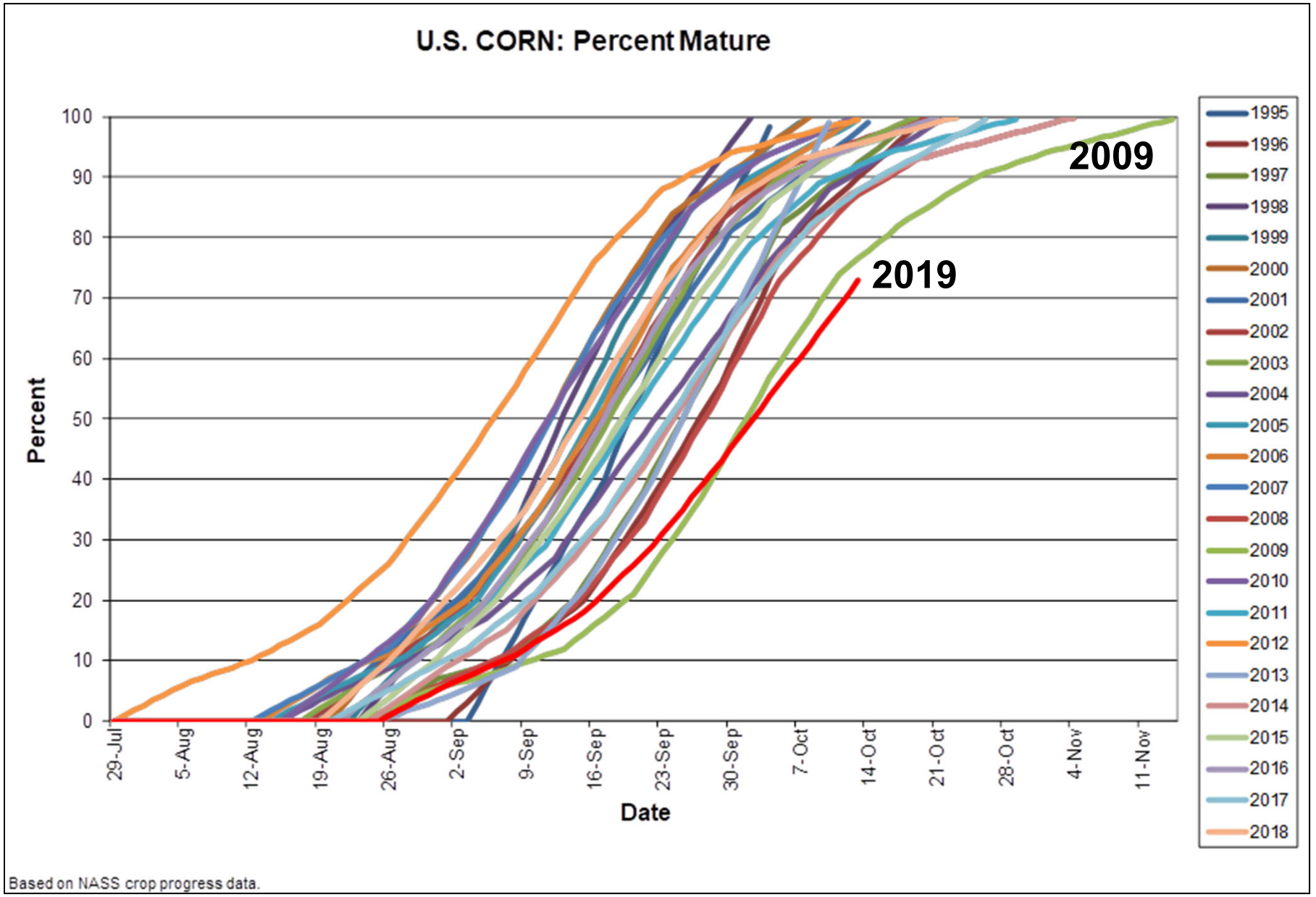


Least Amount of U.S. Corn Mature by October 13, 1995-2019

1. **73% in 2019**
2. 77% in 2009
3. 87% in 2008

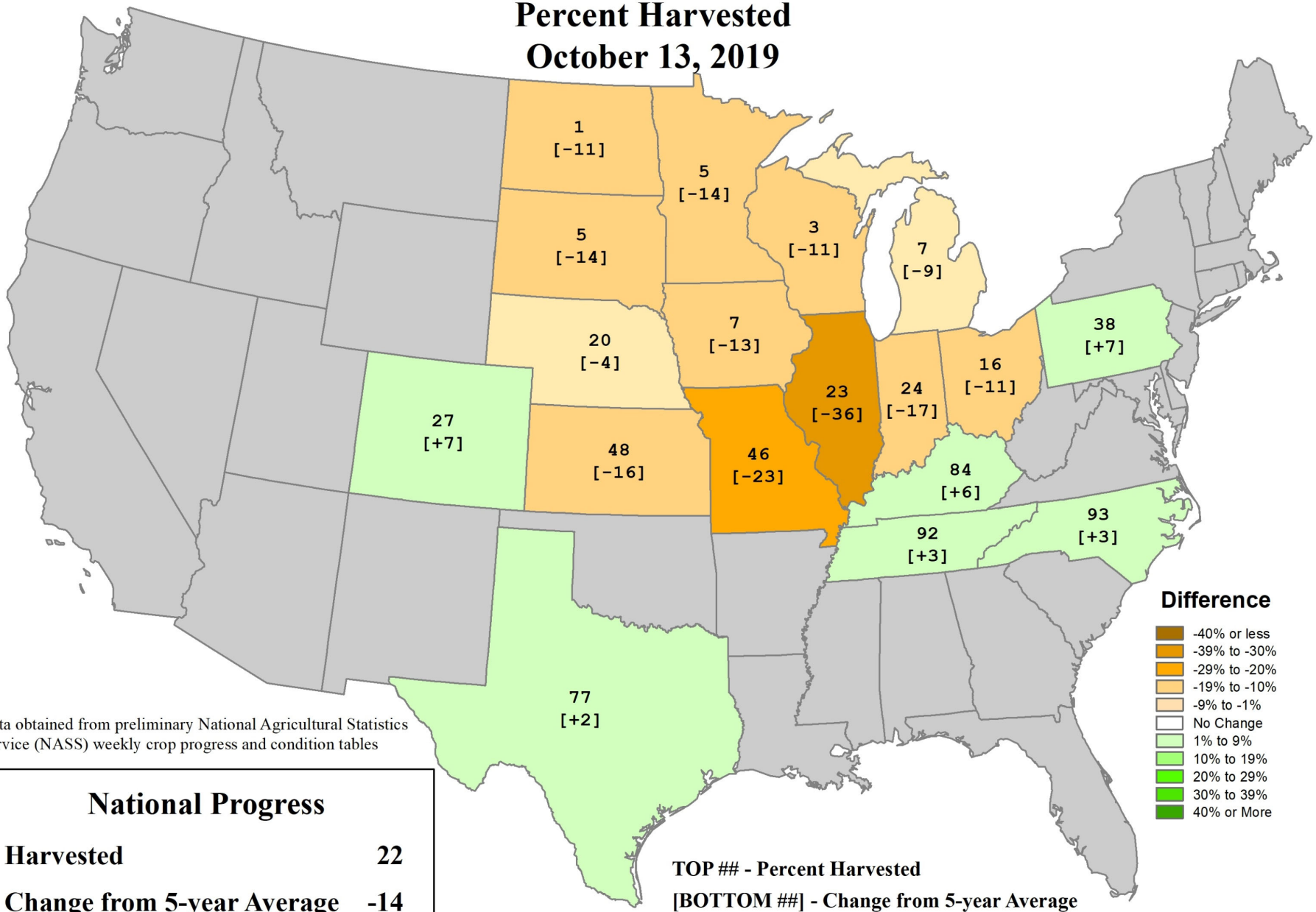
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Mature	73
Change from 5-year Average	-19


U.S. CORN: Percent Mature
Percent
Date
100
90
80
70
60
50
40
30
20
10
0
29-Jul
5-Aug
12-Aug
19-Aug
26-Aug
2-Sep
9-Sep
16-Sep
23-Sep
30-Sep
7-Oct
14-Oct
21-Oct
28-Oct
4-Nov
11-Nov
2009
2019
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Based on NASS crop progress data.

U.S. Corn Progress

Percent Harvested
October 13, 2019



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

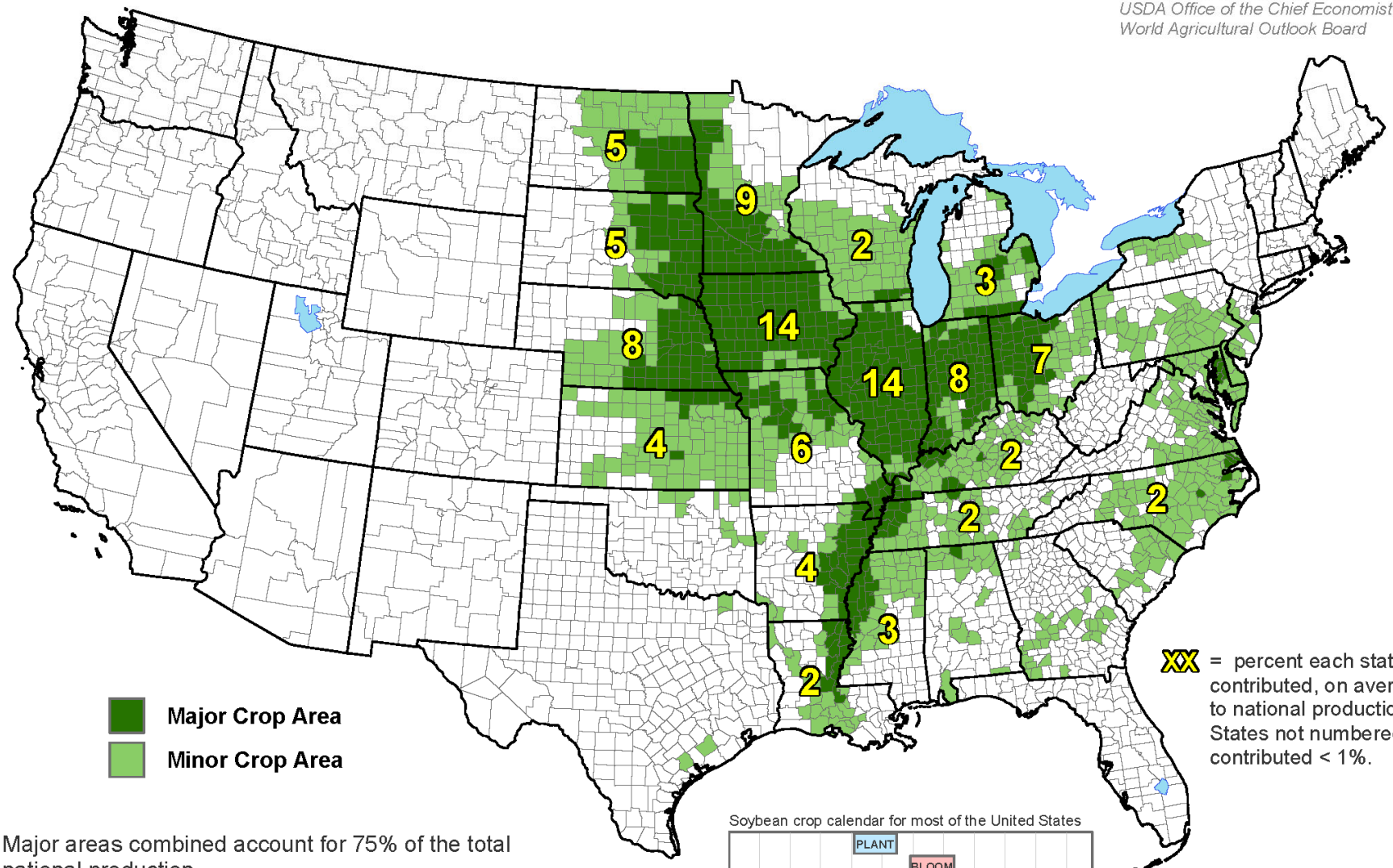
National Progress	
Harvested	22
Change from 5-year Average	-14

TOP ## - Percent Harvested
[BOTTOM ##] - Change from 5-year Average

United States: Soybeans

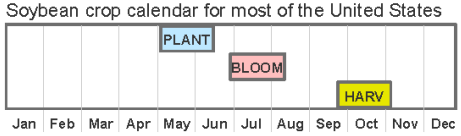
United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS survey data from 2010 to 2014.

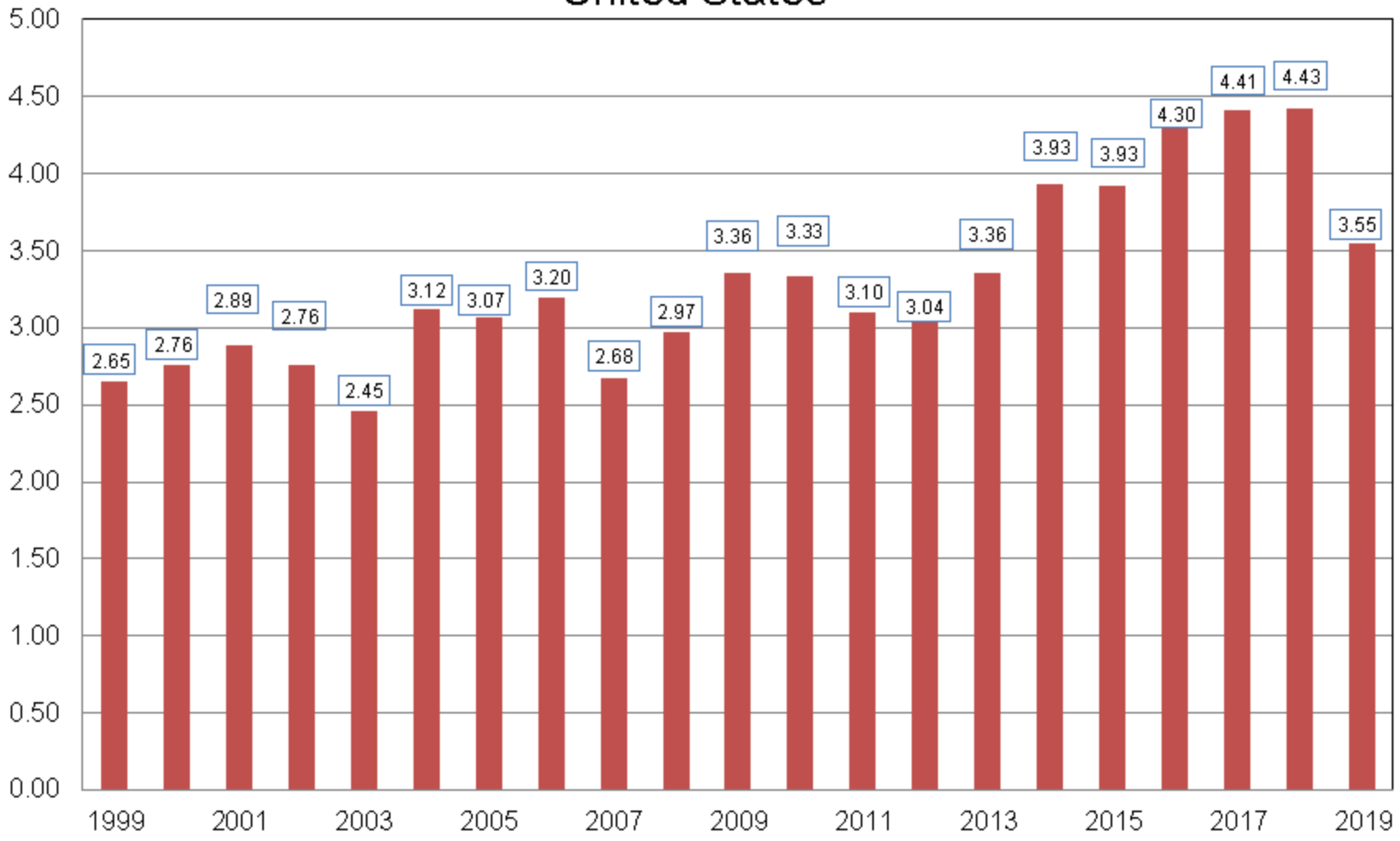
Soybean crop calendar for most of the United States



The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

Soybean Production

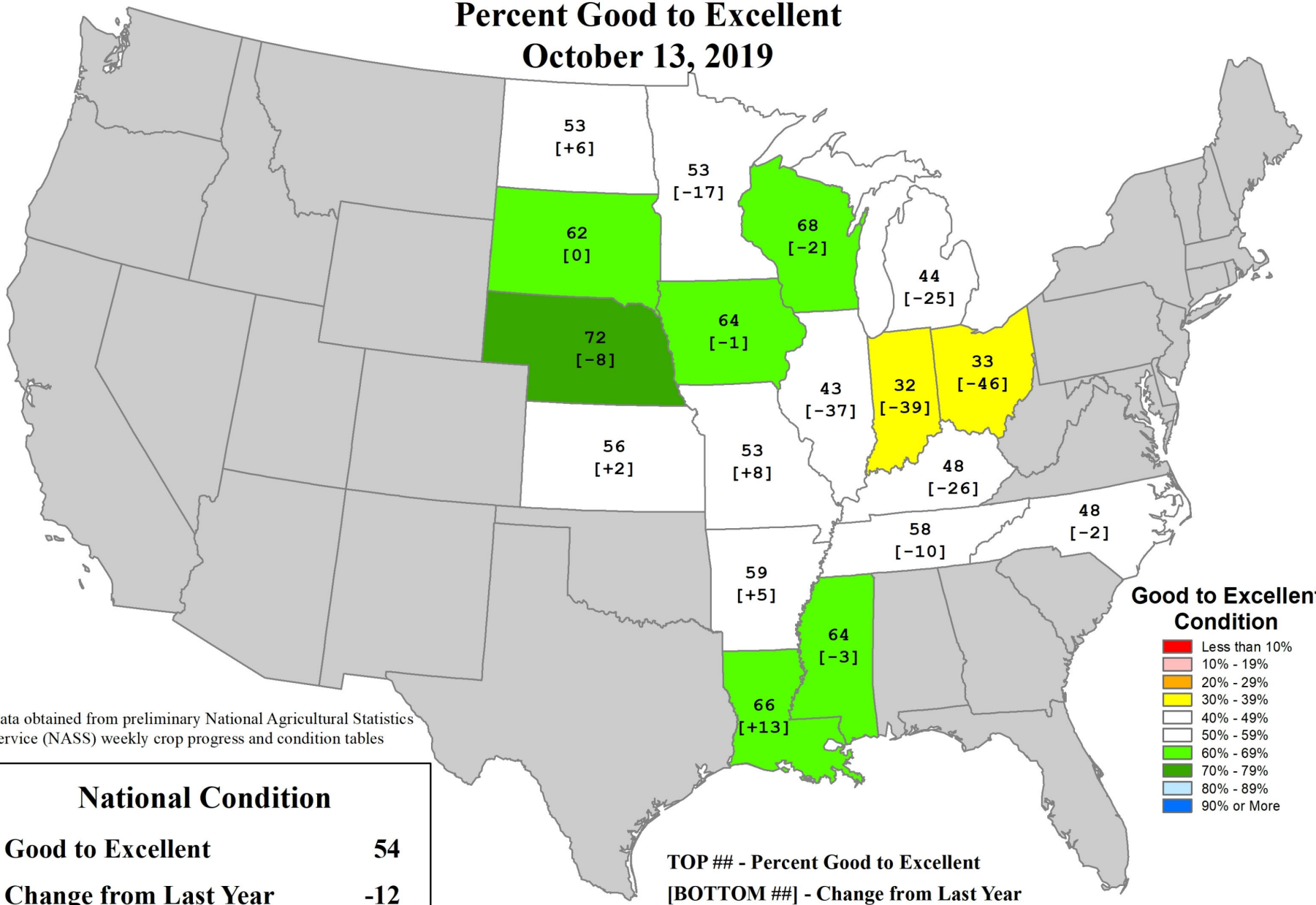
United States



USDA-NASS
10-10-19

U.S. Soybean Conditions

Percent Good to Excellent
October 13, 2019



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

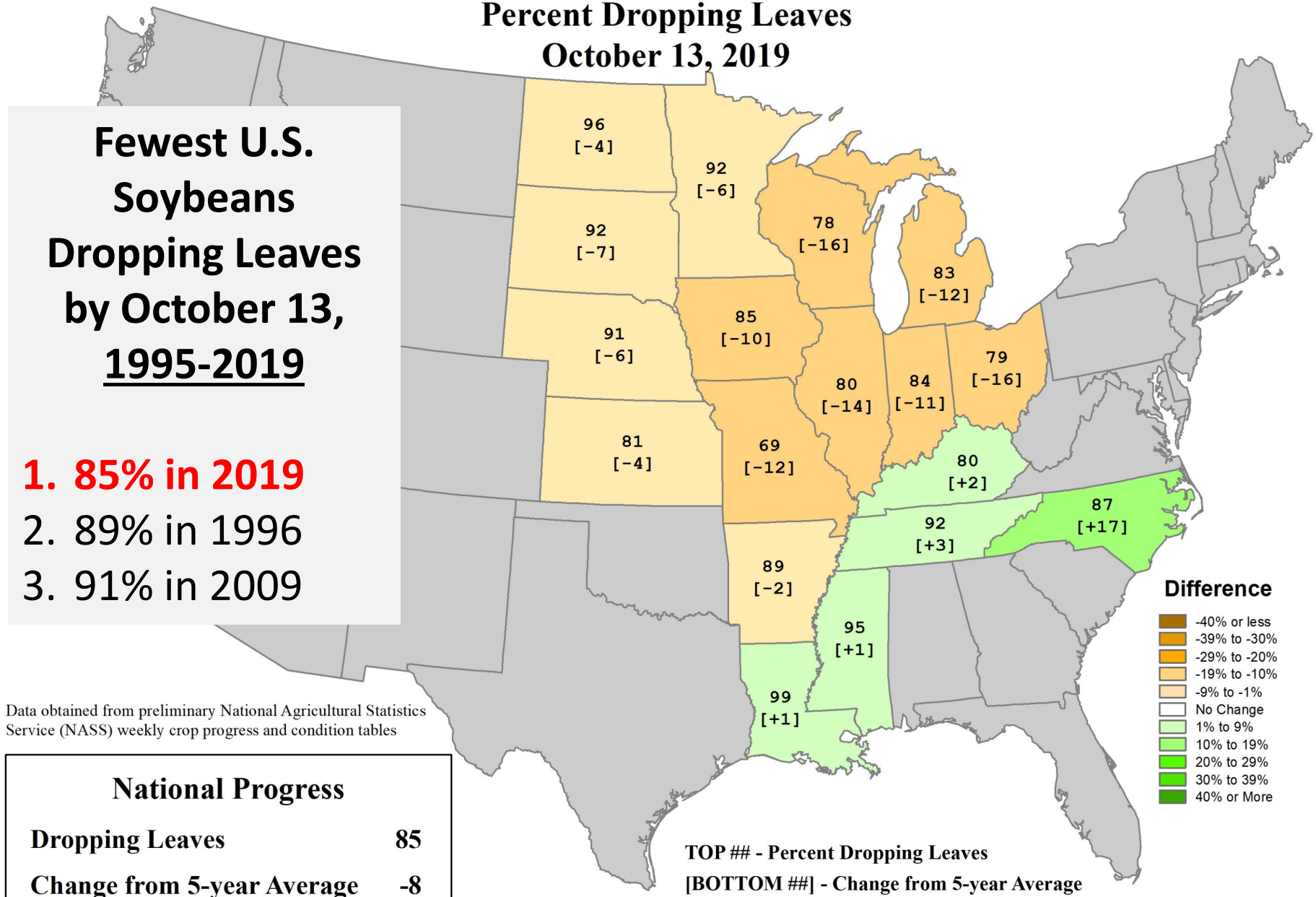
National Condition	
Good to Excellent	54
Change from Last Year	-12

U.S. Soybeans Progress

Percent Dropping Leaves
October 13, 2019

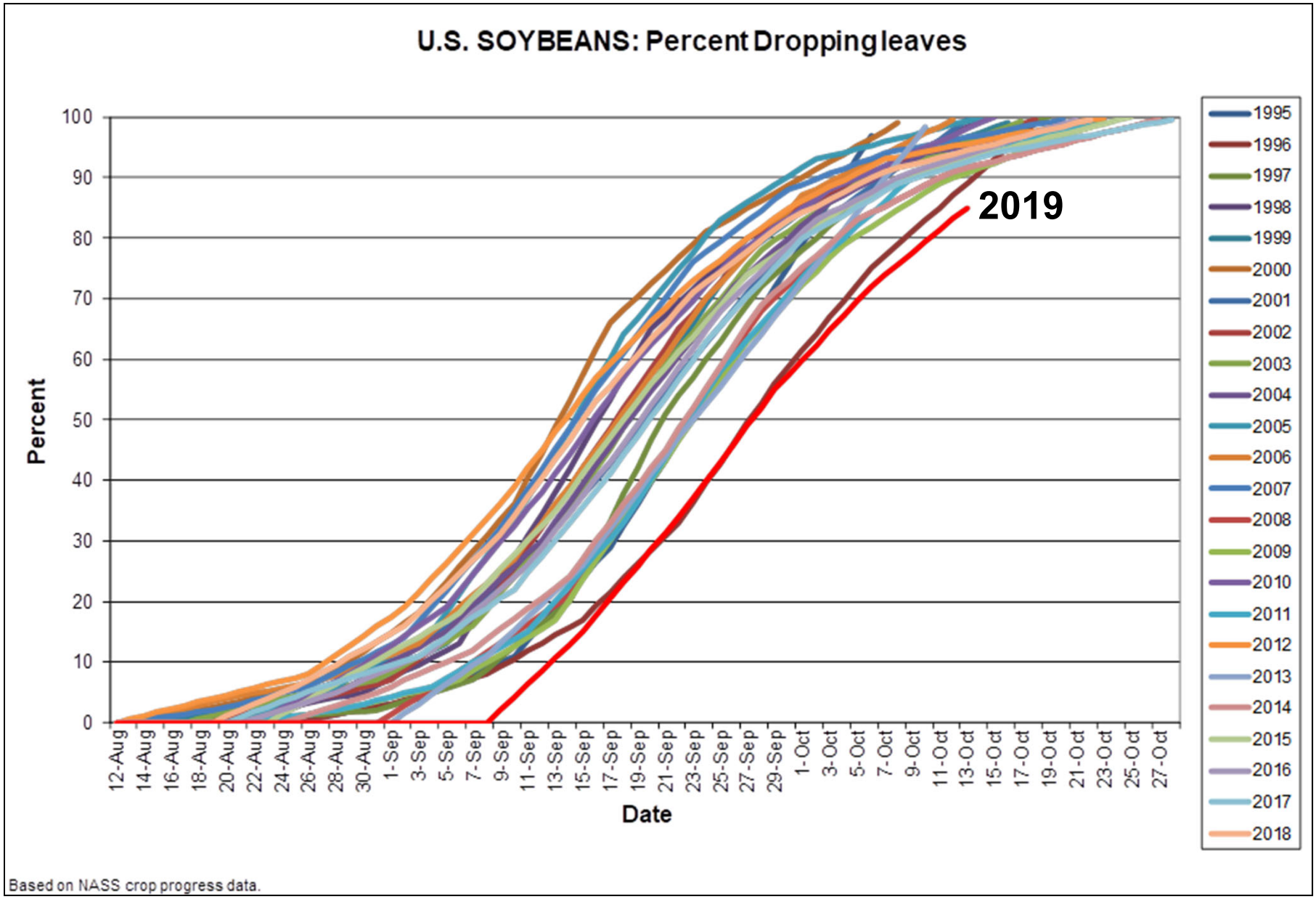
Fewest U.S. Soybeans Dropping Leaves by October 13, 1995-2019

1. **85% in 2019**
2. 89% in 1996
3. 91% in 2009



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

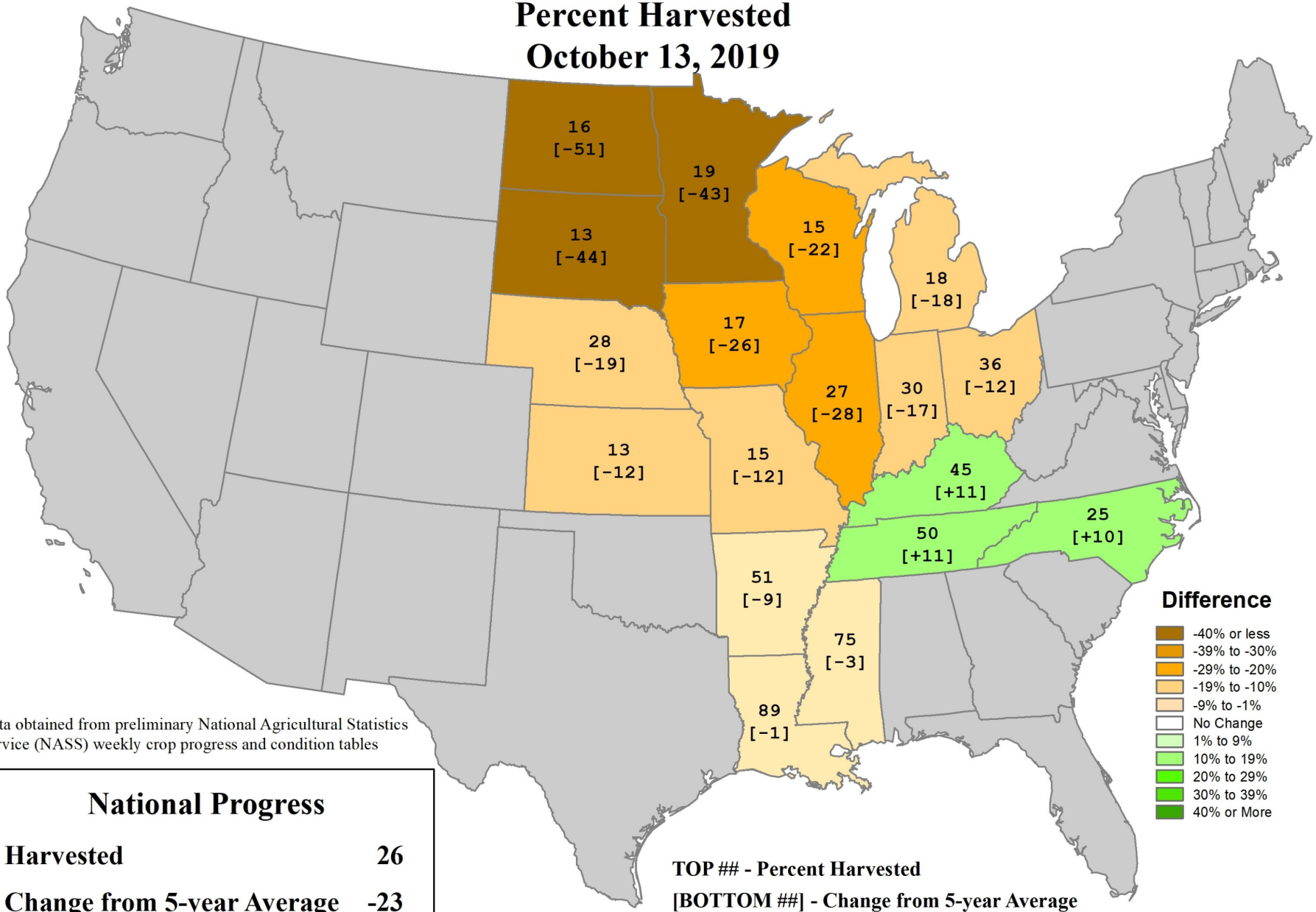
National Progress	
Dropping Leaves	85
Change from 5-year Average	-8



Based on NASS crop progress data.

U.S. Soybeans Progress

Percent Harvested
October 13, 2019



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress

Harvested	**26**
Change from 5-year Average	**-23**

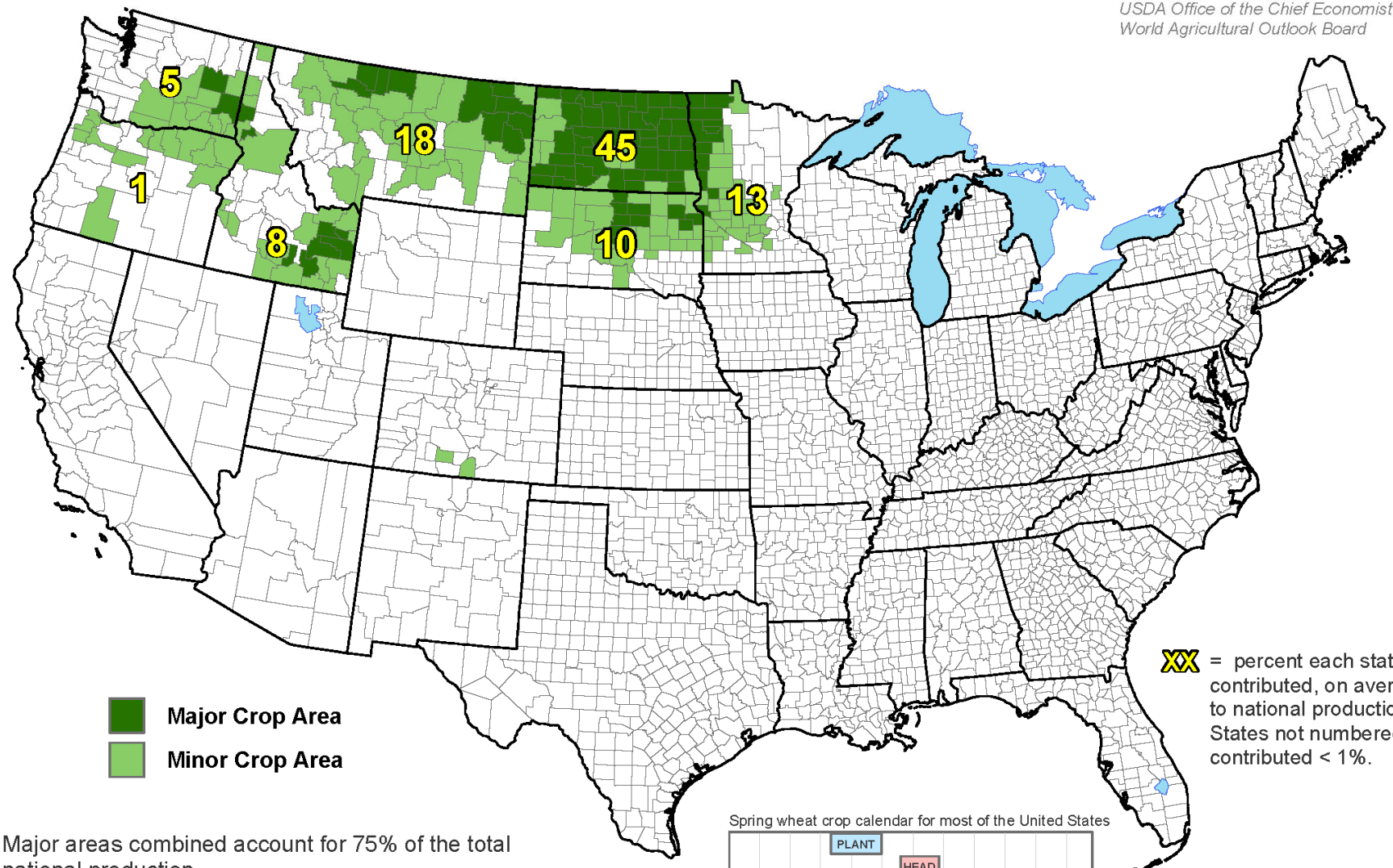
Other Current Agricultural Highlights

- **Spring wheat harvest has been delayed due to late crop maturation, followed by excessively wet weather. By October 13, six percent of the crop remained in the field—a record for the date.**
- **Sunflower production is expected to be up 6.9% from last year, although harvest is substantially delayed by adverse weather.**
- **Winter wheat is emerging in most major production areas, but planting and emergence has been limited in northern production areas by cold, wet weather and early-season snowfall.**
- **The sugarbeet harvest is underway but significantly behind schedule. The production estimate is up 1.4% from last year.**
- **Sorghum production is forecast to be down 4.5% from last year, despite a yield increase of 2.5%. (Harvested area is down 6.8%.)**
- **Rangeland and pastures are in good shape in most areas. However, pasture conditions are lower in the eastern Corn Belt. U.S. hay yield is up 8.7% from last year; production is up 8.1%.**

United States: Spring Wheat

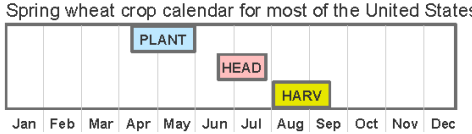
United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS survey data from 2010 to 2014.

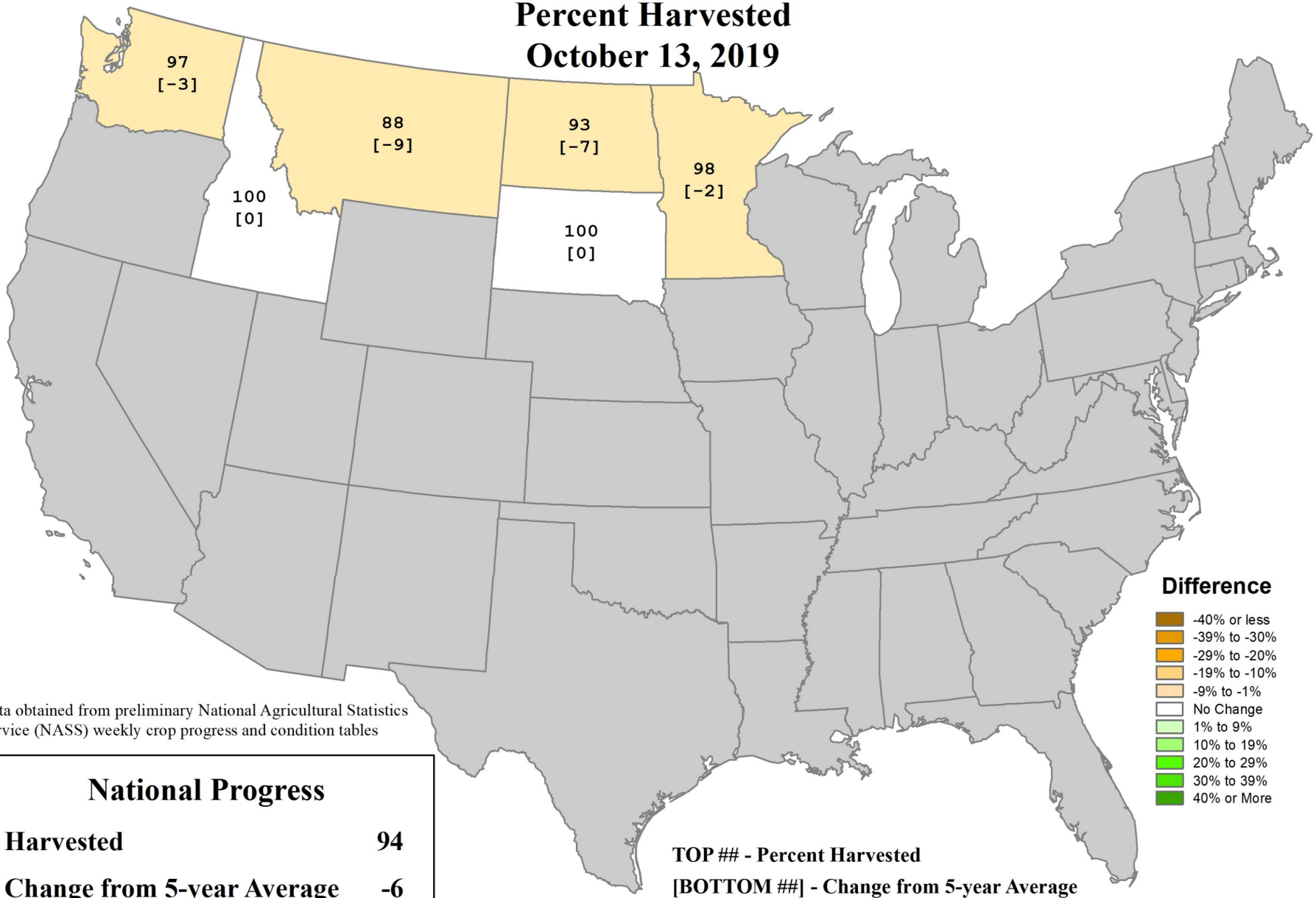
Spring wheat crop calendar for most of the United States



The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

U.S. Spring Wheat Progress

Percent Harvested
October 13, 2019

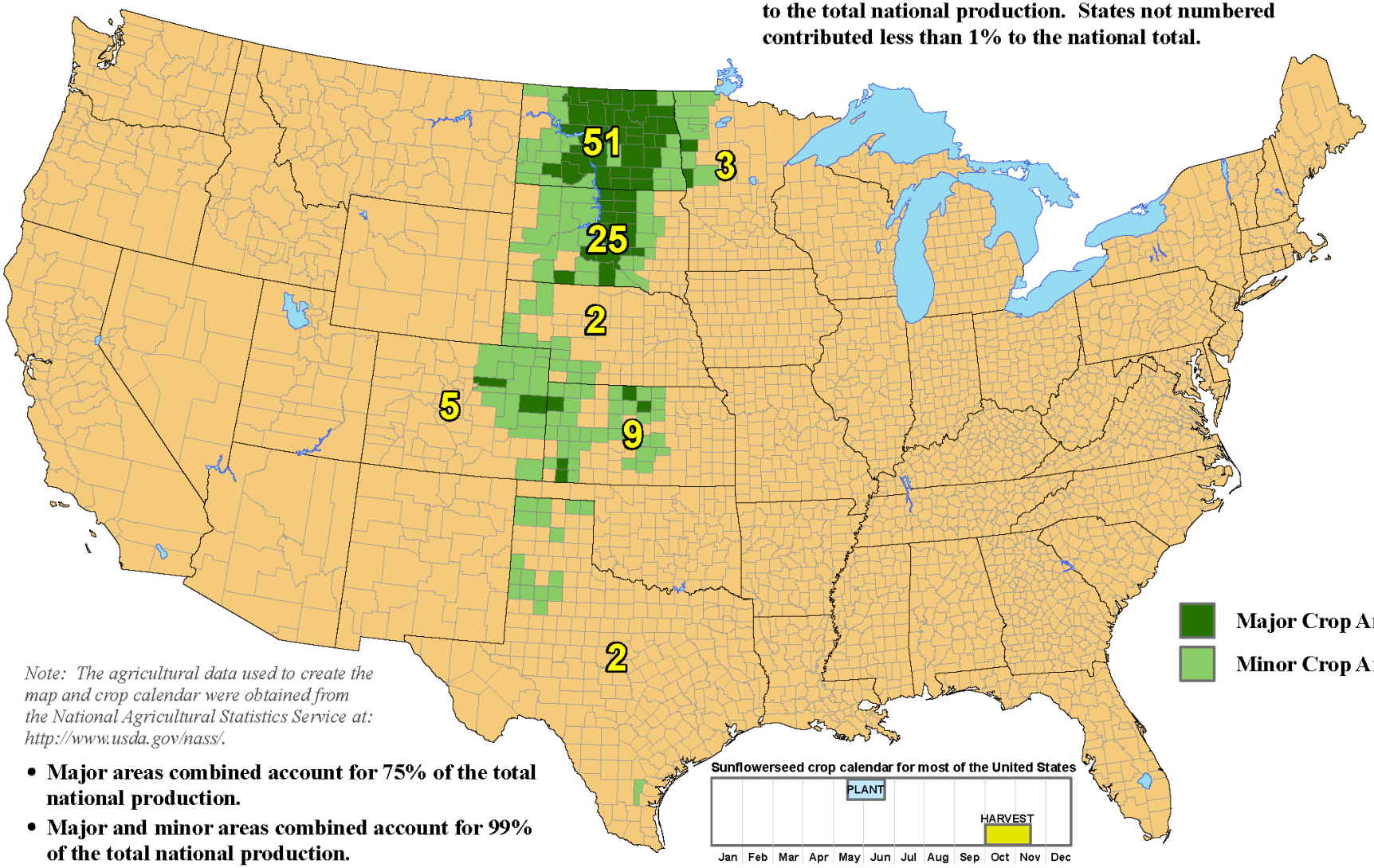


Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Harvested	94
Change from 5-year Average	-6

United States: Sunflowerseed

Yellow numbers indicate the percent each state contributed to the total national production. States not numbered contributed less than 1% to the national total.



Note: The agricultural data used to create the map and crop calendar were obtained from the National Agricultural Statistics Service at: http://www.usda.gov/nass/.

- **Major areas combined account for 75% of the total national production.**
- **Major and minor areas combined account for 99% of the total national production.**
- **Major and minor areas and state production percentages are based upon averaged NASS county-level and state production data from 2000-2004.**

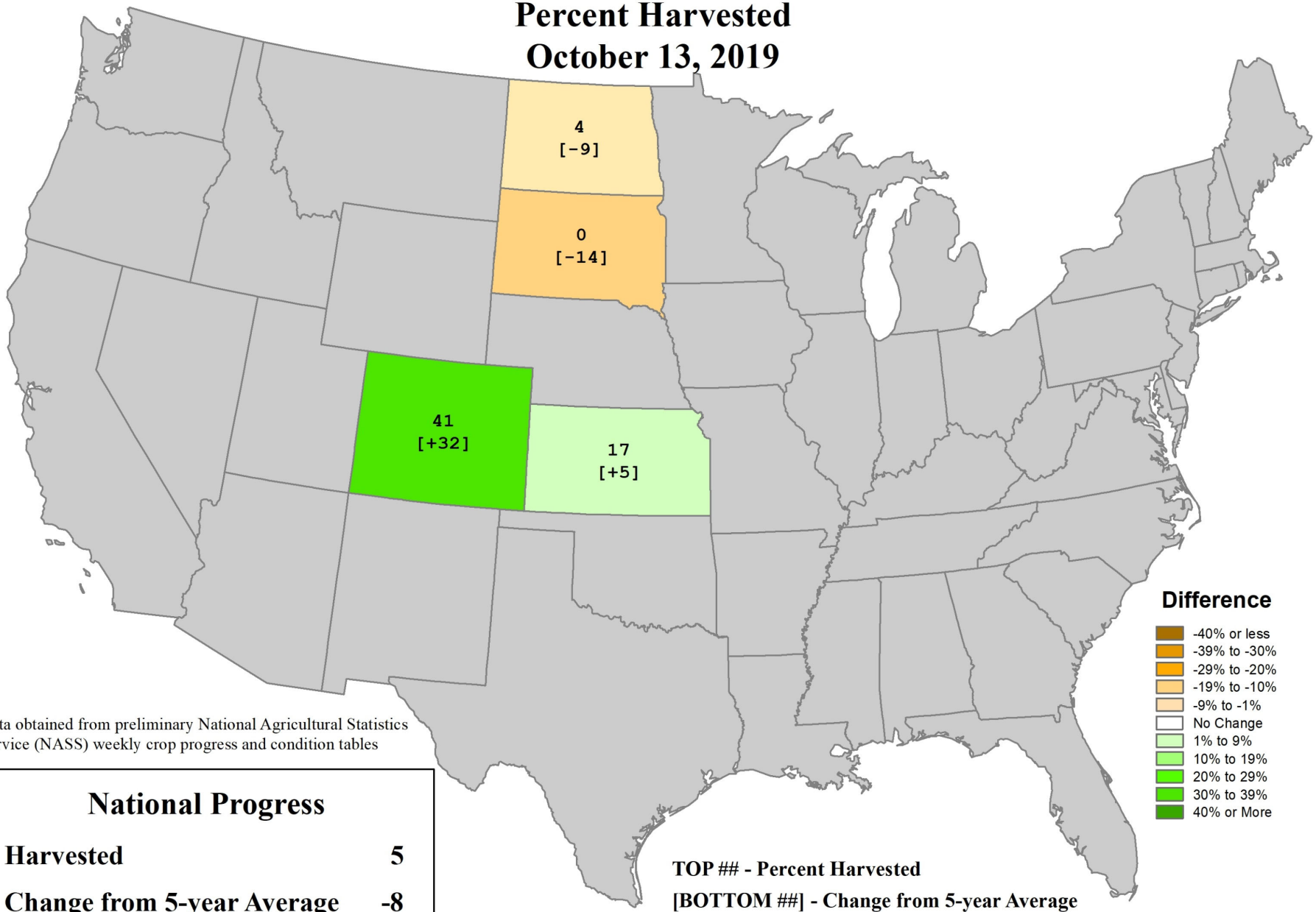
Sunflowerseed crop calendar for most of the United States

Crop calendar dates are based upon NASS crop progress data from 2000-2004. The field activities and crop development stages illustrated in the crop calendar represent the average time period when national progress advanced from 10 to 90 percent.

USDA **World Agricultural Outlook Board**
Joint Agricultural Weather Facility

U.S. Sunflowers Progress

Percent Harvested
October 13, 2019



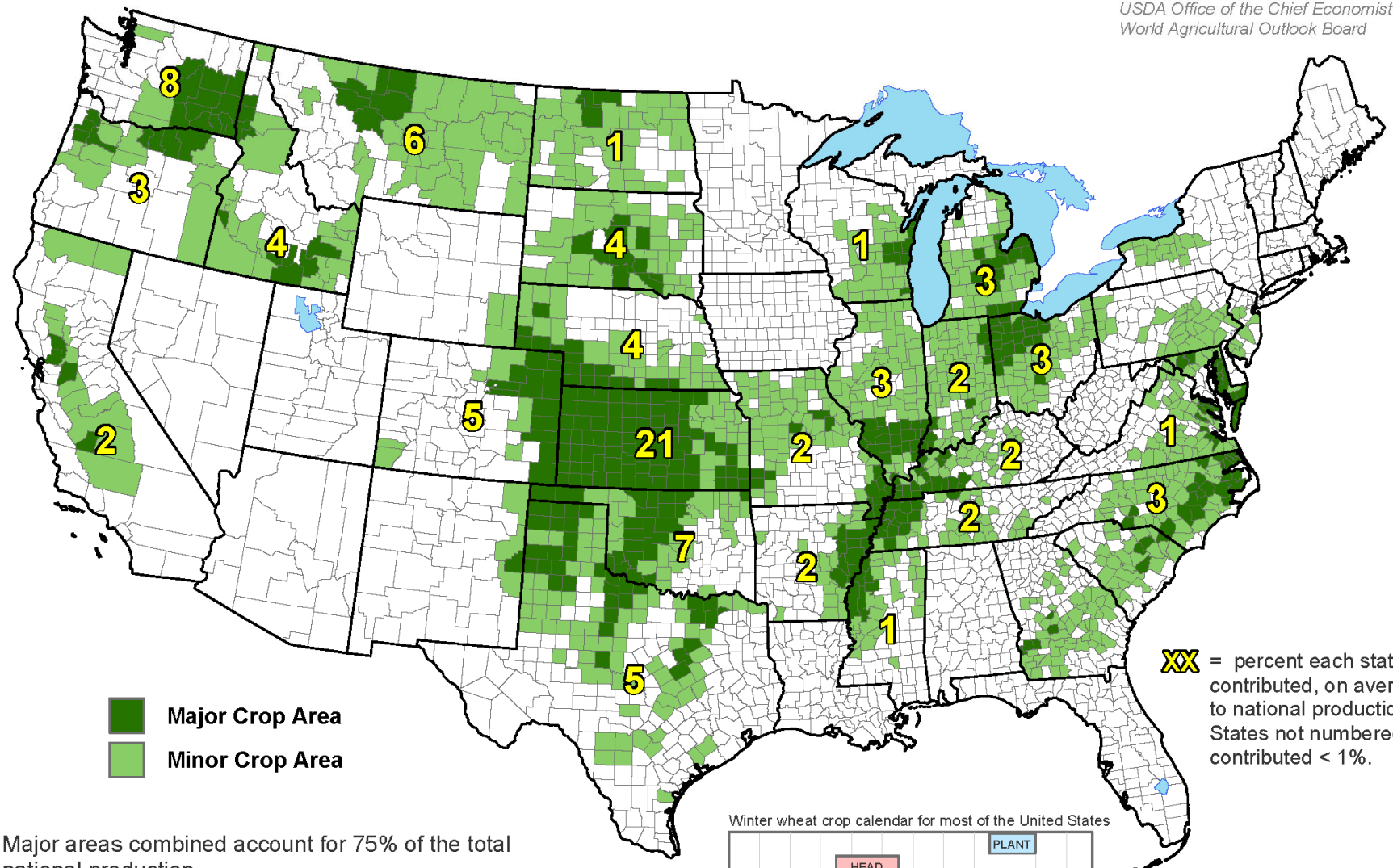
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Harvested	5
Change from 5-year Average	-8

United States: Winter Wheat

United States Department of Agriculture

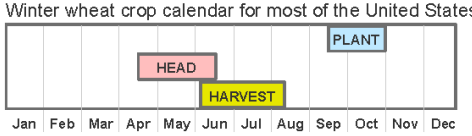
This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



XX = percent each state contributed, on average, to national production. States not numbered contributed < 1%.

- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS survey data from 2010 to 2014.

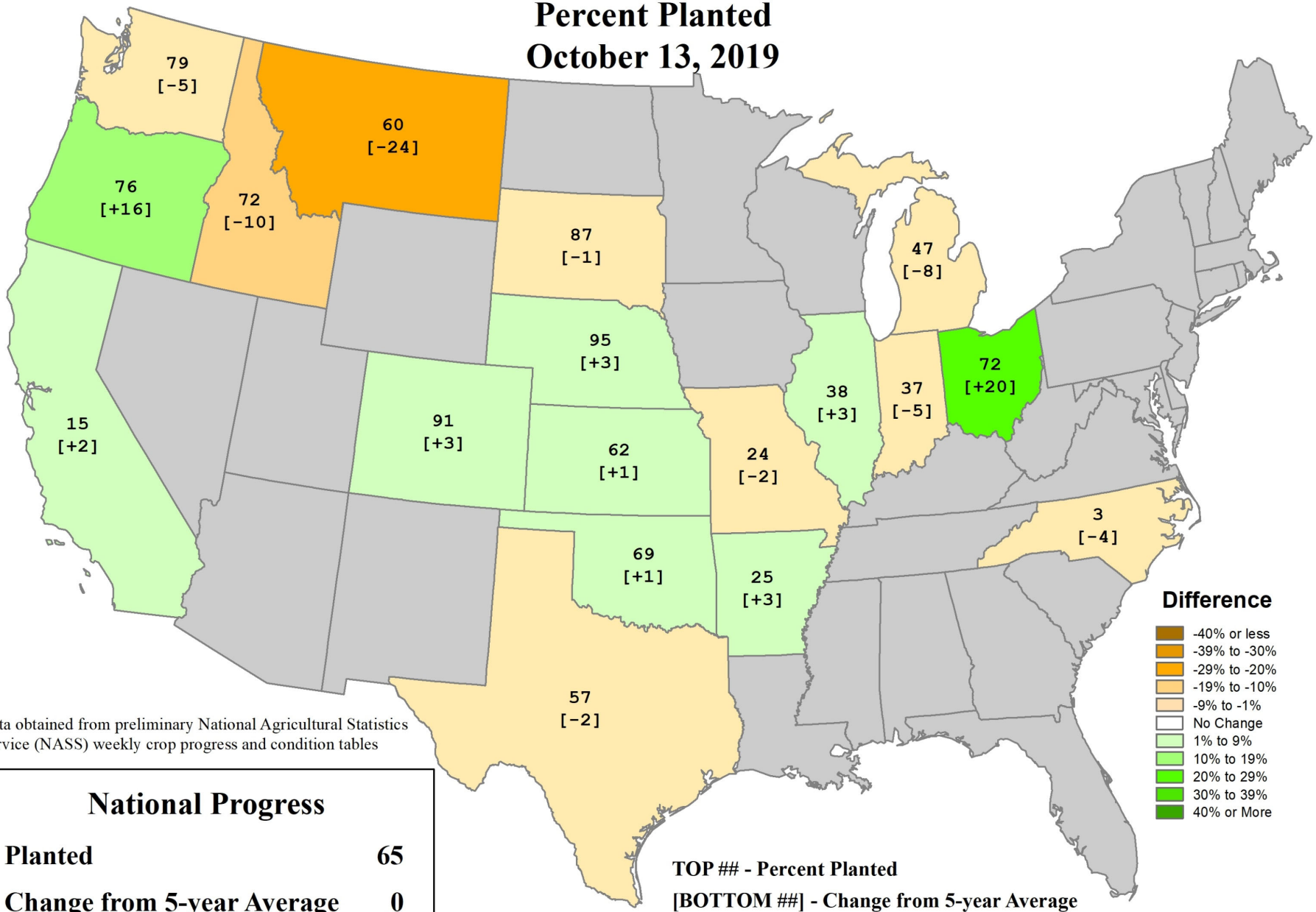
Winter wheat crop calendar for most of the United States



The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

U.S. Winter Wheat Progress

Percent Planted
October 13, 2019



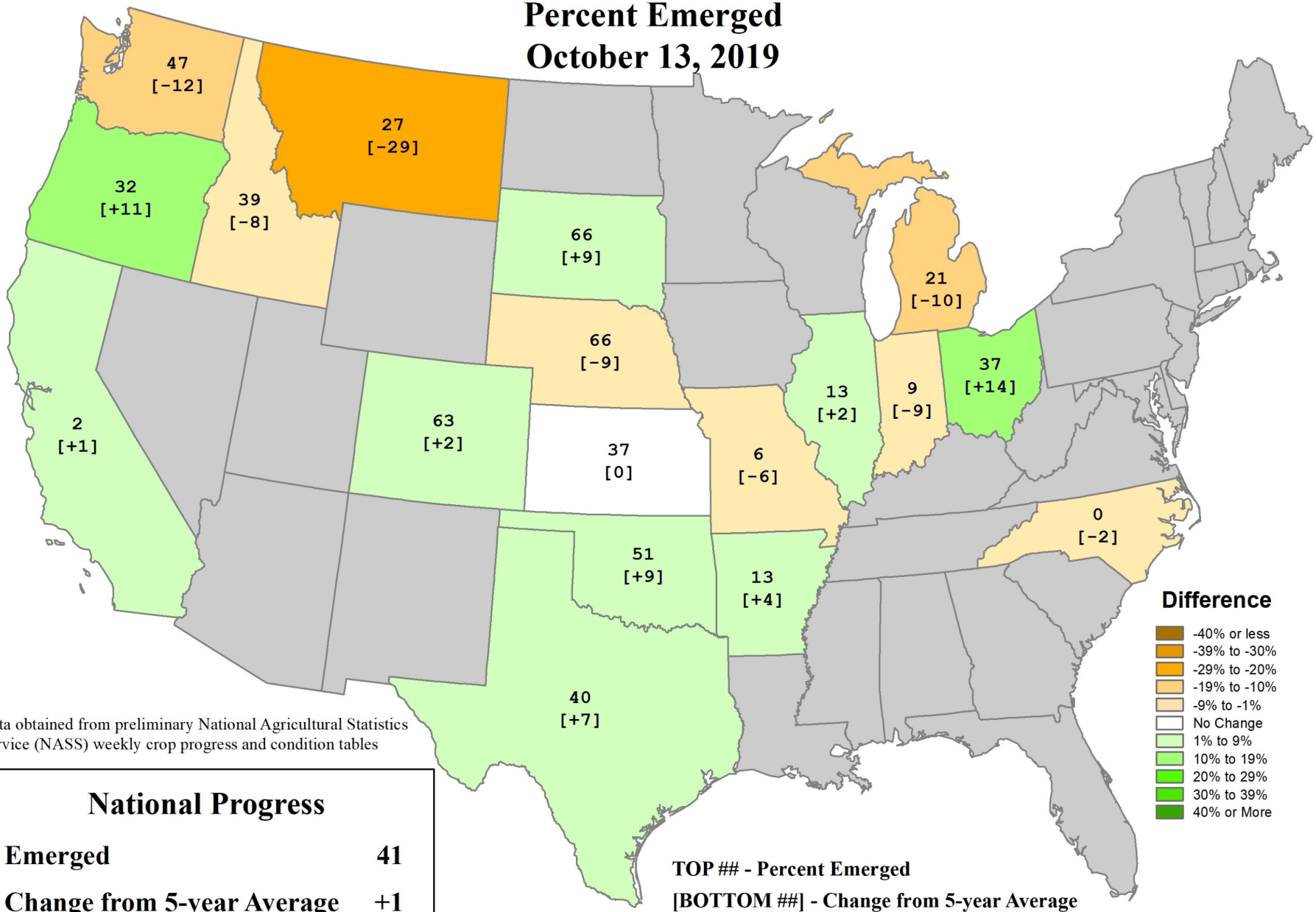
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Planted	65
Change from 5-year Average	0

TOP ## - Percent Planted
[BOTTOM ##] - Change from 5-year Average

U.S. Winter Wheat Progress

Percent Emerged
October 13, 2019



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

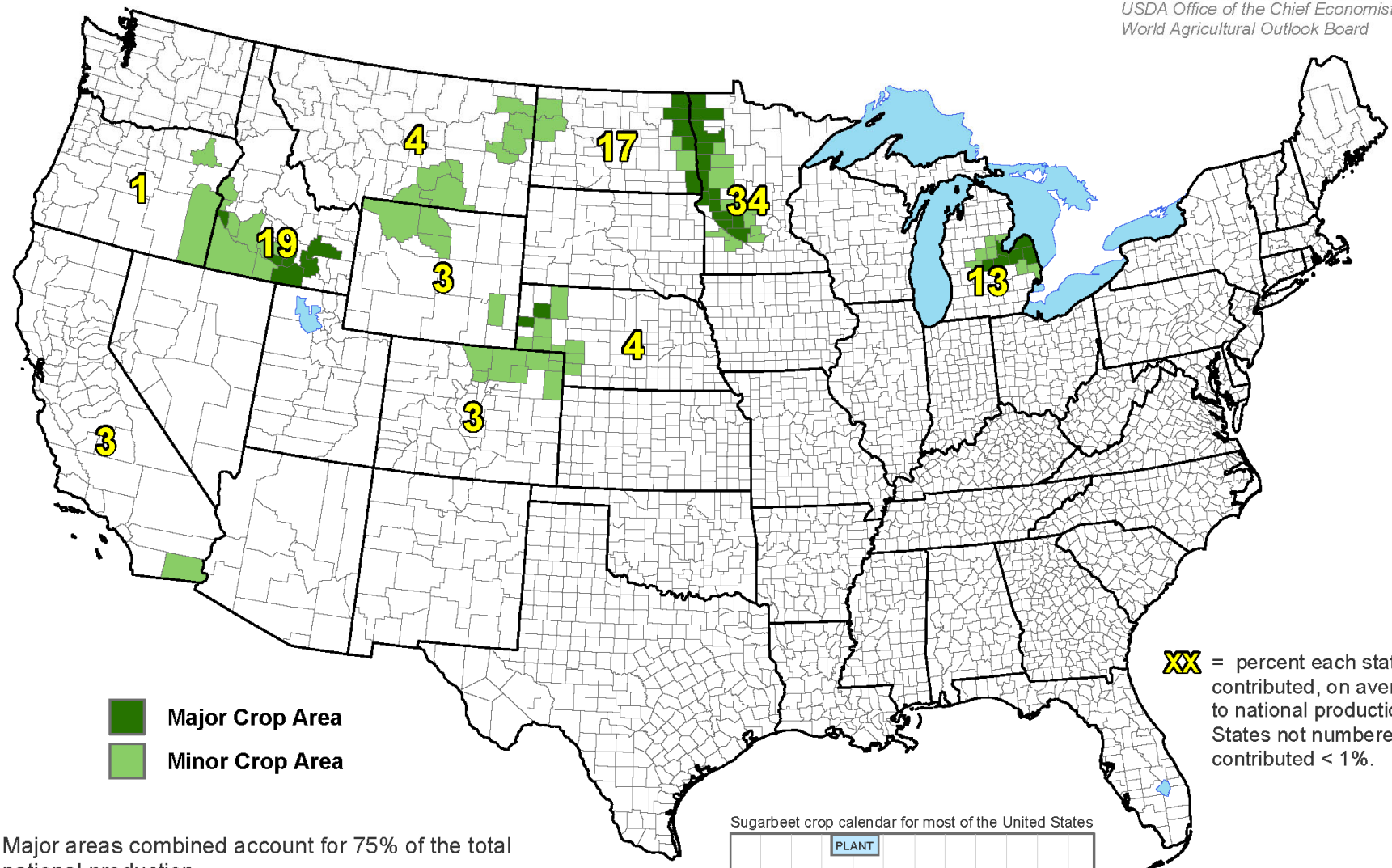
National Progress	
Emerged	41
Change from 5-year Average	+1

TOP ## - Percent Emerged
[BOTTOM ##] - Change from 5-year Average

United States: Sugarbeets

United States Department of Agriculture

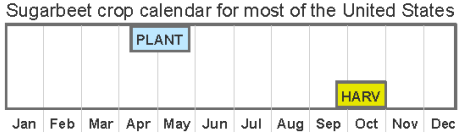
This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



XX = percent each state contributed, on average, to national production. States not numbered contributed < 1%.

- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS survey data from 2010 to 2014.

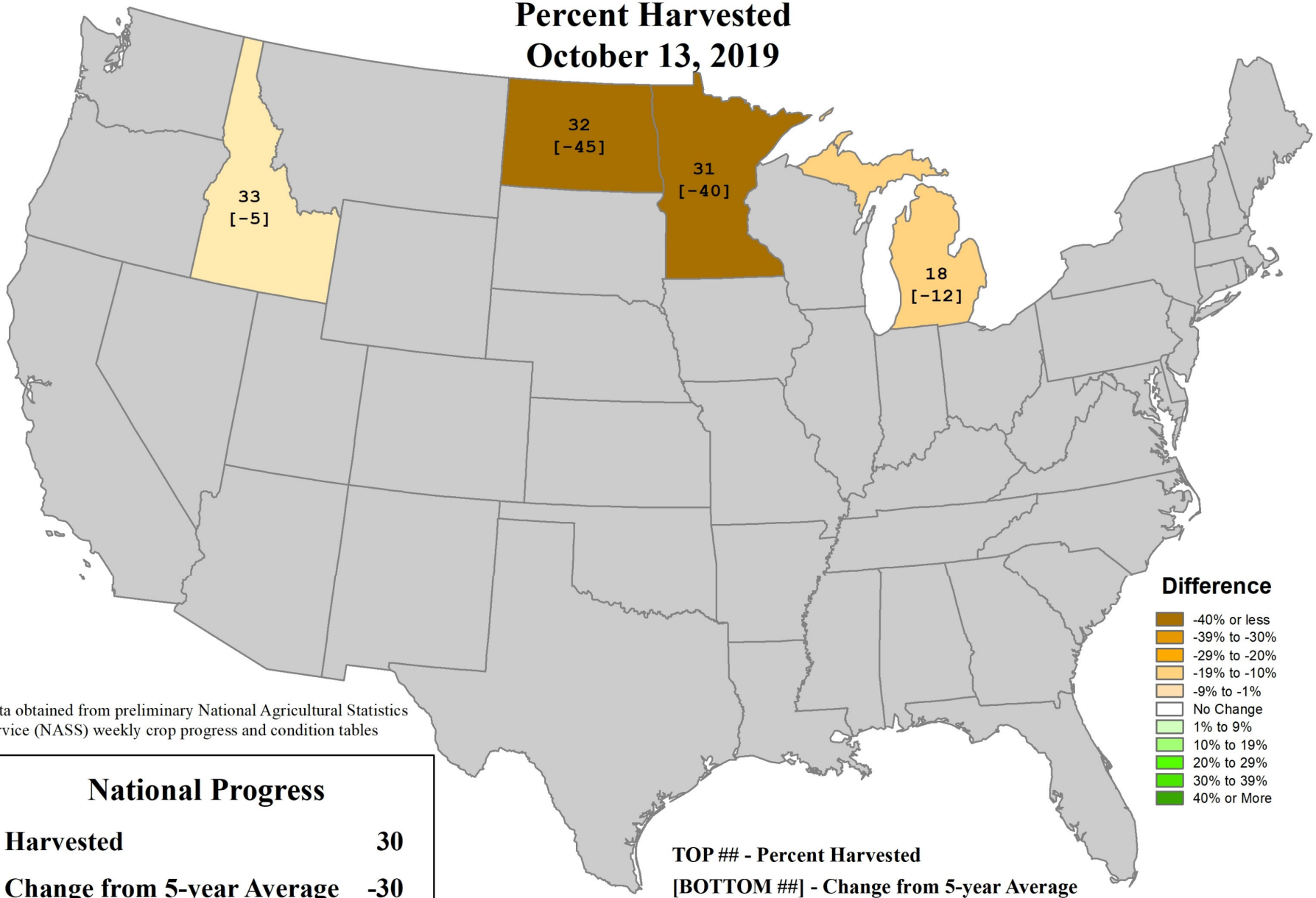
Sugarbeet crop calendar for most of the United States



The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

U.S. Sugarbeets Progress

Percent Harvested
October 13, 2019



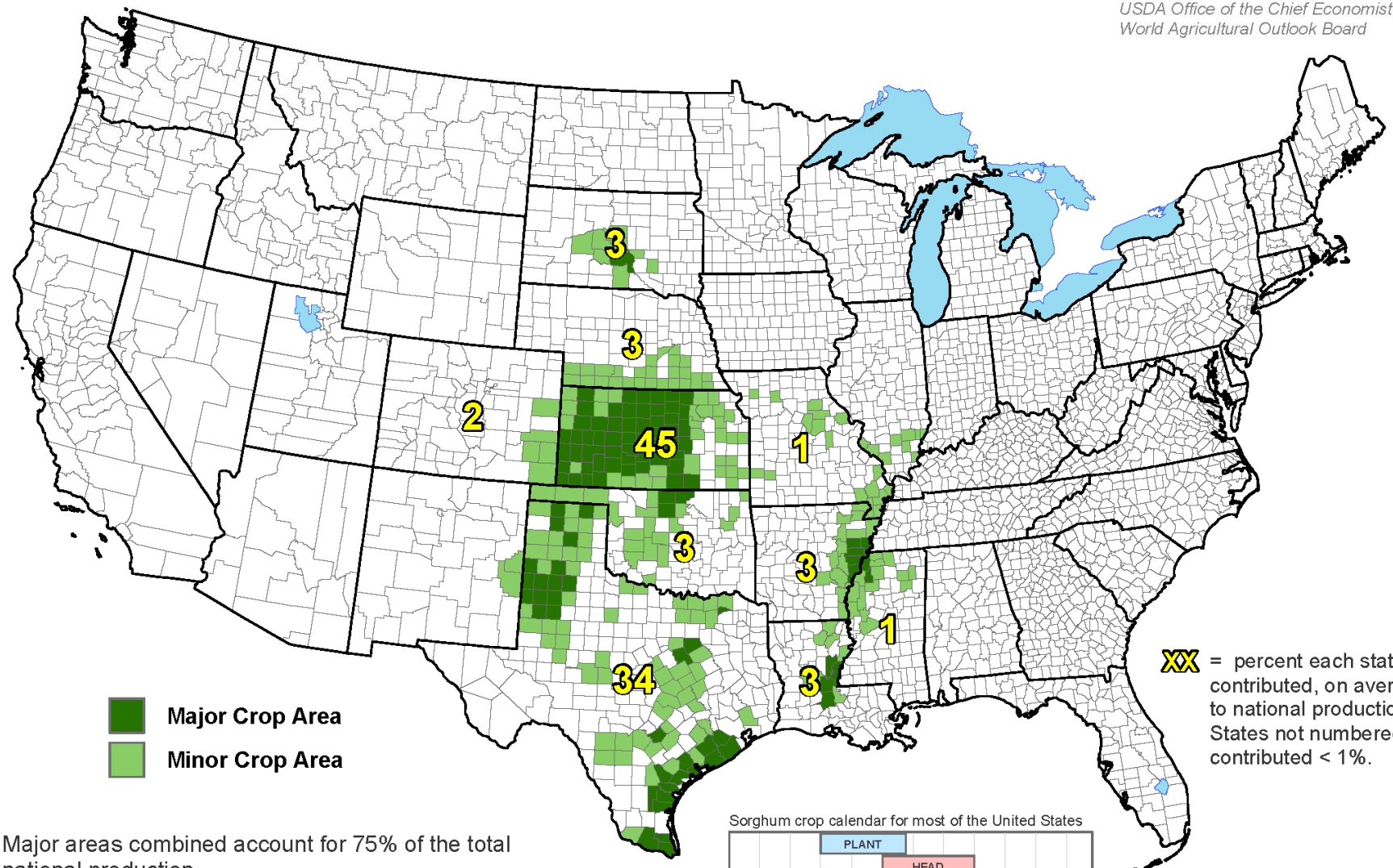
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Harvested	30
Change from 5-year Average	-30

United States: Sorghum

United States Department of Agriculture

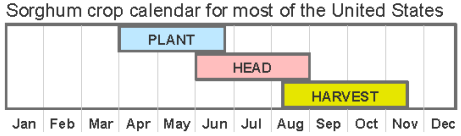
This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



XX = percent each state contributed, on average, to national production. States not numbered contributed < 1%.

- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS survey data from 2010 to 2014.

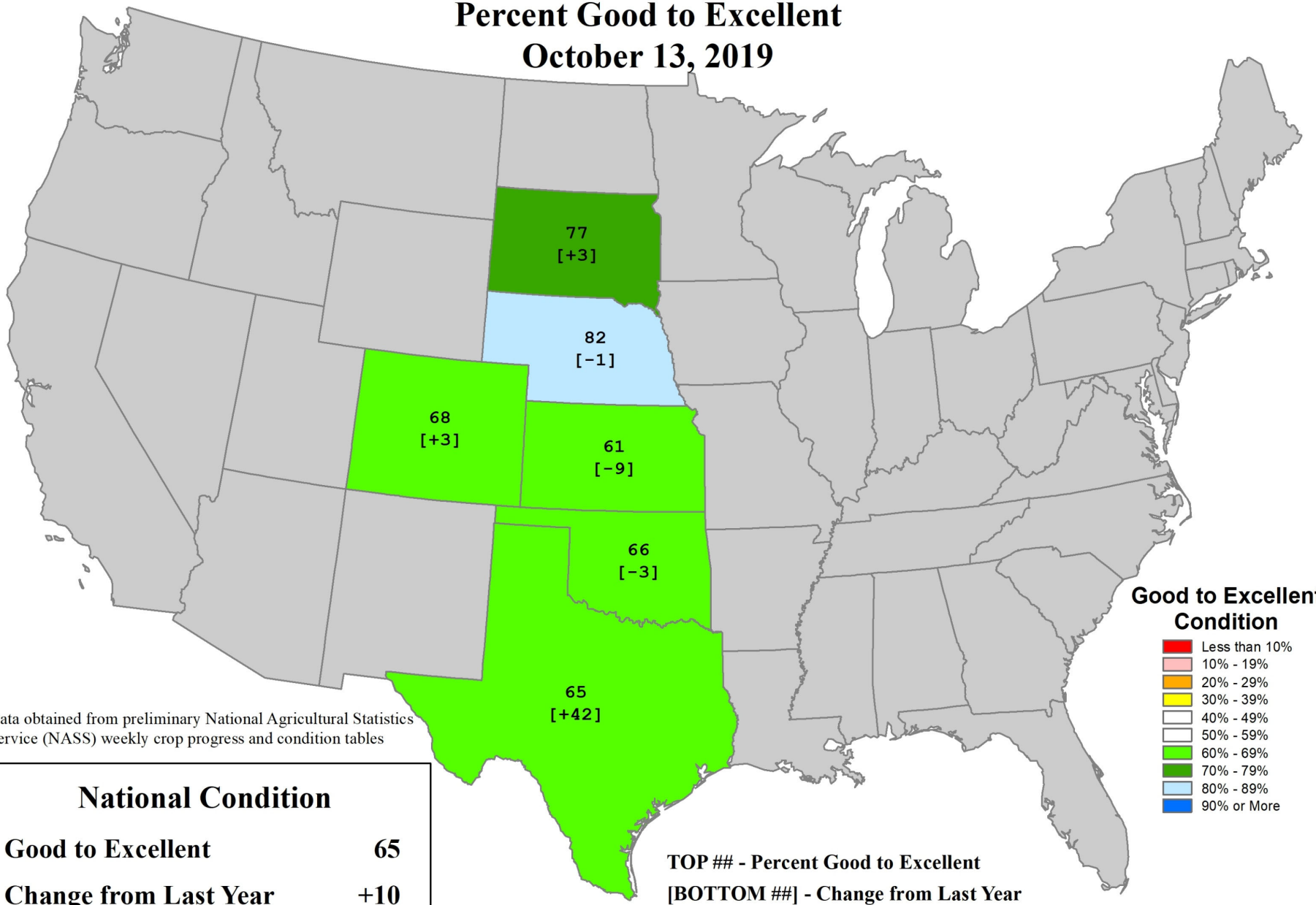
Sorghum crop calendar for most of the United States



The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

U.S. Sorghum Conditions

Percent Good to Excellent
October 13, 2019

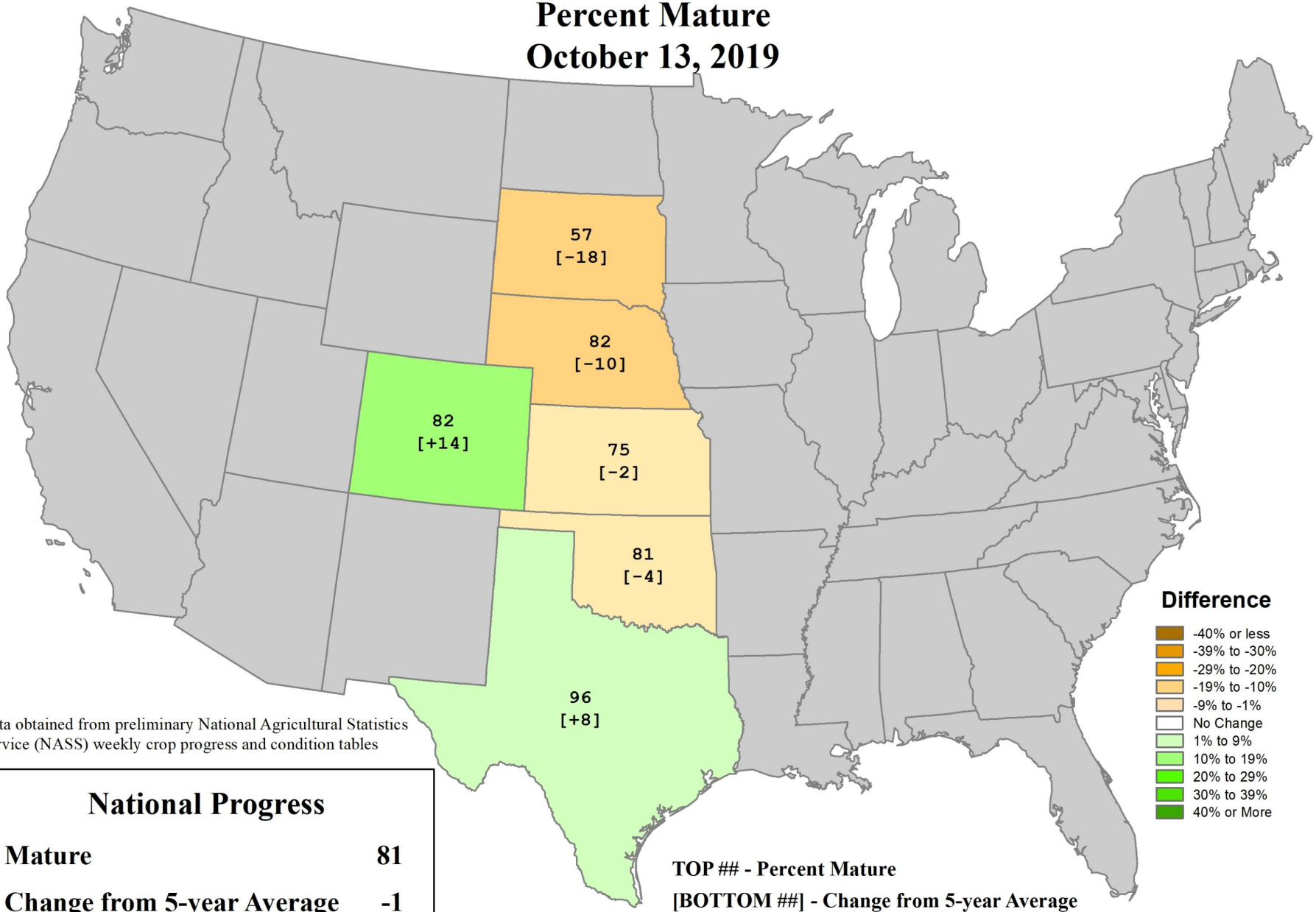


Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Condition	
Good to Excellent	65
Change from Last Year	+10

U.S. Sorghum Progress

Percent Mature
October 13, 2019

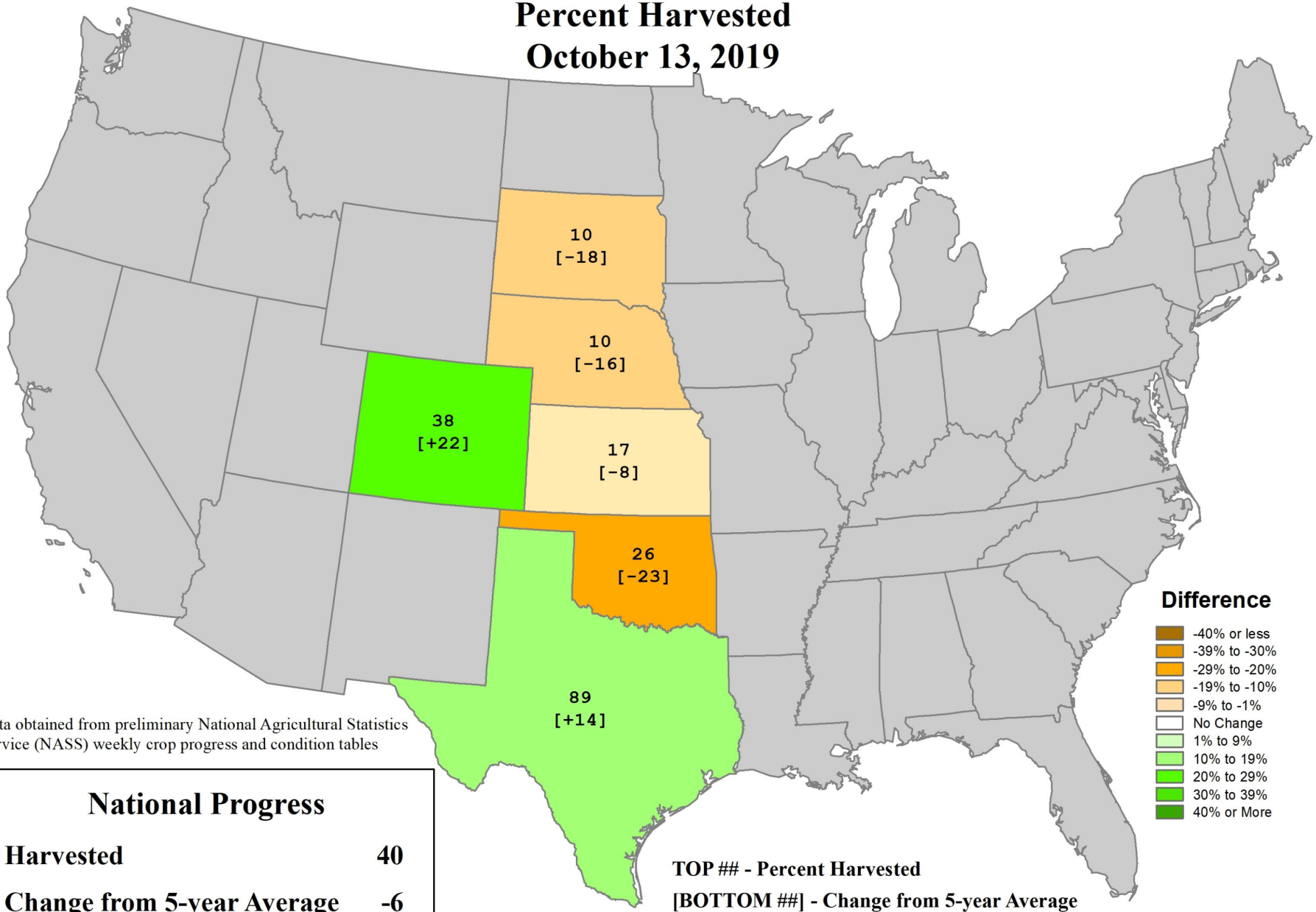


Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Mature	81
Change from 5-year Average	-1

U.S. Sorghum Progress

Percent Harvested
October 13, 2019



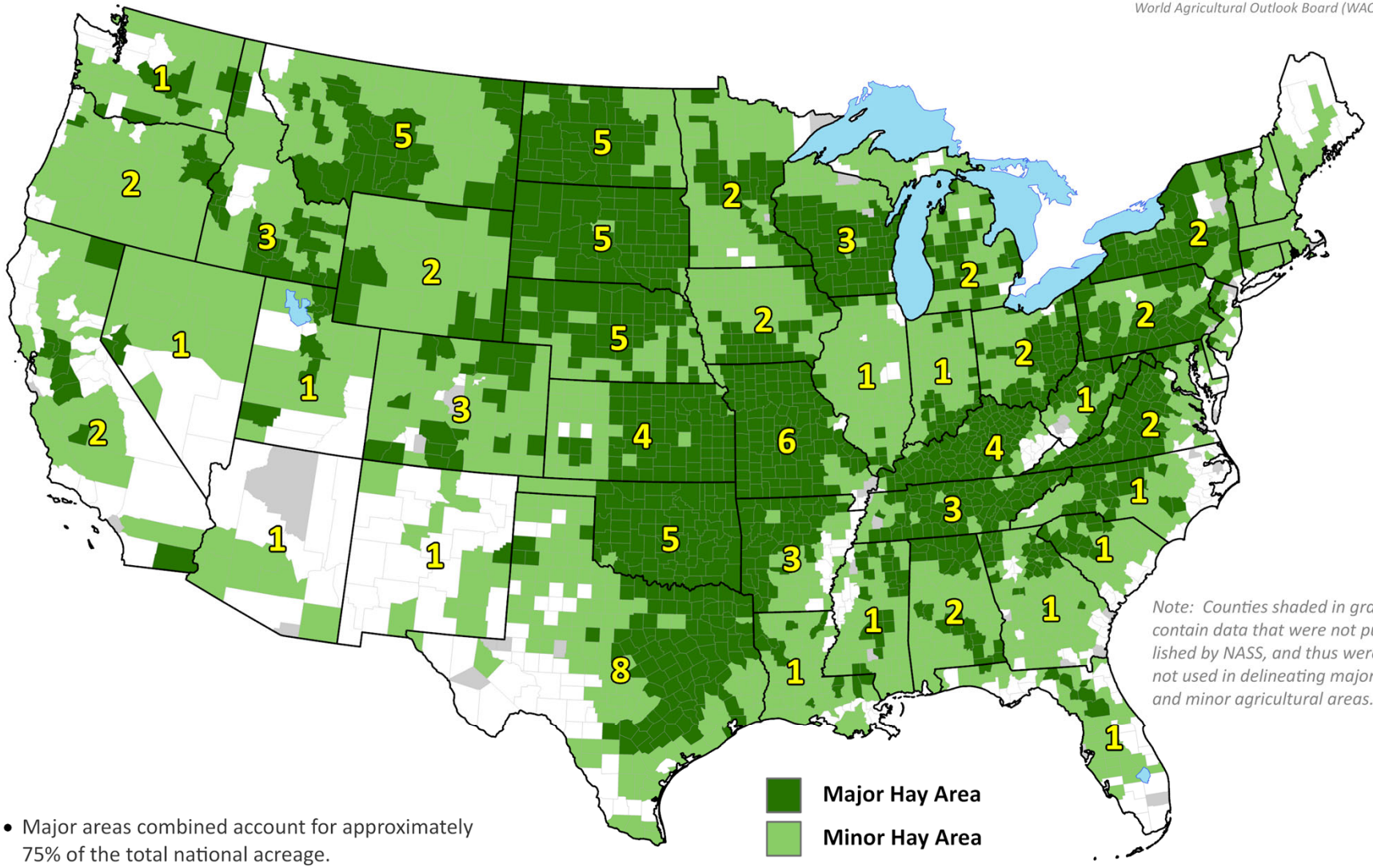
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Harvested	40
Change from 5-year Average	-6

United States: Hay (All)

USDA United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)



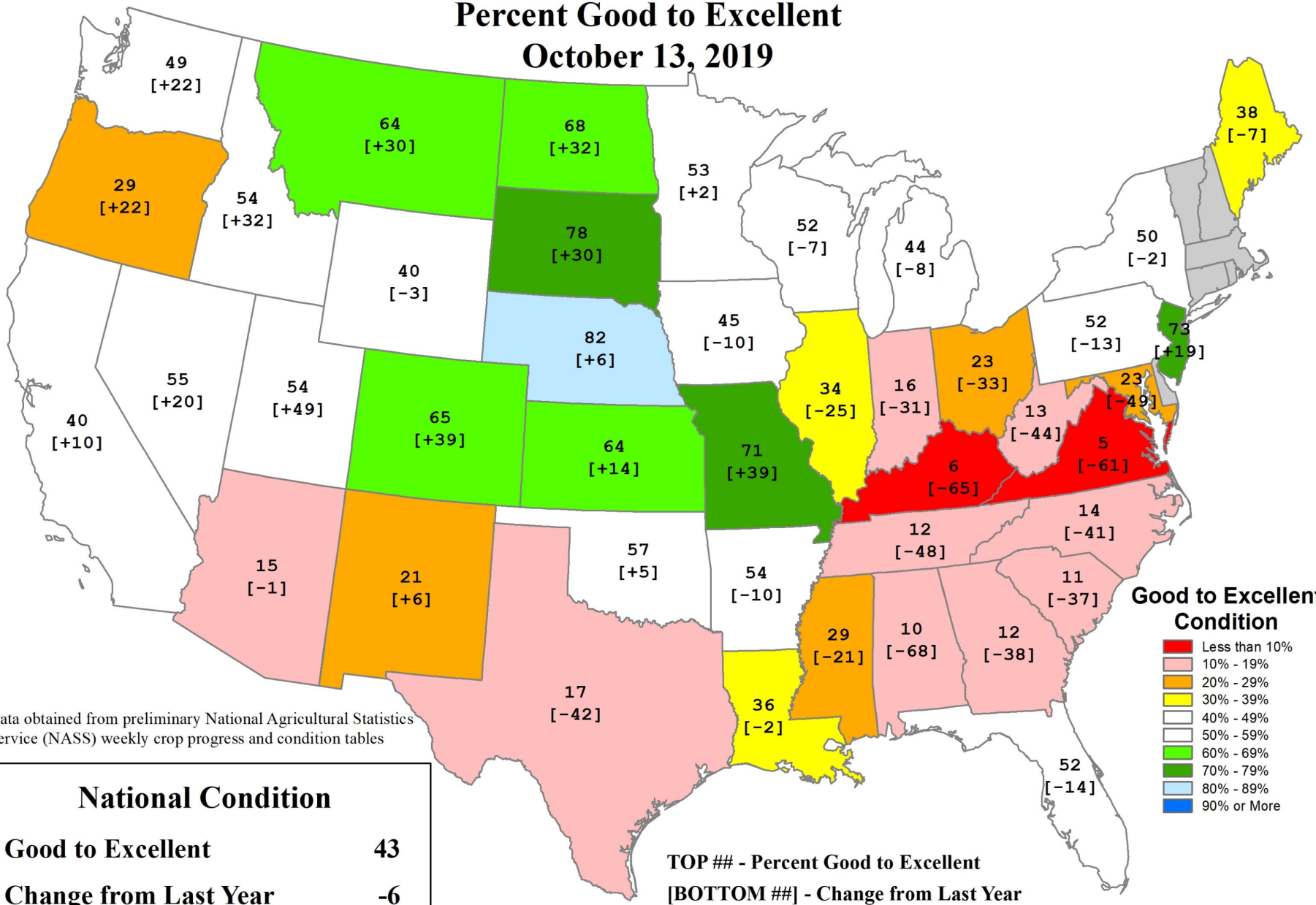
Note: Counties shaded in gray contain data that were not published by NASS, and thus were not used in delineating major and minor agricultural areas.

- Major areas combined account for approximately 75% of the total national acreage.
- Major and minor areas combined account for approximately 99% of the total national acreage.
- Major and minor areas and state acreage percentages are derived from NASS 2017 Census of Agriculture data.

Yellow numbers approximate the percent each state contributed to the total national acreage. States not numbered contributed less than 1% to the national total.

U.S. Pasture and Range Conditions

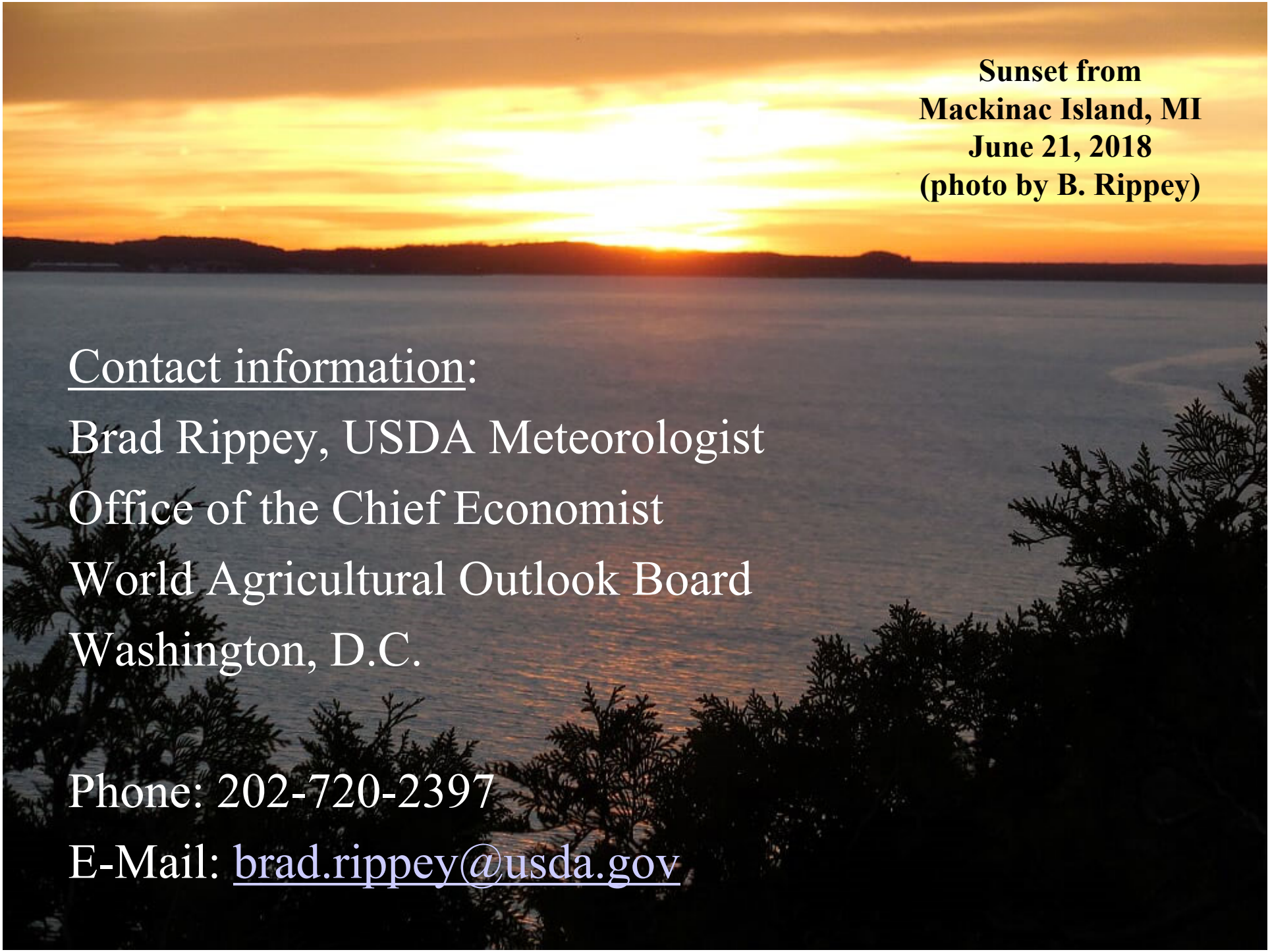
Percent Good to Excellent
October 13, 2019



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Condition	
Good to Excellent	43
Change from Last Year	-6

TOP ## - Percent Good to Excellent
[BOTTOM ##] - Change from Last Year



Sunset from
Mackinac Island, MI
June 21, 2018
(photo by B. Rippey)

Contact information:

Brad Rippey, USDA Meteorologist

Office of the Chief Economist

World Agricultural Outlook Board

Washington, D.C.

Phone: 202-720-2397

E-Mail: brad.rippey@usda.gov