

# North American Drought Monitor Forum

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

### Challenges, Opportunities in Ag Drought Monitoring – USDA Perspective

Jefferson county farmers claim drought designation methods flawed

By MARCUS WOLF  
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PUBLISHED: TUESDAY, SEPTEMBER 27, 2016 AT 12:30 AM

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Watertown (N.Y.) Daily Times  
September 27, 2016

AMANDA MORRISON n WATERTOWN DAILY TIMESState Sen. Patricia A. Ritchie, R-Heuvelton, feels a dried out corn leaf while being shown drought damage in Jefferson County while on a tour of Ronald C. Robbin's farm. (molongoski)



Calgary, Alberta, Canada  
May 1 – 3, 2018

# A Defensible Drought Monitor

- Though the Drought Monitor is not purely mathematical—because verifiable boots-on-the-ground reports and impacts are given some weight—the depiction must be mathematically defensible when questions arise.
- It is much better to approach a Congressional office (or other questioner) with supporting data evidence, rather than saying “it’s not as bad as you think it is” or “because I say so.”



# 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.



# Walking the Fine Line

- County-level drought impacts are crucial but often lack historical perspective.
- Authors must weigh impact reports and possible motives (e.g. wanting D3 instead of D2 for higher LFP payouts) when looking at historical datasets.
- Authors often hear: “I’ve been farming [fill in the blank] years and this is the worst it has ever been.”



# Contact Information (we don't hide)

[Current Map](#)[Maps](#)[Data](#)[Drought Summary](#)[About USDM](#)[Current Conditions and Outlooks](#)[Tutorials](#)[En Español](#)

## General Contact Information

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National Drought Mitigation Center  
University of Nebraska-Lincoln  
P.O. Box 830988  
Lincoln, NE 68583-0988  
P) [402-472-6707](tel:402-472-6707)  
F) 402-472-2946

## Request U.S. Drought Monitor Updates

The National Drought Mitigation Center sends an automated email each week including:

- the latest U.S. Drought Monitor map and narrative
- the percentage of the country in drought
- a map showing what changed in the past week

The NDMC uses the same list for press releases about drought, as warranted by changing conditions. To receive these updates, please subscribe to the DMUpdate list [here](#).

## Social Media

the National Drought Mitigation Center for weekly US Drought Monitor updates:



## U.S. Drought Monitor Authors

For more information about this week's U.S. Drought Monitor map, please contact:

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**[Richard Tinker](#)**

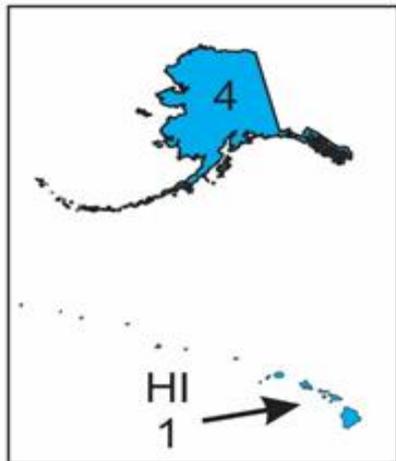
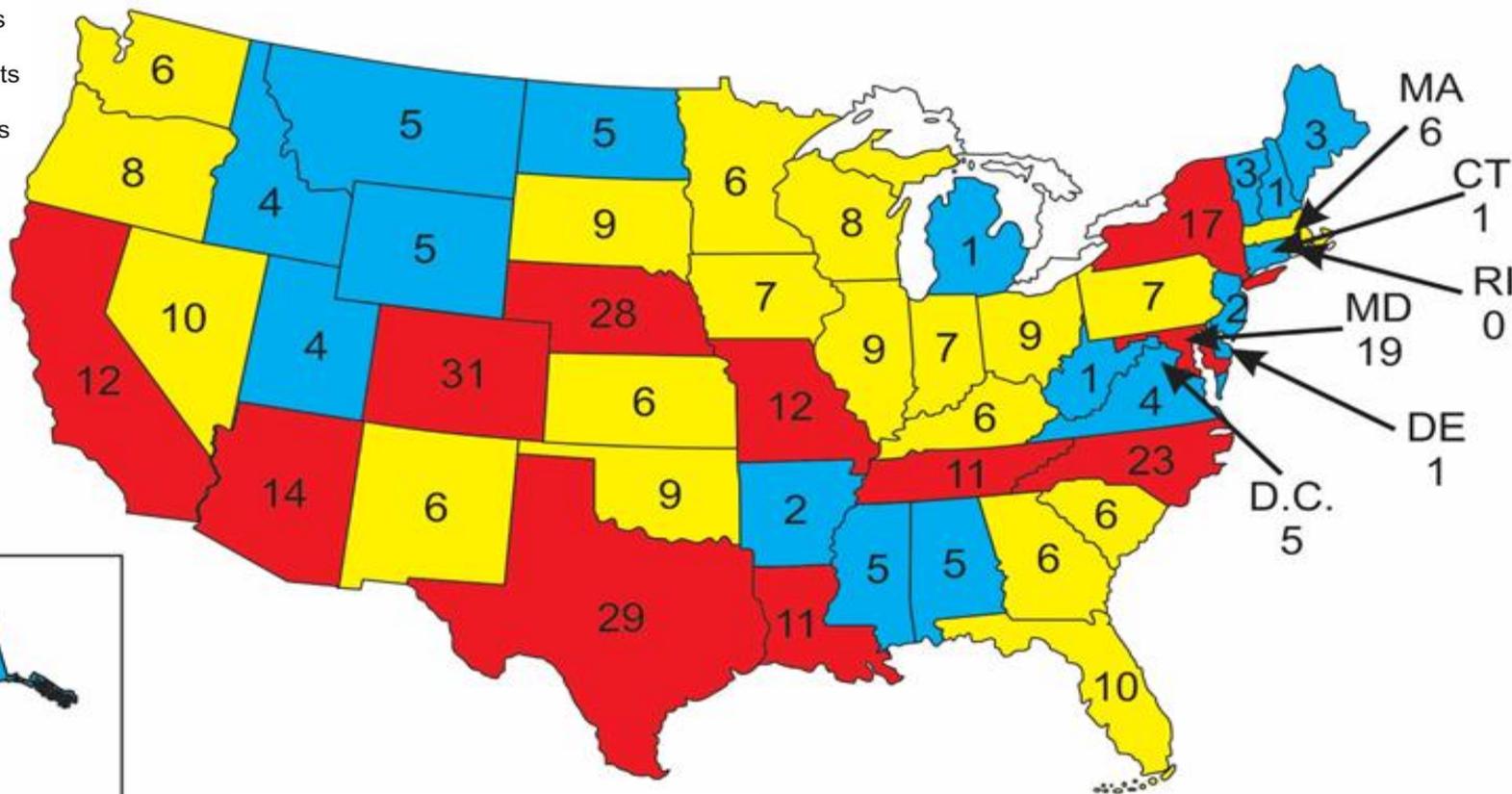
Climate Prediction Center  
[\(301\) 683-3411](tel:301-683-3411)

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

# USDM Listserve Subscribers

(as of August 30, 2017)

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



**More than 400 subscribers from:**

- local NWS & USDA offices
- state climate offices
- state drought task forces
- regional climate centers

# Percentiles and the U.S. Drought Monitor

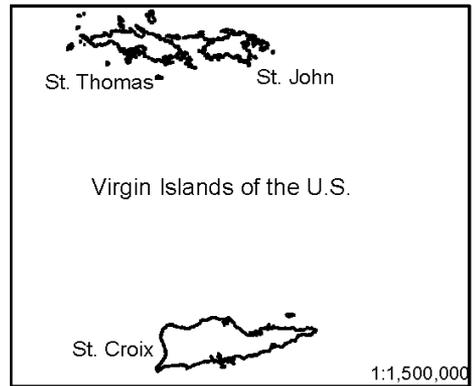
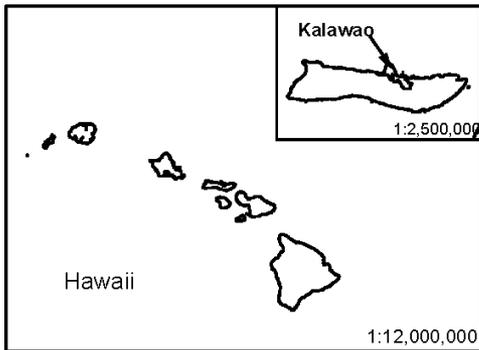
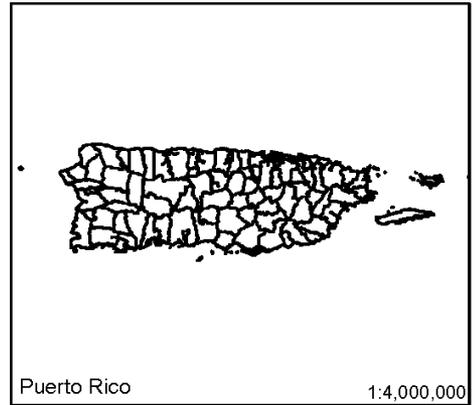
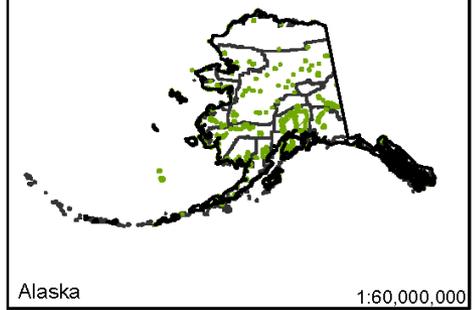
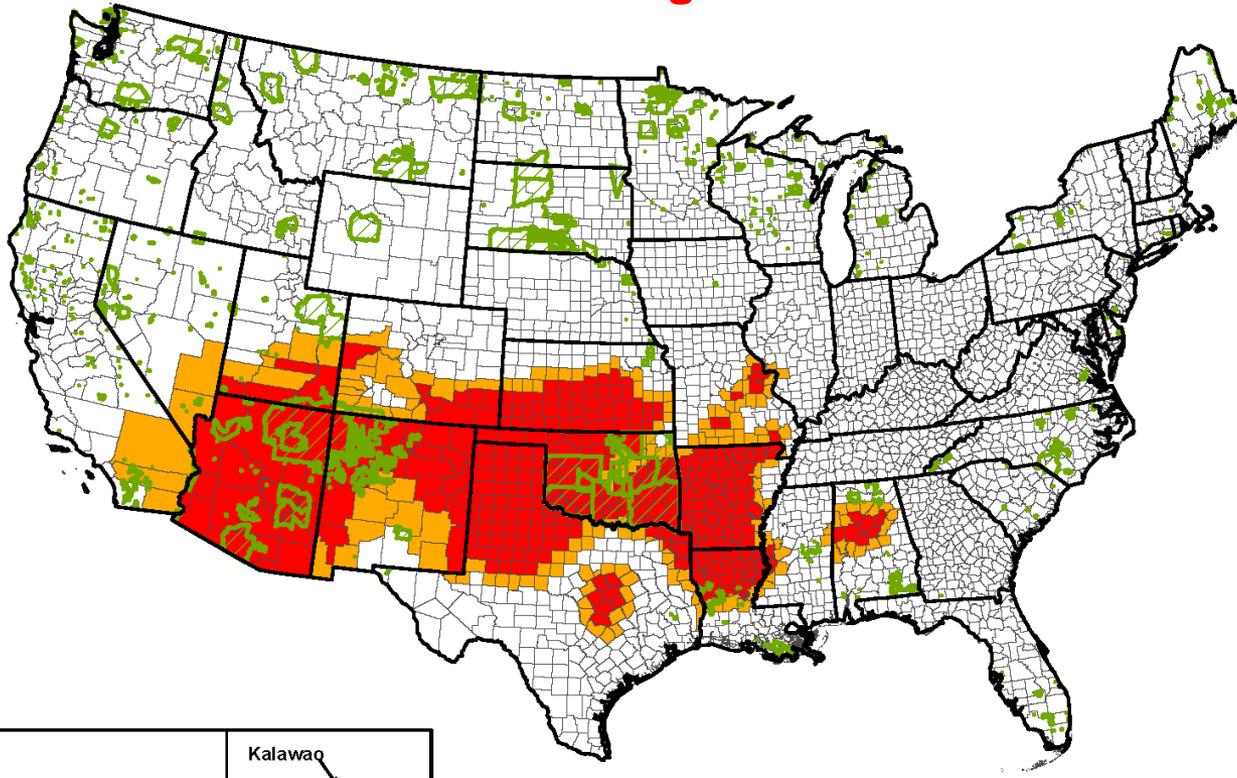
- Advantages of percentiles:
  - Can be applied to any parameter
  - Can be used for any length of data record
  - Helps to put drought in historical perspective
- D4, Exceptional Drought:  once per 50 to 100 years
- D3, Extreme Drought:  once per 20 to 50 years
- D2, Severe Drought:  once per 10 to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

# Primary Uses of the U.S. Drought Monitor for Agricultural Drought Assistance

- **1. Declaration of a primary drought disaster area.** This usage came into existence during the Drought of 2012 and is called the “fast-track” process. The governor of each state/territory still retains the ability to request a drought declaration, pending approval by the Secretary of Agriculture. This type of secretarial declaration leads to the availability of **low-interest loans**, to help producers affected by drought. (Note: contiguous counties also qualify for assistance, per federal law.)
- **2. Payments under the Livestock Forage Disaster Program (LFP).** **Payments** are determined by the size of the livestock operation, the type of forage, and the severity of the drought. This usage came into existence with the passage of the 2008 Farm Bill and was re-enacted, with modifications, in the 2014 Farm Bill. For more information, see: <https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/livestock-forage/index>

# 2018 Secretarial Drought Designations - All Drought

**D2 or worse for eight consecutive weeks**



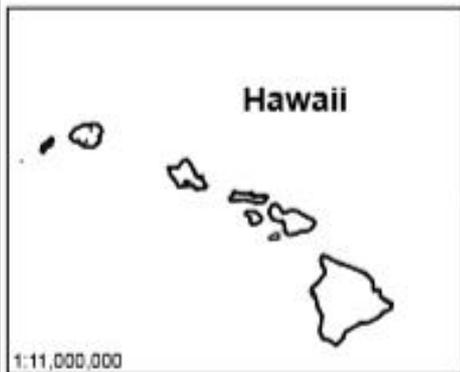
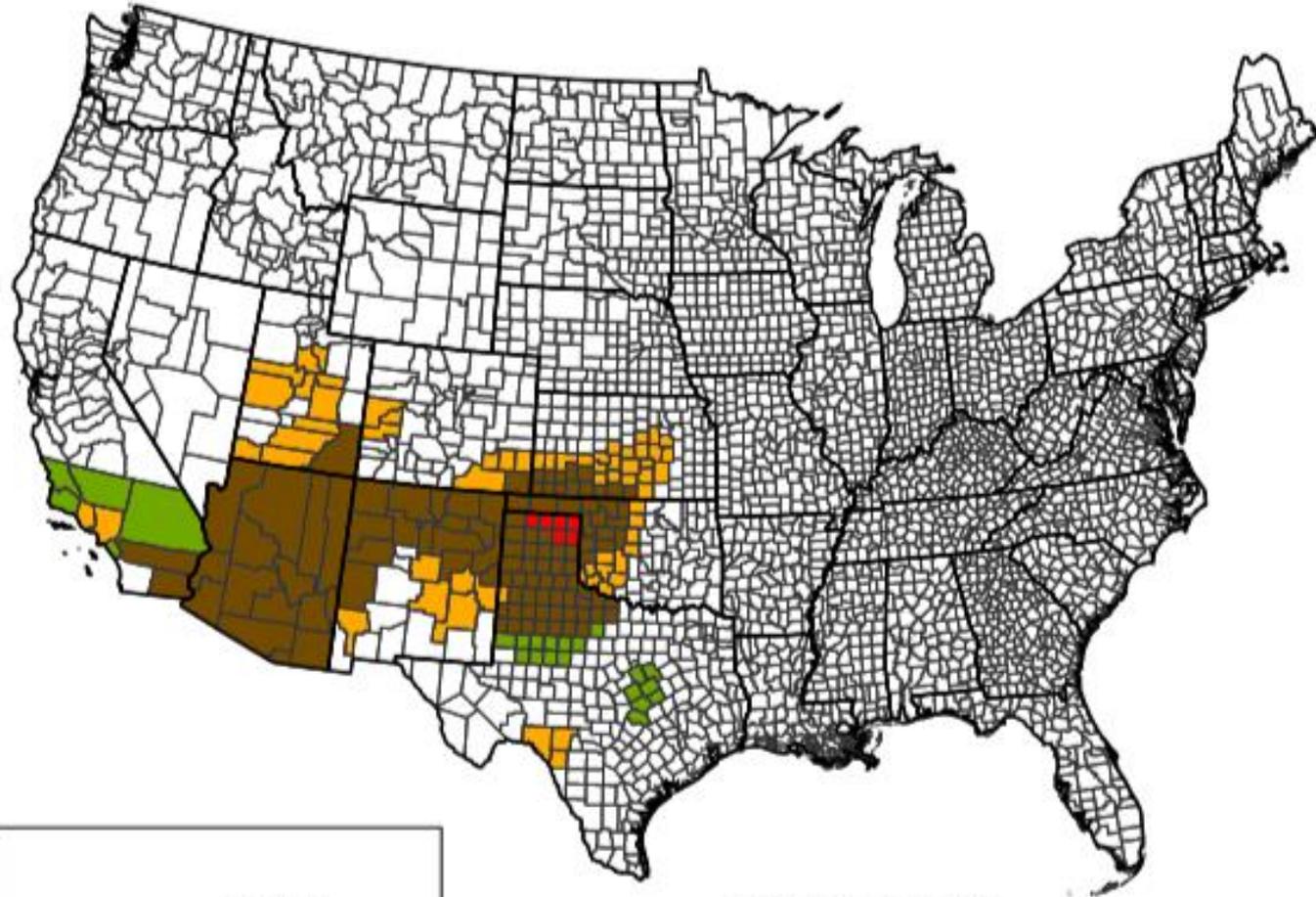
**Eligibility for low-interest loans.**

## Secretarial Drought Designations for 2018

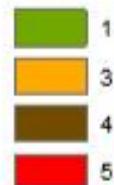
Disaster Incidents as of April 11, 2018

-  State Boundary
-  County Boundary
-  Tribal Lands
-  Primary Counties: 338
-  Contiguous Counties: 183

# Livestock Forage Program Native Pasture - 2018 Program Year



Eligible County  
Payment Months



Map Scales Vary  
Data Update - 04/19/18



# **2003 Livestock Feed Assistance** **Non-Fat Dry Milk Program (NDM)**

On April 8, 2003, then-Agriculture Secretary Ann M. Veneman announced that the U.S. Department of Agriculture will provide surplus USDA stocks of non-fat dry milk (NDM) to livestock producers in areas hardest hit by continuing drought.

USDA will enter into agreements with state and tribal governments to coordinate the movement of the NDM to eligible producers. Approximately 100 counties in nine states (Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, South Dakota, Utah and Wyoming) currently meet the initial eligibility criteria.

The U.S. Drought Monitor will be used to determine which counties are eligible, and eligibility will be re-evaluated every 30 days to ensure the program is targeted to producers in greatest need. To be eligible, counties must meet one of the following two criteria:

\* Be a county or part of a county located in a D4-Exceptional category on the Drought Monitor at any time on or between Sept. 3, 2002, and March 11, 2003, and on the March 11, 2003, Monitor be located in at least D3-Extreme or D4-Exceptional area.

\* Be a county or part of a county located in a D4-Exceptional area on the Drought Monitor on March 11, 2003.

Eligible livestock are foundation herds (breeding and replacement stock) of beef cattle, buffalo, sheep, and goats. The allocation of NDM for a county will be based on a renewable, if applicable, 30-day supply, based upon two pounds of NDM per day for beef cattle and buffalo, and one-half pound of NDM per day for sheep and goats.

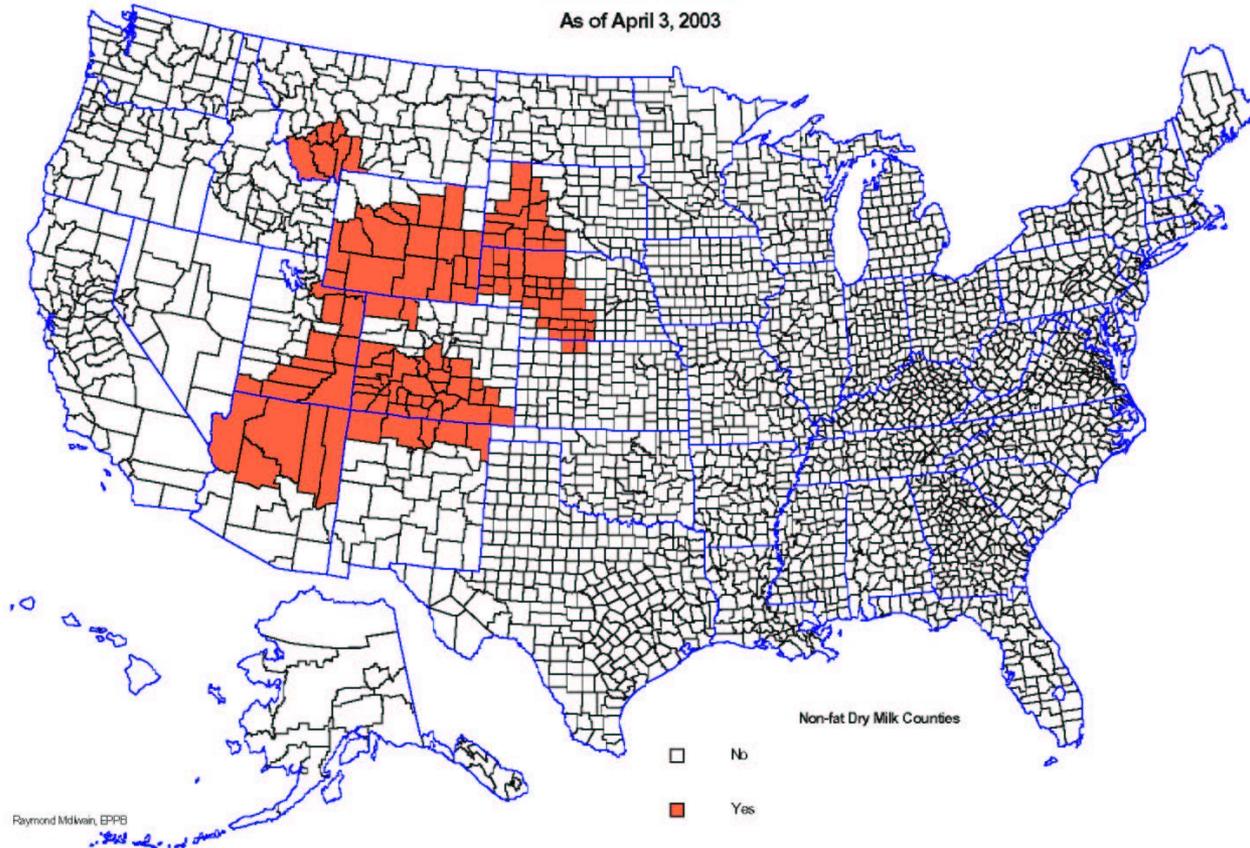


# NDM Counties Approved, April 3, 2003

## NON-FAT DRY MILK PROGRAM

Counties APPROVED

As of April 3, 2003



Raymond Mckean, EPPB

# USDA Disaster Relief and the U.S. Drought Monitor: 2008 Farm Bill

## USDA Announces Implementation of Livestock Disaster Assistance Programs

### Beginning Today, Producers May Sign Up to Participate in these Programs

WASHINGTON, Sept. 14, 2009 - Agriculture Secretary Tom Vilsack today announced that producers may begin applying for benefits under the provisions of the Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program (ELAP) and the Livestock Forage Disaster Program (LFP). **These permanent disaster programs, authorized in the 2008 Farm Bill**, replace previous ad-hoc disaster assistance programs and are funded through the Agricultural Disaster Relief Trust Fund...

For losses due to drought, qualifying drought ratings are determined using the U.S. Drought Monitor located at [www.drought.unl.edu/dm/monitor.html](http://www.drought.unl.edu/dm/monitor.html)... Producers must have suffered losses that occurred on or after Jan. 1, 2008, and before Oct. 1, 2011.



# Livestock Forage Disaster Program (LFP)

- The popular Livestock Forage Disaster Program (LFP) was enacted by the 2008 Farm Bill, and re-enacted by the 2014 Farm Bill. LFP replaced a patchwork disaster assistance program for U.S. livestock producers. Earlier efforts, using the USDM as a payment trigger, were used in 2003 and 2006. Current information on the LFP can be found at: <https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/livestock-forage/index>



# Jefferson county farmers claim drought designation methods flawed

By MARCUS WOLF  
MWOLF@WDT.NET

PUBLISHED: TUESDAY, SEPTEMBER 27, 2016 AT 12:30 AM

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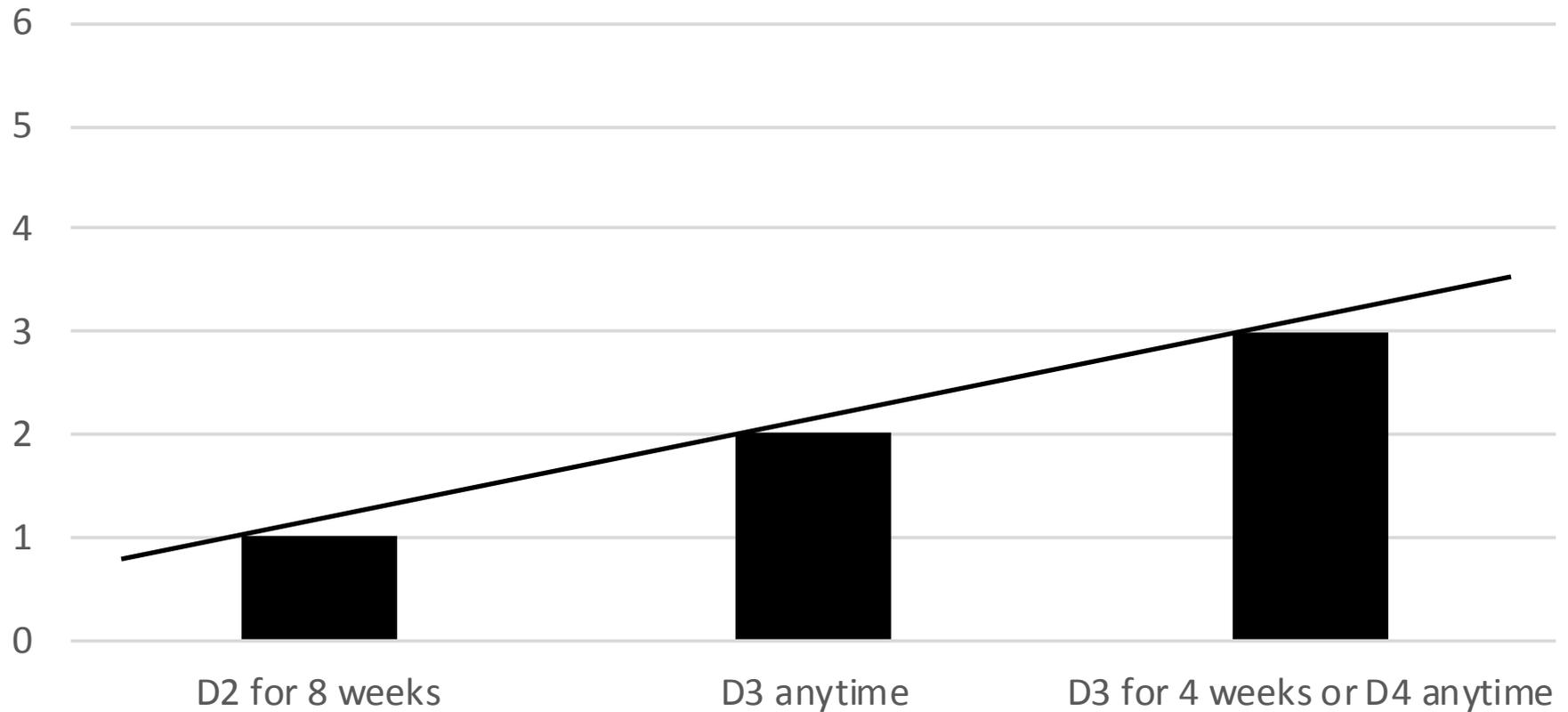
AMANDA MORRISON n WATERTOWN DAILY TIMESState Sen. Patricia A. Ritchie, R-Heuvelton, feels a dried out corn leaf while being shown drought damage in Jefferson County while on a tour of Ronald C. Robbin's farm. (molongoski)

- My first letter regarding omission from disaster assistance came in 2003 from a rancher in Lincoln County, Colorado.
- The drumbeat of complaints from a) producers, b) politicians, and c) USDA/FSA has grown louder in recent years, in parts due to an awkward stair-step structure in LFP payouts (est. 2009), starting with the passage of the 2014 Farm Bill.
- Jefferson Co., NY
- Black Hills (SD/WY)
- Alabama
- Georgia
- South Carolina
- Tennessee
- Southern Iowa

- **U.S. Drought Monitor Usage by FSA**
- **Food, Conservation, and Energy Act of 2008 (“Farm Bill”) authorizes the Livestock Forage Disaster Program (LFP)**
  - **Grazing loss because of drought on owned or leased grazing land or pastureland that is physically located in a county experiencing:**
    - **D2 intensity for at least 8 consecutive weeks during normal grazing period will be eligible to receive payment equal to 1 monthly payment**
    - **D3 intensity during the normal grazing period will be eligible to receive a payment equal to 2 monthly payments**
    - **D3 intensity for at least 4 weeks or a D4 intensity any time during the grazing period will be eligible to receive a payment equal to 3 monthly payments**

- 2008 “Farm Bill” Livestock Forage Disaster Program (LFP) Payouts (financial assistance to producers who suffered grazing losses due to drought or fire on or after January 1, 2008, and before October 1, 2011, during the calendar year in which the loss occurred):
  - 2008 calendar year: \$165,540,837
  - 2009 calendar year: \$ 98,739,950
  - 2010 calendar year: \$ 33,334,458
  - 2011 calendar year: \$180,950,088
  - **LFP total, 2008-11: \$478,565,333**

# LFP Monthly Payment Structure 2008 Farm Bill

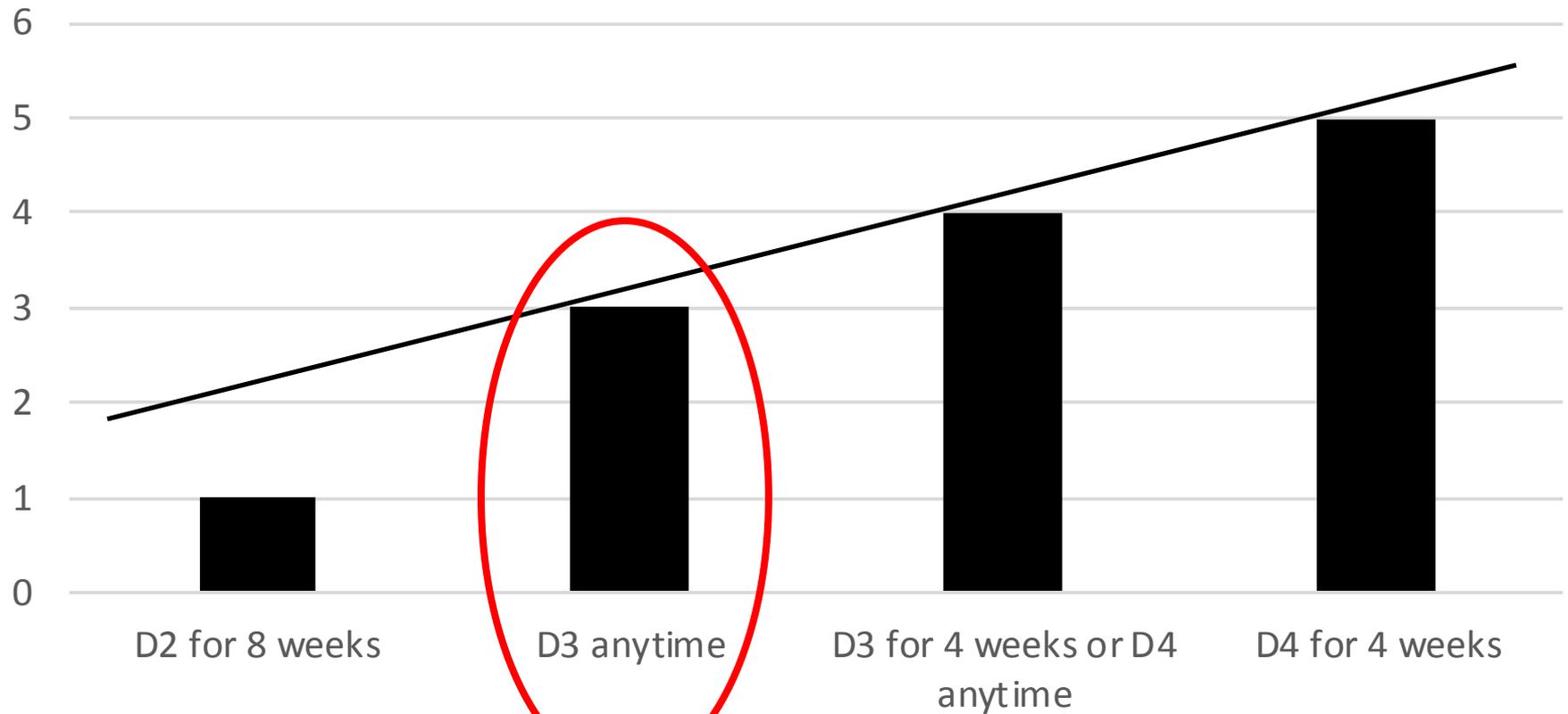


Red text denotes changes between the 2008 and 2014 Farm Bills.

- **U.S. Drought Monitor Usage by FSA**
- **Agricultural Act of 2014 (“Farm Bill”) re-authorizes the Livestock Forage Disaster Program (LFP)**
  - **Grazing loss because of drought on owned or leased grazing land or pastureland that is physically located in a county experiencing:**
    - **D2 intensity for at least 8 consecutive weeks during normal grazing period will be eligible to receive an amount equal to 1 monthly payment**
    - **D3 intensity during the normal grazing period will be eligible to receive an amount equal to 3 monthly payments**
    - **D3 intensity for at least 4 weeks or a D4 intensity any time during the grazing period will be eligible to receive an amount equal to 4 monthly payments**
    - **D4 intensity for at least 4 weeks during the normal grazing period will be eligible to receive an amount equal to 5 monthly payments**

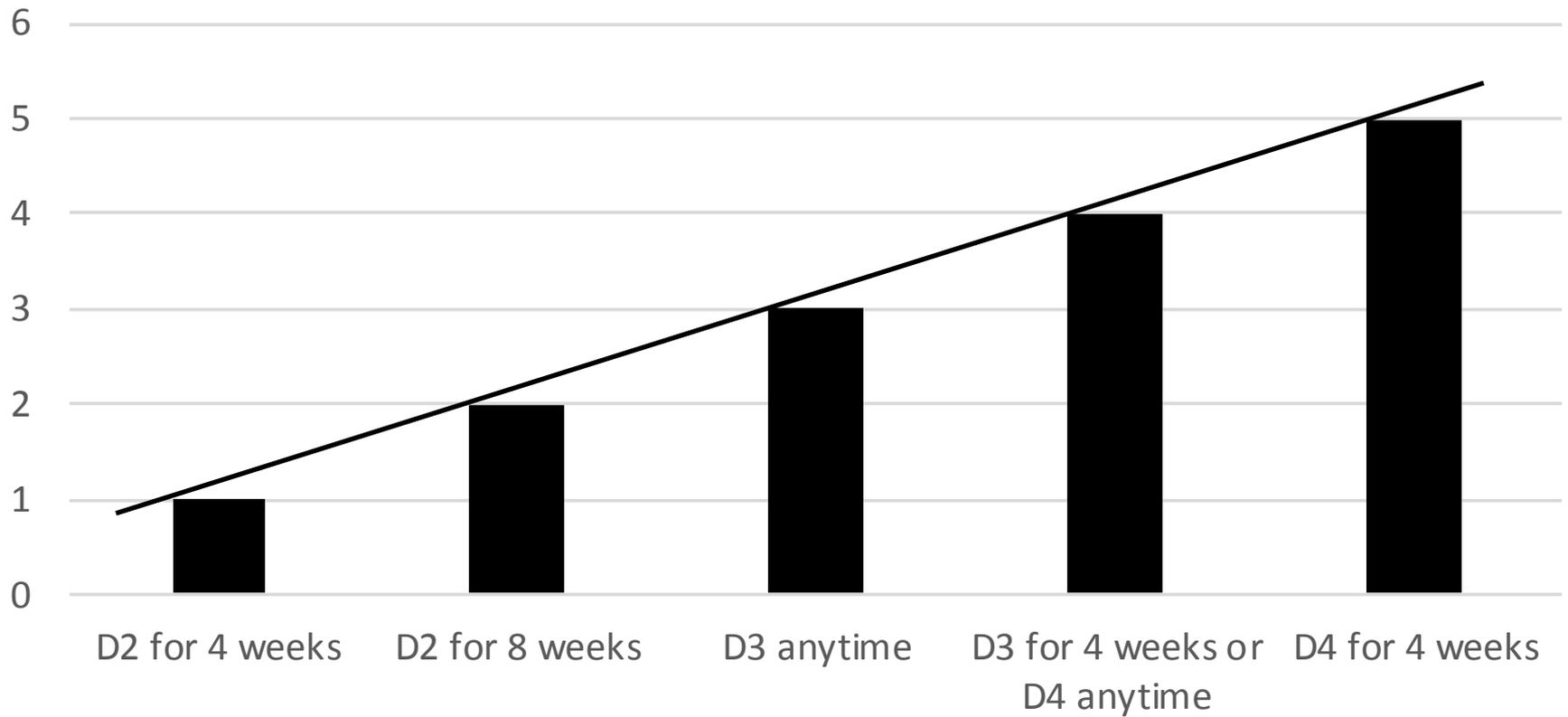
- 2014 “Farm Bill” Livestock Forage Disaster Program (LFP) Payouts (financial assistance to producers who suffered grazing losses due to drought or fire on or after October 1, 2011, during the calendar year in which the loss occurred):
  - 2011 calendar year: \$ 286,453,447
  - 2012 calendar year: \$2,620,163,299
  - 2013 calendar year: \$1,650,912,146
  - 2014 calendar year: \$ 924,930,354
  - 2015 calendar year: \$ 536,191,218
  - 2016 calendar year: \$ 287,671,015
  - 2017 calendar year \$ 316,442,687
  - **LFP total, 2011-17: \$6,622,764,166 (updated through 1/31/2018)**

# LFP Monthly Payment Structure 2014 Farm Bill



# LFP Monthly Payment Structure

## Proposed



# Bottom Line

- Authors “listen to” impact reports.
- Authors are increasingly cognizant that there are attempts to politically or programmatically alter the drought depiction.
- Authors are non-political, career employees; final depictions are scientifically driven and supported by multiple datasets.



Custer State Park, August 26, 1993

# Comments? Questions?

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Photo by B. Rippey  
Saline Co., Nebraska

April 18, 2013

