Partnerships and Products Supporting USDA Drought Programs

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USDA Office of the Chief Economist / World Agricultural Outlook Board

Presentation to

The Future of Drought in the U.S.

Information Gathering Session: Drought Data Users and Decision-Makers

Hosted by The National Academies for Sciences, Engineering, and Medicine

October 14, 2025



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GLICKMAN AUTHORIZES EMERGENCY HAYING FOR DROUGHT RELIEF

WASHINGTON, July 6, 2000 – Agriculture Secretary Dan Glickman today announced that emergency haying will be permitted on some Conservation Reserve Program (CRP) acres in areas of the country hit hardest by this year's drought.

"The drought has devastated many farmers and ranchers," said Secretary Glickman.
"This additional emergency relief measure will provide some hay for producers who need it most."

CRP is a voluntary program that offers annual rental payments and cost-share assistance to establish long-term resource-conserving cover on eligible land. This action will permit approved CRP participants to harvest hay on CRP acreage, providing supplemental forage to producers whose pastures have been decimated by drought.

To be approved for emergency haying, a county must have suffered at least a 40 percent loss of normal moisture and forage for the preceding four-month qualifying period. USDA will determine which counties will be approved for haying and will require CRP participants to submit applications with their local Farm Service Agency (FSA) offices beginning today. Haying may be authorized until August 31, 2000, or until disaster conditions no longer exist – whichever comes first.

Only livestock operations located within approved counties are eligible for emergency haying of CRP acreage. CRP participants who do not own or lease livestock may rent or lease the haying privilege to an eligible livestock farmer located in an approved county.

CRP annual rental payments will be reduced 25 percent to account for the areas hayed. At least 50 percent of the CRP contract acreage must be left unhayed for wildlife. Other restrictions and limitations also apply.

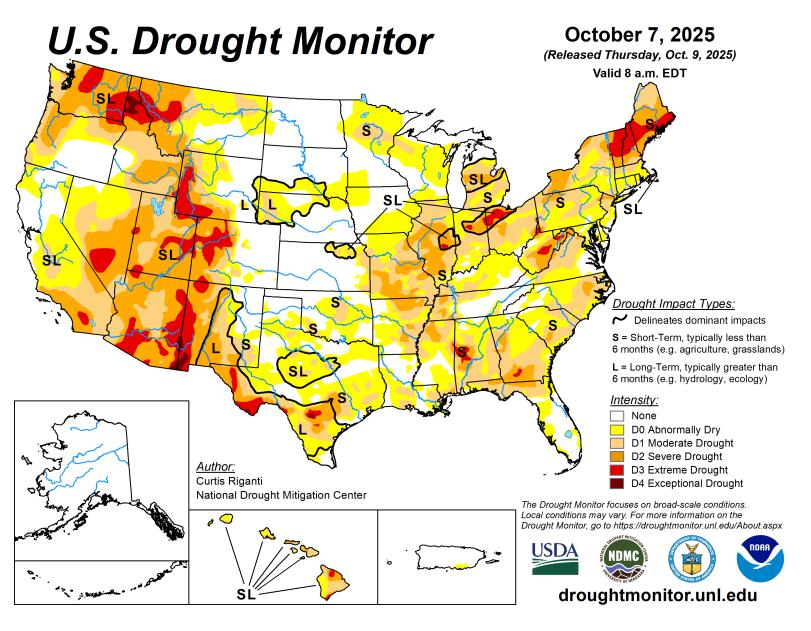
For more information contact local FSA county offices or go to website: www.fsa.usda.gov

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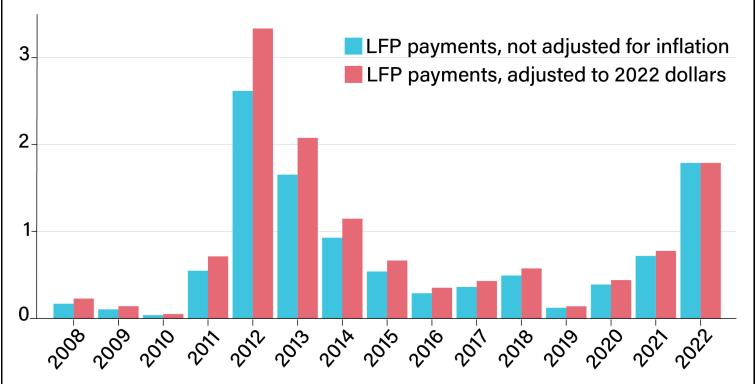


Category	y Description	Example Percentile Range for Most Indicators
None	Normal or wet conditions	30.01 or Above
D0	Abnormally Dry	20.01 to 30.00
D1	Moderate Drought	10.01 to 20.00
D2	Severe Drought	5.01 to 10.00
D3	Extreme Drought	2.01 to 5.00
D4	Exceptional Drought	0.00 to 2.00



Livestock Forage Disaster Program (LFP) payments, 2008-22, not adjusted for inflation and adjusted to 2022 dollars

Total annual LFP payments (billions U.S. dollars)



Note: The chart shows total annual payments for the Livestock Forage Disaster Program (LFP) before adjusting for inflation (nominal) and after adjusting for inflation (real). Nominal payments refer to the amount of payments distributed for losses each year. Real payments show those payments after they have been adjusted for inflation, in this case to the 2022 dollar. LFP payments include those made to producers experiencing forage loss because of drought or because of wildfire on Federal rangeland leased to producers for grazing. The payments for 2011, 2012, and 2013 reflect a 2014 Farm Bill change to eligibility requirements for LFP payments. The bill authorized retroactive payments for producers affected by drought in 2011, 2012, and 2013, when much of the central United States experienced significant drought conditions.

Source: USDA, Economic Research Service using USDA, Farm Service Agency data.

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U.S. Drought Monitor

Eligibility by County

Home / Eligibility by County

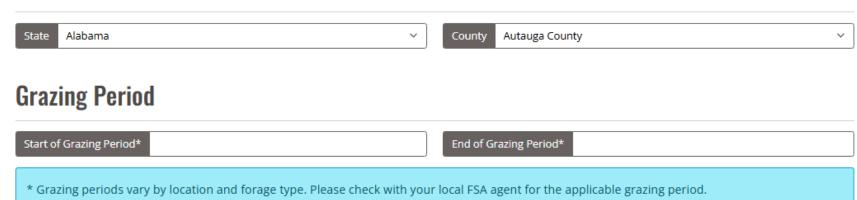
The County Eligibility tool tells you which, if any, of the Livestock Forage Disaster Program requirements are met for a particular county.

The FSA Eligibility Tool does not guarantee any financial aid. It simply estimates which U.S. counties meet the criteria, based on the U.S. Drought Monitor. Eligibility will be confirmed by the FSA once the signup period has begun. Please contact your <u>local FSA agent</u> for more details and to verify eligibility after the start of the signup period.

If you would like information at a state or national level, please visit the Summary Data section or return to the home page.

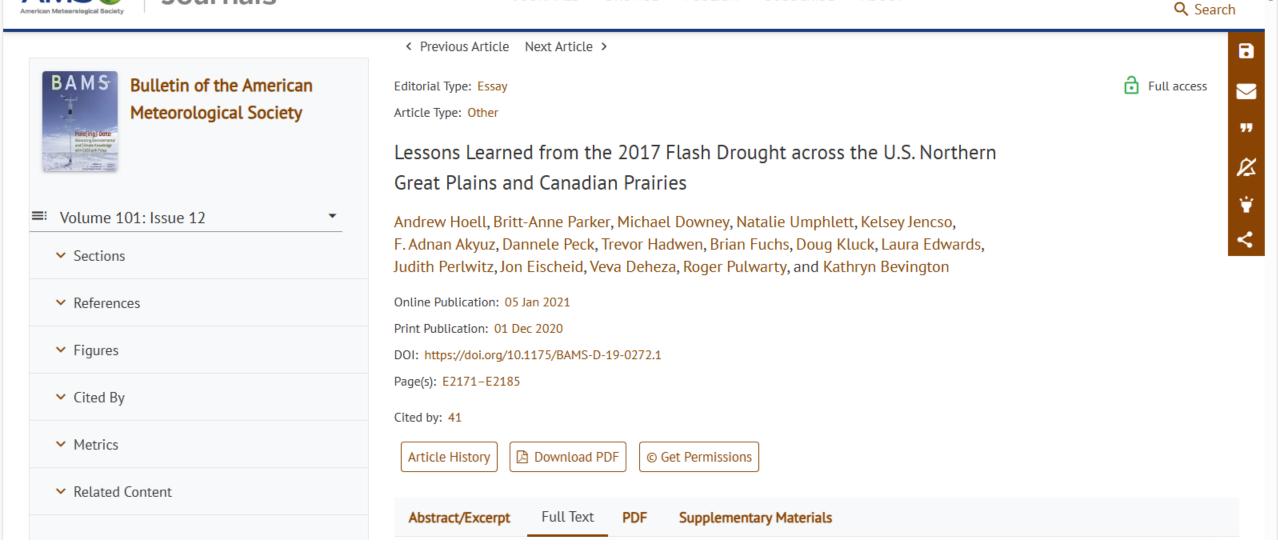
For help with this tool, please visit the FSA Eligibility Tool Help pages.

Location



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Agricultural Improvement Act of 2018 Section 12512: Improvements to United States Drought Monitor

- (a) In General. -- The Secretary shall coordinate with the Director of the National Drought Mitigation Center and the Administrator of the National Oceanic and Atmospheric Administration to enhance the collection of data to improve the accuracy of the United States Drought Monitor.
- (b) Utilization. -- To the maximum extent practicable, the Secretary shall utilize a consistent source or sources of data for programs that are based on drought or precipitation indices, such as the livestock forage disaster program established under section 1501(c) of the Agricultural Act of 2014 (7 U.S.C. 9081(c)) or policies or plans of insurance established under the Federal Crop Insurance Act (7 U.S.C. 1501
- (c) Review. -- Not later than 1 year after the date of enactment of this Act, the Secretary shall conduct a review
 - (1) the types of data currently utilized by the United States Drought Monitor;
 - (2) the geographic coverage and density of existing data collection sites; and
 - (3) other meteorological or climatological data that is being collected by other Federal agencies, State and local governments, and non-Federal entities that could be utilized by the United States Drought
 - (d) Improvements .--
 - (1) In general. -- Upon the completion of the review prescribed in subsection (c), the Secretary shall--
 - (A) seek to expand the collection of relevant data in States or geographic areas where coverage is currently lacking as compared to other States or geographic areas; and
 - (B) to the maximum extent practicable, develop standards to allow the integration of meteorological or climatological data into the United States Drought Monitor derived from
 - (i) in-situ soil moisture profi
 - measuring devices:
 - (ii) citizen science (as defined in the Crowdsourcing and Citizen Science Act (15 U.S.C. 3724)), including data from the Cooperative Observer Program
 - (iii) other Federal agencies, Stat and local governments, and non-Federal
 - (2) Authorization of appropriations. -- There is to be authorized to be appropriated to the Secretary to carry out this subsection \$5,000,000 for each of fiscal years 2019 through 2023.

Step 1: Survey of Products Available to USDM Authors

Step 2: Recommendations on How to Get More

"(i) in-situ soil moisture profile measuring devices:"

"(iii) other Federal agencies .. and non-Federal entities."

Review of Information Used to Produce the *United States Drought Monitor*

Submitted by the Office of the Chief Economist as Partial Execution of

Section 12512

(IMPROVEMENTS TO THE UNITED STATES DROUGHT MONITOR) of The Agricultural Improvement Act of 2018

Public Law 115-334; 7 U.S. Code §5856

Data Used by All Authors Survey Were:

- In-Situ Observations (rainfall, temperature, etc.) via Regional Climate Centers – Multiple Sources
- SNOTEL USDA/NRCS
- Streamflow USGS
- Groundwater USGS
- Precipitation Estimates NOAA/NWS/AHPS
- NLDAS Soil Moisture NOAA/NASA
- Vegetative Health Index NOAA/NESDIS
- EDDI (Evaporative Demand Drought Index) NOAA/ESRL
- Vegetative Drought Response Index (VegDRI) USGS, NDMC, HPRCC
- QuickDRI NDMC, CALMIT, USGS, USDA/ARS, NASA/Goddard
- Objective Blends NOAA/CPC

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Recommendations for Inclusion of New Data Included:

- Quality requirements for inclusion of in-situ data and other products into the USDM should be made public both for transparency and so that data providers may have an opportunity to participate in the process.
- There needs to be coordination amongst NOAA agencies maintaining the various operational databases, so that all sources may be assessed for potential inclusion into the USDM.
- To allow state and regional contributors to better understand their local drought depiction, the list of products used most heavily by the USDM author of record for every individual shift should be made public.
- Methodologies need to be explored that will allow inclusion of data with short periods of record, and other information the authors are being encouraged to use.

Drought Response Action Plan



WESTERN GOVERNORS' ASSOCIATION

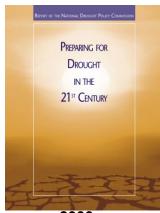
NOVEMBER 1996

1996

Call to action following several western droughts and resultant wildfires

WGA

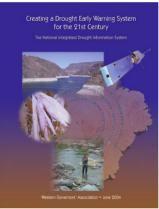
National Drought Policy Commission



2000

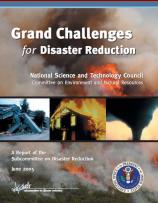
US Congress

Western Governors Association



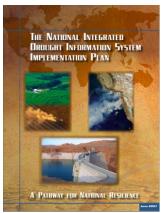
2004

Office of Science & Technology Policy



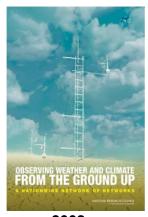
2005

Federal Partners



2007

National Academies

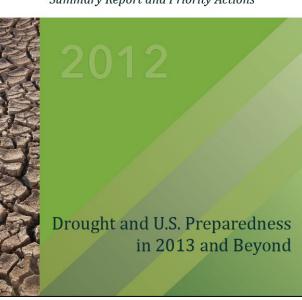


2009

National Drought Forum Summary Report and Priority Actions

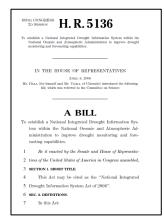
Washington, DC

December 12-13, 2012



2012

Call to action following 2012 drought



2006

OSTP NDPC WGA Cong

OSTP NIDIS Congress NCOS NDF

Call to Action

1990 1995 2000 2005 2010 2015 2020





BETWEEN THE
U.S. Department of Commerce
AND THE

I. General Information

WHEREAS, the U.S. Department of Commerce (Commerce) has responsibility for supporting and sustaining economic growth and development, and, through the National Occanic and Atmospheric Administration (NOAA), has responsibility for understanding, monitoring, and predicting weather and climate, including variations and changes in climate externes, occans, and coasts, and for sharing knowledge and information of interest to agriculture, forestry, and rural and urban communities to enhance the resilience of economies and ecosystems, across the Nation;

WHEREAS, the U.S. Department of Agriculture (Agriculture) has responsibility within the Federal Government to monitor and assess national and international food supplies and natural resource conditions, and acquires, analyzes and interprets weather and climate information for the purpose of providing appropriate information related to the impacts of weather and climate on ecosystems, rural communities, forestry, and agricultural production to the people of the United States, and

WHEREAS, there is increasing risk and vulnerability to rural and urban communities, tribul lands, the agricultural and forestry sectors, transport, and utilities from extreme weather events such as drought, flood, fire, tropical cyclones, and periods of high temperature, and there is evidence that these risks are changing due to climate change;

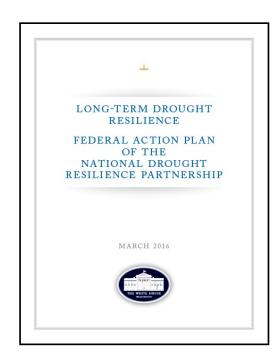
NOW, THEREFORE, Commerce and Agriculture enter into this Memorandum of Understanding (MOU) overing coopenitive efforts to advance the development, sharing and application of weather, climate, economic and demographic information for risk management with respect to agriculture, forestry, and other resource management decisions, with an emphasis on food and energy security, international trade, water availability, water ranagement and ecocystem protection in the face of changing

II. Reference and Authorities

Commerce enters into this MOU pursuant to the authority vested in it by 15 U.S.C 313; Agriculture enters into this MOU pursuant to the authority vested in it by 7 U.S.C. 2201. This MOU supersedes the 1995 agreement between the two Departments relating to coordination and cooperation in climate and weather matters.

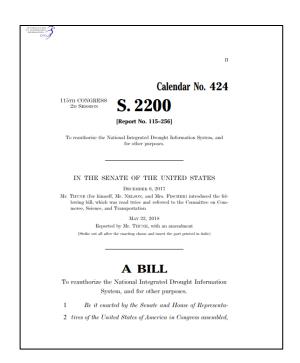
USDA/NOAA MOU (2012)

USDA and NOAA agree to partner on developing a National Soil Moisture Network



National Drought Resilience Partnership (2016)

White House promises policylevel support for a National Soil Moisture Network



NIDIS Reauthorization (2018)

Congress tasks NIDIS with developing the framework for a National Coordinated Soil Moisture Network

USDA/NOAA

To provide for the reform and continuation of agricultural and other programs of the Department of Agriculture through fiscal year 2023, and for other purposes. 1 Be it enacted by the Senate and Hosse of Representatives of the United States of America in Congress assembled,

Agricultural Improvement Act of 2018

Congress urges use of soil moisture observations in creating the US Drought Monitor

White House Congress

Marching Orders!

1990 1995 2000 2005 2010 2015 2020