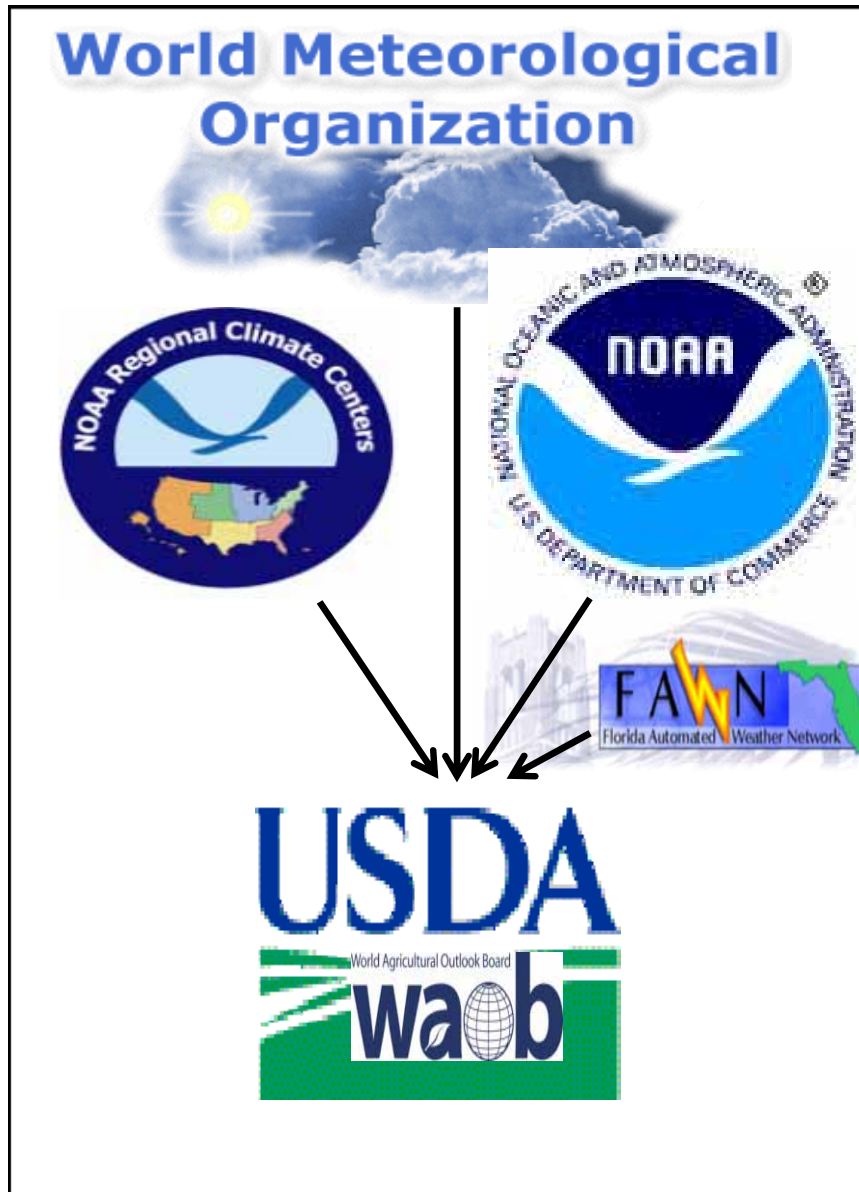




U.S. Department of Agriculture (USDA) Drought Program Activities

Ray Motha
USDA Chief Meteorologist

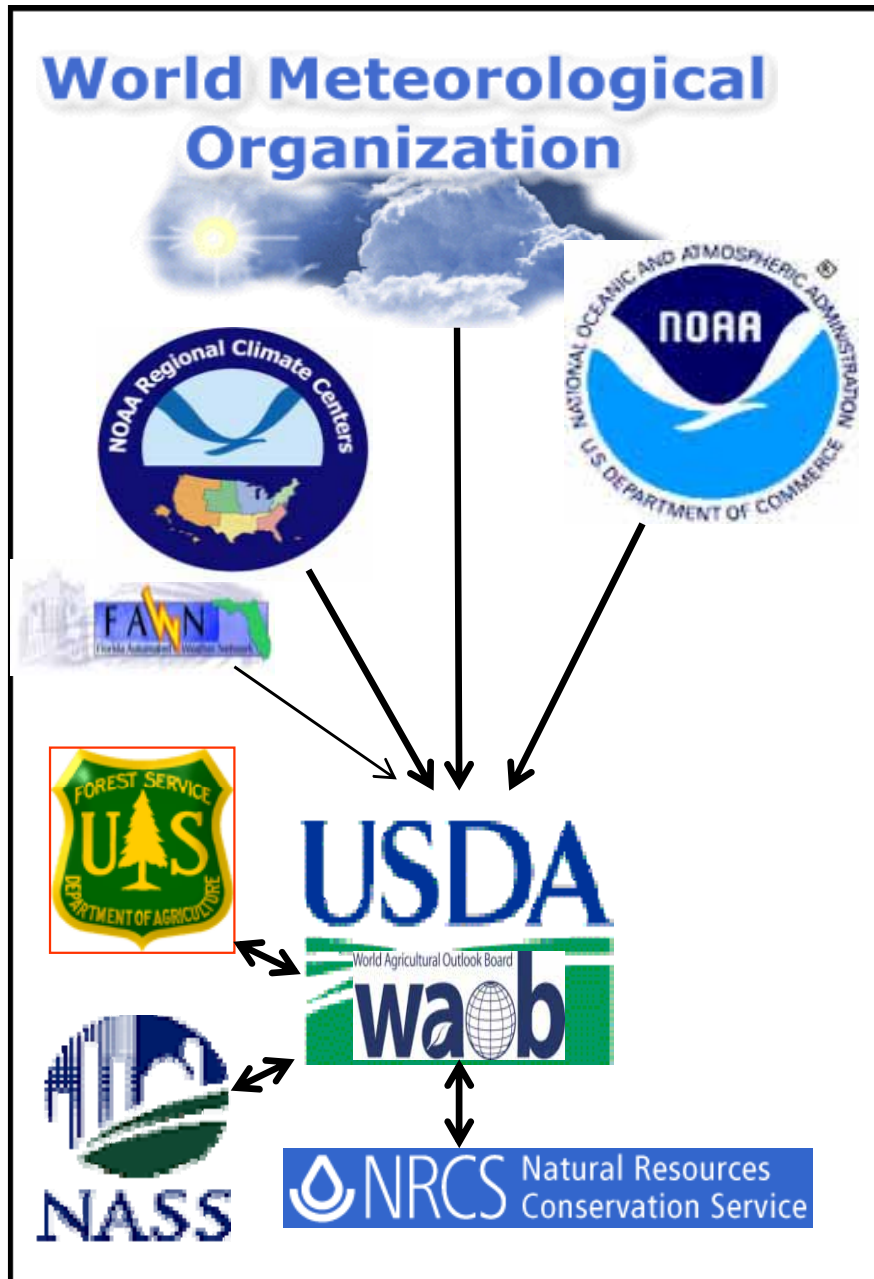
USDA Intergovernmental & Interagency Drought Program Activities



COLLABORATION FOR DROUGHT DATA

- WMO, NOAA, NOAA/RCCs, State mesonets (Florida FAWN etc.) provide USDA with data to monitor drought and develop early-warning alerts.

USDA Intergovernmental & Interagency Drought Program Activities



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USDA INTERAGENCY COLLABORATION

- USDA agencies (NRCS, FS, and NASS) collect weather and crop data for drought management.

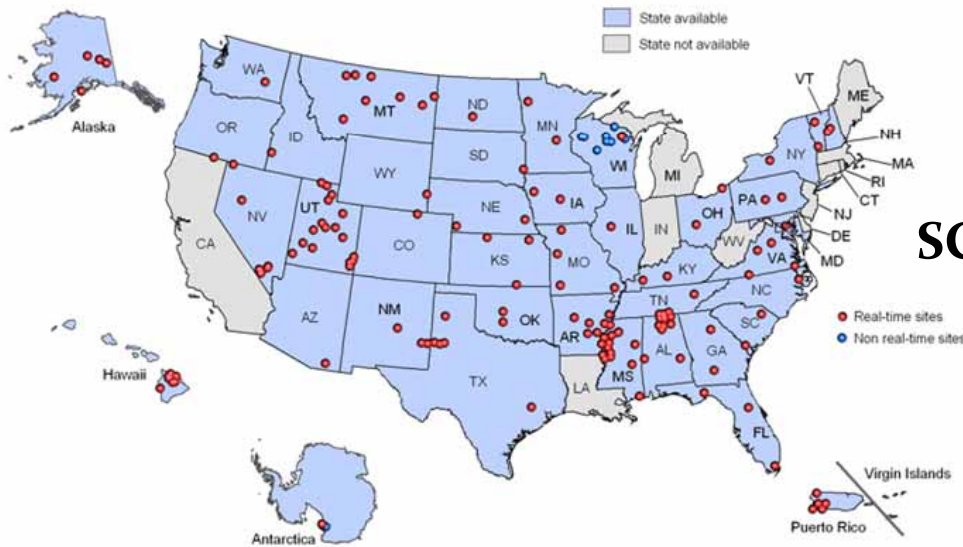
Snow Survey and Water Supply Forecasting Program



SNOTEL (SNOWpack TELEmetry)
750 automated stations in 13 states.

- **Water supply forecasts:**
 - Over 11,534 forecasts issued by states to users from 740 locations
 - Over 1.9M visits to WSF pages

<http://www.wcc.nrcs.usda.gov/wsf>



SCAN (Soil Climate Analysis Network)

150 automated stations in 39 states
Soil-climate monitoring
956K downloads in 2006
Critical for drought monitoring

USDA Intergovernmental & Interagency Drought Program Activities



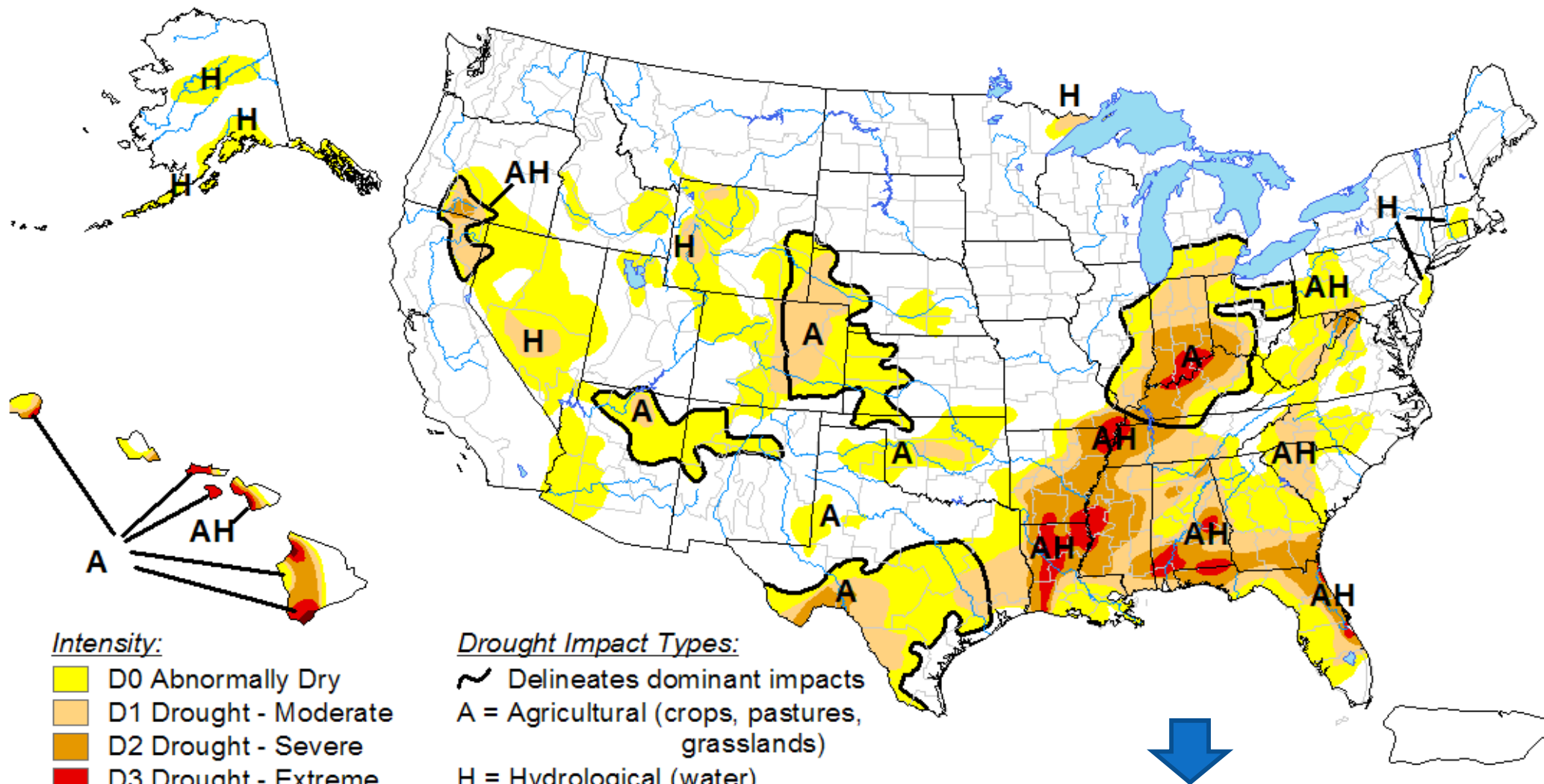
INTERAGENCY COLLABORATION FOR AGRICULTURAL DROUGHT MONITOR

- NOAA, USDA, NDMC produce USDM, agricultural drought products, and prepare crop weather impact analyses.
- Daily & Weekly agricultural weather summaries disseminated to the public via Internet and public media

U.S. Drought Monitor

November 2, 2010

Valid 8 a.m. EDT



Intensity:

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

Drought Impact Types:

- ~ Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)

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



<http://drought.unl.edu/dm>

Released Thursday, November 4, 2010

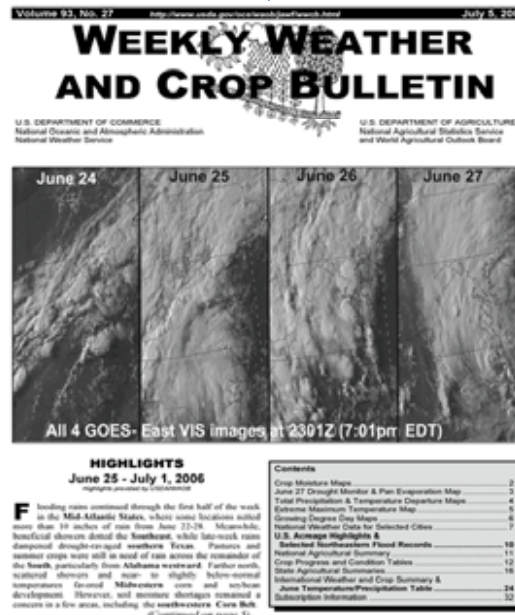
Author: Mark Svoboda, National Drought Mitigation Center

USDA/DOC

Joint Agricultural Weather Facility (JAWF)



Partnership began in 1940 when the Weather Bureau was transferred from the U.S. Department of Agriculture (USDA) to the Department of Commerce (DOC). Agreement was formalized in 1958. JAWF was officially established created in the late 1970's . Located at USDA headquarters in Washington, D.C.



Published weekly and available free (posted Wednesday) on the Internet, hardcopy & media
Coverage includes all of the world's major agricultural regions, and highlights major drought affected areas

USDA Intergovernmental & Interagency Drought Program Activities



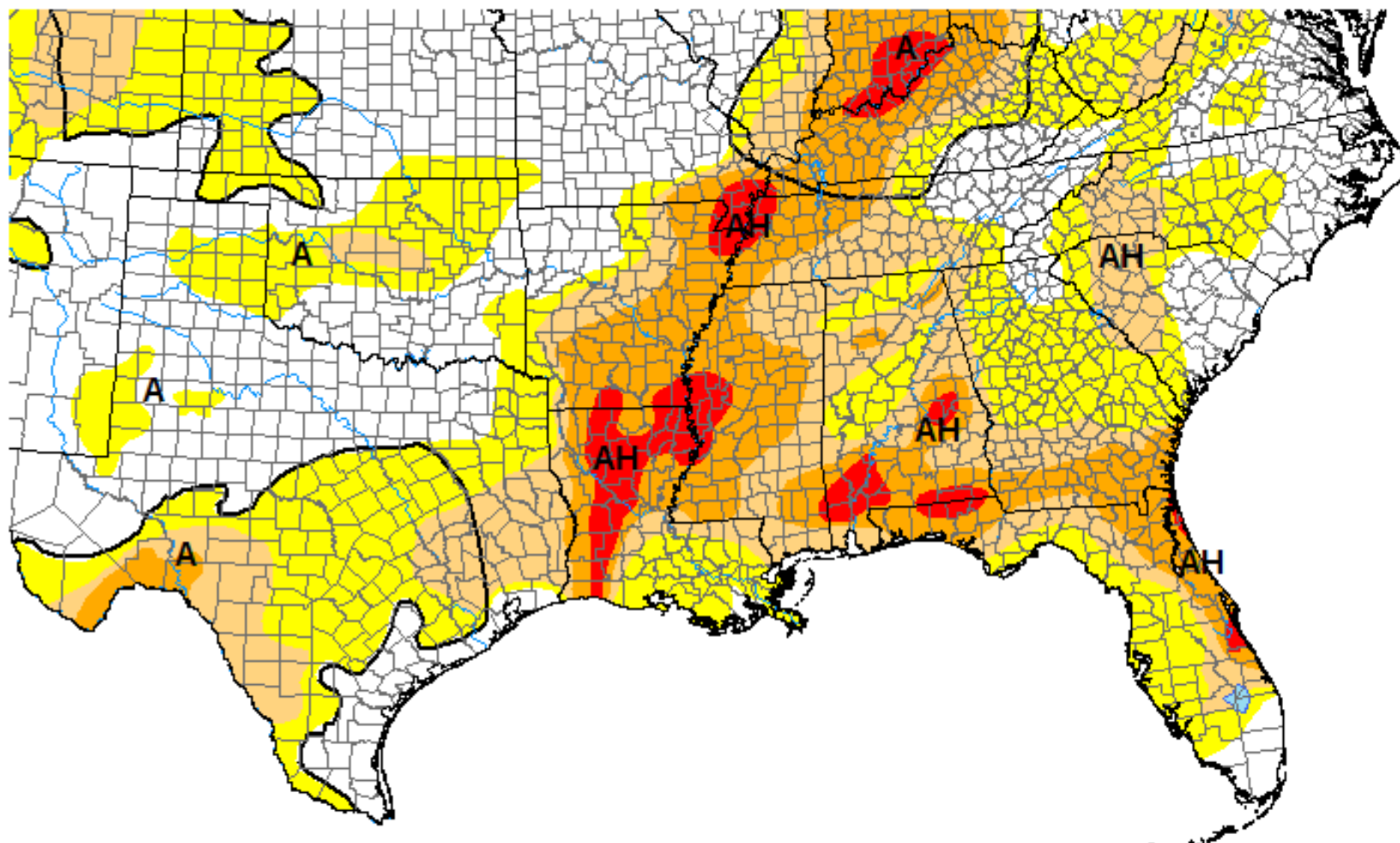
➤ USERS OF USDA DROUGHT INFORMATION

- FS manages fire weather program; NRCS manages climate and water supply program.
- USDA has interagency meetings twice a month to monitor drought conditions, using the USDM to trigger USDA /RMA drought emergency assistance.
- State programs assist farmers with direct advisory services using Internet and cellphones (AgroClimate, SEUSA).






U.S. Drought Monitor

November 2, 2010


Valid 8 a.m. EDT



Intensity:

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Drought Impact Types:

-  Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)
- (No type = Both impacts)



Released Thursday, November 4, 2010
Author: Mark Svoboda, National Drought Mitigation Center

U.S. Drought Monitor

Alabama

November 2, 2010

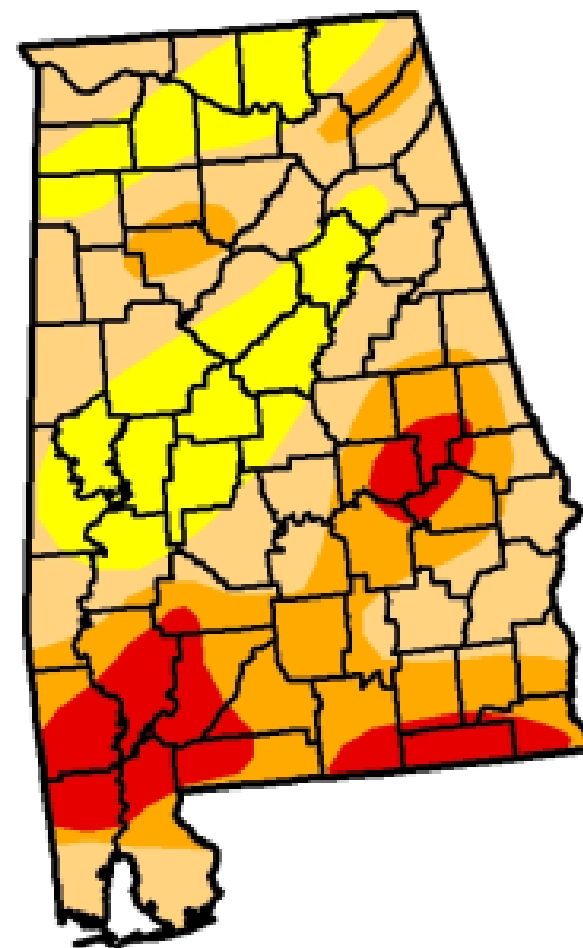
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.0	100.0	77.7	35.7	12.4	0.0
Last Week (10/26/2010 map)	0.0	100.0	93.1	44.6	12.0	0.0
3 Months Ago (08/10/2010 map)	32.2	67.8	25.8	0.0	0.0	0.0
Start of Calendar Year (01/05/2010 map)	100.0	0.0	0.0	0.0	0.0	0.0
Start of Water Year (10/05/2010 map)	3.7	96.3	66.3	25.7	4.4	0.0
One Year Ago (11/03/2009 map)	100.0	0.0	0.0	0.0	0.0	0.0

Intensity:

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<http://drought.unl.edu/dm>



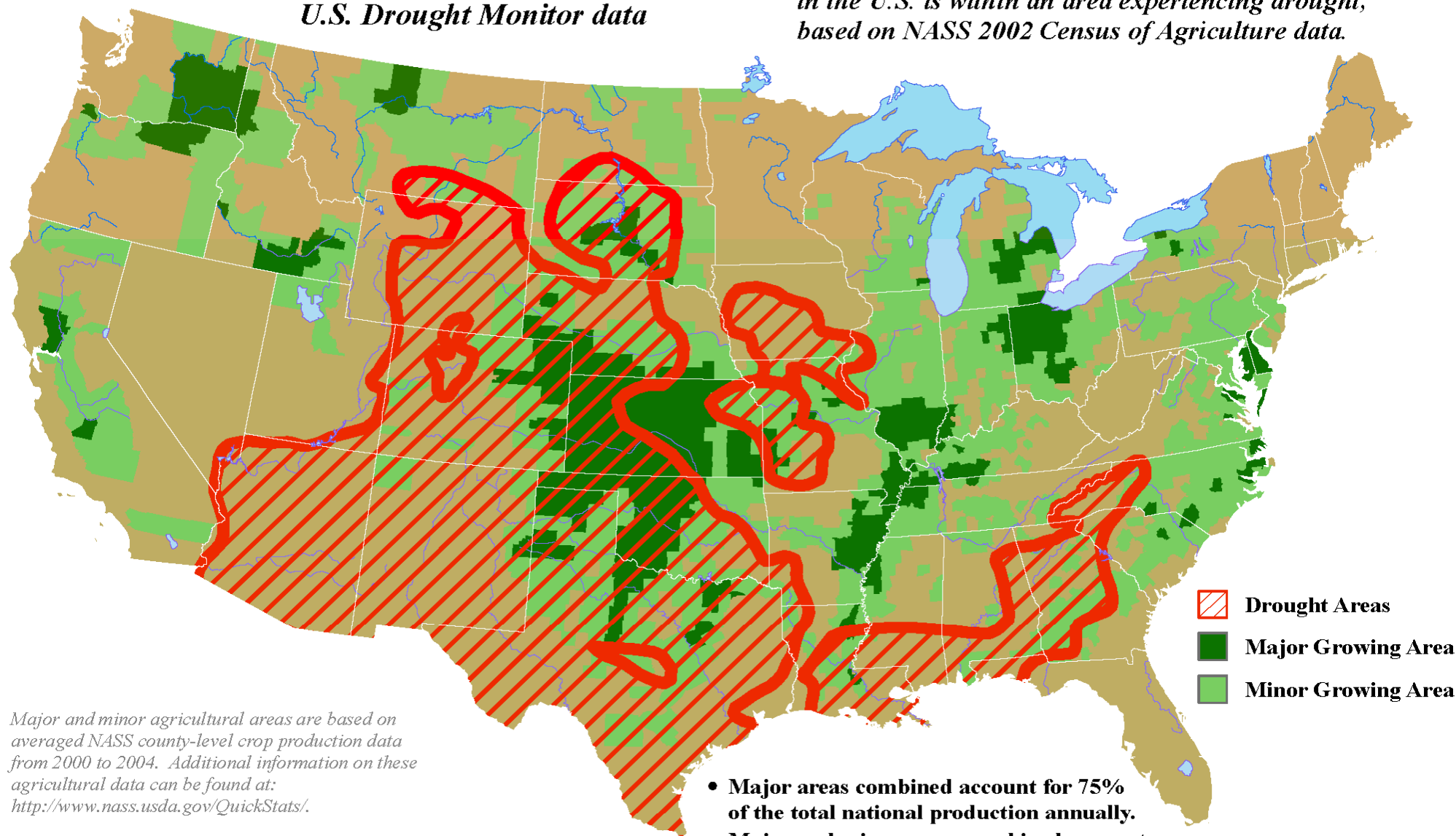
Released Thursday, November 4, 2010

Author: Mark Svoboda, National Drought Mitigation Center

U.S. Winter Wheat Areas Experiencing Drought

Reflects June 27, 2006
U.S. Drought Monitor data

Approximately **40%** of the winter wheat grown
in the U.S. is within an area experiencing drought,
based on NASS 2002 Census of Agriculture data.



-  Drought Areas
-  Major Growing Area
-  Minor Growing Area

Major and minor agricultural areas are based on averaged NASS county-level crop production data from 2000 to 2004. Additional information on these agricultural data can be found at: <http://www.nass.usda.gov/QuickStats/>.

Mapped drought areas are derived from the U.S. Drought Monitor product and do not depict the intensity of drought in any particular location. This map is not used for USDA programs. More information on the Drought Monitor can be found at: <http://www.drought.unl.edu/dm/monitor.html>.

- Major areas combined account for **75%** of the total national production annually.
- Major and minor areas combined account for **99%** of the total national production annually.

Use of the Drought Monitor (DM)

- **USDA Dried Milk Program 2002-03, based on meetings with JAWF about how to use the Drought Monitor (DM)**
The DM was used to determine which counties were eligible.
- **USDA Conservation Reserve Program (CRP) uses DM as a trigger to release acreage during drought.**
- **DM is used as a official declaration for review of FSA claims for drought- prevented plantings of non-irrigated crops.**
- **Numerous states use DM as a drought trigger for USDA Secretary agricultural disaster requests.**
- **USDA 5-yr Farm Bill uses DM as the official drought trigger for drought programs.**



National Drought Policy Commission

- Several years of background preparation by Western Governor's Association (WGA) & key supporters in the late 1990's.
- In 1998, Congress passed the National Drought Policy Act, creating the National Drought Policy Commission (NDPC).
- NDPC members consisted of a cross-section of federal and non-federal agencies, institutions and constituencies who were involved with, or affected, by drought.

National Drought Policy Commission

- The NDPC was tasked to recommend to Congress the guiding principles of a national drought policy.
- Two years of meetings, public hearings across the country, and written comments about the needs and limitations in what was provided by state, regional, local, tribal and federal drought programs and laws led to a set of recommendations from the NDPC for a national drought policy.

National Drought Policy Commission

Findings

- **Planning and Mitigation: Overall**
 - 1. Thirty states had individual drought plans**
 - 2. Few river basin and watershed plans included a drought component.**
 - 3. Small percentage of towns and counties had drought preparedness plans**
 - 4. Very small percentage of individual agricultural producers had drought planning measures.**



National Drought Policy Commission Findings

Key Points of Successful Drought Plans:

- 1. Advanced planning**
- 2. Proactive mitigation**
- 3. Innovative technology**
- 4. Cooperative and collaborative efforts among federal and non-federal entities**

National Drought Policy

1. *“Preparedness”* is the foundation to a proactive national drought policy.
 2. Recommending a paradigm shift in policy from *“Relief”* to *“Readiness”*.
- Change the STATUS QUO of spending billions of dollars in response to drought without reducing the risk situation of the recipients to:
 - Reducing long term costs;
 - Reducing risks; and,
 - Maintaining a safety net.

National Drought Policy

Guiding principles of a national drought policy:

- 1. Favor preparedness over insurance, Insurance over relief; and, Incentives over regulation.***
- 2. Set research priorities based on the potential of the research results to reduce drought impacts.***
- 3. Coordinate the delivery of products and services through cooperation and collaboration of federal and nonfederal entities.***

Long-Term Strategy

- **Preparedness** to improve the effectiveness of response and recovery, such as establishing early-warning systems.
- **Mitigation measures** to reduce the impact of extreme events or natural disasters prior to their occurrence.
- **Adaptation strategies** to prepare for and cope with the potential impacts of extreme events or natural disasters.

Lessons Learned

- **1. Partnership commitments at all levels**
- **2. Bridge the communication gaps between scientists, policy-makers and user-communities**
- **3. Know the impediments to community interactions and local needs**
- **4. Understand all the factors that motivate action or may cause inaction**
- **5. Politics is like the wind.**

Political Reality

- Sectors affected by drought wanted action; supported the NDPC recommendations for national drought policy (NDP) legislation.
- NDP was responsive to user needs , proactive, and supported by diverse group of stakeholders.
- Even momentum was building in the current Congress to enact the NDP legislation.
- But, time ran out with the 2000 election!
- The new Congress had a complete change of priorities!
- The good news is part of the NDP Language later passed as NIDIS and the USDM has become institutionalized.

USDA Potential Contribution to IDMP

- **1. Integrated drought management experience: monitoring, early-warning, risk management strategies**
- **2. Agricultural perspective of vertically integrated drought program and policy planning**
- **3. Promote technology transfer for stakeholder application through training and educational tools (WMO, US AgClim etc.)**



Thank you