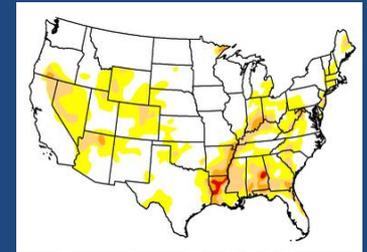
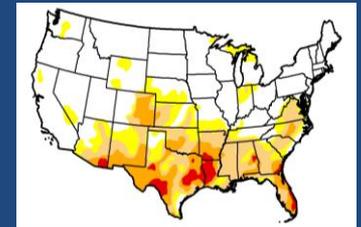


# Southern Plains Drought Assessment 2010-2012

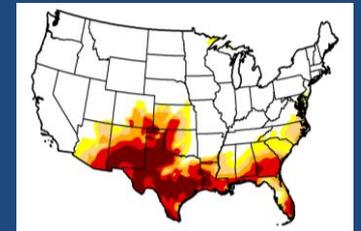
US Drought Monitor Forum, 2013  
South Florida Water Management District



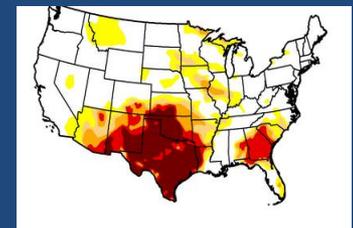
October 5, 2010



March 8, 2011



June 7, 2011



September 27, 2011

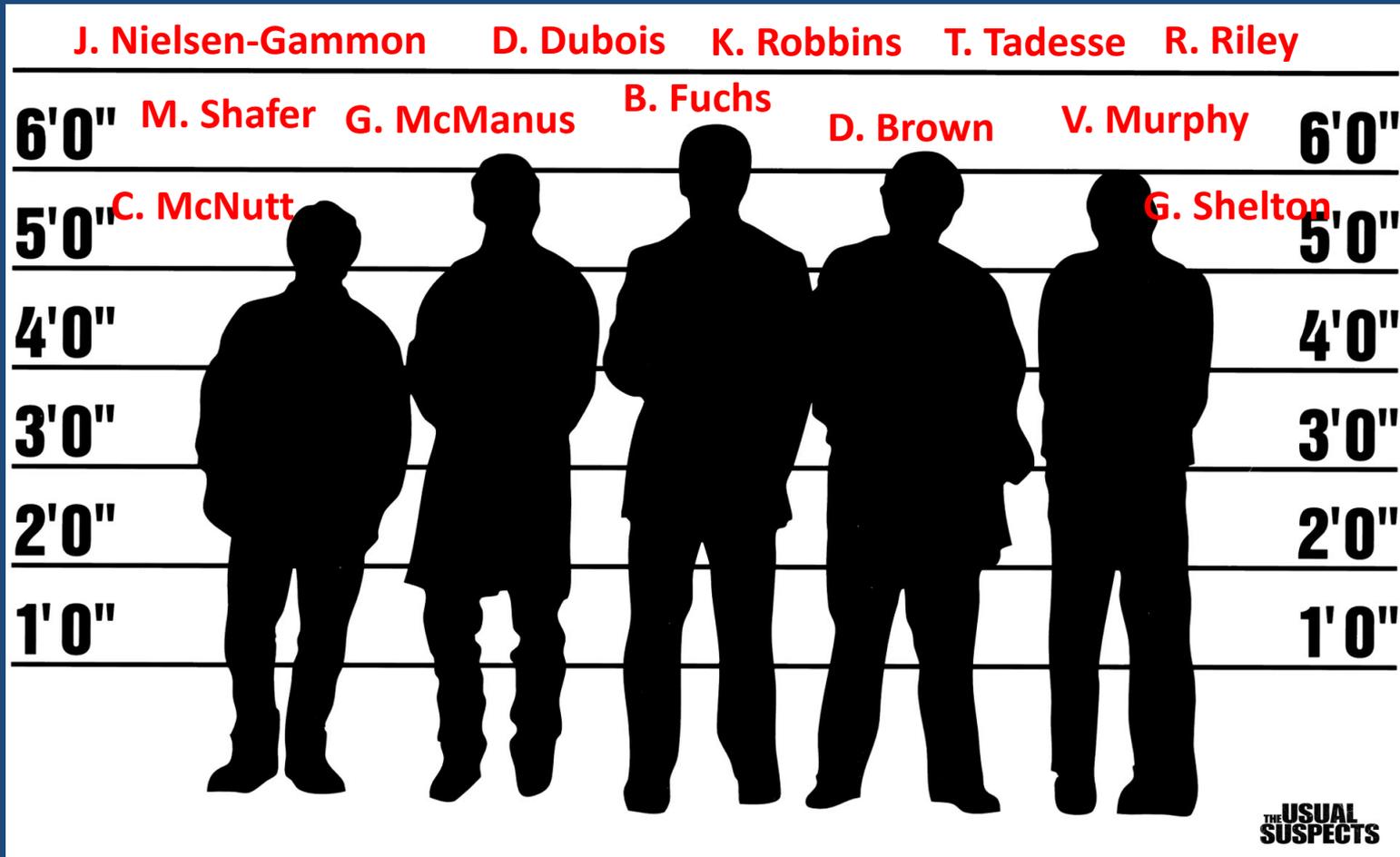
# Drought Assessment

- **purpose:**
  - develop a framework to assess and understand droughts so that future events could be better anticipated and managed
- **New Mexico, Oklahoma, and** Texas
- **October 2010-December 2012**

# Outline

- **Climatological overview**
- **Environmental and economic impacts**
- **Regional climate services provided**
- **Lessons learned, best practices, and next steps**

# Usual Suspects



# Climatological overview

## – Observations

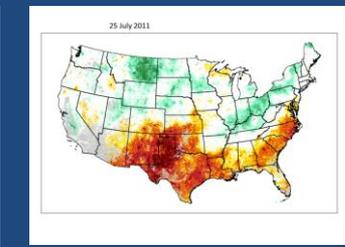
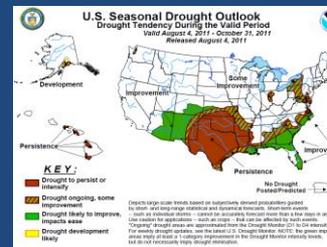
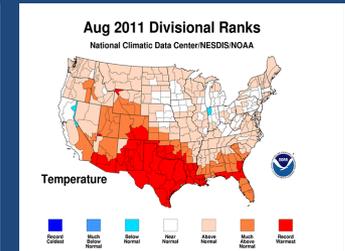
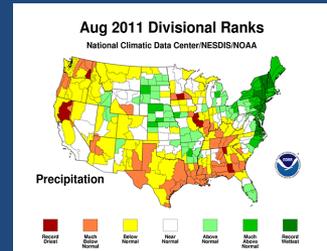
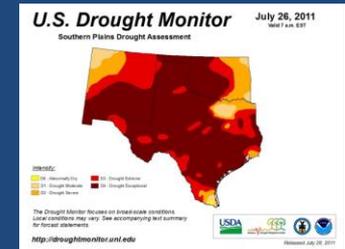
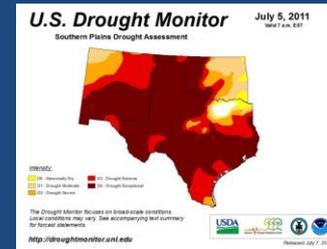
- SRCC/NCDC – climate variables
- NDMC – DM statistics/summary/time series
- NRCS – soil moisture

## – Forecasts

- CPC – seasonal T/P/drought outlooks
- CIRES – experimental outlooks
- WRCC/CLIMAS – wildfire outlooks
- NWS/RFC – 90-day stream flow forecasts
- NRCS – stream flow forecasts
- USACE – water supply forecasts

## – Attribution: Hoerling et al. 2012, J. of Climate

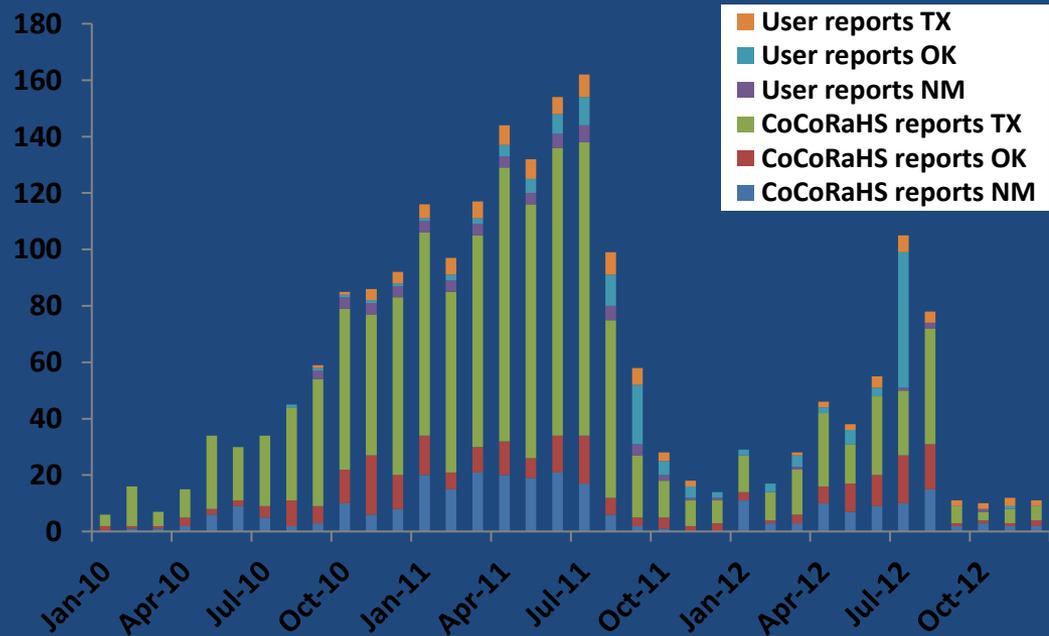
- identify physical processes, underlying causes, and predictability.



# Environmental & Economic Impacts

- Ag: Farming and Ranching
- Water Supply
  - Municipal
  - Irrigation
- Wildfire
- Tourism and Rec.
- Societal Well-being
- Wildlife
- Vegetation

Volunteer-submitted reports from the region  
valid within month



# Regional Climate Services Provided

- Outlook and assessment forums
- 
- Management webinars
- 
- State planning workshops + state drought monitoring coordination
- 
- Media outreach
  - Social media
  - Press releases
  - Teleconferences
- 
- User engagement
  - SCs – talks
  - Extension
  - NWS
  - Town halls
- 
- WFO Drought Information Statements ([Victor Murphy](#))
- 
- Workshop for TX wildfire (A&M, NWS) ([Victor Murphy](#))



## MANAGING DROUGHT IN THE SOUTHERN PLAINS

You are invited to join us in a webinar (web-based seminar) series to discuss drought conditions, impacts and resources available to help manage drought in the Southern Plains. Webinars will be held on the 2nd Thursday of each month at 10:00 A.M. Central Time. Additional webinars will also be offered on the 6th Thursday. The content is geared toward a general audience – anyone who has responsibility to manage or assist others in managing drought and its related impacts.

If you would like to join in these webinars, you need to register via the SCIPP website: <http://www.southernclimate.org> or e-mail [scipp@southernclimate.org](mailto:scipp@southernclimate.org). For each webinar, you will receive an e-mail with the link to access the webinar. Each webinar will last 45-60 minutes.

Each webinar will include an overview of the current drought assessment and outlook, summary of impacts across the region, and a topic or resource, such as La Niña or wildfire conditions. You will have an opportunity to suggest topics for following webinars. The primary focus is in the areas most heavily impacted from the current drought – Texas, Oklahoma and New Mexico – but participation from surrounding states is encouraged.

The webinar series is sponsored by a partnership of the National Integrated Drought Information System (NIDIS), National Oceanic and Atmospheric Administration (NOAA), National Drought Mitigation Center, Southern Climate Impacts Planning Program, Climate Assessment for the Southwest, and the region's State Climatologists.

Information from the webinars will be posted on a website linked through <http://www.southernclimate.org>. A two-page summary will be produced and posted for each webinar. Please pass on this announcement to relative organizations or groups that are involved in managing or monitoring drought and its related impacts.

**To register or for more information, contact:**  
Southern Climate Impacts Planning Program  
<http://www.southernclimate.org>  
405-523-2548 or [scipp@southernclimate.org](mailto:scipp@southernclimate.org)

**Webinar Topics:**

- La Niña
- Cattle in Livestock
- U.S. Drought Monitor
- Ecological Impacts
- Seasonal Forecasting
- Flash Drought
- Water Supply
- Wildfire
- Drought Ready Communities
- Agricultural Impacts

# Lessons Learned: **What Worked**

Benefits of NDMC/RMA 2010 user

workshops for 2010-2012 response

SCIPP webinar survey and feedback

Partnering of resources for product development

Use of the Drought Monitor (media exposure, web hits, etc.) to keep informed

Coordinated state drought input

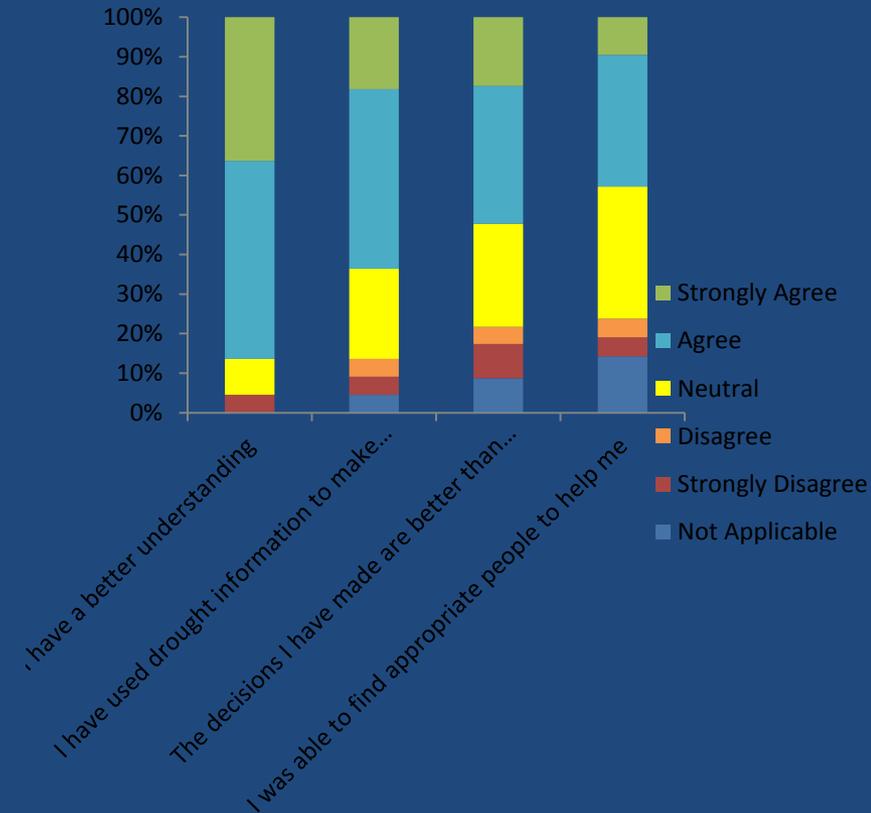
Improved provider-user networks: CPC drought briefings –

OCS engagement experiences with local offices re: DIR

High skill seasonal outlook for winter of 2010-2011

Also, partners “stuck with us” during subsequent busted forecasts

Improved provider-media engagement



# Lessons Learned: Challenges

- Information demand exceeded provider “bandwidth”
- high degree of provider and user time investment
- Variability of state drought plan quality, timeliness, and use
- c. Forecast “bust” for winter of 2011-2012 & misuse/overuse of probabilistic and national-scale CPC products
- Customer fatigue/apathy as drought persisted
  - Fewer inputs to Drought Impact Reporter

# Next Steps

- Identify what is transferrable: regions and for other extreme events
  - Users can help guide – “help us plan for next extreme event” – Memphis
- Identify what could be done with additional resourcing
- Find ways to convey more science and less impacts information to users
  - Practitioners requesting – how stuff works, how forecast is made, etc.
  - Meet users in their settings – professional conferences, trade meetings, etc.

# Next Steps

- Focus on seasonal-to-interannual time scales, less on long-term change
- Find ways to construct and sustain more regional-scale information
  - Forecasts; Local input to ground truth regional drought signal/intensity; Assessments; Regional research
- State and community drought planning – revisiting Memphis
  - Support drought-ready communities and early warning systems
  - Increase user education on drought monitoring processes and products

The screenshot displays the U.S. Drought Portal website. At the top, there is a navigation bar with links for 'Home', 'About', 'Contact Us', and 'Search'. Below the navigation bar, there are several tabs: 'WHAT IS NEW?', 'PRODUCTS', 'TOOLS', 'REGIONAL PROGRAMS', and 'RESOURCES'. The main content area is titled 'Southern Plains' and features a map of the region with a color-coded drought severity scale. To the right of the map, there are sections for 'Current Drought', 'Drought Early Warning Systems', and 'Southern Plains Announcements'. Below the map, there is a table with columns for 'Region', 'Area', 'D1', 'D2', 'D3', and 'D4'. The table lists data for various states including Texas, Oklahoma, New Mexico, and Kansas. To the right of the table, there is a section for 'Current/Ongoing Drought Impacts' and 'Most of the Southern Plains'. Below the table, there is a section for 'Southern Plains Drought Outlook' which includes a map of the United States and three sub-sections: '3-Month Outlook - Precipitation', '3-Month Outlook - Temperature', and 'Resources'. The 'Resources' section lists several links and reports related to drought monitoring and planning.

Region	Area	D1	D2	D3	D4
Alabama	5,000	0	0	0	0
Arizona	293,000	0	0	0	0
Arkansas	4,200	0	0	0	0
California	370,000	0	0	0	0
Colorado	100,000	0	0	0	0
Connecticut	5,000	0	0	0	0
Delaware	2,000	0	0	0	0
Florida	15,000	0	0	0	0
Georgia	59,000	0	0	0	0
Idaho	140,000	0	0	0	0
Illinois	149,000	0	0	0	0
Indiana	39,000	0	0	0	0
Iowa	145,000	0	0	0	0
Kansas	350,000	0	0	0	0
Kentucky	40,000	0	0	0	0
Louisiana	52,000	0	0	0	0
Maine	9,000	0	0	0	0
Maryland	24,000	0	0	0	0
Massachusetts	8,000	0	0	0	0
Michigan	243,000	0	0	0	0
Minnesota	225,000	0	0	0	0
Mississippi	52,000	0	0	0	0
Missouri	168,000	0	0	0	0
Montana	141,000	0	0	0	0
Nebraska	200,000	0	0	0	0
Nevada	285,000	0	0	0	0
New Hampshire	24,000	0	0	0	0
New Jersey	22,000	0	0	0	0
New Mexico	317,000	0	0	0	0
New York	192,000	0	0	0	0
North Carolina	95,000	0	0	0	0
North Dakota	136,000	0	0	0	0
Ohio	117,000	0	0	0	0
Oklahoma	200,000	0	0	0	0
Oregon	255,000	0	0	0	0
Pennsylvania	120,000	0	0	0	0
Rhode Island	3,000	0	0	0	0
South Carolina	52,000	0	0	0	0
South Dakota	170,000	0	0	0	0
Tennessee	52,000	0	0	0	0
Texas	695,000	0	0	0	0
Utah	295,000	0	0	0	0
Vermont	24,000	0	0	0	0
Virginia	40,000	0	0	0	0
Washington	177,000	0	0	0	0
West Virginia	62,000	0	0	0	0
Wisconsin	153,000	0	0	0	0
Wyoming	250,000	0	0	0	0

I NEED YOU TO WRITE A WHITE PAPER FOR AN INDUSTRY TRADE ASSOCIATION.



DilbertCartoonist@gmail.com

FINE, BUT THAT WILL LEAVE ME WITH LESS TIME TO WORK ON MY PROJECT.



DO THE TRADE ASSOCIATION STUFF DURING YOUR UN-PRODUCTIVE TIME.



WHAT EXACTLY IS MY "UNPRODUCTIVE TIME"?



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IT GOES BY MANY NAMES, INCLUDING SLEEP, LEISURE AND HEALTHY LIFESTYLE.



IF I DO LESS OF THOSE THINGS IT WILL REDUCE THE QUALITY OF MY LIFE BELOW THE POINT AT WHICH GOOD HYGIENE HAS ANY UTILITY.



I DON'T WANT TO MAKE OUT WITH YOU. I JUST WANT YOU TO WORK HARDER FOR NO EXTRA MONEY.



I SPEND TOO MUCH TIME EXPLAINING THE OBVIOUS.



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# Lessons learned about the process

- Funding for assessment important
- Working out framework
- Framework in place prior to event