Adapting to Oklahoma's Climate

Continuing the Conversation
May 10, 2011

OKLAHOMA CLIMATOLOGICAL SURVEY

SCIPP
Southern Climate Impacts Planning Program

Welcome and Overview

- Welcome to National Weather Center
- Agenda
- About OCS & SCIPP
- Review of December 2009 Meeting

National Weather Center

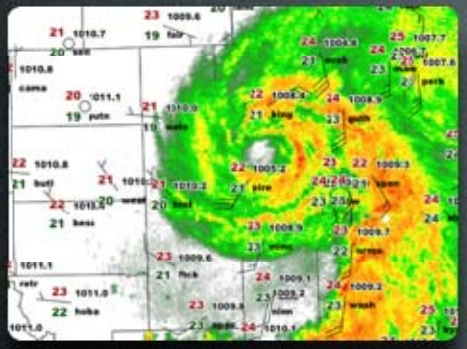
- Largest research center of its kind in the nation; >600 employees
- Provides 244,000 square feet of meteorological research and government programs space, including NOAA Research and Operational Programs
- Home to the largest meteorology school in the country

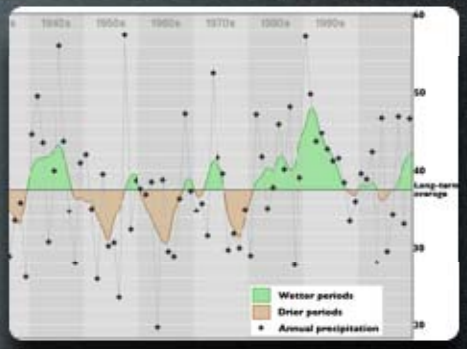
Agenda

- Overview of recent & emerging climate activities and assessments
- 2 breakout sessions
- Lunch with overview of what we know about climate change
- Spotlights on sectoral climate impacts
- Wrap-up & next steps

Oklahoma Climatological Survey (OCS)

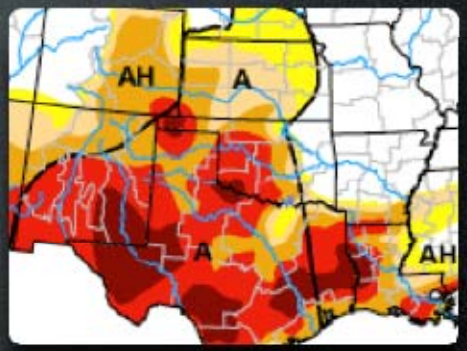
- Established in 1980
- One of the most comprehensive State Climate offices in the nation
- Data available include: cooperative observer, Oklahoma Mesonet, National Weather Service text & graphical products, Doppler radar, and other government publications
- Part of the University of Oklahoma; also a state agency





Water Year: Oct 1, 2010 through May 8,

Climate Division	Total Rainfall	Departure from Normal	Pct of Normal	Driest since
Panhandle	4.21"	-4.55"	40%	2001-02 (2.86")
N. Central	6.89"	-8.16"	46%	1995-96 (3.77")
Northeast	14.82"	-7.35"	67%	1995-96 (9.41")
W. Central	6.27"	-7.45"	46%	1995-96 (2.80")
Central	8.17"	-11.76"	41%	--
E. Central	20.34"	-5.71"	78%	2005-06 (16.34")
Southwest	6.34"	-8.35"	43%	1995-96 (4.99")



OCS Programs & Products

Southern Climate Impacts Planning Program (SCIPP)

Multi-level Partnership:

- State climate offices of Oklahoma and Louisiana
- Southern Regional Climate Center
- National Weather Center
- Region matches domain of Southern Regional Climate Center

Major Program Focus:

- Help communities plan and prepare for extreme events

Other Emerging Foci:

- Water resources
- Coastal impacts
- Climate adaptation

Oklahoma Climate Adaptation Planning Kick-Off Meeting

- 41 participants from 17 state agencies, 10 Native American Tribes, 3 cities, and 2 federal agencies
- Begin a dialogue to collaboratively and incrementally make Oklahoma communities more resilient to weather extremes;
- Learn from participants about their concerns and needs for information;
- Identify projects that can be done easily with existing resources; and
- Identify long-term research needs that can be addressed through partnerships.

Oklahoma Climate Adaptation Planning Kick-Off Meeting

Planning Sector	Stakeholder Issues
Agriculture	Invasive species; crop tolerance; carbon sequestration
Ecosystems	Control of invasive Eastern redcedar
Emergency Response & Preparedness	Preparing and responding to floods, tornadoes, ice storms, and wildfires; checking on elderly adults after storms
Energy	Utility costs; fleet management; alternative energy (e.g., wind)
Health	Urban heat-island effects; heat stress; disease outbreaks
K-12/Higher Education	Standards, curriculum, and assessments
Transportation	Traffic patterns associated with population changes; alternative fuels (e.g., natural gas); aging infrastructure
Water Resources	Storm runoff; groundwater aquifer recharge; water rights; fire suppression

Oklahoma Climate Adaptation Planning Kick-Off Meeting

Data/Resource Needs	
Data Portal:	A free "one stop shop" for weather and climate information; a mechanism for sharing ideas; comprised of data from all state agencies; includes comprehensive datasets (e.g., temperatures, water quality, soil, unpermitted small emissions); with the ability to incorporate GIS maps
Manpower:	Assistance from other agencies to offset resource limitations
Weather/Climate Data:	Groundwater monitoring network (e.g, LIDAR); a more dense observing network
Societal Data:	Uninsured losses due to wildfires, flood, hail, tornadoes, etc.; data on individual/single family travel plans; integrate climate information with transportation planning processes

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