

MARK A. SHAFER

Director of Climate Services
Oklahoma Climatological Survey
University of Oklahoma
120 David L. Boren Blvd., Suite 2900
Norman, OK 73072
Phone: (405) 325-3044; Email: mshafer@ou.edu

Co-Director
Southern Climate Impacts Planning Program
Oklahoma Climatological Survey
University of Oklahoma, Norman OK 73072

(A) PROFESSIONAL PREPARATION

| | | | |
|--|----------------------|-------|------|
| University of Illinois, Urbana, Illinois | Atmospheric Sciences | B.Sc. | 1987 |
| University of Oklahoma, Norman, Oklahoma | Meteorology | M.Sc. | 1990 |
| University of Oklahoma, Norman, Oklahoma | Political Science | Ph.D. | 2005 |

Dissertation Title: *The Role of Scientists and Scientific Information in Public Policy Decisions: The Case of Drought Planning*

(B) APPOINTMENTS

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| 2012-present | Assistant Professor, Department of Geography and Environmental Sustainability, University of Oklahoma, Norman, OK |
| 2008-present | Co-Director, Southern Climate Impacts Planning Program, University of Oklahoma |
| 2007-present | Director of Climate Services, Oklahoma Climatological Survey, University of Oklahoma |
| 2004-2007 | Acting Director of Outreach, Oklahoma Climatological Survey |
| 2003-2007 | Director of Climate Information, Oklahoma Climatological Survey |
| 2001-2003 | Senior Staff Climatologist, Oklahoma Climatological Survey |
| 1990-2001 | Staff Climatologist, Oklahoma Climatological Survey |

(C) PRODUCTS

Research interests include: use of scientific information in policy decisions; institutional factors affecting the use of scientific information; hazard preparedness and mitigation; adaptation to climate change; local and state government; public administration; climate services

(i) Publications within the last 3 years

- White, E., M. Shafer and J. Hocker, 2013: Trends in heavy precipitation in the Southern United States. *Weather* (in press).
- Liu, L., Y. Hong, C. Bednarczyk, B. Yong, M. Shafer, R. Riley and J. Hocker, 2012: Hydro-climatological drought analyses and projections using meteorological and hydrological drought indices: A case study in the Blue River Basin, Oklahoma. *Water Resources Management*, **26(10)**, 2761-2779, DOI: 10.1007/s11269-012-0044-y.
- Liu, L., Y. Hong, J. Hocker, M. Shafer, L. Carter, J. Gourley, C. Bednarczyk, B. Yong and P. Adhikari, 2012: Analyzing projected changes and trends of temperature and precipitation in the southern USA from 16 downscaled global climate models. *Theoretical and Applied Climatology*, **109(3-4)**, 345-360, DOI: 10.1007/s00704-011-0567-9.
- Ojima, D., M. Shafer, J. Antle, D. Kluck, R. McPherson, S. Petersen, B. Scanlon and K. Sherman, 2013: Great Plains. *National Climate Assessment* (draft, released for public comment January 11, 2013), 1193 pp. [Available online at <http://ncadac.globalchange.gov/>].
- Gottlieb, R.J., H.E. Brooks, M.A. Shafer and M.B. Richman, 2012: Using GIS to Assess Vulnerability to Climate Hazards in the Southern United States. Sixth Symposium on Policy and Socio-Economic Research, American Meteorological Society, Seattle, WA.

- Kovacik, C., J. Hocker and M. Shafer, 2011: An Analysis of Southern U.S. Ice Storm Frequency from 2000-2009. Sixth Symposium on Policy and Socio-Economic Research, American Meteorological Society, Seattle, WA.
- Needham, H.F., B.D. Keim, D. Sathiaraj, and M. Shafer, 2012: Storm Surge Return Periods for the U.S. Gulf Coast. World Environmental and Water Resources Congress 2012: Crossing Boundaries, ASCE 2012.
- Shafer, M. and R. Riley, 2012: Managing Drought in the Southern Plains: A summary of survey responses to the webinar series. Southern Climate Impacts Planning Program, 10 pp. [Available online at <http://www.southernclimate.org/publications.php>].

(ii) Other relevant products

- Eosco, G.M., M.A. Shafer, and B. Keim, 2009: Lessons Learned: Evacuations Management of Hurricane Gustav. Fourth Symposium on Policy and Socio-Economic Research, American Meteorological Society, Phoenix, AZ.
- Hocker, J.E., L.M. Carter, M.A. Shafer and H.D. O’Hair, 2010: Developing a Baseline for a RISA Program: SCIPP’s Natural Hazards and Climate Change Planning Survey. 18th Conference on Applied Climatology, American Meteorological Society, Atlanta, GA.
- Sandbo, B., B. Vance, M.A. Shafer, G. McManus, and D. Arndt, 2008: Weathering drought: one state’s experience. *3rd Symposium on Policy and Socio-Economic Research*, American Meteorological Society, New Orleans.
- Shafer, M.A., 2008: Climate Literacy and a National Climate Service. *Physical Geography*, **29(6)**, 561-574.

(D) SYNERGISTIC ACTIVITIES

- Coordinating Lead Author, Great Plains Region, National Climate Assessment (2013)
- Partnered with Louisiana State University for the Southern Climate Impacts Planning Program
- Partnered with University of Nebraska-Lincoln and University of Illinois Urbana-Champaign on Drought Ready Communities (NOAA SARP).
- Science Advisory Team, Gulf Coast Prairie Landscape Conservation Cooperative; National Integrated Drought Information System Implementation Team Member.
- Chair, American Meteorological Society Board on Societal Impacts (2010-2011); Co-Chair AMS Symposium on Policy and Socio-Economic Research (2008-2010).

(E) COLLABORATORS AND OTHER AFFILIATIONS

J. Angel (Univ of Illinois); J. Antle (Oregon State Univ); M. Boone (Univ of Oklahoma); H. Brooks (National Severe Storms Laboratory); D. Brown (NOAA); H. Campbell (OK Dept of Env Quality); L. Carter (Louisiana State Univ); R. Edwards (Louisiana State Univ); G. Eosco (American Meteorological Society); A. Franklin (Univ of Oklahoma), G. Garfin (Univ of Arizona); R. Gottlieb (Univ of South Carolina); J. Gourley (Univ of Oklahoma); M Hayes (Univ of Nebraska-Lincoln); J. Hocker (Univ of Oklahoma); Y. Hong (Univ of Oklahoma); T. James (Univ of Oklahoma – retired); B. Keim (Louisiana State Univ); D. Kluck (NOAA); C. Knutson (Univ of Nebraska-Lincoln); C. Kovacik (Univ of Oklahoma); P. Lamb (Univ of Oklahoma); G. Lilly (US Army Corps of Engineers); L. Liu (Univ of Maryland); R. McPherson (Univ of Oklahoma); M. Meo (Univ of Oklahoma); K. Monroe (Univ. of Oklahoma); B. Moore (Univ of Oklahoma); H. Needham (Louisiana State Univ); H. Dan O’Hair (Univ of Kentucky); D. Ojima (Colorado State Univ); A. Petersen (Adaptation International); M. Richman (Univ of Oklahoma); R. Riley (Univ of Oklahoma); K Robbins (Louisiana State Univ); D. Sathiaraj (Louisiana State Univ); B. Scanlon (Univ of Texas); K. Sherman (Colorado State Univ); K. Smith (Univ of Nebraska-Lincoln); M. Svoboda (Univ of Nebraska-Lincoln); E. White (Univ of Oklahoma); B. Wilcox (Texas A&M Univ); M. Yuan (Univ of Oklahoma); J. Zak (Texas Tech Univ)