

DONALD A. WILHITE
July 2007

PERSONAL DATA

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EDUCATION

B. S. 1967 Central Missouri State University-Warrensburg. Major, Geography; Minor, History

M. A. 1969 Arizona State University-Tempe. Major, Geography/Climatology.

Ph.D. 1975 University of Nebraska-Lincoln. Major, Geography/Climatology and Water Resources.

PRESENT AND PREVIOUS POSITIONS

Director, School of Natural Resources, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln. August 1, 2007-present.

Director, National Drought Mitigation Center, and Professor of Agricultural Climatology. School of Natural Resources, University of Nebraska-Lincoln. September 1995-July 31, 2007.
(Appointment: 90% research [25% research; 65% scholarly service]; 10% teaching)
(Associate Director, School of Natural Resources, 2002-2003)

Director, International Drought Information Center and Professor of Agricultural Climatology. Department of Agricultural Meteorology, University of Nebraska-Lincoln. September 1988-1997.

Adjunct Scientist. Environmental and Societal Impacts Program. National Center for Atmospheric Research, Boulder, CO. October 1984-Present.

Assistant/Associate Professor, Department of Agricultural Meteorology, University of Nebraska-Lincoln. 1979-1988.

Water Resource Scientist, Water Resources Center, University of Nebraska-Lincoln, 1977-1979.

Senior Professional Officer (Agricultural Climatology), Soil and Irrigation Research Institute, Department of Agriculture, Pretoria, South Africa.

Instructor, Department of Geography, Mankato State University, 1969-1971.

RESEARCH INTERESTS

Drought monitoring, mitigation, and planning, climate impact assessment, policy implications of climate variability and climate change, and the use of climate information in decision making.

RECENT AWARDS

Recipient, Omtvedt Innovation Award in recognition of exceptional service, Institute of Agriculture and Natural Resources, University of Nebraska. 2005.

RECENT NATIONAL/INTERNATIONAL LEADERSHIP ACTIVITIES

Consultant, World Meteorological Organization. Development of project proposal for the formation of a Drought Management Center for South-Eastern Europe (11 countries) in association with the U.N. Convention to Combat Desertification. 2007.

Technical program chair, Managing Drought and Water Scarcity in Vulnerable Environments: Creating a Roadmap for Change in the U.S. Sponsored by the Geological Society of American with co-sponsorship by 18 national and regional organizations and federal agencies.

International Team Leader, National Drought Strategy Technical Cooperation Project: Jordan. Food and Agriculture Organization. Cairo, Egypt. 2005-present.

Chair, Task Force on the Socio-economic Benefits of Meteorological and Hydrometeorological Information, World Meteorological Organization. Geneva, Switzerland. 2006-present.

Science advisor, Mediterranean Drought Planning Project (MEDROPLAN), Mediterranean Institute for Agronomic Research, Zaragoza, Spain. Funded by the European Commission (2.5 million Euros). 2003-present.

Member, Organizing Committee, Understanding and Responding to Multiple Environmental Stresses, Committee on Earth-Atmosphere Interactions, Board of Atmospheric Sciences and Climate, National Academy of Sciences. 2005-2006.

Chair, Drought Discussion Group, United Nations International Strategy for Natural Disaster Reduction. Geneva, Switzerland. 2002-present.

EDITORIAL BOARD MEMBERSHIPS

Disaster Prevention and Management: An International Journal
Advances in Natural and Technological Hazards Research, Book Series, Springer Publishers

PROFESSIONAL ORGANIZATION MEMBERSHIPS

American Meteorological Organization
American Water Resources Association

TEACHING/ADVISING EXPERIENCE (10% teaching appointment)

Climate and Society (NRES 452/852), taught even numbered years, 1989-present. Cross-listed with Agronomy, Geography, and Geosciences.

Advised numerous Ph.D./M.S. students in the School of Natural Resources and Department of Agricultural Meteorology, 1985 to present. Currently advising or co-advising 1 Ph.D. student and 6 M.S. students in SNR.

Recent Graduates:

Donna Woudenberg, Ph.D., December 2006. Current position: Post-doctoral research associate, NDMC.

Melissa Melvin, M.S., December 2006. Current position: Ph.D. student, SNR/Human Dimensions

Tsegaye Tadesse, Ph.D., August 2002. Current position: Assistant Geoscientist/Climatologist, NDMC.

Hong Wu, Ph.D., December 2002. Current position: Senior Research Associate, Tarleton State University.

Olga Wilhelmi, December 1999. Current position: Research scientist, National Center for Atmospheric Research.

Program advisor, Human Dimensions Specialization, School of Natural Resources.

Taught climatology and geography courses in the Department of Geography, Mankato State University, 1969-1971.

GRANTS (1990-2007)

Recipient or co-recipient of more than \$20 million in grant support since 1981.

Estimating Impacts of Complex Climatic Events. D.A. Wilhite and M.J. Hayes, Co-Principal Investigators. NOAA. \$300,000. 7/1/06-6/30/09.

National Drought Mitigation Center. D.A. Wilhite, Principal Investigator. Funding received from the USDA. \$495,300. 6/30/05 to 9/30/07.

Drought Mitigation Project (Operating support for National Drought Mitigation Center. D.A. Wilhite, Principal Investigator. CSREES/USDA. \$402,412. 7/1/2005 - 6/30/2007.

Rangeland and Forage Geospatial Decision Support System for Drought Risk Management. D.A. Wilhite, Principal Investigator. USDA/RMA. \$1,023,038. 10/1/2005 to 9/30/2008.

Drought Risk, Impact, and Mitigation Information System. S. Goddard and D.A. Wilhite, Co-PIs. USDA/RMA. \$6,407,472. 10/1/2005 to 9/30/2008.

Climate and Soil Risk Information System. S. Goddard, K. Hubbard, and D. Wilhite, Co-PIs. USDA FCIC/RMA. \$1,212,055. 6/1/2005 - 5/31/2008.

National Drought Monitoring System for Drought Early Warning Using Hydrologic and Ecologic Observations from NASA Satellite Data. S.V. Nghiem, G.R. Brakenridge, R. Dole, D. LeComte, E.G. Njoku, J. Verdin, and D.A. Wilhite, Co-PIs. NASA. \$798,364. 11/1/2005 to 10/31/2008.

Improved Hydrologic Data Collection Systems for Drought Monitoring. D.A. Wilhite, K.G. Hubbard, M.J. Hayes, and M.D. Svoboda. Nebraska Dept. of Natural Resources/Bureau of Reclamation. \$25,000. 1/1/04-12/30/05

Developing an Electronic Drought Atlas of Nebraska. D. Wilhite, K. Hubbard, and S. Goddard. IANR Ag Research Division. \$20,000. 2005-2006.

Database for NWS Forecast Points in the Bighorn, Yellowstone, Milk and Upper Missouri River Basins. D.A. Wilhite and M.D. Svoboda, Co-Principal Investigators. NOAA/NWS. \$25,000. 10/1/05-9/30/06.

National Drought Impacts Tool. D.A. Wilhite and M.J. Hayes, Co-PIs. Funding from the Office of Global Programs/NOAA. \$24,380. 10/1/04-9/30/05.

National Drought Mitigation Center. D.A. Wilhite, Principal Investigator. Funding received from the CSREES/USDA. \$255,000. 7/1/03-6/30/04.

Drought Risks and Mitigation on the Agricultural Landscape: A Series of Risk Analysis, Management, and Mitigation Workshops for Nebraska Farmers and Ranchers. D.A. Wilhite, Project Leader. Co-PIs, M.J. Hayes, H.D. Jose, W.J. Waltman, K.G. Hubbard, Q.S. Hu, and M.D. Svoboda. USDA Risk Management Agency, \$95,198. 10/1/02-9/30/04.

Drought as a Limiting Factor of Cereal Production (Cooperative project with the Czech Republic). PIs, D.A. Wilhite and M. Dubrovsky. NATO Science Program, \$25,000. 12/12/02-11/30/05.

Risk Assessment and Exposure Analysis on the Agricultural Landscape: A Holistic Approach to Spatio-Temporal Models and Tools for Agricultural Risk Assessment and Exposure Analysis. PIs, S. Goddard, D.A. Wilhite, J. Deogun, M. Hayes, K. Hubbard, H. Jose, S. Reichenbach, W. Waltman, and M. Svoboda. USDA Risk Management Agency, \$1,086,600. 10/1/02-3/31/05.

Intelligent Joint Evolution of Data and Information: An Integrated Framework for Drought Monitoring and Mitigation. A.K. Samal, PI. Co-PIs, K.G. Hubbard, L.K. Soh, W. Waltman, and D.A. Wilhite. NSF, \$199,900. 9/1/02-8/30/04.

Improving Drought Monitoring through the Integration of Climate and Satellite-Based Data. D.A. Wilhite, K.G. Hubbard, and M.J. Hayes, Co-Principal Investigators. USGS, \$241,000. 7/1/02-6/30/05.

National Drought Mitigation Center. D.A. Wilhite, Principal Investigator. Funding received from the CSREES/USDA. \$183,000. 7/1/02-6/30/03.

Engaging Agricultural Communities in the Great Plains of the U.S. with the Application and Development of Climate Prediction and Information. Steven Hu, PI. Co-PIs, Gary Lynne, William Waltman, D.A. Wilhite, K.G. Hubbard, M.J. Hayes. NOAA Office of Global Programs, \$432,916. 5/1/02-7/31/06.

Digital Government: A Decision Support System for Drought Risk Management. S. Reichenbach, S. Goddard, W. Waltman, J. Deogun, D. Wilhite, P. Revesz, K. Hubbard, and M. Hayes, Principal Investigators. NSF, \$1,103,643. 5/1/01-4/30/04.

Global Drought Preparedness Network. D.A. Wilhite, Principal Investigator. Office of International Affairs NOAA. \$25,000, March 2001 through December 2003.

Coping with Drought in Morocco: Development of National Drought Observatory and National Drought Policy and Plan. D.A. Wilhite, Principal Investigator. Funding received from USAID, \$39,000 through September 30, 2002, with additional funding (\$163,000) from USDA/FAS for joint program between IAV II and the NDMC through June 2003.

Drought Network News. D.A. Wilhite, Principal Investigator. NOAA International Programs. \$15,000, 2000-01.

Support for Drought Monitor Product. D.A. Wilhite, Principal Investigator. USDA, \$15,000, September 2000 through June 2002.

National Drought Mitigation Center. D.A. Wilhite, Principal Investigator. CSREES/USDA. \$187,000, 2000-2001

National Drought Mitigation Center. D.A. Wilhite, Principal Investigator. CSREES/USDA. \$201,000, 1999-2000.

Coping with Drought: Best Use of Climate Information. D.A. Wilhite Investigator. USAID/OFDA in support of UNDP/WMO workshop. \$11,000. 1999-2000.

Development of Model Drought Planning Process. D.A. Wilhite, Principal Investigator. Bureau of Reclamation, U.S. Department of Interior. \$17,000, 1999.

Drought Network News. D.A. Wilhite, Principal Investigator. NOAA International Programs. \$15,000, 1999-2000.

National Drought Mitigation Center. D.A. Wilhite, Principal Investigator. CSREES/USDA. \$205,439, 1998-99.

Using Agrometeorological Information to Mitigate the Effects of Drought. D.A. Wilhite, Collaborating Scientist. Scientific Exchange Division, Foreign Agricultural Service/USDA and the Hungarian government. \$22,500 and 3.15 million Hungarian forints. 1997-1999.

Drought Network News. D.A. Wilhite, Principal Investigator. NOAA/NWS. \$7,500. 1997-1998.

National Drought Mitigation Center. D.A. Wilhite, Principal Investigator. CSREES/USDA. \$186,921, 1997-98.

Preparation of Cooperative Drought Contingency Plans. D.A. Wilhite, Principal Investigator. Funding received from the Bureau of Reclamation, U.S. Department of Interior. \$200,000, 1997-1999.

National Drought Mitigation Center. D.A. Wilhite, Principal Investigator. CSREES/USDA. \$188,000, 1996-97.

National Drought Mitigation Center. D.A. Wilhite, Principal Investigator. Climate Prediction Center/NOAA and CSREES/USDA. \$375,000, 1995-96.

International Drought Information Center, Publication of Drought Network News. D.A. Wilhite, Principal Investigator. International Affairs Division/NWS/NOAA. \$15,264. 1995.

Drought Management in a Changing West: New Directions for Water Policy. D.A. Wilhite, Principal organizer. May 10-13, 1994, Portland, Oregon. Support from several sources, including:

Western Regional Climate Center	\$	8,700.
Soil Conservation Service/USDA		10,000.
Additional in-kind commitments		

Planning for a Sustainable Future: The Case of the North American Great Plains. D.A. Wilhite, Principal Organizer. May 7-10, 1995, Lincoln, Nebraska. Support from Environment Canada, the Office of Global Programs/USDA, and NOAA (\$80,000). 8/93-12/1996.

Support for Publication of *Drought Network News*. World Meteorological Organization. \$15,000. D.A. Wilhite, Principal Investigator. 7/93-12/1994.

Developing a Precipitation-Based Assessment of Climatic Conditions in Nebraska. Nebraska Natural Resources Commission. \$4,444. D.A. Wilhite, Principal Investigators. 5/93-6/94.

Regional Training Seminars on Drought Planning and Management (Latin American and Caribbean Regions). United Nations Environment Program. \$30,000. D.A. Wilhite, Principal Investigator. 3/92-7/93.

Regional Training Seminars on Drought Planning and Management (Latin American and Caribbean Regions). World Meteorological Organization. \$4,000. D.A. Wilhite, Principal Investigator. 1/93-6/93.

An Assessment of Drought Mitigation Technologies in the United States. Cooperative Agreement with the Soil Conservation Service, U.S.D.A. \$19,972. D.A. Wilhite, Principal Investigator. 8/91-9/1992.

Regional Training Seminars on Drought Planning and Management. International Affairs Branch/NOAA and the World Meteorological Organization. \$39,915. D.A. Wilhite, Principal Investigator. 5/90-9/91.

SELECTED PUBLICATIONS

More than 130 journal articles, books, book chapters, and technical reports.

Journal Articles (1982-present)

Wilhite, D.A., M. Svoboda, and M.J. Hayes. 2007. Understanding the Complex Impacts of Drought: A Key to Enhancing Drought Mitigation and Preparedness. *J. of Water Resources Management*, 21: 763-774.

Wu, H., M.D. Svoboda, M.J. Hayes, D.A. Wilhite, and Wen, F. 2007. Appropriate Application of the Standardized Precipitation Index in Arid Locations and Dry Seasons. *International Journal of Climatology*, 27: 65-79.

Hu, Q., L.M. PytlikZillig, G.D. Lynne, K.G. Hubbard, W.J. Waltman, M.J. Hayes, A.J. Tomkins, and D.A. Wilhite. 2006. Improving farmers' forecast use from understanding their beliefs, social norms, and perceived obstacles. *J. Appl. Meteor. Climatol.*

Cooter, E., B. Eder, C. Rosenzweig, B. Lynn, R. Goldberg, C. Knutson, M. Hayes, D. Wilhite, J. DeCarolis, and T. Barnett. 2005. Effects of climate change on weather and water. *Environmental Management*. Special issue on Climate Change and Air Quality. October. pp. 32-35.

Tadesse, T., D.A. Wilhite, M.J. Hayes, S.K. Harms, and S. Goddard. 2005. Discovering Associations Between Climatic and Oceanic Parameters to Monitor Drought in Nebraska Using Data-Mining Techniques. *Journal of Climate*, 18(10):1541-1550.

Wu, H., M.J. Hayes, D.A. Wilhite, and M.D. Svoboda. 2005. The Effect of the Length of Record on the Standardized Precipitation Index Calculation. *International Journal of Climatology*, 25:505-520.

Tadesse, T., D.A. Wilhite, S.K. Harms, M.J. Hayes, and S. Goddard. 2004. Drought Monitoring Using Data Mining Techniques: A Case Study for Nebraska, U.S.A. *Natural Hazards* 33(1):137-159.

Wu, H., K.G. Hubbard, and D.A. Wilhite. 2004. An Agricultural Drought Risk Assessment Model for Corn and Soybeans. *International Journal of Climatology* 24:723-741.

Wu, H. and D.A. Wilhite. 2004. An Operational Agricultural Drought Risk Assessment Model for Nebraska, USA. *Natural Hazards* 33(1):1-21.

Wilhelmi, O., K. Hubbard, and D.A. Wilhite. 2002. Spatial Representation of Agroclimatology in a Study of Agricultural Drought. *International Journal of Climatology* 22: 1399-1414.

Wilhelmi, O. and D.A. Wilhite. 2002. Assessing Vulnerability to Agricultural Drought: A Nebraska Case Study. *Natural Hazards* 25: 37-58.

Wilhite, D.A. 2002. Combating Drought through Preparedness. *Natural Resources Forum* 26: 275-285.

White, D.H., D.A. Wilhite, B. O'Meagher, G.L. Hammer. 2001. Highlights of Drought Policy and Related Science in Australia and the U.S.A. *Water International* 26(3): 349-357.

Wilhite, D.A. 2001. Moving Beyond Crisis Management. *Forum for Applied Research and Public Policy* 16(1): 20-28.

Wilhite, D.A. and D.A. Wood. 2001. Revisiting Drought Relief and Management Efforts in the West: Have We Learned from the Past? *Journal of the West* 40(3):18-25

Wilhite, D.A. 2000. Drought Response and Preparedness in the Context of Sub-Saharan Africa (invited). *J. of Contingency Planning and Crisis Management* 8(2):81-92. Special issue, H. Bruins (ed.).

Wilhite, D.A., M.J. Hayes, C. Knutson, and K.H. Smith. 2000. Planning for Drought: Moving from Crisis to Risk Management. *J. of Amer. Water Res. Assoc.* 36:697-710.

Byun, Hi-Ryong and D.A. Wilhite. 1999. Objective Quantification of Drought Severity and Duration. *J. of Climate* 12:2747-2756.

- Hayes, M.J., M.D. Svoboda, D.A. Wilhite, and O.V. Vanyarkho. 1999. Monitoring the 1996 Drought Using the Standardized Precipitation Index. *Bull. Amer. Meteorol. Society* 80: 429-438.
- Wilhite, D. A. 1997. State Actions to Mitigate Drought: Lessons Learned. *Jour. of the American Water Res. Assoc.*: 33(5): 961-968.
- Wilhite, D. A. 1997. Responding to Drought: Common Threads from the Past, Visions for the Future. *Jour. of the American Water Res. Assoc.*: 33(5): 951-959.
- Wilhite, D.A. 1996. A Methodology for Drought Preparedness. *Natural Hazards* 13:229-252.
- Wilhite, D.A. 1995. Reducing Vulnerability to Drought. *Water Resources and Environmental Hazards* (Proceedings of AWRA International Symposium), June.
- Wilhite, D.A. and S.R. Rhodes. 1994. State-level Drought Planning in the United States: Factors Influencing Plan Development. *Water International* 19:15-24.
- Wilhite, D.A. 1993. Understanding the Phenomenon of Drought: Prerequisite to Reducing Vulnerability. *Hydro-Review* 12:136-148.
- Meyer, S.J., K.G. Hubbard, and D.A. Wilhite. 1993. A crop specific index for corn. I. Model development and validation. *Agronomy Journal* 85:388-395.
- Meyer, S.J., K.G. Hubbard, and D.A. Wilhite. 1993. A crop specific index for corn. II. Application in drought assessment. *Agronomy Journal* 85:396-399.
- Klinedinst, P.L., D.A. Wilhite, G.L. Hahn, and K.G. Hubbard. 1993. The potential effects of climate change on summer season milk production and reproduction. *Climatic Change* 23:21-36.
- Wilhite, D.A. 1991. Drought planning: A process for state government. *Water Resources Bulletin* 27(1):29-38.
- Wilhite, D.A. 1991. Drought planning and state government: Current status. *Bull. of the Amer. Meteorol. Society* 72(10):1531-36.
- Peters, A.J., D.C. Rundquist, and D.A. Wilhite. 1991. Satellite detection of the geographic core of the 1988 Nebraska drought. *Agri. and Forest Meteorology* 57: 35-47.
- Meyer, S.J., K.G. Hubbard, and D.A. Wilhite. 1991. The relationship of climatic indices and variables to corn yields: A principal components analysis. *Agri. and Forest Meteorol.* 55:59-84.

- Wilhite, D.A. 1990. The enigma of drought: Management and policy issues for the 1990s. *Internatl. J. of Environ. Studies* 36:41-54.
- Meyer, S.J., K.G. Hubbard, and D.A. Wilhite. 1989. Estimating potential evapotranspiration: The effect of random and systematic errors. *Agri. and Forest Meteorol.* 46(4):285-296.
- Wilhite, D.A. and W.E. Easterling. 1989. Coping with drought: Toward a plan of action. *Eos* (American Geophysical Union) 70(7):106-108. February 14.
- Meyer, S.J., K.G. Hubbard and D.A. Wilhite. 1988. Improving projected evapotranspiration estimates using National Weather Service forecasts. *J. of Appl. Meteorol.* 27(10): 1183-1188.
- Easterling, W.E. and D.A. Wilhite. 1987. Improving drought policy: A plan of action (a report of the International Symposium and Workshop on Drought) *Land Use Policy: Special Issue on Desertification.* 4(4):444-449
- Neild, R.E., D.A. Wilhite and K.G. Hubbard. 1987. Preseason precipitation probabilities as an aid to corn planting decisions. *Agri. and Forest Meteorol.* 41:259-266.
- Wilhite, D.A., N.J. Rosenberg and M.H. Glantz. 1986. Improving federal response to drought. *J. Climate and Appl. Meteorol.* 25(3):332-342.
- Wilhite, D.A. 1986. Drought policy in the U.S. and Australia: A comparative analysis. *Water Resources Bull.* 22:(3)425-438.
- Wilhite, D.A. 1986. International drought mitigation: An introduction. *Great Plains Quarterly* 6(3):148-150. Symposium Issue, Social Adaptation in Semiarid Environments.
- Wilhite, D.A. and D.A. Wood. 1985. Planning for drought: The role of state government. *Water Resources Bull.* 21:31-38.
- Wilhite, D.A. and M.H. Glantz. 1985. Understanding the drought phenomenon: The role of definitions. *Water International* 10:111-120.
- Wilhite, D.A., N.J. Rosenberg and D.A. Wood. 1984. Improving governmental response to drought: Lessons from the mid-1970s. *Proceedings of the Symposium on Regional and State Water Resources Planning*, Amer. Res. Assoc. pp. 171-178.
- Wilhite, D.A. 1983. Government response to the mid-1970s drought: With particular reference to the U.S. Great Plains. *J. of Climate and Appl. Meteorol.* 22:40-50.
- Wilhite, D.A. 1983. Measuring drought severity and assessing impact. In: *Proceedings of the International Symposium on Hydrometeorology*, Amer. Water Res. Assoc., pp. 333-335.
- Wilhite, D.A. and R.E. Neild. 1982. Determining drought frequency and intensity on the basis

of plant response: Wild hay in the Sandhills of Nebraska, U.S.A. *Agri. and Forest Meteorol.* 25:257-265.

Books: (1987-present)

Botterill, L. Courtenay and D.A. Wilhite (eds.). 2005. *From Disaster Response to Risk Management: Australia's National Drought Policy*. Springer. Dordrecht, The Netherlands.

Wilhite, D.A. (ed.). 2005. *Drought and Water Crises: Science, Technology, and Management Issues*. CRC Press. Boca Raton, FL.

Wilhite, D.A. (ed.). 2000. *Drought: A Global Assessment* (2 volumes, 51 chapters, 700 pages). Hazards and Disasters: A Series of Definitive Major Works (7 volume series), edited by A.Z. Keller. Routledge Publishers.

Wilhite, D.A., editor. 1993. *Drought Assessment, Management, and Planning: Theory and Case Studies*. Natural Resources Management and Policy Series. A. Dinar and D. Zilberman, Series Editors, Kluwer Publishers. April. 293 pp.

Wilhite, D.A. and W.E. Easterling, editors. 1987. *Planning for Drought: Toward a Reduction of Societal Vulnerability*. Proceedings of the International Symposium and Workshop on Drought. Westview Press, Boulder, Colorado. September. 597 pp.

Conference Proceedings, Technical Reports: (1991-present)

Wilhite, D.A. 2007. *Understanding and Responding to Multiple Environmental Stresses*, Report of a Workshop (2005), National Research Council. Chapter 2: Drought. Member of Organizing Committee.

Wilhite, 2006. *Drought Monitoring and Early Warning: Concepts, Progress, and Future Challenges*. World Meteorological Organization. Geneva, Switzerland.

Trnka, M., M. Dubrovsky, D. Semeradova, Z. Zalud, M. Svoboda, M. Hayes, and D. Wilhite. 2006. New Method for Assessment of the Drought Climatology - Czech Republic as a Case Study. European Geosciences Union 2006, April 2-7 2006 Vienna, Austria

Hayes, M., M. Dubrovsky, M. Trnka, M. Svoboda, D. Wilhite, and Z. Zalud .2005. Application of drought indices for the changed climate. AGU Fall Meeting, San Francisco, CA.

Hayes, M., M. Svoboda, M. Higgins, D. Wilhite, and D. Wood. 2005. The Drought Impact Reporter: A web-based national drought impacts reporting tool. AGU Fall Meeting, San Francisco, CA.

Wilhite, D.A., M.K.V. Sivakumar, and D.A. Wood (eds.). 2000. *Early Warning Systems for Drought Preparedness and Management* (Proceedings of an Experts Meeting). World Meteorological Organization, Geneva, Switzerland.

Wilhite, D.A. 1997. *Improving Drought Management in the West*. Report to the Western Water Policy Review Advisory Commission.

Wilhite, D.A. and D.A. Wood. 1995. *Planning for a Sustainable Future: The Case of the North American Great Plains*. Proceedings of a joint U.S./Canadian Symposium. University of Nebraska-Lincoln.

Wilhite, D.A. and D.A. Wood. 1994. *Drought Management in a Changing West: New Directions for Water Policy*. Proceedings of a Conference. Portland, Oregon. May.

Wilhite, D.A. 1993. Preparing for Drought: A Guidebook for Developing Countries. U.N. Environment Program. Nairobi, Kenya.

Dziegielewski, B., G.D. Lynne, D.A. Wilhite, and D.P. Sheer. 1991. Water Management During Drought: A Research Assessment. Planning and Management Consultants, Ltd. Report Prepared for Institute for Water Resources, U.S. Army Corps of Engineers.

Chapters in Books: (1980-present)

Wilhite, D.A. 2007. Dust Bowl Impacts. Encyclopedia of Oklahoma History and Culture. University of Oklahoma Press (in press).

Wilhite, D.A. 2007. Preparedness and Coping Strategies for Agricultural Drought Risk Management: Progress and Trends. In: M.K.V. Sivakumar and R. Motha (eds.), *Agricultural Risk Management: Challenges and Opportunities*. Springer Publishers (in press).

Tadesse, T., D.A. Wilhite, M.J. Hayes, J.F. Brown, and C.L. Knutson. 2006. Modern drought monitoring tools for decision support systems. In: Ari-Veikko Anttiroiko and Matti Malkia (eds.), *Encyclopedia of Digital Government*, Volume 3, 1212–1218.

Tadesse, T., D.A. Wilhite, M.D. Svoboda, and M.J. Hayes, 2006. Information Circulation Systems (ICS) in drought monitoring and impact assessment in the United States: Past, present, and future prospects. Proceedings of the International Seminar on the Role of Information Circulation Systems in scientific and practical approaches to combat desertification, Windhoek – Ondangwa, Namibia, 2 to 7 April 2006.

Wilhite, D.A. 2005. Drought policy and preparedness: The Australian experience in an international context. In: L. Courtenay Botterill and D.A. Wilhite (eds.) *From Disaster Response to Risk Management: Australia's National Drought Policy*, pp. 157-176. Springer Publishers. Dordrecht, The Netherlands.

Wilhite, D.A. 2005. Drought. In: J.E. Oliver (ed.) *Encyclopedia of World Climatology*, pp. 338-341. Springer Publishers. London.

Wilhite, D.A. 2005. Drought. In: *Encyclopedia of Weather and Climate*. Cambridge University Press, Cambridge, U.K.

Wilhite, D.A. 2005. The role of disaster preparedness in national planning with specific reference to drought. In: M.K.V. Sivakumar, R.P. Motha, and H. Das (eds.) *Natural Disasters and Extreme Events in Agriculture*. pp. 23-37. Springer Publishers. Berlin.

Wilhite, D.A., L. Botterill, and K. Monnik. 2005. National drought policy: Lessons learned from Australia, South Africa, and the United States. In: D.A. Wilhite (ed.) *Drought and Water Crises: Science, Technology, and Management Issues*. pp. 137-172. CRC Press. Boca Raton, FL.

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INTERNATIONAL PROGRAM ACTIVITIES (2000-present)

- 2007. **Spain**. Met with co-editors of a book in preparation on drought preparedness guidelines for the Mediterranean region for Springer Publishers to be published in 2007 or 2008.
- 2007. **Slovenia and Switzerland**. Assessed facilities of the Slovenian Meteorological Services to host a drought management center for South-Eastern Europe (11 countries) and prepared a project proposal under sponsorship of the World Meteorological Organization.
- 2006. **India**. To participate in an Agricultural Risk Management Workshop with sponsorship by the World Meteorological Organization.
- 2006. **Australia**. To advise the Australian Bureau of Meteorology and the Bureau of Resource Sciences on drought monitoring and policy issues.
- 2006. **Jordan**. To evaluate national drought strategy project funded by FAO. Serving as the International Team Leader.
- 2006. **Syria**. To conduct a short course on drought mitigation for the Mediterranean and Near-East region under sponsorship of ICARDA, CIHEAM, and FAO.
- 2006. **Switzerland**. To chair a Task Force meeting for the World Meteorological Organization on the socio-economic benefits of meteorological and hydrometeorological information.
- 2006. **Italy**. To participate as a member of the Task Force on Assessment of Natural Disaster Impacts on Agriculture (ANADIA) for the World Meteorological Organization.
- 2006. **Mexico**. To participate in the 4th World Water Forum, co-convene a session with WMO and U.S.D.A. on drought risk management, and present the keynote paper.
- 2005. **South Korea**. To participate in an international drought seminar in Seoul in association with the formation of a national drought management strategy program.
- 2005. **China**. To participate in a drought monitoring workshop in Beijing under the US/China Bilateral Science Agreement.
- 2005. **Italy**. To participate in a MEDROPLAN workshop on drought mitigation for the Mediterranean Region and meet with FAO officials in Rome to discuss drought programs.
- 2005. **France**. To give a keynote presentation at the annual meeting of the European Water Resources Association in Menton.
- 2005. **China**. To discuss the organization of a drought monitoring workshop with officials from the Chinese Meteorological Administration as a member of the U.S. delegation representing USDA, NOAA, and the NDMC.

- 2005. **Spain.** To meet with staff at the Mediterranean Agronomic Institute in Zaragoza and others from the Polytechnic University of Madrid to plan a short course on drought mitigation for February 2006.
- 2005. **Egypt.** To meet with FAO officials to discuss regional drought projects and an Egyptian National Drought Center.
- 2005. **Japan.** To participate in a drought session organized for the U.N.'s World Conference on Disaster Reduction, Kobe.
- 2004. **Namibia.** To participate in a UNESCO sponsored workshop on the feasibility of creating an integrated drought management center for Southern Africa.
- 2004. **Morocco.** To assess progress on the national drought observatory at IAVII and participate in a workshop on risk assessment in drought planning.
- 2004. **Austria.** Presented a paper to the International Workshop on Drought and Drought Monitoring, Vienna.
- 2004. **Czech Republic.** Participated in discussion related to the NATO Science Program project with colleagues from Mendel University and presented a paper to the National Meteorological Institute.
- 2004. **Jordan.** Conducted a one-day workshop and made a plenary presentation at the International Water Demand Management Conference, Dead Sea, Jordan.
- 2004. **Spain.** Served as principal lecturer at a CIHEAM Short Course on Drought Preparedness and Mitigation Strategies for the Mediterranean Region. Zaragoza.
- 2004. **South Korea.** Attended the International Conference on High-Impact Weather and Climate: Understanding, Prediction, and Socio-Economic Consequences, and helped organize drought sessions. Seoul.
- 2004. **China.** To attend and participate in an expert meeting on reducing the impacts of extreme events/natural disasters in agriculture, forestry, and fisheries sponsored by the World Meteorological Organization.
- 2003. **Germany.** To attend, present, and chair a parallel drought session at the International Conference on Early Warning, Bonn.
- 2003. **Switzerland.** To chair a meeting of the drought discussion group, International Strategy for Disaster Reduction Secretariat, Geneva.
- 2003. **Spain.** To launch the MEDROPLAN project funded by the European Commission and plan a short course on drought mitigation for April 2004.
- 2003. **Italy.** To discuss implementation of a regional network on drought preparedness for the Mediterranean and Near East region with FAO, ICARDA, and CIHEAM.
- 2003. **Czech Republic.** To launch a NATO Science Program project on drought and crop production.
- 2003. **Malaysia.** To conduct a drought mitigation workshop for the National Hydrologic Institute and explore collaborative opportunities with the National Drought Mitigation Center.
- 2003. **South Korea.** To present the keynote address at the annual meeting of the Korean Meteorological Society and give lectures at universities and research institutes.

- 2002. **Spain.** To collaborate with the International Center for Advanced Mediterranean Agronomic Studies and other groups from the Mediterranean region on development of a proposal to establish a regional drought preparedness network.
- 2002. **Slovenia.** To present a keynote address at the International Conference on Drought Mitigation and Prevention of Land Desertification and discuss development of a regional drought preparedness project for eastern and central European countries.
- 2002. **Hungary.** To meet with the Ministries of Environment and Agriculture and the Hungarian Meteorological Service to develop a strategy for drought mitigation planning in Hungary.
- 2001. **Morocco.** To present an invited paper at the International Conference on Drought in Morocco and meet with members of the National Drought Observatory project team from the Institute of Agronomy and Veterinary Science and the National School of Agriculture.
- 2001. **Mexico.** To advise the National Water Commission (CNA) on development of a drought management plan for the Rio Grande/Bravo River Basins.
- 2001. **Thailand.** To participate in the United Nations DESA/ESCAP/NOAA Interregional Symposium on Water-Related Disaster Reduction and Response in Bangkok.
- 2001. **Switzerland.** To discuss initiation and partnerships for a Global Drought Preparedness Network with the World Meteorological Organization, International Secretariat for Disaster Reduction and other U.N. agencies.
- 2001. **Morocco.** To lecture at an advanced course on “Management strategies to mitigate drought in the Mediterranean: Monitoring, risk analysis, and contingency planning” sponsored by CIHEAM, IAVII, and the European Commission and continue collaboration on the national drought observatory project.
- 2001. **Brazil and Argentina.** To lecture at the Institute of Agronomy in Campinas, Brazil, and participate in World Meteorological Week, Institute of Meteorology, Brasilia. To participate in the Hemispheric Conference on Vulnerability to Socio-Natural Hazards, Mendoza, Argentina.
- 2001. **Morocco.** To initiate the 3-year project to establish a national drought observatory, policy, and plan.
- 2000. **Morocco.** Participated in discussions to finalize a work plan for a 3-year project funded by USAID and the USDA/FAS to develop a national drought observatory, including a national drought policy and plan.
- 2000. **Spain.** Participated in a planning meeting in Zaragoza, Spain, sponsored by the International Center for Advanced Mediterranean Agronomic Studies, to organize a short course on Management Strategies to Mitigate Drought Effects in the Mediterranean Region: Preventive Methods and Contingency Plans (planned for May 2001).
- 2000. **Portugal.** Co-organizer of experts meeting on drought early warning systems sponsored by the World Meteorological Organization, U.N. Convention to Combat Desertification, and UNDP’s Office to Combat Desertification and Drought, Lisbon.

- 2000. **Hungary.** Co-organizer and presenter at the Eastern and Central Europe Drought Mitigation Workshop, Budapest.
- 2000. **Australia.** Organized focus session on drought mitigation for the World Water Congress, Melbourne.