

Dr. Tonya R. Haigh
 ORCID <https://orcid.org/0000-0002-5240-685X>
 Research Assistant Professor and Social Science Coordinator
 National Drought Mitigation Center
 University of Nebraska – Lincoln
 Lincoln, NE U.S.
 thaigh2@unl.edu

Professional Preparation

University of Nebraska – Lincoln	Human Dimensions of Natural Resources Management	PhD	2019
University of Nebraska – Lincoln	Survey Research Methods	Certificate	2015
South Dakota State University	Rural Sociology	MS	1998
Hamline University	Human and Physical Ecology	BS	1992

Appointments and Positions

Research Assistant Professor/Social Science Coordinator , National Drought Mitigation Center, UNL	2021-present
Rural Sociologist Research Associate/Project Manager , National Drought Mitigation Center, UNL	2015-2021
Rural Sociologist Research Associate , National Drought Mitigation Center, UNL	2009-2015

Dr. Tonya Haigh is a Research Assistant Professor and the Social Science Coordinator for the National Drought Mitigation Center at the University of Nebraska - Lincoln. Dr. Haigh's research focuses on the adaptive capacity of agricultural producers and others to cope with drought. Her research connects social science with climate science by informing the development of stakeholder-driven resources and tools. Dr. Haigh's academic and research expertise includes social theory related to climate risk management, survey development and administration, quantitative data collection and analysis, qualitative data collection and analysis, and evaluation.

Publications (ORCID <https://orcid.org/0000-0002-5240-685X>)

*Denotes student advised or mentored by Haigh

*Campbell, O.G., **Haigh**, T. (2025) Critical Precipitation Months Across the Western United States. *Rangeland Ecology & Management*.

Haigh, T., Goebel, M., C. Knutson. (2025) Conceptualizing ranch drought plans and planning: A typology. *Rangelands*.

Baylis, K., Lentz, E., Caylor, K., Gu, M., Gunderson, C., **Haigh**, T., Hayes, M., Lahr, H., Maxwell, D., and Funk C. (2025). "Six lessons for closing the last mile: How to make climate decision support actionable." *Earth Futures*.

- Haigh, T., Kluck, D., Todey, D., Nowatzke, L.** 2024. Delivering & Evaluating Climate Services: The North Central Climate and Drought Webinar Series. Weather, Climate, and Society.
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- Elias, E., B. Fuchs, J. Lisonbee, T. Bernadt, V. Martinez, and T. **Haigh**, 2023: Evolution of the Southwest Drought Learning Network: Collective Response to Exceptional Drought. *Bull. Amer. Meteor. Soc.*, 104, E935–E942, <https://doi.org/10.1175/BAMS-D-22-0017.1>.
- Cravens, A.E., Goolsby, J.B., Jedd, T., Bathke, D.J., Crausbay, S., Cooper, A.E., Dunham, J. **Haigh, T.**, Hall, K.R., Hayes, M.J., McEvoy, J., Nelson, R., Poděbradská, M., Ramirez, A., Wickham, E., Zoanni, D. 2023. The patchwork governance of ecologically available water: A case study in the Upper Missouri Headwaters, Montana, United States. *JAWRA Journal of the American Water Resources Association* 1-21. <https://doi.org/10.1111/1752-1688.13167>.
- Haigh, T.**, Wickham, E., Hamlin, S., Knutson, C. (2023) Planners' perceptions of strategies and barriers to achieving local drought preparedness. *Journal of the American Planning Association*. 89 (3): 348-362. DOI: 10.1080/01944363.2022.2071324
- Haigh, T.**, Otkin, J., Woloszyn, M., Todey, D., Felkley, C. (2022) Meeting the drought information needs of Midwest perennial specialty crop producers. *Journal of Applied Meteorology and Climatology*. Pp. 839–855 DOI: <https://doi.org/10.1175/JAMC-D-21-0105.1>
- Otkin, J. A., Woloszyn, M., Wang, H., Svoboda, M., Skumanich, M., Pulwarty, R., Lisonbee, J., Hoell, A., Hobbins, M., **Haigh, T.**, & Cravens, A. E. (2022). Getting ahead of Flash Drought: From Early Warning to Early Action, *Bulletin of the American Meteorological Society*, 103(10), E2188-E2202. DOI: <https://doi.org/10.1175/BAMS-D-21-0288.1>
- Ulrich-Schad, J.D., Li, S., Arbuckle, J.G., Avemegah, E., Brasier, K.J., Burnham, M., Kumar Chaudhary, A., Eaton, W.M., Gu, W., **Haigh, T.** and Jackson-Smith, D., 2022. An Inventory and Assessment of Sample Sources for Survey Research with Agricultural Producers in the US. *Society & Natural Resources*, pp.1-9.
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- Ibarra, A.M.S., Hewitt, C., Winarto, Y.T., Walker, S., Keener, V.W., Bayala, J., Christel, I., Bloomfield, H., Halsnæs, K., **Haigh, T.**, Jacob, D. and Bresseur, G.P., 2021. Resilience through climate services. *One Earth*, 4(8), pp.1050-1054.
- Haigh, T.**, Hayes M., Smyth J., Prokopy L., Francis C., Burbach, M. (2021) Ranchers' use of drought contingency plans in protective action decision-making. *Rangeland Ecology & Management*, 74, 50-62.

- Lu, J., Singh, A.S., Koundinya, V., Ranjan, P., **Haigh**, T., Getson, J.M., Klink, J. and Prokopy, L.S., 2021. Explaining the use of online agricultural decision support tools with weather or climate information in the Midwestern United States. *Journal of Environmental Management*, 279, p.111758.
- Liu, T., Krop, R., **Haigh**, T., Smith, K. H., & Svoboda, M. (2021). Valuation of Drought Information: Understanding the value of the US Drought Monitor in land management. *Water*, 13(2), 112.
- Smith, K.H., Burbach, M.E., Hayes, M.J., Guinan, P.E., Tyre, A.J., Fuchs, B., **Haigh**, T. and Svoboda, M.D., 2021. Whose ground truth is it? Harvesting lessons from Missouri's 2018 bumper crop of drought observations. *Weather, Climate, and Society*, 13(2), pp.227-244.
- Haigh**, T., Schacht, W., Knutson, C., Smart, A., Volesky, J., Hayes, M., and Burbach, M. (2020) Preparing for Drought on the Ranch: Lessons from 2012. *Research Counts* 3(6). Boulder, CO: Natural Hazards Center, University of Colorado Boulder.
- Church, S.P., Bentlage, B., Weiner, R., Babin, N., Bulla, B.R., Fagan, K., **Haigh**, T., Carlton, J.S. and Prokopy, L.S., (2020). National print media vs. agricultural trade publications: communicating the 2012 Midwestern US drought. *Climatic Change*, pp.1-21.
- *Noel, M., Bathke, D., Fuchs, B., Gutzmer, D., **Haigh**, T., Hayes, M., ... & Svoboda, M. (2020). Linking drought impacts to drought severity at the state level. *Bulletin of the American Meteorological Society*, 101(8), E1312-E1321.
- Liu, T., Smith, K. H., Krop, R., **Haigh**, T., & Svoboda, M. (2020). Critical Analysis of the Value of Drought Information and Impacts on Land Management and Public Health. *Water*, 12(4), 1064.
- *Poděbradská, M., Noel, M., Bathke, D. J., **Haigh**, T. R., & Hayes, M. J. (2020). Ready for Drought? A Community Resilience Role-Playing Game. *Water*, 12(9), 2490.
- Haigh**, T., Otkin, J., Mucia, A., Hayes, M., Burbach, M. (2019). Drought early warning and the timing of range managers' drought response. *Advances in Meteorology*.
- Haigh**, T. R., Schacht, W., Knutson, C. L., Smart, A. J., Volesky, J., Allen, C., ... & Burbach, M. (2019). Socioecological determinants of drought impacts and coping strategies for ranching operations in the Great Plains. *Rangeland Ecology & Management*, 72(3), 561-571.
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- Demisse, G. B., Tadesse, T., Wall, N., **Haigh**, T., Bayissa, Y., & Shiferaw, A. (2019). Linking seasonal drought product information to decision makers in a data-sparse region: A case study in the Greater Horn of Africa. *Remote Sensing Applications: Society and Environment*, 14, 200-206.
- Haigh**, T., Koundinya, V., Hart, C., Klink, J., Lemos, M., Mase, A. S., Prokopy, L., Singh, A., Todey, D., & Widhalm, M. (2018). Provision of climate services for agriculture: Public and private pathways to farm decision-making. *Bulletin of the American Meteorological Society*, 99(9):1781-1790.
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- Prokopy, L. S., Carlton, J. S., **Haigh**, T., Lemos, M. C., Mase, A. S., & Widhalm, M. (2017). Useful to Usable: Developing usable climate science for agriculture. *Climate Risk Management*, 15, 1-7.
- Tadesse, T., **Haigh**, T., Wall, N., Shiferaw, A., Zaitchik, B., Beyene, S., ... & Petr, J. (2016). Linking seasonal predictions to decision-making and disaster management in the Greater Horn of Africa. *Bulletin of the American Meteorological Society*, 97(4), ES89-ES92.
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- Tadesse, T., Bathke, D., Wall, N., Petr, J., & **Haigh**, T. (2015). Participatory Research Workshop on Seasonal Prediction of Hydro-climatic Extremes in the Greater Horn of Africa. *Bulletin of the American Meteorological Society*.
- Prokopy, L. S., Carlton, J. S., Arbuckle Jr, J. G., **Haigh**, T., Lemos, M. C., Mase, A. S., ... & Hart, C. (2015). Extension' s role in disseminating information about climate change to agricultural stakeholders in the United States. *Climatic Change*, 130(2), 261-272.
- Carlton, J.S., A.S. Mase, C.L. Knutson, M.C. Lemos, T. **Haigh**, D.P. Today, L.S. Prokopy. (2015) The effects of extreme drought on climate change beliefs, risk perceptions, and adaptation attitudes. *Climatic Change*.
- Vogt, R., Burkhart-Kriesel, C. A., Cantrell, R., Lubben, B., McElravy, L. J., & **Haigh**, T. (2015). Climate and Energy: Opinions of Nonmetropolitan Nebraskans.
- Lemos, M. C., Lo, Y. J., Kirchhoff, C., & **Haigh**, T. (2014). Crop advisors as climate information brokers: Building the capacity of US farmers to adapt to climate change. *Climate Risk Management*, 4, 32-42.
- Haigh**, T. and C.L. Knutson. 2013. Roles of Perceived Control and Planning in Ranch Drought Preparedness. *Great Plains Research*, 23(1).
- Knutson, C. L., & **Haigh**, T. R. (2013). Ranchers in the United States, Scientific Information, and Drought Risk. *Drought, Risk Management, and Policy: Decision-Making Under Uncertainty*, 2, 171.
- Knutson, C., & **Haigh**, T. (2013). A Drought-Planning Methodology for Ranchers in the Great Plains. *Rangelands*, 35(1), 27-33.
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- Arbuckle, J., L. Prokopy, T. **Haigh**, J. Hobs, T. Knott, C. Knutson, A. Loy, A. Mase, J. McGuire, L. Morton, J. Tyndall, M. Widhalm. (2013). Climate change beliefs, concerns, and attitudes toward adaptation and mitigation among farmers in the Midwestern United States. *Climatic Change Letters*. Vol. 117 (4), pp. 943-950.
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- Knutson, C. L., **Haigh**, T., Hayes, M. J., Widhalm, M., Nothwehr, J., Kleinschmidt, M., & Graf, L. (2011). Farmer perceptions of sustainable agriculture practices and drought risk reduction in Nebraska, USA. *Renewable Agriculture and Food Systems*, 26(03), 255-266.

Other Publications, Technical Reports, Educational Materials

- *Varisco, K., **Haigh**, T. Building Drought Resilience with Soil Health, draft. Individualized fact sheet produced for participants in Climate-Smart Indigenous Ag Project (Haigh, PI), USDA-NRCS.
- *Varisco, K., **Haigh**, T., Nowatzke, L., Todey, D. (2024) Midwest Climate Hub (MCH) & National Drought Mitigation Center (NDMC) Cooperative Agreement Task – Working with Underserved Agricultural Audiences, October 2023-September 2024 Technical Report, delivered to USDA.
- *Kirchner, O.G., *Varisco, K., **Haigh**, T., and Bathke, D. (2024). IMPACT2 State Farm Game. Developed and used to engage with farmers and Extension personnel at workshop in Lafayette, IN as part of IMPACT2 Project (Haigh, PI), USDA AFRI
- *Kirschner, O.G., **Haigh**, T. Critical Dates Dashboard. Web Interface Prototype developed through USDA Cooperative Agreement
- *Kirschner, O.G., **Haigh**, T. Range & Drought Monitoring Tool Library. Web Interface Prototype developed through USDA Cooperative Agreement
- Haigh**, T. (2024) Ranch Drought Planning Guidance Factsheet and Worksheets. Developed through USDA Cooperative Agreement
- Bathke, D.J., Hunt, E., Akin, H., Basche, A., Bell, J., DiLeo, D., Dixon, R.D., Durr, M., Hay, J., **Haigh**, T., McMillan, N., Kintziger, K., Miller, H., Powers, C., Roy, T., Sonsthagen, S., Spurgeon, J., Tang, Z., Wishart, R., and Young, A., (2024). Understanding and Assessing Climate Change: Preparing for Nebraska's Future, 2024. University of Nebraska-Lincoln.

Grants Awarded - Current/Active

- Haigh**, T. (PI). Strengthening Rangeland Resilience to Climate Change in Semi-Arid Regions. Lead Institution Colorado State University. \$88,275 (NDMC portion) 2024-2028.
- Haigh**, T. (PI) Graduate Student Support. Daugherty Global Water for Food Institute. \$17,500 2024-2025
- Svoboda, M. (PI), Fuchs, B., **Haigh**, T. (Co-I), Knutson, C., Mieno, T., Smith, K., Rimsaite, R., Tadesse, T., Wardlow, B. Cooperative Agreement. USDA Support of the US Drought Monitor and Hub Activities for 2025-2026, Dept of Agriculture-OCE, Federal, Public Service. Lead Institution: UNL. \$1,275,000 2025-2026.

Haigh, T. (PI), D. Bathke (Co-I). Integrated Midwest Partnerships for Actionable Climate Tools and Training (IMPACT2): Supporting System Transformation on Working Lands. USDA NIFA. Lead Institution: Purdue University. \$99,174 (NDMC portion) 2023-2026.

Emery, M. (PI), D. Bathke (Co-I), **T. Haigh (Senior Personnel)**. Rural Confluence: Communities and Academic Partners Uniting to Drive Discovery and Build Capacity for Climate Resilience. National Science Foundation EPSCoR. Lead Institution: UNL (joint submission with Oklahoma State University and Louisiana State University) \$1,119,211 2023-2027

Roy, T., M. Svoboda, T. **Haigh** (Co-I). Enhancing the Hydrological Drought Monitoring Capability of the US Drought Monitor. NASA. Lead Institution: UNL. \$555,362. 2022 - 2025

Research Outcomes/Impacts

Research on useful drought monitoring information for ranchers led to the development of the Ranch Drought Monitoring Dashboard: <https://drought.unl.edu/ranchplan/monitor.aspx>.

Research on drought vulnerability, coping impacts, and planning led to ongoing development of the National Drought Mitigation Center's Managing Drought Risk on the Ranch website: <https://drought.unl.edu/ranchplan>.

Research on the decision calendars of Midwestern specialty crop growers led to development of fact sheets on appropriate drought monitoring resources by season for specific cropping systems, found on the National Drought Mitigation Center website at <https://drought.unl.edu/Projects/Detail.aspx?id=41>.

Research evaluating the process and outcomes of scenario-based drought planning exercises informed the development of a new online guide to Collaborative Drought Planning using Scenario Exercises found at: <https://drought.unl.edu/scenarioguide/Overview.aspx>.

Quantitative and qualitative research on the climate information needs of U.S. Corn Belt farmers led to the development of new agricultural decision-support tools developed by the USDA AFRI-funded Useful to Usable Project (<http://agclimate4u.org>), now housed on Regional Climate Center websites such as <https://hprcc.unl.edu/agroclimate.php>.

Honors & Awards

Awarded Best Paper of 2023, Journal of the American Planning Association

UNL Center for Great Plains Studies Fellow – December 2024 - Present

Faculty Fellow with the Daugherty Water for Food Global Institute – November 2023 - Present

Professional Memberships

Vice-Chair, Hatch Multi-State Project NC1190, Enabling natural resources conservation practice adoption: Applied social science research for behavior change and policy support

Member, International Association for Society and Natural Resources

Member, Society for Range Management

Professional Development Training

LGBTQA+ Inclusive card – 2024

Responsible Conduct of Research (RCR) Certification – 2024