

CHRISTINA GREENE

Assistant Research Scientist
Climate Assessment for the Southwest
University of Arizona
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EDUCATION

University of Arizona

Ph.D., Geography, 2019

Dissertation: From Drought in California to the Global Framework for Climate Services: Narratives and Lived Experiences of Climate Vulnerability

Committee: Diana Liverman (chair), Gregg Garfin, Andrea Gerlak, Connie Woodhouse

Johns Hopkins School of Advanced International Affairs

M.A., International Affairs, 2006

Stanford University

B.A. with Honors, International Relations, 1999

RESEARCH INTERESTS

Human-environment geography, human dimensions of drought, global environmental change, political ecology, climate services and development, inter and transdisciplinary research

RESEARCH AND PROFESSIONAL EXPERIENCE

Senior Social Scientist, Tucson, AZ

Climate Assessment for the Southwest (CLIMAS), University of Arizona, 2025-present

- Human dimensions of drought, resilience, wildfire & aridity, wildfire recovery

Research Scientist, Tucson, AZ

Climate Assessment for the Southwest (CLIMAS), University of Arizona, 2019-2024

- Human dimensions of drought, rangeland resilience, climate services, wildfire recovery

Graduate Research Assistant, Tucson, AZ

International Research Applications Program: Integrating Climate Information and Decision Processes for Regional Climate Resilience, University of Arizona, 2013-2016

- Research on design, development, and provision of climate information. Project funded by NOAA and USAID.

Research Assistant, Tucson, AZ

Institute of the Environment, University of Arizona, 2011-2012

- Assessment of Climate Change in the Southwest United States

Programme Officer, Field offices in Sudan, Southern Sudan, Lebanon, and Libya

United Nations Mine Action Service, United Nations, 2006-2011

AWARDS AND HONORS

Jeanne X. Kasperson Award, 2018, Hazards, Risks, and Disasters Specialty Group, Association of American Geographers
Human Dimensions of Global Change Specialty Group Research Competition, 2015, Association of American Geographers

FELLOWSHIPS AND GRANTS

- NOAA Climate Adaptation Partnerships (CAP), formerly Regional Integrated Sciences and Assessments (RISA), Health and Social Services in the Long-term Wildfire Recovery of Rural Communities. Lead PI: C. Greene. Co-PI: K. Clifford, 2023-2027. \$473,798.
- NOAA Climate Adaptation Partnerships (CAP), formerly Regional Integrated Sciences and Assessments (RISA), Cultivating Equitable Responses to Increased Aridity in the US Southwest: The Climate Assessment for the Southwest (CLIMAS), 2022-2027. Lead PI: D. Ferguson. Co-PIs: H. Brown, M. Crimmins, D. DuBois, T. Lane, G. Owen. B. McMahan, A. Meadow, C. Woodhouse, G. Frisvold, C. Greene, L. Keith, H. Geli, L. Prihodko. \$6,000,000.
- AFRI NIFA Predoctoral Fellowship, National Institute of Food and Agriculture, United States Department of Agriculture, 2017, \$95,000.
- Social & Behavioral Sciences Research Institute Dissertation Grant, University of Arizona, 2015, \$2,000.
- Climate and Society Graduate Fellow, Climate Assessment for the Southwest, 2015, University of Arizona. \$5,000.
- Confluence Center for Creative Inquiry Graduate Fellow, University of Arizona, 2015, \$5,000.
- Carson Scholar, Institute of the Environment, University of Arizona, 2014, \$5,000.

PUBLICATIONS

Njeri, S., and C. Greene. 2024. Land degradation: The 'double exposure' of ERW contamination and climate change. Bonn Contact Group on Climate, Peace and Security.

Greene, C. 2024. Experiences with drought and the Livestock Forage Disaster Program in Arizona. Tucson, AZ: Climate Assessment for the Southwest.

Greene, C. 2024. Drought Monitoring Insights from the New Mexico Drought Monitoring Working Group. Tucson, AZ: Climate Assessment for the Southwest.

Wilmer, H., D.B. Ferguson, M. Dinan, E. Thacker, P.B. Adler, K.B. Walsh, J.B. Bradford, M. Brunson, J.D. Derner, E. Elias, A. Felton, C. A. Gray, C. Greene, M. McClaran, R.K. Shriver, M. Stephenson, K.N. Suding. 2024. Rangeland Ecology & Management 95:56-67.

Greene, C., and D.B. Ferguson. 2024. Equity, Justice, and Drought: Lessons for Climate Services from the U.S. Southwest. *Bulletin of the American Meteorological Society* 105(1): E45-E58.

Greene, C., H. Wilmer, D.B. Ferguson, M.A. Crimmins, M.P. McClaran. 2022. Using scale and human agency to frame ranchers' discussions about socio-ecological change and resilience. *Journal of Rural Studies* 96:217-226.

- Dinan, M., P.B. Adler, J. Bradford, M. Brunson, E. Elias, A. Felton, **C. Greene**, J. James, K. Suding, E. Thacker. 2021. Making research relevant: Sharing climate change research with rangeland advisors to transform results into drought resilience. *Rangelands* 43(5): 1850193.
- Wilmer, H., A.M. Meadow, A.B. Brymer, S.R. Carroll, D.B. Ferguson, I. Garba, **C. Greene**, G. Owen, D.E. Peck. 2021. Expanded Ethical Principles for Research Partnership and Transdisciplinary Natural Resource Management Science. *Environmental Management* 68:453-476.
- Greene, C.** 2021. "Drought isn't just waster, it is living": Narratives of drought vulnerability in California's San Joaquin Valley. *Geoforum* 121:33-43.
- Gerlak, A.K., S. Mason, M. Daly, D. Liverman, Z. Guido, M.B. Soares, C. Vaughan, C. Knudson, **C. Greene**, J. Buizer, K. Jacobs. 2020. The Gnat and the Bull: Do Climate Outlook Forums Make a Difference? *Bulletin of the American Meteorological Society* 101(6): E771-E784. <https://doi.org/10.1175/BAMS-D-19-0008.1>
- Mahon, R., **C. Greene**, S. Cox, Z. Guido, A.K. Gerlak, J. Petrie, A. Trotman, D. Liverman, C.J. Van Meerbeeck, W. Scott, D. Farrell. 2019. Fit for purpose? Transforming National Meteorological and Hydrological Services into National Climate Service Centers. *Climate Services* 13: 14-23.
- Gerlak, A.K., **C. Greene**. 2019. Interrogating vulnerability in the Global Framework for Climate Services. *Climatic Change* 157:99-114. <https://doi.org/10.1007/s10584-019-02384-y>
- Greene, C.** 2018. Broadening understandings of drought – the climate vulnerability of farmworkers and rural communities in California (USA). *Environmental Science & Policy* 89: 283-291.
- Bedsworth, L., D. Cayan, G. Franco, L. Fisher, S. Ziaja. (**C. Greene** contributing author). 2018. Statewide Summary Report. California's Fourth Climate Change Assessment. Publication number: SUMCCCA4-2018-013.
- Gerlak, A.K., Z. Guido, C. Vaughan, V. Rountree, **C. Greene**, D. Liverman, A.R. Trotman, R. Mahon, S. Cox, S.J. Mason, K.L. Jacobs, J.L. Buizer, C.J. Van Meerbeeck, and W.E. Baethgen (2018) Building a Framework for Process-Oriented Evaluation of Regional Climate Outlook Forums. *Weather, Climate and Society* 10: 225–239, <https://doi.org/10.1175/WCAS-D-17-0029.1>
- Guido, Z., V. Rountree, **C. Greene**, A. Gerlak, and A. Trotman. 2016. Connecting Climate Information Producers and Users: Boundary Organization, Knowledge Networks, and Information Brokers at Caribbean Climate Outlook Forums. *Weather, Climate and Society* 8(3): 285- 298.
- Liverman, S., S.C. Moser, P.S. Weiland, L. Dilling, M.T. Boykoff, H.E. Brown, E.S. Gordon, **C. Greene**, E. Holthaus, D.A. Niemeier, S. Pincetl, W.J. Steenburgh, and V.C. Tidwell. 2013. "Climate Choices for a Sustainable Southwest." *In Assessment of Climate Change in the Southwest United States: A Report Prepared for the National Climate Assessment*, edited by G. Garfin, A. Jardine, R. Merideth, M. Black, and S. LeRoy, 405-435. A report by the Southwest Climate Alliance. Washington, DC: Island Press.

Publications under review and in press

- Greene, C. Drought. (in press) *The SAGE Encyclopedia of Environmental Justice*. Ed. Taylor, D.E.
- Crimmins, M. et al. (under review) Changing Climate, Changing Fire: Understanding Ecosystem-Specific Fire-Climate Dynamics in Arizona and New Mexico. *Earth Interactions*.
- Greene, C., and L. Schipper. Maladaptation (under review). *The Environmental Peacebuilding Glossary*. Routledge.

PRESENTATIONS

Conference Participation

- 2024 Health and Social Services in the Long-Term Wildfire Recovery of Rural Communities. Southwest Fire Ecology Conference.
- 2024 Linking Humanitarian Mine Action and Climate Change Adaptation. 3rd International Conference on Environmental Peacebuilding.
- 2024 Exploring Findings from NOAA Climate Adaptation Partnerships Program Bi-Partisan Infrastructure Law Investments. Association of American Geographers Annual Meeting.
- 2023 Bringing Equity into Climate Adaptation Partnerships: Challenges and Opportunities. Panel member, Association of American Geographers Annual Meeting.
- 2018 Dynamics of socioeconomic drought for farmworkers and rural communities in California's San Joaquin Valley. American Geophysical Union Fall Meeting
- 2018 Dynamics of Drought Vulnerability in Rural Communities of California's San Joaquin Valley. Association of American Geographers Annual Meeting.
- 2017 Interrogating the Global Framework for Climate Services. Association of American Geographers Annual Meeting.
- 2016 Drought in California's San Joaquin Valley: Assessing Environmental Narratives of Vulnerability. Association of American Geographers Annual Meeting
- 2015 Understanding Drought Impacts and Vulnerability in California. Poster session, American Geophysical Union Fall Meeting
- 2015 Drought, Labor, and Food Insecurity: A Political Ecology of the California Drought. Association of American Geographers Annual Meeting.
- 2014 Geographies of Contemporary Global Food Crisis. Panel member, Association of American Geographers Annual Meeting.

Public and Stakeholder Presentations

- 2024 Equity and Wildfire Resilience. Arizona WUI Summit.
- 2022 Climate Resilience and Public Health through Community Engagement, California Delta Science for Communities Workshop
- 2021 The Western Drought: The Hidden Human Impacts, California State Senate Select Committee on Human Security
- 2020 Range Resilience in the West, Western Drought Resilience Workshop, USDA Southwest Climate Hub
- 2018 Drought Impacts and Drought Vulnerability in Rural Communities of California's San Joaquin Valley. NIFA Fellows Project Director Meeting, USDA.

- 2018 Panel on food systems: How will agricultural communities and food systems survive peak drought and temperatures? Surviving Peak Drought and Warming Workshop, University of Arizona.
- 2017 Drought Impacts and Drought Vulnerability in Rural Communities of California's San Joaquin Valley. California's 4th Climate Change Assessment Collaborator meeting
- 2016 Best Practices in Communicating Climate Information and Media Analysis. Caribbean Institute of Hydrology and Meteorology, Bridgetown, Barbados.
- 2016 Drought in Words and Music. Women's Salon Series, Tucson, Arizona.
- 2015 Drought in Words and Music. Confluence Center for Creative Inquiry's Creative Collaborations, University of Arizona.
- 2014 Barriers to Use of Climate Information. The Caribbean Climate Outlook Forum, Antigua.

TEACHING EXPERIENCE

University of Arizona, Instructor of Record

Introduction to Environmental Studies (EVS 260), 2014

Introduction to Sustainable Development (GEOG 302), 2012

University of Assistant, Graduate Teaching Assistant

Introduction to Environmental Studies (EVS 260), Dr. Diana Liverman, 2012

SERVICE

Peer-review: *Agriculture and Human Values* (2024), *Climate Services* (2022,2024), *Environmental Science and Policy* (2021), *Weather, Climate and Society* (2022, 2020), *BAMS* (2019), Elsevier Book Review (2019), *Climatic Change* (2021, 2018, 2017), *Progress in Disaster Science* (2023), *Geoforum* (2023, 2024), National Science Foundation (2022), California Sea Grant (2024).