KayLynn Larrison
Curriculum Vitae

RESEARCH INTERESTS

Human Dimensions of Environmental Change | Community Resilience | Climate Adaptation | Spatial & Quantitative Methods

EDUCATION

Ph.D. Sociology, Louisiana State University 2022 – 2026
Conferred August 2026
Dissertation: *Climate Change Attributable Flooding and Post-Disaster Housing Market Outcomes: Evidence from Hurricane Harvey*
Chair: Dr. Kevin Smiley

M.S. Sociology, University of North Texas 2020 – 2022

B.S. Sociology, Texas A&M University 2017 – 2020

PROFESSIONAL EXPERIENCE

Resilience Fellow, SBP, Gulfport, MS 2025 – present
Co-hosted by the Community Resilience Center at The Water Institute and the Southern Mississippi Planning and Development District

- Help develop state and federal grant applications for infrastructure and resilience projects in coastal Mississippi; more than $6 million in external funding has been secured to date.
- Integrate and analyze geospatial data in R and ArcGIS, including flood insurance, environmental hazards, aerial imagery, and census demographics, to support resilience and planning.
- Present findings and gather community feedback at planning committee and public meetings; create outreach materials and organize community events that build flood risk awareness and hazard preparedness.
- Administer and analyze a gulf-wide survey on how people perceive the language used to describe community-led migration; inductively code interview data on voluntary property buyouts to develop program recommendations.
- Lead engagement planning for a newly launched NOAA co-stewardship plan supporting Chandeleur Islands fisheries, mapping commercial, industrial, and recreational fishers and state, federal, NGO, and university partners; determining the appropriate form of engagement for each; and designing co-design workshops to guide plan objectives and restoration activities.

Graduate Research Assistant, Louisiana State University, Baton Rouge, LA 2024 – 2025
Advisor: Dr. Kevin Smiley. Interdisciplinary climate attribution project with researchers from LSU, NCAR, and The Water Institute.

- Led the final research phase quantifying climate change's contribution to Hurricane Ida impacts under past and future conditions.
- Built a hierarchical, multi-hazard geospatial dataset of nearly one million structures in southern Louisiana by integrating wind and storm surge damage estimates.
- Conducted statistical and spatial analyses of social inequalities in Ida's attributable impacts.
- Helped design a survey on perceptions of disasters, climate change, and migration.
- Produced reproducible code, maps, figures, and research products for peer-reviewed publication (code).

Graduate Assistant, Louisiana State University, Baton Rouge, LA 2022 – 2024
Drs. Kroeger, Smiley, and Slack

- Coded 311 service-request calls to classify flooding and drainage-related reports by type, location, and urgency.

Technical Writer, Pacston Technologies 2020 – 2022

- Wrote evidence-based narratives for employment-based immigration petitions (EB-1, EB-2 NIW), translating researchers' CVs, publications, and citation metrics into arguments about research significance and impact for federal adjudicators.

PUBLICATIONS

Peer-Reviewed Publications

Smiley, Kevin T., Ovel Díaz-García, James M. Done, Scott A. Hemmerling, KayLynn Larrison, Rubayet Bin Mostafiz, Md Adilur Rahim, Alexandra N. Ramos-Valle, and Jonathan Teye Yevuyibor. (2026). "Advancing extreme event impact attribution: attributing multi-hazard impacts of Hurricane Ida in south Louisiana to past, present, and future climates." *Environmental Research: Climate*. https://doi.org/10.1088/2752-5295/ae6889.

Smiley, Kevin T., Ilan Noy, Michael F. Wehner, Christopher C. Sampson, Oliver E.J. Wing, and KayLynn Larrison. (2025). "Climate Change and Federal Aid Disbursements After Hurricane Harvey: An Extreme Event Attribution Analysis." *Environmental Research Letters*. https://doi.org/10.1088/1748-9326/adf978.

O'Connell, Heather, Marcus Venable, and KayLynn Larrison. (2025). "Neighborhood Disadvantage and the Geographic Distribution of Registered Sex Offender Concentration: Another Dimension of Racial Inequality?" *Race and Social Problems*. https://doi.org/10.1007/s12552-025-09446-0.

Manuscripts in Progress

Larrison, KayLynn, Kevin Smiley, and Michael Wehner. "Climate Change and Post-Disaster Housing Inequality: Insights from Extreme Event Impact Attribution." Under Review at *Climatic Change*.

Larrison, KayLynn, Kevin Smiley, Ovel Díaz-García, James M. Done, Scott A. Hemmerling, Rubayet Bin Mostafiz, Md Adilur Rahim, Alexandra N. Ramos-Valle, and Jonathan Teye Yevuyibor. "Social inequalities in past and future damages attributable to Hurricane Ida in southern Louisiana." In Preparation.

Extension Products

Collini, R., B. Mehney, and K. Larrison. (2026). "Flood Event Probability." Community Resilience Center at The Water Institute.

Haertling, A., K. Larrison, B. Mehney, M. Daigle, N. Pace, and D. Reid. (2025). "Program for Public Information." Community Resilience Center at The Water Institute.

SUCCESSFUL FUNDING

Total Secured: approximately $6.3 million

EPA Brownfield Coalition Grant $1.5 million
EPA | Data analysis and grant writing

Stone County Industrial Park Sewer Improvements $3.2 million
Gulf Coast Restoration Funds | Grant writing and evidence development

George County Industrial Park Water Improvements $1.3 million
Gulf Coast Restoration Funds | Grant writing and evidence development

Stone County Airport Fixed-Based Operator $250,000
State Economic and Infrastructure Grant | Grant writing

Perry County Sportsman's Lake Wharf & Floating Dock $32,610
Mississippi Outdoor Stewardship and Trust Fund | Grant writing and implementation planning

Revitalizing Historic Stone County $10,000
National Heritage Area Community Grant | Grant writer

Pending Proposals

Jackson County Stormwater Drainage Improvements $9.4 million requested
FEMA Building Resilience Infrastructure and Communities |Developed and implemented community engagement and data analysis strategy

Harrison County Fire Apparatus Replacement $2.2 million requested
FEMA Assistance to Firefighters | Grant writer

TEACHING EXPERIENCE

Research Mentor, High School Research Internship 2025
Louisiana State University

Supplemental Statistics Instructor, Introduction to Statistics (Sam Ramey) 2023
Louisiana State University

Teaching Assistant, Medical Sociology (Dr. Rhiannon Kroeger) 2022
Louisiana State University

Teaching Assistant (Dr. Karen Gregg/Dr. Deborah Fessenden) 2021 – 2022

University of North Texas, Denton, TX

CONFERENCE PRESENTATIONS

Bohrson, Michelle, Sherry Risk, Sara Hambrick, and **KayLynn Larrison**. (2025). "An Alternative Model for Enhancing Community Resilience." Natural Hazards Workshop Practitioner's Meeting. Broomfield, Colorado.

Larrison, KayLynn and Kevin Smiley. (2025). "Effects of Climate Change Attributed Damage and Flooding on Housing Stability." Natural Hazards Workshop Researcher's Meeting. Broomfield, Colorado.

Smiley, Kevin T., Teye Yevuyibor, **KayLynn Larrison**, James Done, and Alexandra N. Ramos-Valle. (2025). "Social Implications of an Extreme Event Attribution Analysis of Hurricane Ida's Wind and Flood Impacts." American Meteorological Society. New Orleans, Louisiana.

Smiley, Kevin T., James Done, Teye Yevuyibor, Alexandra Ramos, and **KayLynn Larrison**. (2024). "Investigating Socio-spatial Impacts from an Extreme Event Attribution Analysis of Hurricane Ida." American Geophysical Union. Washington DC.

Smiley, Kevin T., Teye Yevuyibor, **KayLynn Larrison**, James Done, and Alexandra N. Ramos-Valle. (2024). "Social Responses to Climate Change Attributed Flooding in South Louisiana." Natural Hazards Workshop Researchers Meeting. Broomfield, Colorado.

Larrison, KayLynn. (2024). "Threat perceptions and group empathy: An explanation of intergroup attitudes." Southern Sociological Society annual meeting. New Orleans, Louisiana.

SERVICE ACTIVITIES

Co-lead, Gulf Resilience Community of Practice Science Café	2026
Reviewer, *Cities*	2026
Committee Member, LSU Fred C. Grey Memorial Award	2025
Judge, LSU Discovery Day Undergraduate Research and Creativity Symposium	2024, 2025
Reviewer, *GeoHealth*	2024
Local Arrangements Committee Member, Southern Sociological Society	2024

METHODS & SKILLS

Quantitative Methods: Linear, multilevel, logistic, and multinomial regression; spatial econometrics; survey data analysis; predicted probabilities and marginal effects.
Spatial Analysis: Geoprocessing, georeferencing, dasymetric mapping, raster and vector analysis, and cartography; spatial data integration.
Qualitative Methods: Inductive coding and qualitative analysis of interview data; content coding of administrative text records.

Data Sources: NOAA sea level rise projections; NWS Flood Inundation Mapping; SLOSH storm surge; OpenFEMA NFIP policy and claims data; county tax parcel and assessor records; American Community Survey and decennial census; CDC PLACES and social vulnerability; USGS land use/land cover; aerial imagery.
Software: R (sf, terra, tigris, tidycensus rfema), ArcGIS Pro, QGIS.

AWARDS

2026 Spot On, The Water Institute, Internal Award

2025 Rolland Pellegrin Outstanding Graduate Student in Sociology

2025 Travel Grant, Environmental Data Science Innovation & Impact Lab (ESIIL) Innovation Summit, University of Colorado

2025 Travel Grant, Compounding, Cascading, and Critical Risks to U.S. Infrastructure and Security Workshop, Portland State University

2024 Travel Grant, CyberTraining for Disaster Management Workshop