

# Department of Environmental Science and Policy

## Seminar Series

### Migration as Adaptation? Relocations in the United States in Response to Hurricanes

Margaret Walls

Resources for the Future

DATE: Friday, 04/22/2022 Time: 12:00 pm

Zoom: <https://bit.ly/3rDYGXH>



**Abstract:** Hurricanes are the most damaging natural disaster in the United States and worldwide, and climate scientists predict the worst of these storms to increase in frequency with climate change. In this study, we combine U.S. county-to-county migration data from the Internal Revenue Service (IRS) with FEMA Presidential Disaster Declarations data, information on hurricane storm surge risks, and county socioeconomic characteristics to analyze the extent to which hurricanes cause internal migration in the U.S. and whether that migration may result in better risk and socioeconomic outcomes. We find that hurricanes cause an average increase of approximately 3% in a county's overall out-migration rate in each of the five years after a hurricane strikes and a 1.9% increase in migration to a single other county. When we break down the county-to-county effects, we find that migration is greater to counties with lower storm surge risks. In the year following a hurricane, the migration rate to destination counties that have a lower storm surge risk than the origin county rises by 2.7 percent compared to only 1.7 percent for destination counties with higher storm surge risks. We also find that migration rates are higher to counties with better socioeconomic conditions as measured by poverty rates, unemployment rates, a social vulnerability index, and median household income, though the differences are less pronounced than those for storm surge risks. Our analysis of differential effects on migration by characteristics of origin and destination counties provides some evidence that disasters may induce households to move to less risky and more economically robust locations.

**Bio:** Margaret Walls is a Senior Fellow at Resources for the Future (RFF), Director of the RFF Climate Risks, Impacts, and Resilience Program and the RFF Environmental Justice Initiative. Dr. Walls's research focuses on the impacts of extreme weather and wildfire events and the design of programs and policies to enhance resilience to such events. She has written about the benefits of natural infrastructure, such as coastal wetlands and riparian buffers, in reducing flood damages and the evaluation of conservation investment decisions in floodplains and coastal zones. Her current research includes evaluation of the impacts of hurricanes on migration in the United States and estimation of the impact of wildfires on local economic activity. Dr. Walls has published widely in peer-reviewed journals and is the author of 34 book chapters and published reports. Dr. Walls holds a PhD in economics from the University of California at Santa Barbara and a BS in agricultural economics from the University of Kentucky.

