

William Mobley

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EDUCATION

Ph.D. Urban & Regional Science, Texas A&M University

College Station, Tx

Dissertation: How does wildfire risk differ across a landscape, given heterogeneous development patterns?

2017

Committee: Highfield, W., Brody, S., Quiring, S., Wu, B.,

M.U.P. University Wisconsin-Milwaukee

Milwaukee, Wi

Focus: GIS and Sustainable Development

2013

B.S. University Wisconsin-La Crosse

La Crosse, Wi

Focus: Geography - GIS

2010

PROFESSIONAL EXPERIENCE

Postdoctoral Researcher

Texas A&M

Feb. 2018-Present

Research Assistant

Texas A&M

2013 - 2017

Intern

Southeast Wisconsin Watershed Trust, Milwaukee, Wisconsin

2012 - 2013

Intern

Milwaukee Municipal Sewer District, Milwaukee, Wisconsin

2012

Intern

CH2M Hill, Milwaukee, Wisconsin

2012

RESEARCH INTEREST

Natural Hazards; Climate Change Adaptation; Uncertainty Analysis; Machine Learning; Land Use and Environmental Planning; Coastal Resilience; Spatial Analytics; Landscape Modeling; Flood Risk Management;

PUBLICATIONS

Peer-review Journal Articles (Published, Accepted & In Press)

1. **Mobley, W.**, Sebastian, A., Highfield, W. and Brody, S.D. (2019), Estimating Flood Extent during Hurricane Harvey using Maximum Entropy to build a Hazard Distribution Model. **Journal of Flood Risk Management**, p.e12549.2019
2. **Mobley, W.** (2019). Effects of changing development patterns and ignition locations within Central Texas. **PloS one**, 14(2), p.e0211454.2019
3. Ross, A.D., Rouse, S.M. and **Mobley, W.**, (2019) Polarization of Climate Change Beliefs: The Role

of the Millennial Generation Identity. **Social Science Quarterly**

4. van Berchum, E.C., **Mobley, W.**, Jonkman, S.N., Timmermans, J.S., Kwakkel, J.H. and Brody, S.D., (2018). Evaluation of flood risk reduction strategies through combinations of interventions. **Journal of Flood Risk Management**, p.e12506.

Peer-review Journal Articles (In Preparation & Under Review)

1. **Mobley, W.** Atoba, K. Highfield, W. Uncertainty in Flood Mitigation Practices: Assessing the Economic Benefits of Property Buyouts and Freeboard Elevation in Flood Prone Communities (*revise and resubmit*).
2. Retchless, D. **Mobley, W.**, Webmapping projected economic effects of the Ike Dike (*expected submission 03/2019*).
3. **Mobley, W.** Sebastian, A., Blessing, R., Highfield, W. Brody, S., Using Random Forest to predict the Houston Flood Hazard Part 1 (*expected submission 03/2020*)
4. Sebastian, A., **Mobley, W.** Blessing, R., Highfield, W. Brody, S., Using Random Forest to predict the Houston Flood Hazard Part 2 (*expected submission 04/2020*)
5. **Mobley, W.**, Development Patterns and the Wildfire Risk Gradient in Central Texas. (*expected submission 03/2020*)

Conference Papers

1. **Mobley, W.** Atoba, K. Highfield, W. Uncertainty in Flood Mitigation Practices: Assessing the Economic Benefits of Property Buyouts and Freeboard Elevation in Flood Prone Communities 2019 ACSP Annual Conference. October 2019. Greenville, South Carolina.
2. **Mobley, W.** Sebastian, A., Leveraging Machine Learning & Twitter to Identify Rescue Needs during Hurricane Harvey 2018 ACSP Annual Conference. October 2018. Buffalo, New York.

Book Chapters

1. **Mobley, W.**, Cash, S.B. and Brody, S.D. (2016). "Bringing corporate stakeholders to the table in collaborative ecosystem." In Steven A. Moore (2nd ed.). Pragmatic Sustainability. Abingdon, UK: **Routledge Press**.

Technical Reports & White Papers

1. Sharp, J. (2018). Eye of the Storm: Report of the Governor's Commission to Rebuild Texas. Texas A&M University. College Station, Texas. **Contributing Author**.
2. Hendricks, M., **Mobley, W.** (2018) To Avoid Future Catastrophes Like The California Fires, We Must Learn To Build Smarter. Huffington Post
3. van Berchum, E.C., **Mobley, W.**, (2017) Flood Risk Reduction System Optimization Application to the Galveston Bay Area.
4. Blessing, R.B., Wilson, M., **Mobley, W.**, Atoba, K., & Brody, S.D. (2014). A Flood Risk Assessment of the San Jacinto River Waste Pit. Center for Texas Beaches & Shores. Texas A&M University at Galveston.
5. Huebner, D., **Mobley, W.**, Olson, E., Palmer, L., Riordan, K. (2013) "No Vacancy in Spirit - Addressing Residential Lots, Commercial Corridors, and Neighborhood Identity in the Lindsay Heights area of Milwaukee, Wisconsin"

*Conference Presentations and Posters(*denotes speaker)*

1. **Mobley, w.***, Atoba, K., Highfield, W., Uncertainty in Flood Mitigation Practices: Assessing the Economic Benefits of Property Buyouts and Freeboard Elevation in Flood Prone Communities. ACSP 2019 Annual Conference. October 2019, Greenville, South Carolina.
2. **Mobley, W.***, Sebastian, A. Leveraging Machine Learning and Twitter, to Identify Rescue Needs during Hurricane Harvey. ACSP 2018 Annual Conference. October 2018, Buffalo New York.
3. Sebastian, A.*, **Mobley, W.** A Data-driven Approach to Real-time Flood Hazard Delineation: Estimating Flood Extent during Hurricane Harvey using MaxEnt. 2018 Rice Data Science Conference.

October 8, 2018 Houston, Texas.

4. **Mobley, W.*** How changes in development affect wildfire risk. 7th International Fire Ecology and Management Congress. November 28. Orlando, FL
5. **Mobley, W.,** Walters, H. (2017) Galveston Bay Status and Trends: Atlas through the Ages. ESRI Water Conference. February 8. Orlando, FL.
6. Brody S.,* **Mobley W.,** (2016) Understanding Flood Risk and Risk Reduction with the Coastal Atlas. Avoiding Disasters Conference. April 26th. Houston, TX.
7. **Mobley, W.*** (2016) GBC: Galveston Bay Status and Trends: Building off a history of success July 20th. Houston, TX
8. Brody S.,* **Mobley W.,** (2016) Texas A&M Coastal Development Panel April 13th. Galveston, TX
9. Brody S.,* **Mobley W.,** (2016) Bay Area Houston Economic Partnership Ike Dike Presentation. April 6th. Clear Lake, TX
10. Walters, H.,* **Mobley W.,** (2016) Plenary Session: State of the Bay: The Future of Preservation of Galveston Bay and an Introduction to the Texas Coastal Atlas for Galveston Bay, State of the Bay Symposium. January 14, 2016. Galveston, TX.
11. **Mobley, W.,*** (2015) Effects of development on wildfire risk, 6th International AFE Fire Congress. November 18th, San Antonio, TX.
12. **Mobley, W.,** Walters, H. (2015) Special Program: Update on Coastal Hazard Mitigation Strategies. Living on the Edge Conference, October 22nd. Galveston, TX.
13. Brody S.,* **Mobley W.,** (2014) Influence of Development Patterns on Flood Damages. Resiliency Forum. December 12th. Nassau Bay, TX.

Expert Panels & Workshops

1. Coastal Atlas Workshop. April 15th & 22nd 2016. Galveston TX.
2. Framework for Flood Risk Reduction in the Galveston Bay Area. Delft University of Technology & Texas A&M University at Galveston. December 14-16, 2014. Galveston, TX.

PROJECTS

1. *Contributing Author & Researcher.* Texas General Land Office. \$2,000,000. PI: S.D. Brody, co-PIs: W.E. Highfield, A. Sebastian. Contract No. 19-181-000-B574. Measuring, Mapping, and Managing Flood Risk in Texas (2019-2022).
2. *Researcher.* Texas General Land Office. \$1,594,189. PI: W.E. Highfield, co-PIs: D. Retchless, M. Davlasheridze, S.D. Brody, A. Ross. Evaluating the Effects of a Coastal Spine: National-Level Economic Ripples and Effects on Flood Insurance (2018).
3. *Contributing Author & Researcher.* National Science Foundation. \$3.6 million. PI: S.D. Brody. NSF PIRE Coastal Flood Risk Reduction Program (2015-2020).

PROFESSIONAL DEVELOPMENT WORKSHOPS ATTENDED

Summer School on Sustainable Climate Risk Management (<i>Externally Funded</i>)	2019
Center for the Integration of Research, Teaching and Learning Associate – Fellow	2019
Visiting Scholar <i>Delft University of Technology, Delft Netherlands</i>	2017

TEACHING EXPERIENCE

Guest Lecturer & Teaching Assistant
PLAN 641 Environmental Planning

Professional Service

Manuscript Reviewer

Local Government Studies

Membership

Association of Collegiate Schools of Planning

American Geophysical Union

HONORS & AWARDS

- National Texas A&M Boost Fellow 2017
- APA-Wisconsin 2014 Student Project Award 2014
"No Vacancy in Spirit - Addressing Residential Lots, Commercial Corridors, and Neighborhood Identity in the Lindsay Heights area of Milwaukee, Wisconsin"