

William Mobley

📍 Center for Texas Beaches and Shores · Texas A&M University at Galveston
2121 W Holcombe Blvd · Houston, Texas · 77030

✉ wmobley@tamu.edu ☎ (850) 774-5498

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

- Associate Research Scientist**
Texas A&M *Jan. 2020 - Present*
- Postdoctoral Researcher**
Texas A&M *Feb. 2018-Dec. 2019*
- Research Assistant**
Texas A&M *2013 - 2017*

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.** Atoba, K. Highfield, W. (2020) Uncertainty in Flood Mitigation Practices: Assessing the Economic Benefits of Property Buyouts and Freeboard Elevation in Flood Prone Communities **Sustainability**, 12(5), 2098; <https://doi.org/10.3390/su12052098>
2. **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
3. **Mobley, W.** (2019). Effects of changing development patterns and ignition locations within Central Texas. **PloS one**, 14(2), p.e0211454.2019
4. 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**
5. 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. Retchless, D. **Mobley, W.**, Davlasheridze, M., Atoba, K. Highfield, W. Mapping Cross-Scale Economic Impacts of Storm Surge Events: Considerations for Design and User Testing. (*Under Review*).
2. **Mobley, W.**, Sebastian, A., Blessing, R., Highfield, W. E., Stearns, L., and Brody, S. D. (in review, 2020) Quantification of Continuous Flood Hazard using Random Forrest Classification and Flood Insurance Claims at Large Spatial Scales: A Pilot Study in Southeast Texas, Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2020-347>.

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. Brody, S., Atoba, K., Highfield, W., Sebastian, A., Blessing, R., **Mobley, W.**, Stearns, L. (2020 in print). "A Comprehensive Framework for Coastal Flood Risk Reduction: Charting a Course Towards Resiliency." In Kousky, C., Fleming, B., and Berger, A (Eds.) A Blueprint for Coastal Adaptation. **Island Press**
2. **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. *Contributing Author & 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
 PLAN 642 Coastal Resiliency & Sustainability
 Mars 625 & 325 Introductory GIS

Professional Service

Manuscript Reviewer

Local Government Studies
Journal of Hydrology
Sustainability
Natural Hazards and Earth Systems Sciences

Membership

Association of Collegiate Schools of Planning
American Geophysical Union

HONORS & AWARDS

- Journal for the JFRM Outstanding Paper Award 2020
Evaluation of flood risk reduction strategies through combinations of interventions.
- 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"