



COLLEEN MCHUGH

Senior Planner

Colleen McHugh is an urban planner with fifteen years of experience supporting climate and resilience planning and implementation at the local, state, and federal level.

Colleen leads much of The Water Institute’s resilience planning practice, including managing the development of comprehensive city resilience strategies for Houston, Jacksonville, and Mobile. Colleen has helped to lead several other long-range water resources, climate mitigation, and adaptation plans for the Institute, including the Louisiana Climate Action Plan and civil works and R&D strategic plans for the U.S. Army Corps of Engineers.

Colleen has extensive experience advising public sector partners, translating science to support decision making, managing ambitious and inclusive planning processes, facilitating interdisciplinary workshops, designing projects and policies, providing technical and programmatic support through implementation, and communicating complex issues through clear visuals and language.

Prior to joining the Institute, Colleen spent five years working in the public sector in New Orleans, advancing resilience and sustainability projects and programs that have become national best practices. She was instrumental in the development of the city’s award-winning resilience strategy and first climate action plan, the design and implementation of FEMA- and HUD-funded neighborhood-scale green infrastructure projects, and the customization of climate adaptation decision support tools. She focused on long-term visioning, strategy, and integrated planning, and successfully translated those efforts into proven implementation and cross-departmental collaboration.

Colleen also teaches Urbanism & Urban Design at the University of New Orleans.

ORGANIZATION ROLE

Senior Planner

PROJECT ROLE / FOCUS AREAS

- Urban resilience
- Climate adaptation
- Climate mitigation
- Nature-based solutions
- Policy & program development
- Urban design
- Structured decision making

EDUCATION

Master’s in City Planning, Certificate in Urban Design, Massachusetts Institute of Technology, 2013

BA, Global Studies, University of California, 2009

DISTINCTIONS

Excellence in Public Service Award, MIT Department of Urban Studies and Planning, 2016

PROFESSIONAL EXPERIENCE

2018–Present: Senior Planner, The Water Institute; New Orleans, LA

2023–2024: Adjunct Instructor, University of New Orleans, Department of Planning and Urban Studies

2016–2018: Resilience Design Manager, City of New Orleans

2013–2016: Resilience Planner, New Orleans Redevelopment Authority

2011–2013: Research Assistant, Massachusetts Institute of Technology

2009–2011: Editorial Assistant, San Francisco Planning & Urban Research (SPUR)



SELECTED PROJECTS

Resilient Jacksonville. *City of Jacksonville (2022–2023)* Project Lead. Developed a roadmap for adapting to a changing climate, accommodating a growing population, guiding new urban development, and planning for uncertain shocks and stressors. The plan leverages local expertise with science-based assessments to identify specific, implementable actions and prioritize investments that will strengthen the city's resilience.

Virginia Flood Protection Master Plan *Virginia Department of Conservation & Recreation (Ongoing)*. Planner. Co-leading the development of a decision framework and supporting policy and program development on an interdisciplinary team tasked with drafting the 2025 Virginia Flood Protection Master Plan in partnership with the state.

Resilient Mobile. *City of Mobile. (Ongoing)*. Project Lead. Developing a citywide Resilience Assessment and Plan in collaboration with local stakeholders to set a baseline understanding of the city's resilience and develop an actionable plan to ensure that all members of the community are poised to thrive in the face of increasing challenges and changes in the environment, climate, and economy.

Louisiana Climate Action Plan. *Louisiana Governor's Office of Coastal Activities. (2021–2022)*. Lead Planner & Project Manager. Advised the Governor's Office throughout a one-year planning process to support the Climate Initiatives Task Force in developing a roadmap and specific actions to meet the state's ambitious goal of net zero greenhouse gas emissions by 2050. This effort engaged multidisciplinary experts across the Task Force, four Advisory Groups, and six Sector Committees, as well as the public, throughout a transparent and collaborative planning process grounded in a Structure Decision Making framework.

Evaluating and Communicating Stormwater Risk in New Orleans. *(2021–2023)*. Planner. Supported from a planning and policy application lens a Robust Decision Making modeling study that examined stormwater flooding in New Orleans to help decision makers and residents understand how to better manage stormwater under stressors such as climate

change and inconsistent maintenance of outdated infrastructure.

Resilient Houston. *City of Houston. (2018–2020)*. Project Manager. Managed a multidisciplinary team of experts and directly advised the Chief Resilience Officer throughout an 18-month planning process to develop a comprehensive resilience strategy that includes actions to build resilience at the individual, neighborhood, bayou, citywide, and regional scales.

Civil Works Strategic Plan. *U.S. Army Corps of Engineers, Southwestern Division. (2019–2020)*. Lead Planner. The Institute developed a fifteen-year strategic plan for the USACE Southwestern Division's Civil Works program, guiding a safe, sustainable, and resilient water future in the face of evolving risks for communities in Texas, Arkansas, and Oklahoma.

Research & Development Strategy. *U.S. Army Corps of Engineers. (2021)*. Planner. The Institute supported USACE in developing an R&D Strategy designed to catapult USACE into a new bold era of innovative solutions to the nation's toughest challenges. This first-of-its-kind product was developed in close coordination with the Director and Deputy Director of R&D and other key USACE personnel, with direct input from the Chief of Engineers.

SELECTED PUBLICATIONS

1. Kiskaddon, E., Dalyander, P. S., DeJong, A., McHugh, C., Parfait, J., Littman, A., Hemmerling, S. A., & Dausman, A. (2023). Evaluation of emission reduction and other societal and environmental outcomes: Structured decision making for the Louisiana climate action plan. *Journal of Environmental Management*, 345(118936).
2. Fischbach, J. R., Dalyander, S., McHugh, C., DeJong, A., Littman, A., Haertling, A., & Bond, C. A. (2023). *Enhancing benefits evaluation for water resources projects: Towards a more comprehensive approach for nature-based solutions* (Enhancing Benefits Evaluation for Water Resources Projects: Towards a More Comprehensive Approach for Nature-Based Solutions, p. 241) [Case study analysis results and recommendations]. The Water Institute of the Gulf. Produced for and funded by the U.S. Army Corps of Engineers' Engineering with Nature Program.