COMPANY ROLE
Director of Planning and Policy Research

PROJECT ROLE / FOCUS AREAS
Climate Adaptation

Disaster Recovery

Disaster Mitigation

EDUCATION

PhD Policy Analysis, Pardee Rand Graduate School, 2010

M. Phil Policy Analysis, Pardee RAND Graduate School 2006

BA History, Columbia University, 2001

PROFESSIONAL MEMBERSHIP

Water Science and Technology Board, National Academies of Science, Engineering, and Medicine

American Society of Adaptation Professionals

American Geophysical Union

Society for Decision Making Under Deep Uncertainty

JORDAN R. FISCHBACH, PH.D.
Director of Planning and Policy Research

Jordan R. Fischbach, Ph.D., is the Director of Planning and Policy Research at The Water Institute of the Gulf.

Before joining the Water Institute, Dr. Fischbach was codirector of the RAND Climate Resilience Center, a senior policy researcher at the RAND Corporation, and an affiliate faculty member at the Pardee RAND Graduate School. Since 2010, Fischbach has led a range of policy research efforts focused on climate adaptation, urban resilience, water resources management, coastal planning, and post-disaster recovery.

For more than 10 years, Fischbach has been the principal investigator for the Coastal Louisiana Risk Assessment (CLARA) modeling effort, which provides next-level modeling capabilities for Louisiana Coastal Protection and Restoration Authority to estimate flood risk under a wide range of future environmental, operational, and growth uncertainties, and with various proposed projects in place. Fischbach has also led recent Institute work evaluating the economic, environmental, and social benefits of Nature Based Solutions and investigating present and future flood risk from heavy rainfall in New Orleans.

Fischbach's other work includes serving as a co-investigator for the NOAA Mid-Atlantic Regional Integrated Sciences and Assessments (MARISA) program, which has the goal to support the effective utilization of climate science and the building of adaptive capacity and resilience to climate variability and change in the Mid-Atlantic region. Fischbach was previously principal investigator on a project to evaluate the benefits and costs of a range of green stormwater infrastructure proposals for Pittsburgh's Negley Run watershed.

PROFESSIONAL EXPERIENCE

2021-Present: Director of Planning and Policy Research, The Water Institute

2010-2021: Associate/Full/Senior Policy Researcher, RAND Corporation

2014-2021: Climate Resilience Center Co-director, RAND Corporation

2011-2021: Professor of Policy Analysis, Pardee RAND Graduate School

2018-2020: Quality Assurance Manager, Homeland Security Operational Analysis Center

2004-2010: Assistant Policy Analyst, RAND Corporation

2001-2004: Analyst. The Cadmus Group, Inc.

SELECTED PROJECTS

Policy Research to Improve the Evaluation of Nature Based Solutions in U.S. Army Corps of Engineers Programs. *(2021-Present). Principal Investigator.* Led a policy research effort to review existing evaluation methods for feasibility studies and recommend an approach to better consider the economic, environmental, and social benefits of nature-based solutions.

Developing and Applying an Improved Version of the Coastal Louisiana Risk Assessment (CLARA) Model to Support the 2023 Coastal Master Plan. *(2010-Present). Principal Investigator.* Risk assessment team lead to further update and apply the CLARA model to provide next-level modeling capabilities and support the development of Louisiana's 2023 Coastal Master Plan.

Mid-Atlantic Regional Integrated Sciences and Assessments (MARISA) Center. *(2016-Present). Co-Investigator.* Co-Investigator for the NOAA-supported MARISA program, partnering with Pennsylvania State University, Johns Hopkins, Cornell, Carnegie Mellon, VIMS, and Morgan State; MARISA's goal is to support the effective utilization of climate science and the building of adaptive capacity and resilience to climate variability and change in the Mid-Atlantic region.

Valuing the Resilience Benefits of Green Infrastructure: An Urban Systems Analysis for Key Watersheds in Pittsburgh. *(2018-2020). Principal Investigator.* Led a detailed evaluation of the economic, social, and ecosystem benefits and costs of a range of green stormwater infrastructure proposals for Pittsburgh's Negley Run watershed; project applies simulation modeling and Robust Decision Making to evaluate proposals across a range of uncertain climate futures; funded by the Henry L. Hillman Foundation and Heinz Endowments.

Puerto Rico Economic and Disaster Long Term Recovery Plan: Damage and Needs Assessment. *(2018-2019). Research Team Lead.* Damage and Needs Assessment Team Lead for Homeland Security Operational Analysis Center (HSOAC) project to provide analytic and technical support for Puerto Rico's long term economic and hurricane recovery plan,

sponsored by FEMA; effort includes integrating information and analysis on damage and needs assessment and possible solutions from the various partners and stakeholders, (2) providing in-depth analytical support to facilitate objective decision-making about the recovery, and (3) helping to author the plan and supporting technical appendices.

Integrated Analysis and Planning to Reduce Coastal Risk, Improve Water Quality, and Restore Ecosystems in Jamaica Bay, New York. *(2014-2018). Co-Principal Investigator.* Co-led a multiyear effort to work with local, state, and federal agencies with responsibilities in Jamaica Bay, located in South Brooklyn and Queens in New York City, as well as the Science and Resilience Institute at Jamaica Bay, to develop an integrated modeling and scenario analysis and evaluate baywide alternatives that address coastal resilience, ecosystem health and habitat function, and water quality goals.

SELECTED PUBLICATIONS

1. **Fischbach, J.R.**, M.T. Wilson, C.A. Bond, A.K. Kochhar, D. Catt, and D. Tierney, Managing Heavy Rainfall with Green Infrastructure: An Evaluation in Pittsburgh's Negley Run Watershed, Santa Monica, CA: RAND Corporation, RR-A564-1, 2020.
2. **Fischbach, J.R.**, D.R. Johnson, and D.G. Groves, "Flood damage reduction benefits and costs in Louisiana's 2017 Coastal Master Plan," Environmental Research Communications, Vol. 1, No. 11 October 2019
3. Groves, D.G., E. Molina-Perez, E. Bloom, and **J.R. Fischbach**, "Robust Decision Making (RDM): Application to Water Planning and Climate Policy," in Decision Making under Deep Uncertainty, Springer, Cham, 2019, pp. 135-163.
4. National Academies of Sciences, Engineering, and Medicine, Understanding the Long-Term Evolution of the Coupled Natural-Human Coastal System: The Future of the U.S. Gulf Coast, Washington, DC: The National Academies Press, 2018, https://doi.org/10.17226/25108.
5. **Fischbach, J.R.**, D. Knopman, H. Smith, P. Orton, E.W. Sanderson, K. Fisher, N. Moray, A. Friedberg, and A. Parris, Building Resilience in an Urban Coastal Environment: Integrated, Science-Based Planning in Jamaica Bay, New York, Santa Monica, CA: RAND Corporation, RR-2193-RF, 2018.