



## JESSICA HENKEL, MS, PH.D.

*Director of Research Operations/Director of RESTORE Act Center of Excellence for Louisiana*

Dr. Jessica Renee Henkel, Director of Research Operations and Director of the RESTORE Act Center of Excellence for Louisiana (LA-COE), brings more than 15 years of research, collaborative science and planning to her role coordinating technical teams at The Water Institute.

### ORGANIZATION ROLE

Director of Research Operations / Director of RESTORE Act Center of Excellence for Louisiana

### PROJECT ROLE / FOCUS AREAS

Structured decision making

Large-scale restoration and resilience planning

Avian ecology

### EDUCATION

Ph.D., Ecology and Evolutionary Biology, Tulane, 2015

MS, Biological Sciences, Conservation Biology, University of New Orleans, 2009

BA, English, Stony Brook University, 2004

### PROFESSIONAL MEMBERSHIP

American Association for the Advancement of Science

USFWS – Decision Analysis Certification Program

Jessica received her master's degree in biology from the University of New Orleans and her Ph.D. in ecology and evolutionary biology from Tulane University. Her research focused on the population genetics of the Mississippi Sandhill crane and the migration ecology of shorebirds along the northern Gulf of Mexico. In 2015, she joined the Gulf Coast Ecosystem Restoration Council (RESTORE Council), an independent federal agency established following the Deepwater Horizon oil spill, as part of a fellowship through the National Academies of Sciences. In 2016 Jessica joined the RESTORE Council staff where she served as the science advisor and coordinator and led the development of guidance on how over \$500 million in restoration activities should be monitored and adaptively managed, led the design and building of database software to support the RESTORE Council in tracking and assessing its work, and advised on how that information could be synthesized and used to inform science-based restoration planning at watershed and regional scales.

At The Water Institute Jessica oversees Research Operations, the implementation of the \$4M LA-COE granting program, and The Water Institute avian monitoring program. She also specializes in structured decision making (SDM) and is a member of the USFWS National Conservation Training Center Decision-Analysis certification program.

### PROFESSIONAL EXPERIENCE

2024–Present: Director of Research Operations at The Water Institute

2023–Present: Director of the RESTORE Act Center of Excellence for Louisiana

2022–2024: Deputy Director to the Chief Scientist at The Water Institute

2017–2022: Science Advisor and Coordinator, Gulf Coast Ecosystem Restoration Council

2016–2017: Ecosystem Science Specialist, Gulf Coast Ecosystem Restoration Council

2015–2016: Science Policy Fellow, National Academies of Sciences, Engineering and Medicine (NASEM), Washington, DC, and New Orleans, LA

2012–2015: EPA Star Research Fellow, Tulane University, Ecology & Evolutionary Biology Dept, New Orleans, LA

2001–2004: Production Controller, Cambridge University Press, New York, NY



## SELECTED PROJECTS

**Louisiana RESTORE Act Center of Excellence.** *Coastal Protection and Restoration Authority (2022–Present).* Director. The mission of the RESTORE Act Center of Excellence for Louisiana (LA-COE) is to provide research directly relevant to implementation of Louisiana’s Coastal Master Plan by administering a competitive grants program and providing the appropriate coordination and oversight support to ensure that success metrics are tracked and achieved. Currently in its third funding cycle, the LA-COE oversees nearly \$4M in research funding.

**Gulf of Mexico Colonial Waterbird Monitoring.** *Louisiana Department of Wildlife and Fisheries and Louisiana Trustee Implementation Group (Ongoing).* Principal Investigator. The collection and analysis of aerial photographic surveys have been used to monitor shrub- and select ground-nesting waterbird species across the northern Gulf of Mexico since 2010. This project entails the aggregation of >50,000 photos and associated databases through the development of a geospatially enabled online portal that enables users to explore total nests and birds observed over various geographical areas and time scales.

**Structured Decision Making to support Long-Term Strategic Planning.** *Capital Area Ground Water Conservation Commission (CAGWCC) (Ongoing).* SDM Technical Advisor. The Institute is working with CAGWCC and other stakeholders to identify and evaluate feasible and cost-effective, science-based alternatives to meet long-term water needs through evaluation of the current science available on groundwater use and to identify management alternatives. The aim is to develop a strategic plan for the long-term water supply for users in the district.

**Resilient Jacksonville.** *City of Jacksonville (2022–2023)* Project Manager and SDM Advisor. 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.

**Restoration Data Synthesis.** *Science for Nature and People Partnership (SNAPP) and National Center for Ecological Analysis and Synthesis (NCEAS) (2016–2020).* Technical Advisor. As part of the Coastal Restoration Working Group, worked to better define governmental agency needs for decision making, assessing past restoration projects, and developing tools that will help future decision making through comprehensive data assimilation and analysis.

## SELECTED PUBLICATIONS

1. Windhoffer, E.D., Carruthers, T.J.B., Henkel, J.R., Gleason, J.S., Wiebe, J.J. Leveraging co-production within ecosystem restoration to maximize benefits to coastal birds. (2024) *Journal of Environmental Management*, (360), 121093.
2. City of Jacksonville (2023). *Resilient Jacksonville*. Jacksonville, FL, 148.
3. Gulf Coast Ecosystem Restoration Council. 2022 Comprehensive Plan Update: Restoring the Gulf Coast’s Ecosystem and Economy.
4. Henkel, J.R., and A. Dausman. 2020. A Short History of Funding and Accomplishments Post-Deepwater Horizon. *Shore and Beach Journal*,
5. Beck, M.W., Sherwood, E.T., Henkel, J.R., Dorans, K., Ireland, K., Varela, P. 2019. Assessment of the cumulative effects of restoration activities on water quality in Tampa Bay, Florida. *Estuaries and Coasts*. 42(7).
6. Gittman, R., Baillie, C., Arkema, K., Bennett, R., Benoit, J., Blich, S., Brun, J., Chatwin, A., Golden, A., Dausman, A., DeAngelis, B., Herold, N., Henkel, J.R., Houge, R., Howard, R., Hughes, A.R., Scypher, S., Shostik, T., Sutton-Grier, A., Grabowski, J. 2019. Voluntary restoration: Mitigation’s silent partner in the quest to reverse coastal wetland loss in the USA. *Frontiers in Marine Science*. 6.
7. Henkel, J.R., Taylor, C.M. 2015. Migration strategy predicts stopover behavior in migrating shorebirds on the northern Gulf of Mexico. *Animal Migration*, 2, Issue 1, ISSN (Online) 2084–8838.
8. Henkel, J.R., Sigel, B., Taylor, C.M. 2012. Large-scale impacts of the Deepwater Horizon oil spill: Can local disturbance affect distant ecosystems through migratory shorebirds? *Bioscience*, 62: 676–685.
9. Henkel, J.R., Jones, K.L. Howard, J.J. Hereford, S.G., Savoie, M.L., Leibo, S.P. 2011. Integrating microsatellite and pedigree analyses to facilitate the captive management of the endangered Mississippi sandhill crane (*Grus canadensis pulla*). *Zoo Biology*. 30: 1–14.