



## JESSICA R. HENKEL, PH.D.

*Director of Coastal Ecology and RESTORE Act Center of Excellence for Louisiana*

Dr. Jessica Renee Henkel, Director of Coastal Ecology 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 Coastal Ecology / 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 Coastal Ecology, the implementation of the \$4M LA-COE research granting program, and The Water Institute’s 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

2025–Present: Director of Coastal Ecology at The Water Institute  
 2023–Present: Director of the RESTORE Act Center of Excellence for Louisiana  
 2024–2026: Director of Research Operations at The Water Institute  
 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

**Gulfwide Colonial Waterbird Monitoring.** *Deepwater Horizon Regionwide and Louisiana Trustee Implementation Groups (Ongoing). Principal Investigator.* In collaboration with state and federal partners, The Institute developed the “Guidance for Coastal Ecosystem Restoration and Monitoring to Create or Improve Bird-Nesting Habitat” which outlines habitat needs, engineering and design considerations, and data gaps for restoration of bird habitats. This program also developed [avianmonitoring.com](http://avianmonitoring.com), a geospatially enabled online portal that enables users to explore colonial waterbird survey data and imagery collected across the northern Gulf since 2010.

**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.

**Nature-Based Solutions for MacDill Air Force Base.** *U.S. Air Force (Ongoing). Co-Principal Investigator.* The Institute, MacDill AFB, and Coastal Engineering Consultants are developing Nature-Based Solutions (NBS) to protect MacDill’s shorelines from erosion and flooding. Guided by structured decision making and stakeholder input, the project is combining modeling, remote sensing, and avian and seagrass monitoring to design an integrated NBS. These efforts aim to protect infrastructure, enhance wildlife habitat, and strengthen regional resilience.

**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.

**RESTORE Council Comprehensive Plan.** *Gulf Coast Ecosystem Restoration Council (2016–2022). Science Advisor.* Technical coordination of the Council’s 2017 and 2021 Funding Priority Lists, resulting in the approval of over \$188 million for restoration activities. Facilitated the development of, and updates to, guidelines for restoration project metrics, monitoring data collection, and adaptive management plans for Council funded activities.

## SELECTED PUBLICATIONS

- Oster, J.M., Henkel, J.R., Dausman, A., Windhoffer, E.D., Liu, B., Baustian, M.M., Reed, D., Langlois, S., Lindquist, D.C. (2025) Advancing the implementation of coastal restoration in Louisiana through a co-production of science framework. *Estuaries and Coasts*, (48), 148. [10.1007/s12237-025-01584-3](https://doi.org/10.1007/s12237-025-01584-3)
- 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.
- Deepwater Horizon Louisiana Trustee Implementation Group. 2023. [\*Guidance for Coastal Ecosystem Restoration and Monitoring to Create or Improve Bird-Nesting Habitat\*](#), Baton Rouge, LA, 152pp.
- Dalyander, P.S., Tebyanian, N., Henkel, J. (2023). Resilient Jacksonville: Analysis of Spatial Planning Alternate Future Scenarios. The Water Institute. Baton Rouge, LA, 15 pp.
- Gulf Coast Ecosystem Restoration Council. 2022 Comprehensive Plan Update: Restoring the Gulf Coast’s Ecosystem and Economy.
- Henkel, J.R., and A. Dausman. 2020. A Short History of Funding and Accomplishments Post-Deepwater Horizon. *Shore and Beach Journal*.
- 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).
- 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.
- 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.