



JESSICA HENKEL PHD

Deputy Director to the Chief Scientist

Dr. Jessica Renee Henkel, Deputy Director to the Chief Scientist of The Water Institute and Director of RESTORE Act Center of Excellence for Louisiana, brings 15 years of research, collaborative science and planning to her role coordinating technical teams at The Water Institute.

Henkel received her master's degree in conservation biology from the University of New Orleans and her Ph.D. in ecology and evolutionary biology from Tulane University. Her research focused on the migration ecology of shorebirds along the northern Gulf of Mexico and the impacts of the Deepwater Horizon oil spill. In 2015, as part of a fellowship through the National Academies of Sciences, Engineering and Medicine she began work as a science policy fellow with the Gulf Coast Ecosystem Restoration Council (RESTORE Council), an independent federal agency established following the Deepwater Horizon oil spill. Most recently, Henkel was the science advisor and coordinator for the RESTORE Council where she led the development of guidance on how over \$500 million in restoration activities should be monitored and adaptively managed, designed and led the 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.

Henkel specializes in structured decision-making, and is a member of the USFWS National Conservation Training Center Decision-Analysis certification program. During her time with the RESTORE Council she used this training to connect and build consensus across the 11 federal and state agency representatives on the RESTORE Council.

COMPANY ROLE

Deputy Director to the Chief Scientist / 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

PhD Ecology and Evolutionary Biology, Tulane, 2015

MSc 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

PROFESSIONAL EXPERIENCE

2022-Present: Deputy Director to the Chief Scientist at The Water Institute, Director of the RESTORE Act Center of Excellence for Louisiana

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



SELECTED PROJECTS

Structured Decision-Making to support Long-Term Strategic Planning. *Capital Area Ground Water Conservation Commission (CAGWCC) (2022-Present).* *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.

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.

Gulf Coast Ecosystem Restoration Council. (2016-2022). *Science Advisor and Coordinator.* Led the Best Available Science Review Process and technical coordination of the Council's 2017 FPL and the 2020-21 FPL 3, resulting in the approval of over \$188 million in funding for restoration activities across the Gulf. Facilitated the development of, and updates to, guidelines for restoration project metrics, monitoring data collection and management for RESTORE Council funded activities. This included leading the coordination of the Council's Monitoring and Assessment Workgroup, a technical workgroup with representation from the Council's 11 member agencies.

Open Science for Synthesis (OSS). Finding the Means: Investment and Adaptation in Vulnerable Communities. *NASEM, Gulf Research Program and NCEAS (2017-2019).* *Principal Investigator.* As part of the OSS 2017: Gulf Research Program, applied scientific synthesis to work related to the Gulf of Mexico's human, environmental, and energy systems. This effort resulted in a synthesized analysis of the cumulative benefits of restoration activities on water quality in Tampa Bay, Florida.

SELECTED PUBLICATIONS AND REPORTS

1. Gulf Coast Ecosystem Restoration Council. 2022 Comprehensive Plan Update: Restoring the Gulf Coast's Ecosystem and Economy. <https://www.restorethegulf.gov/sites/default/files/2022-Comp-Plan-Update-Final1.pdf>
2. Gulf Coast Ecosystem Restoration Council. 2020, 2021. Funded Priorities Lists 3a & 3b. *FPL 3a:* <https://www.restorethegulf.gov/sites/default/files/Final-FPL%203a-Final-Perdido-EC-508-3-2-2020.pdf> *FPL 3b:* <https://www.restorethegulf.gov/sites/default/files/FPL3b%20Final%20Document.pdf>
3. Henkel, J.R., and A. Dausman. 2020. A Short History of Funding and Accomplishments Post-Deepwater Horizon. *Shore and Beach Journal*, <http://doi.org/10.34237/1008811>.
4. 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*. <http://doi.org/10.1007/s12237-019-00619-w>.
5. Gittman, R., Baillie, C., Arkema, K., Bennett, R., Benoit, J., Blicht, 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*. <https://doi.org/10.3389/fmars.2019.00511>.
6. 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, <http://doi.org/10.1515/ami-2015-0003>.
7. Henkel, J.R., Sigel, B.J., Taylor, C.M. 2014. Oiling rates and condition indices of shorebirds in the northern Gulf of Mexico following the Deepwater Horizon oil spill. *Journal of Field Ornithology*. 85: 408-420. <https://doi.org/10.1111/jfo.12080>
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. <https://doi.org/10.1525/bio.2012.62.7.10>.
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. <https://doi.org/10.1002/zoo.20399>.