



## JOSEPH HANKERSON, MS

### *Geoscientist*

Joseph Hankerson is a geoscientist focused on sediment inventory analysis and coastal geomorphology. Joseph joined The Water Institute as an intern on the Applied Geosciences team in May 2021, where he worked on examining core and seismic data in Barataria and Terrebonne bays, GOMA MMiS formatting, and working on a project in Onslow Bay in North Carolina and South Carolina.

Joseph's thesis work used CHIRP seismic and vibracoring to explore shallow stratigraphy, map geomorphologic change across northern Gulf of Mexico using historical and recently acquired imagery, and work on correlations of stratigraphic units to better understand the framework of Terrebonne Basin.

Joseph's research interests include the mapping of sand resources for coastal restoration and geomorphology. Originally from North Carolina, Joseph said he's excited to be a professional scientist and looks to be a role model and supporter for the next generation of minority geologists and scientists.

Joseph received his bachelor's degree in geosciences and master's degree in coastal geomorphology from the University of New Orleans.

#### **ORGANIZATION ROLE**

Geoscientist

#### **PROJECT ROLE / FOCUS AREAS**

Sediment inventory

Coastal  
geomorphology

Seismic data  
collection/analysis

Field work

#### **EDUCATION**

M.S. Coastal  
Geomorphology,  
University of New  
Orleans, 2022

B.S. Geosciences,  
University of New  
Orleans, 2018

#### **PROFESSIONAL EXPERIENCE**

2022–Present: Geoscientist, The Water Institute

2021–2022: Geoscientist Intern, The Water Institute

2018–2022: Graduate Teaching Assistant, University of New Orleans, Earth and Environmental Sciences Department

2018: College of Sciences Undergraduate Research Position, Coastal Research Laboratory, University of New Orleans

2016: Biodiversity Teaching Assistant, University of New Orleans.

2015–2016: Human Resource Management Student Worker, University of New Orleans.



## SELECTED PROJECTS

**Facies Analysis of Terrebonne Basin Using Vibracores and CHIRP Seismic Data.** *University of New Orleans. (2022).* Thesis Investigator. CHIRP seismic data and vibracores were collected in Terrebonne Basin. Data was collected in three study areas: Upper Madison Bay, Lower Madison Bay, and Lake Boudreaux. Results from core descriptions were used to create cross sections of the study areas according to described delta facies encountered.

**TO72.** *Coastal Protection and Restoration Authority. (2021–Present).* Geoscientist. Interpretation of historical CHIRP and vibracore data as well as new data collection for the identification and characterization of sand resources in coastal Louisiana (Barataria Bight, Barataria Basin, Terrebonne Basin). High detail core descriptions are used to aid in the interpretation of CHIRP data as well as plotting where sand resources are located within the region and what systems or processes connect them.

**MMiS.** *Bureau of Ocean Energy Management. (2021–2022).* Geologist. Reformatting historical core datasets into MMiS to update the database as well as making the datasets compatible with the NGSAAAP Tool set. When formatted, the toolset can be used on the datasets to select cores with an array of qualifiers (grain size, depth, proximity to project, etc.) and could create polygons from the cores that are representative of sand resource bodies.

## SELECTED PUBLICATIONS

1. Hankerson, Joseph M., "Facies Analysis of Terrebonne Basin Using Vibracores and CHIRP Seismic Data" (2022). University of New Orleans Theses and Dissertations. 3016. <https://scholarworks.uno.edu/td/3016>.