Maricel Beltrán-Burgos, MS
Geoscientist
The Water Institute
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EDUCATION

Tulane University	New Orleans, LA	Earth and Environmental Sciences	MS, 2021
University of Puerto Rico, Mayaguez	Mayaguez, PR	Geology	BS, 2016

RESEARCH INTERESTS

Coastal ecogeomorphology and geosciences, wildlife research, coastal wetlands, field and laboratory work

PROFESSIONAL EXPERIENCE

The Water Institute	Geoscientist - Research Associate II	2021–Present
Tulane University	Research/Teaching Assistant	2018–2021
The Water Institute	Summer Intern	2018
Smithsonian, Washington, D.C.	NHRE Intern	2014

AWARDS AND HONORS

- Outstanding Teaching Assistant, Department of Earth and Environmental Sciences, Tulane University, 2021
- Winner of the 3 min thesis Coastal Connections Competition, presented by Louisiana Sea Grant at UNO, 2019
- ExxonMobil Diversity Award, The University of Puerto Rico, 2015
- Fundación Toyota Scholarship, 2011–2016

COMMUNITY SERVICE

Seeds of Success: STEM Girl Ambassador Program, *mentor*	Ciencia PR	2020-2022
GeoLatinas at Tulane University, Co-Founder/President	GeoLatinas	2019-2020

NOTABLE PROJECTS

Research Associate/ Avian Monitoring Project   Current
The Water Institute
Work on georeferencing and dotting images of bird colonies using ArcGIS, for monitoring purposes.

Research Associate/CIROH-Plum Island Marsh DEM   Current
The Water Institute
Assist on compiling data, creating data inventory, digitizing point and geographic data on GIS.

Research Associate/Lake Borgne Gulf Sturgeon Monitoring and Habitat Characterization   2021-2024
The Water Institute
Develop a percent sand substrate map and grid for Lake Borgne and Lake Pontchartrain, using mapping software such as Surfer and ArcMap, based on LASARD geodatabase, core samples and surface sediment classification data.

Research Associate/APTIM GLO Sand Resources   2022, 2024
The Water Institute
Assist in geophysical survey as Protective Species Observer (PSO, marine mammals), seismic data analysis, data presentation.

Research Associate/Bay Denesse Living Lab   2022-2023
The Water Institute
Support field activities and instrument deployment for monitoring conditions at Bay Denesse. The Bay Denesse Living Lab is a Landscape-Scale project that facilitates co-production in restoration practice. It consists of physical infrastructure to support monitoring, logistical support for participants, and a community of practice supporting workshops and field trips.

Research Associate/Barrier Island Synthesis and Report Preparation   2021
Caminada Headlands
Work on the analysis, synthesis and report of habitat and vegetation data provided by BICM and CPRA of Caminada Headland and Shell Island.

PUBLISHED WORKS

Peer-Reviewed Publications

Beltran-Burgos, M., Esposito, C. R., Nepf, H. M., Baustian, M., & Di Leonardo, D. (2023). Vegetation-driven seasonal sediment dynamics in a freshwater marsh of the Mississippi River Delta. *Journal of Geophysical Research: Biogeosciences*, *128*(4).

Xu, Y., Esposito, C., Beltran-Burgos, M., & Nepf, H. (2022). Competing effects of vegetation density on sedimentation in deltaic marshes. *Nature Communications*, *13*(1).

Beltran Burgos, M. (2021). *Effects of vegetation seasonality on sediment dynamics in a freshwater marsh of the Mississippi River Delta* [Master of Science, Tulane University].

Technical Reports

Dalyander, P. S., Miner, M. D., Richards, A., Grace, A., Green, M., Curole, J., Lezina, B., Beltran-Burgos, M., & Howes, N. (2022). *Lowermost Mississippi River Management Program: Strategies and scenarios workplan* (p. 34 + app). The Water Institute. Partnership for Our Working Coast: A Community-Informed Transdisciplinary Approach to Maximizing Benefits of Dredged Sediment for Wetland Restoration Planning at Port Fourchon, Louisiana. Prepared for and funded by The National Fish and Wildlife Foundation, Shell, Chevron, Danos, and the Greater Lafourche Port Commission.

Conference Proceedings and Presentations

Hankerson, J., Hollis, R., Khalil, S., Coleman, W., Beltrán-Burgos, M., Swartz, J., Cameron, B., Mallindine, J., & Miner, M. (2024). Uncovering a preserved coastline in southern Louisiana: Implications for sand resources and deltaic evolution. *2024 Ocean Sciences Meeting*. American Geophysical Union.

Hollis, R., Swartz, J., Khalil, S., Hankerson, J., Coleman, W., Beltrán-Burgos, M., Cameron, B., Mallindine, J., & Miner, M. (2024). Preserved deltaic sand bodies offshore Louisiana as sediment resources. *2024 Ocean Sciences Meeting*. American Geophysical Union.

Beltrán-Burgos, M., 2023, Conversatorio: Impacto del quehacer científico en las comunidades, Conversatorio Ciencia, CSIL, San Juan, P.R.

Beltrán-Burgos, M., 2022, ¿Y si lo perdemos? CSIL, San Juan, P.R.

Beltrán-Burgos, M., Esposito, C., Baustian, M., Di Leonardo, D., & Nepf, H. (2020). *Effects of vegetation seasonality on marsh sediment dynamics* [Oral]. American Geophysical Union.

Beltrán-Brugos, M., Esposito, C., & Baustian, M. (2019). *Effects of vegetation on sediment dynamics* [Poster]. CERF, Mobile, AL.

Beltrán-Burgos, M., & Carrano, H. (2015). *Cretaceous theropod teeth from western North America*. UPRM Undergraduate Symposium, Mayaguez, PR.