



MARICEL BELTRÁN-BURGOS, MS

Geoscientist / Research Associate

Maricel Beltrán-Burgos, geoscientist at The Water Institute, is a driven scientist with a master's degree in Earth and Environmental Sciences. Her research focuses on coastal geomorphology and sediment resources. Maricel has experience in field, laboratory, and data analysis. She is skilled in digital design, imagery, ArcGIS, and is fluent in Spanish and English.

ORGANIZATION ROLE

Geoscientist /
Research Associate

PROJECT ROLE / FOCUS AREAS

Sediment transport
within vegetation

Deltaic wetlands

Coastal geology and
geomorphology

Sediment resources

EDUCATION

MS, Earth and
Environmental
Sciences, Tulane
University, 2021

BS, Geology,
University of Puerto
Rico, Mayagüez, 2016

PROFESSIONAL EXPERIENCE

2021–Present: Geoscientist, The Water Institute

2018–2021: Research/Teaching Assistant, Tulane University

2018: Summer Intern, The Water Institute

2014: NHRE Intern, Smithsonian, Washington D.C.



SELECTED PROJECTS

CIROH-PLUM ISLAND Marsh DEM. Research Associate. (Ongoing). Assist on compiling data, creating data inventory, digitizing point, and geographic data on GIS.

Lowermost Mississippi River Management. TO69, TO105. (Ongoing). Research associate, Project Coordinator.

Bay Denesse Living Lab. (Ongoing) Research associate. 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.

Lake Borgne Gulf Sturgeon Monitoring and Habitat Characterization. (Ongoing) Research associate. 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.

SELECTED PUBLICATIONS AND PRESENTATIONS

1. Beltrán-Burgos, M., Esposito, C.R., Nef, H.M., and Di Leonardo, D.R. 2023. Vegetation-driven seasonal sediment dynamics in a freshwater marsh of the Mississippi River Delta. *Journal of Geophysical Research: Biogeosciences*.
2. Beltrán Burgos, M., 2023, Conversatorio: Impacto del queacer científico en las comunidades, Conversatorio Ciencia, CSIL, San Juan, P.R.
3. Beltrán Burgos, M., 2022, ¿Y si lo perdemos? CSIL, San Juan, P.R., Invited Speaker.
4. Beltrán-Burgos, M., Esposito, C.R., Baustian, M., Di Leonardo D., and Nef, H., 2020, Effects of Vegetation Seasonality on Marsh Sediment Dynamics, AGU. Oral Presentation
5. Beltrán-Burgos, M., Esposito, C.R., and Baustian, M., 2019, Effects of vegetation on Sediment Dynamics, CERF, Mobile. Poster Presentation

6. Beltrán-Burgos, M., 2016, Geology and Paleontology in Puerto Rico, CSIL, San Juan, P.R., Invited Talk
7. Beltrán-Burgos, M., Santos, H., and Ramírez, W., 2015, Using Textural Analysis, Sequence Stratigraphy and Facies Analysis to determine Kuphus sp. Paleoenvironment, Undergraduate Research
8. Beltrán-Burgos, M. and Santos, H., 2015, Identification of the Maximum Flooding Surface (MFS) in the PR #111 outcrop, between Km 27.1 to 27.5, Undergraduate Research
9. Beltrán-Burgos, M. and Carrano, M., 2014, Cretaceous Theropod Teeth from Western North America, UPRM Undergraduate Symposium, Mayagüez, P.R. Poster Presentation
10. Beltrán-Burgos, M., Beltrán Burgos, A, and Abad, C.I., 2009, La Torrecilla Secondary Forest Interdisciplinary Research Project, LSLTER Symposium, UPR,RP, San Juan, P.R. Talk