

THE MOTHER MAP: RÍO GRANDE DE MANATÍ WATERSHED AND THE HUMAN IMPACT ON NATURAL RESOURCES

Jobel Y Villafane-Pagan

University of Puerto Rico, Mayaguez

The "Mapa Madre" (Mother Map) is an environmental initiative and community project that promotes the importance and protection of rivers and forests across the Río Grande de Manatí drainage basin in Puerto Rico. The project was developed in the Toro Negro community (Ciales, Puerto Rico) through an interagency initiative called "Management Plan for Human Impact Areas of the Toro Negro River" (2015 - 2019). The Mapa Madre is currently composed of five different community organizations across the north-central mountainous region of Puerto Rico: Acción Comunitaria Cialitos Inc., Bosque Cibales, Amigos del Bosque Toro Negro Inc., Comunidad Toro Negro Inc., and Para la Naturaleza. The project's primary goals have been to conserve, recover, and protect rivers and forests across the Río Grande de Manatí drainage basin by promoting educational activities and communicating about disseminating relevant local laws and regulations. Community engagement has been successful due to recruitment and collaboration with groups/individuals with hands-on activities: geology field trips, cleaning rivers and forests, reforestation, and monitoring water quality across the drainage basin. Science communication and education have been vital to the Mapa Madre environmental community project, helping the community develop a common goal: conserving, restoring, and protecting the island's natural resources from human impact.

PRESENTER BIO: Jobel Y. Villafane-Pagan is a senior undergraduate geology student from the University of Puerto Rico - Mayaguez. He has dedicated undergraduate research on groundwater elevation changes during the 2020 southwestern Puerto Rico seismic sequence and sedimentology and stratigraphy of Enriquillo Lake sediments for developing a framework for paleoclimatic studies.