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Sustainability Seminar Series, 2024

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## Tropical Hydrology and Critical Infrastructure in the Caribbean: The Impact of the PRWRERI

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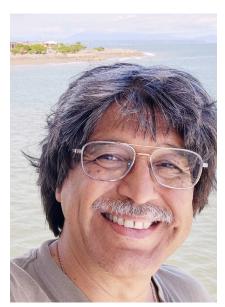


The Doctoral Program in Environmental Science & Management and MSU Sustainability Seminar Series Present:

## Tropical Hydrology and Critical Infrastructure in the Caribbean: The Impact of the PRWRERI

WHEN: October 21, 3:45 pm WHERE: CELS 120 Dr. Walter F. Silva

## Department of Civil Engineering and Surveying



Walter has over 30 years of experience teaching and researching in hydraulic and hydrological engineering. He held administrative positions: Director of the Research and Development Center of the University of Puerto Rico in Mayaguez, Director of the Department of Engineering Science and Materials, and Associate Director of the Center for Hemispheric Cooperation. Presently he is the director of the Puerto Rico Water Resources and Environmental Research Institute (PRWRERI) and professor at the Department of Civil Engineering and Surveying.

Dr. Silva's research areas include pipe systems and river modeling, stormwater systems, erosion studies, and sediment transport. Presently he has a joint project with Dr. Yang Deng from Montclair University to assess resiliency in water infrastructure in Puerto Rico.

The Caribbean region is prone to natural hazards including hurricanes, floods, landslides and droughts. These natural phenomena carries impacts in the society, the infrastructure and the economy of this region. Puerto Rico was impacted by two major destructive hurricanes in 2017 (Hurricane Maria) and in 2022 (Hurricane Fiona). The consequences are still seen, and recovery is undergoing Rural communities struggle to maintain essential services operating 24/7; however, there is much to be done to have robust and resilient communities in Puerto Rico. Efforts to increase resilience and reduce risk are performed by several groups, including a collaborative project between Montclair State University and the University of Puerto Rico.