

**Gurabo, Puerto Rico Urban Site**  
**18.25597N 65.97388W**

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**History:** The area was an important settlement for the Pre-Colombian Taino people, who farmed much of the area. The first Spanish farms were established in 1627 and the city was founded in 1815. It is located on an alluvial valley between the Luquillo and Central mountains of Puerto Rico. It has seen rapid growth in the last 20 years as urban sprawl from the San Juan and Caguas metropolitan area has increased.

**Key Contribution to Domain and Continental issues:** The site is proposed for study of the effects of hurricane passage, global climate change, and pathogen outbreaks on urbanized land covers. Gurabo is a smaller city with room to grow and a land use plan to organize that growth. Gurabo is part of a moist zone land use gradient proposed for the domain and contrasts with Ponce, a city in the dry forest life zone (PON-PR-NEO). Mobile unit campaigns across various types of urban development can monitor the interaction of climate change and land use. Moreover, given the location of Gurabo, this site allows the study of the effects of rapid urbanization on water supplies and water quality of over 25 percent of the Island's population.

**Key Characteristics:** Population is over 30,000 people and density of Gurabo County is over 500 per km<sup>2</sup>. The city lies in the moist forest life zone. Average annual temperature is 24.8°C and rainfall is 158 cm/yr. Land area of Gurabo county is 73 km<sup>2</sup>. Elevation ranges from 45-100 masl. The city lies upstream of the Carraizo Reservoir (CZO-PRNEO) in the valley of the Gurabo River. This river connects to the Loíza River before forming the Carraizo Reservoir, which is the water supply for most of the San Juan metropolitan area.. At this time, prior to the expected urbanization increase, the Gurabo River contains higher quality water than the Loíza River.

**Existing Infrastructure:** Gurabo is located near two major highways in the NE section of PR. The University of Turabo will host relocatable tower systems. The island government is currently developing a land use plan, which calls for more industrial development in Gurabo.

**Facilities:** The university has a record of performing ecological research and has labs, Internet, etc. Hotels are present in the area and the university has dorms.

