

## **ENVIRONMENTAL MANAGEMENT INFORMATION SYSTEM GIS\_BASED AT UNIVERSIDAD DE PUERTO RICO RIO PIEDRAS**

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In last decades, human activities had affected the environment in different aspects and the consequences of these activities are related to a significant transformation of our natural reserves, ecosystems, climate and social structures around the globe. Since 1980, referred as the industrial era, fossil fuel and solid waste had become the main environmental problems and climate change (IPCC, 2007). They are also identified as the main source of pollution. A combination of unsustainable development and hazardous substances are built with serious implications to human health and the environment in a complex urban area like Rio Piedras.

The University of Puerto Rico has the challenge to transform this unsustainable development with the incorporation of an environmental management system based on sustainable strategies and actions plans. One of this sustainable strategies is the design of an Environmental Management System (EMS), combined with a Geographical Information System (GIS), in order to explore all base data and mapping concerning hazardous substances and waste programs conforming the: University of Puerto Rico Environmental Management Information System (UPREMIS).