

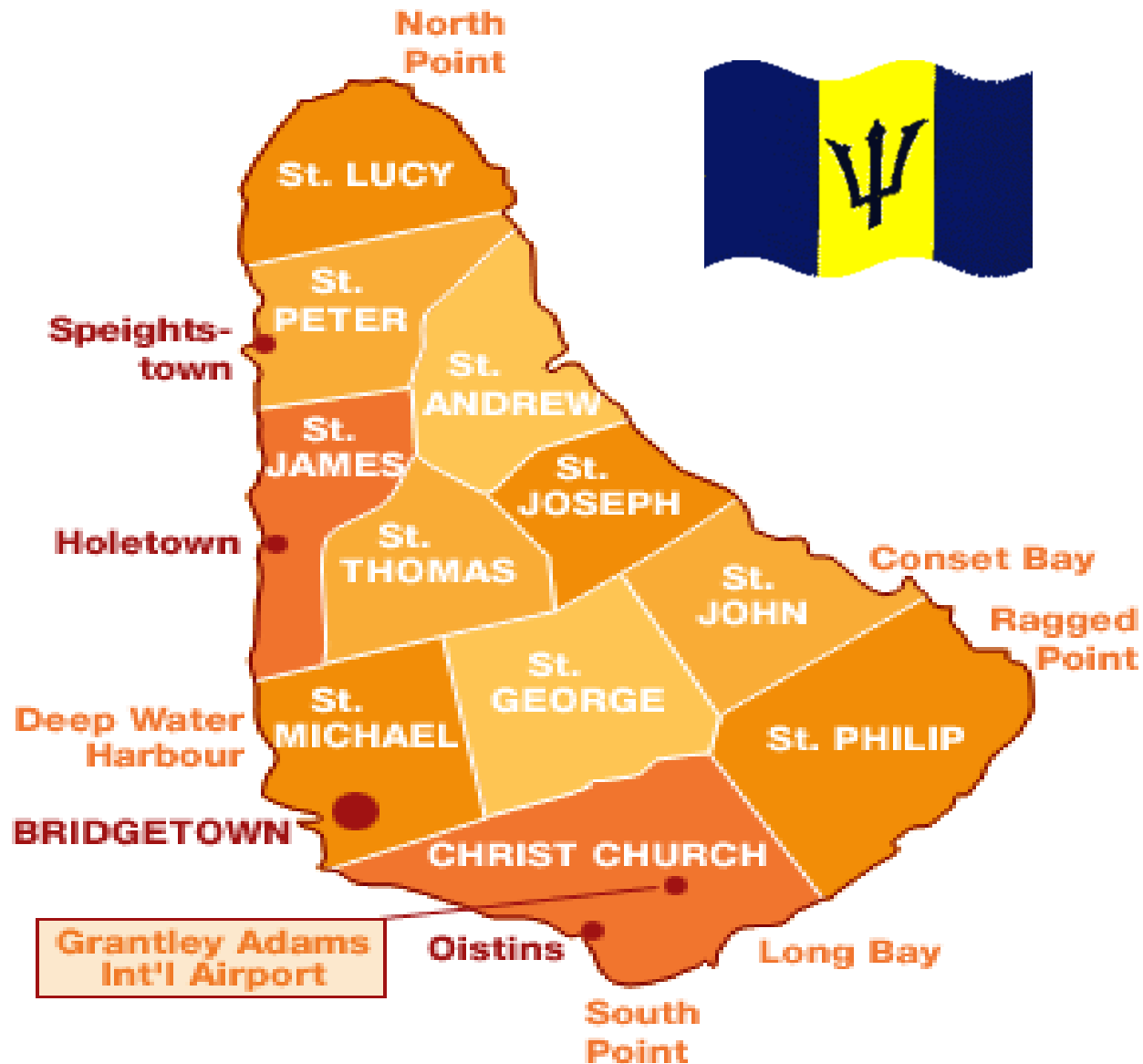
# **Piloting Climate Change Adaptation to Protect Human Health**

**Identification of Health Risks in  
Barbados**

**by**

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# Map of Barbados



# Outline of Barbados

<b>Location:</b>	13.1°N, 59.3°W; edge of Atlantic Storm Zone
<b>Size:</b>	431 km <sup>2</sup>
<b>Coastline:</b>	97 km
<b>Ave. temp.:</b>	26.8°C
<b>Annual rainfall:</b>	1254 mm
<b>Population:</b>	276,000
<b>Parishes:</b>	11
<b>Water source:</b>	Ground water and desalination

# Identification of Health Risks

## **Water scarcity and quality:**

- vectorborne dengue fever (206 cases in 2011)
- rodentborne leptospirosis (75 cases in 2011)
- hanta virus (44 cases in 2011)

## **Insufficient supplies of freshwater:**

- increase transmission of waterborne diseases:
  - salmonellosis (94 cases in 2011)
  - giardiasis (1 case in 2011)
  - shigellosis (0 cases in 2011)
  - campylobacter (65 cases in 2011)

# Identification of Health Risks

## **Rainwater catchments & storage facilities:**

- used to reduce stress on groundwater resources
  - increase potential breeding sites for the *Aedes aegypti* mosquito (dengue)
- use of treated wastewater
  - increase transmission of waterborne diseases and contamination with hazardous chemicals

# Identification of Health Risks

## Drinking water:

- 86.4% from three coastal catchments
- west coast catchment wells 992.80 m the from sea
- water levels 0.3 m above sea level
  - risk for saline intrusion
- increasing drought, lack of rainfall and saline inundation
  - adverse health outcomes associated with water scarcity