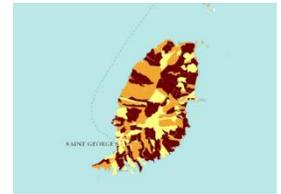


A List of Spatial Layers



At the Water's Edge (AWE) project for the Grenadine Bank is using spatial information to determine vulnerability of local communities and natural habitats to storm surge and sea level rise. Below is an outline of spatial information available.

This information will be viewable online through the Coastal Resilience website (www.coastalresilience.org). For questions please contact: Lynnette Roth (lroth@tnc.org)

Base Information

- | | | | | | |
|---------------------------------------|---|---|-----------------------|---|---|
| Elevation, Bathymetry and derivatives | - | Height at a 5 meter resolution or depth from mean sea level | Enumeration districts | - | National census-based enumeration districts |
| Imagery | - | Aerial and satellite imagery | Coastline | - | Highest resolution outline of coast |

Ecological Information

- | | | | | | |
|------------|---|--|--------------------------|---|---|
| Coral Reef | - | Extent of coral reef digitized from aerial and satellite imagery | Mangrove | - | Extent of mangrove digitized from aerial and satellite imagery and expert mapping |
| Seagrass | - | Extent of seagrass digitized from aerial and satellite imagery | Mangrove migration areas | - | Potential areas of mangrove migration (methods document available upon request) |
| Beach | - | Extent of beaches digitized from aerial and satellite imagery | Mangrove Vulnerability | - | Index calculated through a simple weighted summation of 8 variables (including mangrove migration; methods document available upon request) |

Socioeconomic Vulnerability Information

- | | | | | | |
|-------------------|---|--|---------------|---|--|
| Adaptive Capacity | - | By enumeration district; describes the ability of that district to anticipate, respond to, cope with, and recover from climate impacts (methods document available upon request) | Exposure | - | By enumeration district; describes the amount of that district impacted by a given scenario (methods document available upon request) |
| Sensitivity | - | By enumeration district; describes the characteristics of that district that influence its likelihood to experience harm (methods document available upon request) | Vulnerability | - | By enumeration district; the result of multiplying adaptive capacity, sensitivity, and exposure together for each district (methods document available upon request) |

Inundation Information

- | | | | | | |
|-------------------------|---|--|----------------------|---|--|
| Sea level rise scenario | - | 1 and 2 meter bathtub inundation scenarios | Storm surge scenario | - | Inundation scenarios by different types of hurricanes and storms |
|-------------------------|---|--|----------------------|---|--|

At the Water's Edge (AWE) Project



Coastal Resilience in Grenada
Saint Vincent & the Grenadines



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Demonstration Site (Grenville and Union Island) Information

Sea level rise scenario	- 1 and 2 meter bathtub inundation scenarios at 1 meter LiDAR resolution	Participatory 3D modeling (P3DM) results	- Locations of various socioeconomic features collected from P3DM modeling process
Bathymetric and Benthic habitat	- Files created from in field collection of depth points and benthic videos		

Socio-economic Information

Airport	- Perimeter of all airports	School	- Point location of schools with associated capacity
Cell tower	- Point location of Lime and Digicel cell phone towers	Sewage station	- Point location for pumping stations
Electric plant	- Point location of all electric power plants	Transport terminal	- Point location for commuter terminals for buses, inter-island ferries and cruise ship terminals and associated number of operators
Emergency shelter	- Point location of all emergency shelters	Water infrastructure	- Points locations for dams, filter systems, storage tanks and reservoirs
Fire station	- Point location of all fire stations with associated number of fire fighters and number of vehicles	Census	- Census information summarized by enumeration district or census division
Fishing gear storage location	- Point location of all fishing gear storage locations with associated capacity and fishing gear type	Cemeteries	- Perimeter of public and private cemeteries
Fishing gear emergency storage location	- Point location of emergency fishing gear storage area	Dive center	- Point location of dive centers with associated number of employees
Hotel	- Point location of hotels with associated number of rooms, presence/absence of air conditioning, pool, tennis court, and water sport facility	Financial institutions	- Point location of banks and credit unions
Marina	- Point location of marinas with associated name and number of slips and boats	Fish market	- Point location of fish markets with associated name
Medical facilities	- Point location of medical facilities with associated number of beds and number of vehicles	Fish landing site	- Point location of fish landing sites
Police station	- Point location of police station	Ship building	- Point location of ship building sites with associated type of boats built
Port	- Point location of port and associated number of calls received in 2009	Building footprint	- Perimeter of buildings
Religious center	- Point location of religious centers such as churches	Road	- Center line of roads