A look at the Anguilla Warning System

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CAP Workshop

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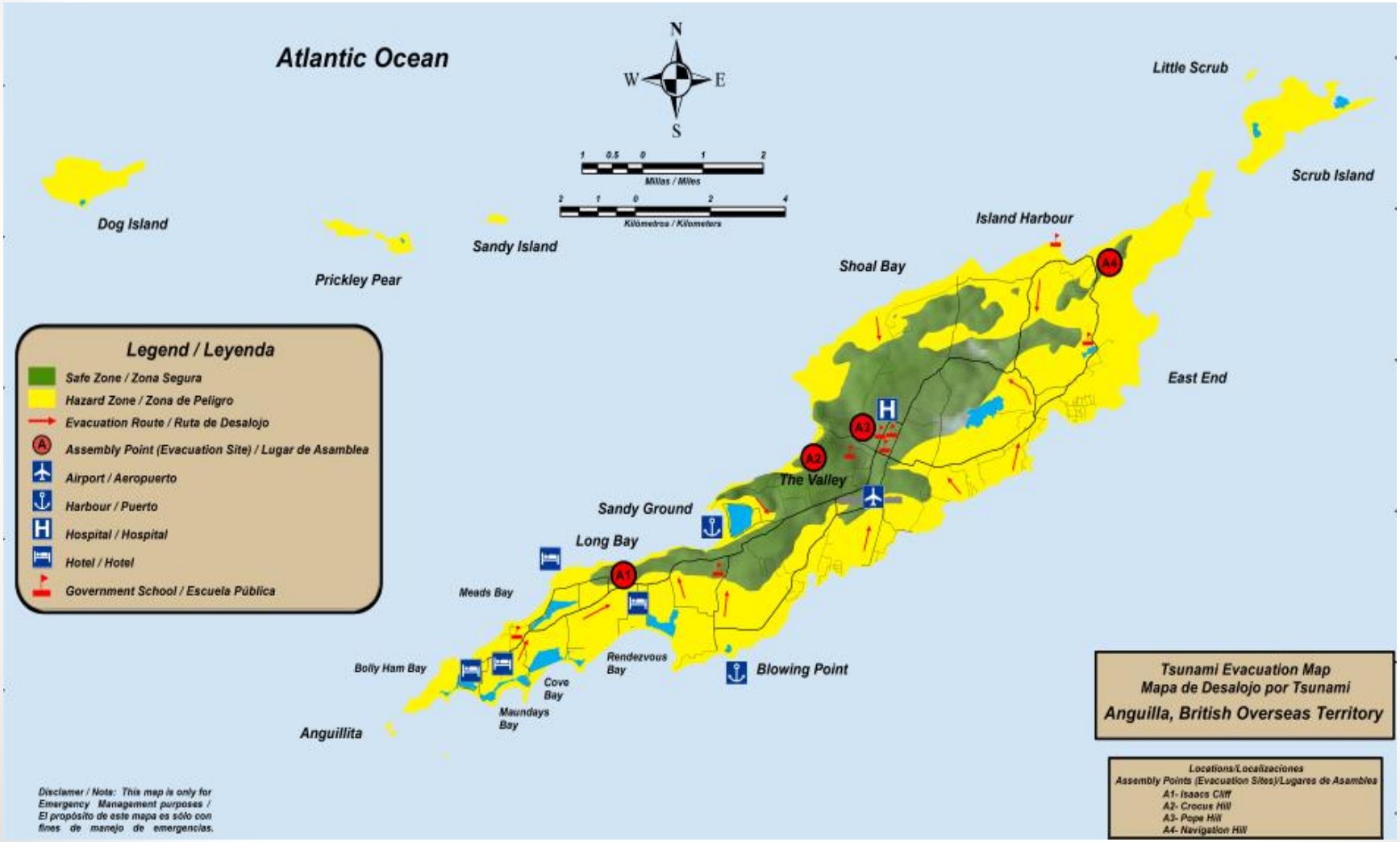
GOVERNMENT OF ANGUILLA
DDM
DEPARTMENT OF DISASTER MANAGEMENT
"PROTECTING OUR FUTURE"

About Anguilla

Anguilla a flat 35 square mile island, the most northerly of the Leeward Islands, is surrounded by the crystal clear blue waters of the Caribbean Sea to the South and the deep aquamarine blue waters of the Atlantic Ocean to the North.

Its highest point of 210 feet, Crocus Hill, is located to the north central portion of the island.
This tranquil isle is inhabited by some 13,000 warm and friendly people.

Anguilla Tsunami Inundation Map



Anguilla Warning System

- The first and longest running Common Alerting Protocol (CAP) based Multi Hazard Early Warning System (MHEWS) in the region.

- System has been operated by the Department of Disaster Management since 2007.

- Current system (CAP server software and interfaces) was designed under contract with UNDP by Mr. Barker and implemented by OptimIT in Croatia and is available as an off the shelf package called CAP.CAP.

About CAP.CAP

- The system is designed to guarantee delivery of alerting messages within 60 seconds of alert generation via all dissemination means.

- The software is currently the CAP backbone for MHEWS systems in Anguilla, Antigua, Saint Lucia , Dominica, Saint Vincent, Grenada and Barbados.

Anguilla Warning System Cont'd

- Current system based on CAP.CAP supports multilingual CAP 1.2 based alerting , selective alert dissemination messaging and interfaces to allow the reception and distribution of CAP alerts generated from external sources

- Currently the Anguilla Warning System provides the following dissemination methods :
  - FM broadcast interruption
  - Smartphone notification
  - Mass email
  - NOAA weather radio alert
  - Outdoor warning sirens (were to be installed in September 2017 but delayed due to the passage of Hurricane Irma)

A little more about dissemination methods

- No one method is sufficient to warn the entire population. Several different methods are required to form a functional warning system.

- It is also important that one keeps abreast of developments in ICT which directly impact the forms of media that would be most impactful to the public.

- Be prepared to adapt and change with the technology especially noting the advance of social media. Insisting on the use of CAP as a standard means, that device manufacturers have a stable platform for their warning devices and hence helps to future proof warning systems and protect the investment made in them.

AWS through the years

2007	2009	2010-2012	2013-2018
• Initial Protocol and Policy development •CAP Server •Single Radio Interrupt Unit •RDS receivers and transmitter •Initial BamBox for Staff Notification	•Improved BamBox (repurposed for Public Notification) •Development of Public Email notification , (website and server) •Development of Public Outreach materials for Anguilla Warning System.	•Implementation of new CAP 1.2 server. •Blackberry App developed for Anguilla Warning System •Marine Alert and Weather Alert Technology added to system. •Multi-lingual alert dissemination capability •Multi-lingual “Stay Safe” public Education Campaign.	• New CAP server software designed and implemented (CAP.CAP) • BlackBerry App retired and replaced with Android and iOS apps packaged with CAP.CAP • Expansion of FM broadcast capability. (6 DASDEC units) • RDS system retired • 1st weather station connected to AWS (destroyed by IRMA) • Installation of Outdoor sirens slated for 2017 (Delayed due to passage of IRMA)

The future of the AWS and CAP based warning for Anguilla

- The expansion of dissemination devices and methods (sirens in particular)
- Adding a level of real time data input to the system to facilitate semi-automatic and automatic activation based on observed sensor data : i.e. tide gauges , pond level monitoring, automatic weather stations
- Even stronger legislative base in order to ensure participation by all media houses and telecommunications companies in public warning via the Anguilla Warning System

Final thoughts

- CAP based MHEWS are extremely useful at saving lives when the proper infrastructure to support them are in place. However gaining the communities trust is often difficult if their introduction follows the mentality of simply replacing “obsolete” time honored and culturally traditional methods of alerting. CAP based warning systems like any warning system can only be effective if people are educated as to what hazards they face and what alerts they are likely to receive in the face of these hazards. It is therefore much better to include the community in the earliest stages of system design and do so with the mentality that the technology is there to help and augment existing community based warning systems rather than to replace.

- The reputation of a warning system is its lifeblood. Failure to activate for whatever reason can cost lives and destroy the public confidence in the system, a situation that is very difficult to recover from. Along with the system therefore legislative frameworks or policies to protect the system from abuse and or misuse and to ensure maintenance and support are critical elements of any warning system programme.

THE END