

[illegible]

GENERAL INFORMATION

This SOP is to provide procedural guidance for actions to be taken in the event of a tsunami affecting the parish of St. Patrick. It defines actions to be taken by institutions/ community to coordinate early warning and response to mitigate the impact of a tsunami.

Tsunamis result typically from large earthquakes; however tsunamis can also be generated from submarine and sub aerial landslides; from volcanic eruptions; and from an object falling from outer space. Tsunamis can affect a region from within minutes up to several hours following an earthquake.

This SOP outlines initial alert and warning protocols, and responsibilities and actions to be taken.

RISK PROFILE

Grenada is part of a volcanically and tectonically active ridge formed along the Lesser Antilean island arc system. The island has two potentially active volcanic centers, Mt. St. Catherine (land) and Kick Em Jenny (sub marine). The Parish of St. Patrick is directly threatened by the presence of 'Kick 'em Jenny' located 9km North of the parish. The potential impact to St. Patrick is extremely high given the fact that most of the population lives on the coastline. While St. Patrick is at risk to a tsunami originated from Kick em Jenny, the community is also at risk to tsunamis that can be caused by other hazards namely earthquakes or under water landslides.

NATIONAL TSUNAMI WARNING CENTER:

The Meteorological Office is the National Tsunami Warning Center and Focal point that will evaluate the tsunami product from the Pacific Tsunami Warning Center. They will also determine the level of warning that will be issued directly to the communication department in the Headquarters of the Royal Grenada Police Force (local Tsunami warning center) and to the National Disaster Management Agency (NaDMA).

TYPES OF TSUNAMI PRODUCTS ISSUED NTWC

The National Tsunami Warning Centre (MET) will issue Tsunami Warning products based on its own assessments and data gathering points.

Tsunami Warning

If Grenada is included within the countries where there might be hazardous tsunami waves, a warning will be issued only if the estimated time of arrival (ETA) is 3 hours or under. (5 minutes to 60 minutes if the event is locally generated). The Tsunami warning alert will be indicated by the color **Red**.

When a tsunami is imminent residents will be advised to run to higher ground away from the sea to the MUSTER POINTS (ASSEMBLY POINTS). They must use all possible evacuation routes as indicated on the St. Patrick tsunami evacuation map; (which is indicated by the color red) and also any local route, not parallel to the coast that will take them away from the hazard zone to

higher ground. However if you feel a strong earthquake, see a sudden fall in sea level, hear a loud roar from the sea RUN FOR HIGH GROUND.

Tsunami Advisory: is issued when there is the treat of possible dangerous currents and flooding. Residents are expected to move away from marinas, beaches and low lying areas and follow official instructions. (If the event is generated regionally, the time span is 60 minutes to 3 hours); the color used to indicate this level is **ORANGE**.

Tsunami Watch: In Grenada a watch product is issued when and if the ETA is greater than 3 hours, indicating the threat to local area is under evaluation. In this case the parish of St. Patrick When a distant event occurred and is under investigation /evaluation. The color for this alert level is **YELLOW**.

Tsunami Information Statement: is given when an event occurred with no imminent danger to the public but citizens need to be informed. For example, an earthquake has occurred, however there is no tsunami waves forecasted. This alert is indicated by the color **GREEN**

Tsunami Warning Protocol for St. Patrick

In the event of a tsunami threat to the parish of St. Patrick information will be disseminated in the following sequence.

The Head office of the Royal Grenada Police Force, (LTWFC) will then inform the St. Patrick's district Police Station. The St. Patrick's district Police Station will then inform the churches (St. Patrick's Anglican and the St. Patrick's Roman Catholic) to initiate the tolling of their bells. The district RGPF will then initiate the following:

- Fire Station Sirens
- Police Sirens/Vehicle Loud Speakers

The St. Patrick Anglican Church and the St. Patrick Roman Catholic Church would initiate the tolling of the Church Bells.

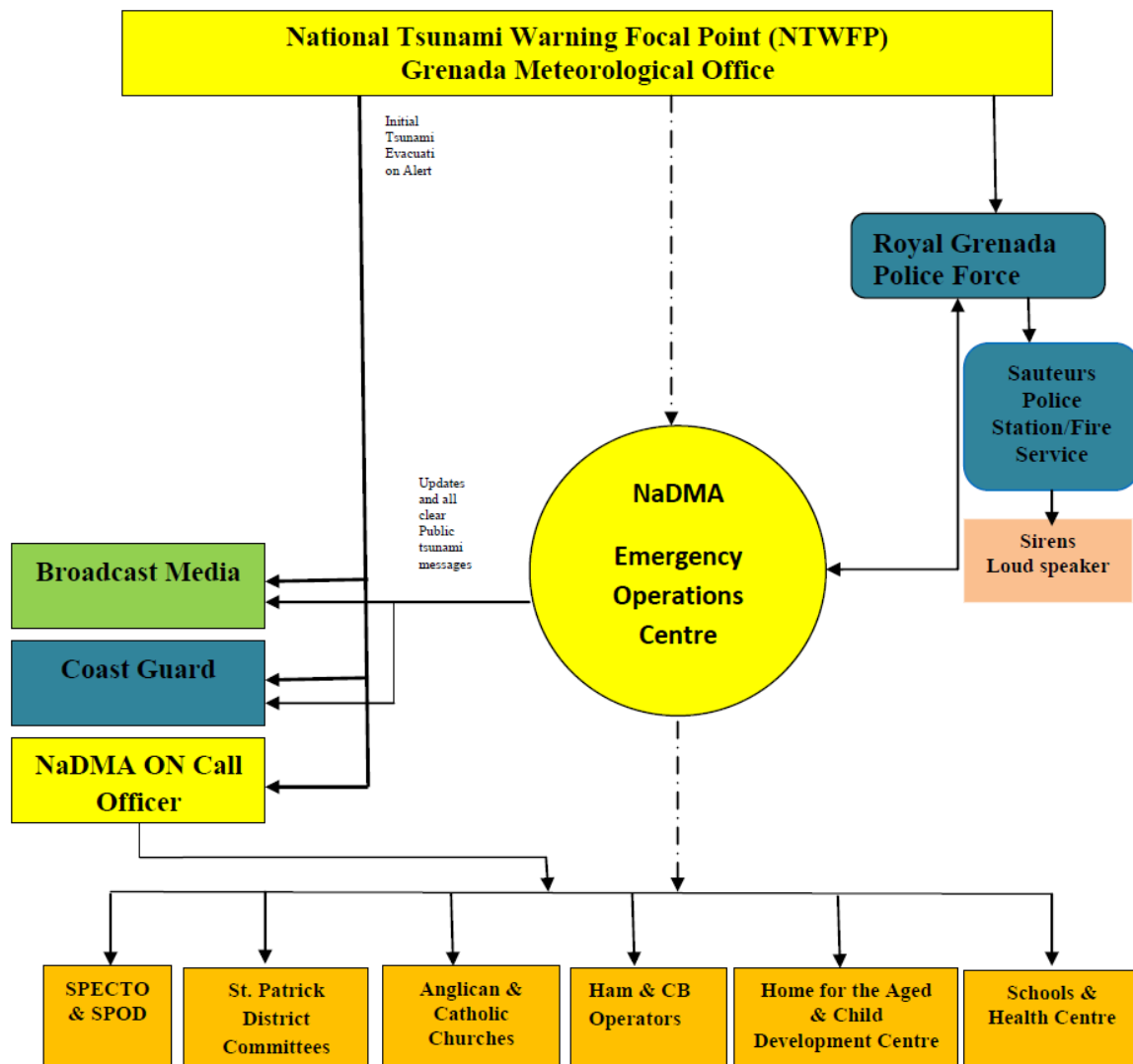
This signals the beginning of the evacuation procedure. This process will continue until a Tsunami Cancellation and/or All Clear is given by NaDMA.

The Following is a table stating the various organizations, and their contact information.

Organization/ Position	Name	work #	Mobile	Email	Organization using VHF/HF
MET: Meteorological Office	Hubert Whyte	444-4142 ext. 2023	534-5262	hwhyte@mbiagrenada.com forcaster@mbiagrenada.com	VHF/HF
Royal Grenada Police Force	Edwin Martin	440—3999 / 435-2346	405-5300	rgpf@spiceisle.com edwinmartin@yahoo.com	VHF/HF
District Police Station St. Patrick	Supt. Glen Paul	442-6161		Glen327p@hotmail.com	VHF/HF
National Disaster Management Agency	Sylvan Mc Intyre	440-8390-4	405-7451	Sylvamac.biz@gmail.com nadma@spiceisle.com	VHF/HF
Community Program Office	Simeon Grainger	440-8390-4	404-6499	simeongrainger@gmail.com	
NaDMA District Coordinator St. Patrick East	Mr. Emerson Murray	442-9277	416-1612	Murrayman51@hotmail.com	
Deputy District Coordinator St. Patrick East	Kierene Thomas		417-5866	royanna99kay@gmail.com	
NaDMA District Coordinator St Patrick West	Natasha Sutterlands		419-7918	Natashawm.sutherland@gmail.com	
Deputy District Coordinator St. Patrick West	Abigale Frasier	442-2594	538-7041	abgailfraser@yahoo.com	
St. Patrick's Anglican Church	Ms. Debra Burke / Joan Mc. Queen	442-9249	523-0972	stpatrickanglicanchurchgnd@gmail.com	
St. Patrick's Catholic Church	Father Michael Opoku	422-9235	414-1788		

St. Patrick's Environmental & Community Tourism Organization (SPECTO)	Valentino Sweany	442-1748(H) 439-9988(W)	409-9495	Specto.grenada@gmail.com	
St. Patrick's Organization for Development (SPOD)	Ms. Rush	442-0555	406-0568	Spodstpatrick2018@outlook.com	
St. Patrick's Anglican School	Mrs. Wilma Alexander	442-9414		stpatricksanglican@hotmail.com	
St. Patrick's Fish market	Michael Grant	442-9716			
St. Patrick's RC School	Mr. Rodney Julien	442-9223		stparticksrc@hotmail.com	
St. Patrick's Health Clinic	Carol Alexander Stafford	442-9312	533-2276		
Sauteur Health Clinic	Audrey Lyons	442-9317	404-2380 417-8143 ambulance	sauteurhealthcenter@gmail.com nursekharim2@gmail.com	
Real FM Radio Station	Mr. Andre Donald	442-0975			
Ham Radio Operators / Citizen Band Radio Operator	Asp. Wilson/		407-3261		VHF/HF
	Joy Fleming		449-2640		VHF/HF

COMMUNICATION MATRIX



Muster Points

Mr. Rocafort yard (P1)

Mr. Xavier yard (P2)

Mc Donald College (P3)

RESIDENTS WILL RUN AWAY FROM THE SEA AND NOT ALONG THE COAST

TSUNAMI SIGNS USED IN ST. PATRICK



ROLES AND RESPONSIBILITIES

ROLES	RESPONSIBILITIES
ALARMS Sounding of sirens Ringing of bells	St. Patrick Police St. Patrick Anglican Church St. Patrick Roman Catholic Church
Evacuation	St. Patrick Police
Muster point management	District Management Committees
Shelter management	District Shelter Management Sub-committee
Search and rescue	St. Patrick Police