



COMMUNITY DISASTER RISK MANAGEMENT PLAN

For Waterford, Portmore



Facilitated through the

Building Disaster Resilient Communities Project,

An Office of Disaster Preparedness and Emergency Management (ODPEM) Project

Funded by the Canadian International Development Agency

in collaboration with the

Portmore Municipal Council

and other partners.



TABLE OF CONTENTS

CONTACT LIST	V
HAZARD MAP	VIII
PREAMBLE	9
Name of the Plan	9
Purpose of the Plan	9
Actors	9
SCOPE OF PLAN	9
AUTHORITY	
Responsibility	
Assumptions	
RELATIONSHIP TO PARISH AND NATIONAL PLANS/STRUCTURE	
DISASTER RISK MANAGEMENT (DRM) ORGANIZATIONAL STRUCTURE	
HAZARD HISTORY	14
HISTORY OF HAZARDS AND COPING MECHANISMS	14
IDENTIFICATION OF FUTURE HAZARDS	
IDENTIFICATION OF COMMUNITY VULNERABILITY	
REDUCING COMMUNITY VULNERABILITY	
Priority Listing of Hazards	25
COMMUNITY RESOURCES AND CAPACITY ANALYSIS	
COMMUNITY CAPACITY	27
MITIGATION	28
AREAS WHICH SHOULD NOT BE DEVELOPED	28
ZONING	29
COMMUNITY MITIGATION ACTIVITIES	30
MITIGATION ACTIVITIES REQUIRING EXTERNAL HELP	31
MITIGATION ACTION PLAN	
RISK TRANSFER	34
PREPAREDNESS AND INITIAL RESPONSE	35
Monitoring	35
Warning	36
Evacuation	39
SHELTER	44

Preparedness Action Plan	45
Instructions for DRM Team	46
Response	47
Search and Rescue/First Aid/Emergency Medical Care	47
Initial Damage Assessment	49
Damage Assessment Procedure	51
Response Action Plan	53
Relief	55
APPENDIX A – HURRICANE STANDARD OPERATING PROCEDURES (SOPS)	56
Phase 1: Prevention, Preparedness and Mitigation (January through to 144 hours before impact).	57
Phase 2: Alert (144 hours up to 72 hours before impact)	57
Phase 3: Event and Event Response (72 hours before impact through to 120 hours after landfall/All Clear)	57
Phase 4: Recovery	57
ACRONYMS	58
Tropical Disturbance	59
Tropical Depression	59
Tropical Storm	59
Hurricane	59
Hurricane Categories	60
Warnings and Watches	60
Phase 1: Prevention, Mitigation and Preparedness (January through to 5 Days before impact).	62
Phase 2: Alert (5 Days up to 72 hours before impact)	
Phase 3: Event and Event Response (72 hours before impact through to 5 Days after landfall/All Clear)	66
Phase 4: Recovery	77
APPENDIX (A. 2) – EARTHQUAKES - STANDARD OPERATING PROCEDURES (SOP)	79
Phase 1: Prevention, Preparedness and Mitigation (year round).	80
Phase 2: Event, Event Response, Damage Assessment	80
Phase 3: Recovery	80
ACRONYMS	81
Phase 1: Prevention, Mitigation and Preparedness	84
Phase 2: THE EARTHQUAKE – The first 3-6 hours immediately following the event	88
Phase 3: Recovery	93
APPENDIX (A.3) – FIRE - STANDARD OPERATING PROCEDURES (SOP)	95
Phase 1: Prevention, Mitigation and Preparedness	96
Phase 2 (a): Event and Event Response – Building Fires (Homes, Small Businesses)	96

Phase 2 (b): Event and Event Response – Bush Fires	96
Phase 2 (b): Event and Event Response – Bush Fires Phase 3: Recovery	96
APPENDIX B - TERMS OF REFERENCE CDRM GROUP	
APPENDIX C - SPECIAL NEEDS LIST	119
APPENDIX D- EMERGENCY SUPPLIES TO BE TAKEN TO SHELTER	122
APPENDIX E - TRAINING	
APPENDIX F - SIMULATION AND DRILLS	124
APPENDIX G - PUBLIC EDUCATION AND AWARENESS	125
APPENDIX H - EQUIPMENT/ASSETS/RESOURCE LIST	
ITEMS THE COMMUNITY ALREADY HAS	
APPENDIX I – COMMUNITY BACKGROUND	
Stakeholder Partnerships	
APPENDIX J- ACROYNMS	137
APPENDIX K- DEFINITONS	138

CONTACT LIST

Names	Position/Agencies	Contact
Mr. Rupert	CDC President, Preparedness Coordinator & Prevention and Mitigation Coordinator	377-9920
Mr. Michael Corinaldi	Public Education and Fundraising Coordinator	294-2636
Ms. Beverley Leach	Vulnerability and Risk Identification Coordinator/ Shelter Manager	428-9625
Mr. Baldwin Tulloch	Response and Recovery Coordinator	819-8105
Ms. Opal Neita	Transport Coordinator	398-6989
Mr. Anthony Wheeler (Blue)	Response and Recovery Assistance	459-2481
Ms. Sharon Wheeler	Shelter Manager	883-9483
Ms. Tamika Thomas	Special Needs Coordinator	398-5454
Ms. Carol White		872-6301
Mr. Roy Nelson		350-6551
Waterford Health Centers		939-6642
	Waterford Fire Brigade	
	Waterford Police Station	988-1763
	ODPEM	906-9674-5

Mr. Lloyd Heron	National Works Agency	984-2222
Mrs. Phillipa Ricketts Edmund	Portmore Municipal Council	740-7440-2
	Jamaica Public Service	
Superintendent James Lee	Jamaica Fire Brigade	895-7763
Mr. Errol Lynch	Councillor	
Mrs. Camille Greenland	Red Cross	474-4388
Mr. Collin Fagan	Member of Parliament	
Mr. Daleyon Campbell	SDC	342-2932
ODPEM	JDF	906-9674
	JCF	
Mrs. Francia Prosper - Chen	МОН	
Lloyd Heron	NWA	583-2478
Ms. Ivy Jarrett	Gregory Park Primary School	998-9426/704-8462
Beverley Leach Sharon Wheeler	Shelter Managers	428-9625
Jermaine Jackson	NWC	990-0071
Mr. Rupert Walters	Waterford CDC	377-9920
Baldwin Tulloch	Community Leaders	
	Youth Clubs	

Schools in Waterford

SCHOOL	ADDRESS	TELEPHONE	PRINCIPAL	PTA	TEL.
				PRESIDENT	
Waterford Infant School	Pondside Road, Portmore	988-7730	Miss Aldith	Mr. Canute	898-5206
			Davis	Christie	
Waterford Primary School	Caymanas Drive	988-3127	Mr. Rohan	Mr. Hubert	704-6190
			Walker	Vaccianni	
Waterford Dev. Faith	Waterford				
Basic					
Waterford SDA Basic	3747 Chepstow Rd.	704-7675	Sandra Walker		
School	Portmore				
Waterford High School	94 Waterford Parkway,	988-2027, 988-	Mrs. Cecile	Mrs. Judith	968-7552
	Ptmr.	2963	Bernard	Wilson	



PREAMBLE

Name of the Plan

The name of the plan is the "Waterford Community Disaster Risk Management Plan".

Purpose of the Plan

This plan provides:

- 1. The residents with a workable emergency system to minimize loss of life and property to prevent disasters from occurring.
- 2. A basic outline of shelters, welfare and relief system as well as some focus on evacuation planning that will make preparation, response and recovery from a disaster more effective.
- 3. Provide an emergency contact list and identification of vulnerable populations living in Waterford.
- 4. A basic guideline for the community as to who is responsible for what and who is in charge of critical functions in managing an emergency.
- 5. An overall framework for reducing risks in the community including mitigation and preparedness

Actors

The key actors involved in the development of the draft plan are the Waterford Community Development Committee, the Parish Council and the Office of Disaster Preparedness and Emergency Management, Social Development Commission, the Utility Companies and other NGO's within Waterford.

Scope of Plan

The Plan will cover Pre and Post-impact aspects of disaster risk management, that is, prevention, mitigation, preparedness, response and recovery.

Authority

This plan was developed with the guidance and assistance of the ODPEM and the Parish Council. Under the Disaster Preparedness and Emergency Management Act 1993, ODPEM has the responsibility for ensuring development of hazard management plans. The ODPEM also has the responsibility to collaborate with local government authorities and community based organizations in supporting disaster preparedness and mitigation.

Responsibility

The responsibility for updating and testing the plan lies with the Waterford Disaster Group. This plan is a "living" document, as conditions change (new roads, new houses and residents etc) the plan will have to be revised. The recommended period for review and subsequent revision is one year. Therefore, an annual schedule for review will be conducted.

Special emphasis will be placed on updating the following information:

- The internal resources available in the community
- Assessment of emergency supplies available to the community's disposal and some focus on storage.
- Updated contact list of heads of the CBOs and critical persons in the CERT.
- Re-Election of persons to be part of the CERT
- Capacity building for shelters in the community and shelter management.

Assumptions

1. There will always be a CBO in place that will continue to assume the leadership role for disaster risk management in the community

- 2. In a disaster utility services may be unavailable for extended periods (i.e., electricity, water, and telephone)
- 3. Police and fire response services will be overrun within the first 3-5 days after a major disaster, do not expect help from them initially
- 4. The community will largely be on its own in the initial days following a disaster.
- 5. There will be serious problems with transportation. Road closures will occur and access to outside help will not be possible.
- 6. The community and the parish disaster committee will work together to identify and source resources to continue the development and maintenance of the plan.
- 7. The president of the Waterford Community Disaster Risk Management Group will periodic meetings of the Portmore Municipal Council Disaster Committee

Relationship to Parish and National Plans/Structure

The Waterford Community Based Disaster Risk Management Plan represents the operational procedures and strategies to be employed at the community level in response to, recovery from and in preparation for a number of hazards. The community will be supported by and will work through the District Sub-Committee of the Parish Disaster Committee and will be closely integrated with the PEOC. Therefore the community disaster risk management plan will draw on other existing parish plans and national plans where necessary for the mounting of an efficient response and preparedness programme. The ODPEM collaborates with the Portmore Municipal Council on Disaster Risk Management matters through the Parish Disaster Committee and the Coordinator. The Standard Operating Procedures (SOP's) contained in the plan reflect national SOP's.

Disaster Risk Management (DRM) Organizational Structure

The table outlines the membership of the committee and the roles and responsibility of each member is outlined in the DRM Group Terms of Reference in Appendix A.

EXECUTIVE MEMBERSHIP POST	NAME/RESPONSIBILITY	TELEPHONE	ADDRESS	EMAIL
CDC President, Preparedness Coordinator & Prevention and Mitigation Coordinator	Mr. Rupert Walters	377-9920		
Public Education and Fundraising Coordinator	Mr. Michael Corinaldi	294-2636		
Vulnerability and Risk Iderntification Coordinator/ Shelter Manager	Ms. Beverley Leach	428-9625		
Response and Recovery Coordinator	Mr. Baldwin Tulloch	819-8105		
Transport Coordinator	Ms. Opal Neita	398-6989		
Response and Recovery Assistance	Mr. Anthony Wheeler (Blue)	459-2481		
Shelter Manager	Ms. Sharon Wheeler	883-9483		
Special Needs Coordinator	Ms. Tamika Thomas	398-5454		
	Ms. Daphne Pitter			
	Ms. Carlene Spencer			

Ms. Carol White	872-6301		
Mr. Roy Nelson	350-6551		
 I			

HAZARD HISTORY

History of Hazards and Coping Mechanisms

The hazard analysis provides a detailed timeline account of the disaster history and significant events that happened in the community, the impact as well as the coping strategy and/or mechanism of the community.

Table 1: Historical Overview of Disasters

Hazard, Year	Impact	How did the Community Cope?
Earthquake in 1993	Cracks in ceiling and walls	Assistance from companies as well as residents work together to
		clean up community.
Hurricane Gilbert 1988	Major flooding at its highest in all 9	Majority of the residents evacuated to the national Arena and to
	blocks. Some persons were evacuated	friends and relatives in St Andrew
	from their homes, property was damaged.	
	However no lives were lost.	
	Dyke overflowed and persons living along	
	the Waterford Canal panicked and fled	
	their homes.	
Hurricane Ivan	Major Flooding , some properties had	Persons evacuated to Shelters
2004	trees and other fallen debris but no lives	
	were lost	
Hurricane Dean	Minor flooding compared to other	Community members listened constantly to their radios and
2007	hurricanes in the past.	reported incidents to the Portmore EOC

Tropical Storm Gustav	Minor flooding	compared	to	other	Person stayed in their homes and monitored the rising of the water
	hurricanes in the p	ast.			and called the National EOC (ODPEM) and the Portmore EOC

The community identified several key lessons learned from the occurrence of the events highlighted above. These were:

Earthquake in 1993

- Based on the housing material a number of damages can occur.
- The community is prone to trauma

Hurricane Gilbert 1988

- The drainage capacity is not adequate for storm water.
- To constantly keep the Waterford gully clean

Hurricane Ivan 2004

- Evacuate early and to ensure that home are secured before leaving.
- A plan is needed for elderly persons who are very reluctant to evacuate the community

Hurricane Dean 2007

• Waterford drain desperately need cleaning

Identification of Future Hazards

Table 2 highlights the future hazardous events or changes in circumstances which may alter prevailing conditions in the community. Detailed considerations of the location and number of exposed households, physical infrastructure and critical facilities and their exposure to the different hazards are identified.

Table 2: Future Hazards

HAZARD	POSSIBLE IMPACT
Worsening of floods associated with block drains and poorly maintained Canal	 Houses located in Block 3, 4, 5 and 7 likely to be impacted by debris flow, Flooding/ inundation along the following roadways: Adire Drive, Falmouth, Ramble Road and Timbrel Way Waterford High School can become waterlogged and the possibility of it becoming inaccessible Flooding of the Waterford Service Stations
Worsening of the overflow of sewage caused by the Independence City Plant. The Plant malfunction frequently due to a lack of servicing and a growth in population rendering the plant inadequate, therefore whenever it rains sewage water	A raise in human diseases cause from the exposure to human waste.

HAZARD	POSSIBLE IMPACT
comes up in through the inspection chambers and into backyards via manholes which then run onto the roadways.	
Increase in Squatting in the Railway Line Community	 Poor housing development Raise in illegal activities in the surrounding community Increase in illegal dumping Community will become unattractive.
Overgrown Vegetation in drains and along road corridors	 Illegal dumping will increase Visibility along roadways would be hampered hence the likely wood of accidents would increase An area for thief to hide away
Increase in mosquitoes breeding from lakes and ponds	Residents will be expose to malaria.
Increase in Youth Violence	 Housebreaking Rape / Carnal Abuse Robbery Murder Domestic Violence

Identification of Community Vulnerability

Vulnerability is the condition or circumstance of the community which makes it susceptible to being damaged by a hazard or disaster. The vulnerability analysis identifies the exposure of the different assets within the community to hazards and the approximate value of the elements at risk.

Table 3: Vulnerability Summary and Approximate Value of Elements at Risk

HAZARD	VULNERABLE ASSET AND POSSIBLE IMPACT	APPROXIMATE VALUE OF ELEMENT AT RISK
HURRICANE/ FLOODING	Flooding/ inundation along the following roadways: Adire Drive, Falmouth, Ramble Road and Timbrel Way	To be determined
	Water goes into houses, furniture is damage this occur in the areas of Block 3, 4, 5 and 7	"
	Waterford Service Station is flooded hence there is an overflow of sewage	"
	Waterford High School can become waterlogged and the possibility of it becoming inaccessible	
		"
Overflow of sewage from the Independence City Plant	Human health is affected as the raise in illness.	"
Squatting	Unplanned settlements are development hence a strain occur on the utilities in Waterford	"

Youth Violence	Housebreaking	"
	Rape / Carnal Abuse	
	Robbery	
	Murder	
	Domestic Violence	
Increase in Mosquitoes Breeding in community	Residents of Waterford are now expose to	"
Community	dengue illness	

Reducing Community Vulnerability

The vulnerabilities identified above can be corrected and the impact of the hazards reduced if the appropriated actions are employed. It is important that corrective actions be put in place as the table above shows that the value of the assets exposed is significant. However a number of resources will be required to make this possible and these will also be included in the actions to reduce the vulnerabilities in the community

Table 4: Corrective Actions to Reduce Community Vulnerability

HAZARD	VULNERABLE ASSETS	CORRECTIVE ACTIONS
Flooding / Hurricane	 Houses in Blocks 3, 4, 5 and 7 are flooded. Waterford Service Station is flooded hence there is an overflow of sewage. Waterford High School can become waterlogged and the possibility of it becoming inaccessible. 	 Evacuation Regular drain cleaning and busing of vegetation in canals Proper disposal of garbage by residents Ensure houses are secure along with important documents
Overflow of sewage from the Independence City Plant	Residents of WaterfordAnimals and pets	 Regular maintenance of the sewage plant Upgrade the sewer systems in

HAZARD	VULNERABLE ASSETS	CORRECTIVE ACTIONS	
		Waterford	
Squatting	The wider community of Waterford	Ensuring that housing development are plan and have received clearance from Portmore Municipality.	
Youth Violence	The safety of the Waterford community	 Regular policing of community Establishments of job opportunities and training for youth in Waterford 	
Increase in Mosquitoes Breeding in community	Residents of Waterford will be expose to malaria illness	 Public education campaign on proper disposal of cans and garbage. Spray black oil in the pond around the school area. 	

As most hazards cannot be controlled, the following corrective activities/actions were identified to reduce the environmental, social/economic, health related and political vulnerability of the community and the resources needed to achieve this objective.

Table 5: Reducing Waterford Vulnerability

VULNERABILITY	CORRECTIVE ACTIVITIES/ACTION	RESOURCES NEEDED
A. Environmental		
Flooding	 Evacuation Regular drain cleaning and busing of vegetation in canals Proper disposal of garbage by residents Ensure houses are secure along with important documents Fix the issue of silt that is flowing into the drains from Caymanas Park 	 Portmore Municipal heavy duty equipment ODPEM Community Members Sensitization/ training sessions, PCV National Work Agency (NWA)
Overflow of sewage from the Independence City Plant	 Regular maintenance of the sewage plant Upgrade the sewer systems in Waterford 	Portmore MunicipalNational Water CommissionNGOs
Increase in Mosquitoes Breeding in community	 Public education campaign on proper disposal of cans and garbage. Spray black oil in the pond around the 	 Ministry of Health Portmore Municipal Community Members ODPEM

VULNERABILITY	CORRECTIVE ACTIVITIES/ACTION	RESOURCES NEEDED	
	school area.		
Solid waste disposal	 Intensive ongoing public education about proper garbage disposal. Regularized garbage collection. Provisions of disposal sites or bins strategically placed in communities 	 Regularized collection from NSWMA Residents 	
B. Social/Economic			
Lack of youth based programmes	 Get private & public sector involve to construct community centre 	Funding from CHASE,JSIF, Digicel Foundation	
Loss of livestock and crops	 Movement of animals to higher grounds Reaping of crops that can be reaped before flood waters. Digging of drainage around crops 	RADAPortmore MunicipalCommunity Members	
High unemployment / unattached youths	Employment opportunities/ job creation	Skills training from Heart Trust NTA Course/ training in entrepreneurship	
Poor road condition	 Proper engineering construction practice been undertaken with road network. Maintenance of road network 	 Portmore Municipal Member of Parliament NWA 	
Poor development Practices / Squatting	 Sensitization of where to construct buildings 	Portmore MunicipalNEPAODPEM	
C. Health Related			
Threat of epidemic outbreak of Gastrointestinal disease	 Repair all broken pipes, fogging, treatment of water sources for 	Ministry of health,Portmore Municipal	

VULNERABILITY	CORRECTIVE ACTIVITIES/ACTION RESOURCES NEEDED	
	mosquito larva, proper disposal of cans, tyres and other containers that can collect water.	•
Motor vehicle Accidents	 Street marking and signs Replace the blocks that have been removed 	 Portmore Municipal NWA National Road Safety Unity
	 Education by the national road safety unit 	
Garbage in drains breeding mosquitoes and rats	Cleaning and maintenance of drains and ponds.	Portmore MunicipalMinistry of HealthNSWMA
Overflow of sewage plant	Vector control Regular checks and upgrading of the plant	Portmore MunicipalMinistry of Health
D. Political		
Lack of political support from Member of Parliament and Councilor	 Community members need to learn to pull together their own resources 	Community SpiritReturning Residents

Priority Listing of Hazards

The objective is to rank the main hazards affecting the community. The hazards were listed in the first column and then the likelihood that the hazard may occur in any given year was assigned a number using the "probability of occurrence" scoring system in the second column. In the other columns, the impact of each hazard on the community was identified using the "impact" scoring system below.



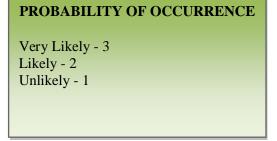


Table 6: Priority Listing of Hazards

Hazard	Probability of	IMPACT ON COMMUNITY					
	Occurrence	People	Buildings	Infrastructure	Critical Facilities	Livelihoods	Total
Fire	2	2	2	2	2	2	12
Flooding	3	3	3	3	3	3	18
Hurricane	3	3	3	3	3	3	18
Earthquake	2	3	3	3	3	3	17
TOTAL	10	11	11	11	10	11	64

Based on the matrix Hurricane	he priority ranking of haza	ards that currently a	affects Waterford are a	as follows (in priority	order):
flooding					
Earthquake					
The causes and effec	s of flooding are included	in the problem tree	e in Appendix I.		

Community Resources and Capacity Analysis

Waterford has the capacity to manage and implement its Community Based Disaster Risk Management Plan. These capacities and resources come in various forms as is listed in the table. In order to implement many of the action/activities proposed, a number of these resources and capacities will be drawn on and these include people (human resources), funding, transportation, input from organized groups within the community among other things.

Community Capacity

Capacity	Type of Resource	Task
Skills	Musicians, Hairdressers, Welders, Cosmetologists, Barbers, Nail Technicians, Masons, carpenters, electricians, First Aiders, Plumbers, Draftsman, Architects, Mason, Electricians, Spray-men, Designers, Tailors, Dressmakers, personnel, nurses, Mechanics, Refrigeration Technicians, Tilers, Cabinet Makers, IT Specialist,	Aid in rehabilitation process, construction of buildings and other facilities. Looking after the sick, disabled and elderly.
Social Services	Post Office, Public Health Centre, Churches, Police, Library, Fire Station, and hardware	Keeping and restoring law & order. Providing food and other supplies as well as building material.
Communication and Technology	Digicel, Claro, Lime and FLOW	Keeping and restoring communication means
Medical Care	Doctors Office, Health care workers	Providing health care
Education and Awareness	Schools, One Training Centre,	To create awareness and promote environmental education

MITIGATION

In order to ensure that future development in the community is not exposed to the same hazards as in the past, implementation of a mitigation plan is deemed essential to facilitate sustainable development as well as create an enabling environment for reducing disaster risks. The elements of the community's overall mitigation plan are set out below.

Areas Which Should Not Be Developed

The following areas in Table 7 below were identified by the community as being unsuitable for future development because of the vulnerability of these areas to hazards.

Table 7: Areas for No Development

Area	Reason
No development should take place in the green spaces that are located in each blocks	These areas are use for reaction activities

Zoning

The following areas in table 8 below were identified by the community as being suitable for development.

 Table 8:
 Suitable Areas for Development

Area	Type of Development which would be safe
Jam world	Further Expansion of the Entertainment Industry
Fishing Village	Aquaculture Development

Community Mitigation Activities

The following are some activities that the community can do itself to reduce the impact from hazards.

Table 9: Community Mitigation Activities

HAZARD	ACTIVITY	TIMEFRAME
Flooding that are cause from block drains and cannels	BushingPublic EducationProper Disposal of garbage	Ongoing activity
Hurricane	 Removal of debris from home after an event 	After the all care is issue
Youth Violence	 Community Policing Establishment of peace group in community Establishment of sport club and skill training 	■ ongoing
	•	•

Mitigation Activities Requiring External Help

The mitigation activities are beyond the scope of the community and as such require external assistance for successful implementation.

Table 10: Mitigation Activities Requiring External Help

HAZARD	ACTIVITY	AGENCY
Flooding	Maintenance of the Dyke , Inspection chambers	NWA
Hurricane	Cutting of Tree limbs from light wires	JPS
Fire	Bushing of empty lots and verges and removal of debris	NWA/ NSWMA/ PMC
Earthquake	Drill	ODPEM

Mitigation Action Plan

The mitigation action plan identifies the disaster risk reduction measures for implementation which will enable the community to become disaster resilient in the long term. The community's Action Plan sets out a prioritized list of activities, timeframe and cost, and responsibility/partner for successful implementation.

Table 11: Community Mitigation Action Plan

Hazard	Mitigation	Areas for	Timeframe	Priority	Resource
Impact	Required	Improvement	for	Ranking	
			Action Plan		
Flooding due to	Drains to be cleaned.	Sections of	1-6 months	High	Back Hoe/ Front end
blocked drains,	• Cleaning of Sink Holes and	Waterford			Loader
heavy rainfall, and	drains				Portmore Municipal
lack of proper	• Continuous maintenance				
maintenance.					
Overflow of	Upgrading of sewer plants	Independence city	1 year	High	Donor Agencies
Sewage		plant			NWC
					Local Government
					Ministry of Health
Fire	Fire Hydrants across		1-6 months	Medium	JPS and Fire Brigade

	Waterford need to be				
	mapped and repaired.				
	Education against burning				
	of cane fields				
Hurricane					
Fallen Trees	Cutting back of trees	Bushing in general	1-6 months	High	Portmore Municipal
		areas along blocks			
Damage Roofs	Retrofitting	in Waterford			
		urgent			
Flooding	Dredging of the Waterford Main		1-2 years	High	SDC, MOH, NWC,
	Drain				Portmore Municipal
Block 3	Inspection Chambers, footbridges	Subrite Way and	1-2 years	High	
		Buckshot Way			
Block 8	Inspection Chambers, footbridges	Kedar Way	1-2 years	High	
Wimbledon	Inspection Chambers, footbridges		1-2 years	High	
(Wilbdon) Way					

Risk Transfer

Risk transfer is the process of shifting the financial cost risks from the community to another party so that if there is a disaster the affected community or persons can get some form of compensation.

INFORMAL risk transfer options	Fundraising activities where the proceeds would be placed in to an account for disaster/emergencies Collection of emergency fees (\$20 per person per household) for each household. This would be placed in the Zonal Committees Account on an annual basis. Monies will be collected by Block Reps and teams. Proper documentation of payments will be done and accounting system established.
FORMAL risk transfer options	Establish an Emergency fund for the community

PREPAREDNESS AND INITIAL RESPONSE

Monitoring

The following persons are responsible for monitoring situations in or that may affect the community and disseminate information to the CDRM group.

Table 12: Community Monitoring Programme

SITUATION	RESPONSIBILITY
Hazardous or dangerous situations in the community	Ms. Beverley Leach 428-9625
Listening to the radio for official information	Mr. Michael Corinaldi 294-2636
Monitoring marine weather forecasts	Mr. Michael Corinaldi 294-2636
Liaising with the Parish Disaster Committee and Coordinator and ODPEM	Rupert Walters 377-9920
Other	Rupert Walters 377-9920

Warning

The community must be alerted to the possibility of a threat or dangerous situation. Table 13 identifies the traditional warning systems to be used by residents to warn of impending disasters- hurricane/flooding, landslide, storm surge and fire for protection of the community.

Table 13: Traditional Early Warning System

Hazard	Method of Delivery	Target Group	Responsibility
Fire	Telephone, whistle, runners, community notice	Waterford Community	Waterford Zonal
	boards, email, word of mouth,		Committee
Hurricane	Telephone, whistles, runners	Waterford Community	Waterford Zonal
			Committee
Earthquake	Telephone	Waterford Community	Waterford Zonal
			Committee
Flooding	Telephone	Waterford Community	Waterford Zonal
			Committee

The following focal person(s) will be responsible to give warning signals to alert the vulnerable groups and other persons in the community.

Table 14: Early Warning Activity and Responsibility

HAZARD	ACTIVITY	RESPONSIBILITY	MEANS	
Hurricane and Flooding	*Warn Special Needs residents	Ms. Tamika Thomas 398-5454	Using contact list to contact care givers by telephone, word of mouth.	
	Old and sick persons	Ms. Tamika Thomas 398-5454	Telephone Word of mouth by usage of runner.	
	Persons with disabilities	Ms. Tamika Thomas 398-5454	Using contact list to contact care givers by telephone, word of mouth.	
	Mothers and babies and young children	Ms. Tamika Thomas 398-5454	Through different means of community groups and Health Aids	
	The School	Mr. Michael Corinaldi 294-2636	By having contact with School boards and principals. Also through PTA meetings.	
	Members of the community who are at sea	Ms. Opal Neita 398-6989	Through contacts with fisherman cooperation.	

HAZARD	ACTIVITY	RESPONSIBILITY	MEANS
	Evacuation Zone residents		Calling evacuation team Using runners to go through community.
	Rest of Community	Mr. Michael Corinaldi 294-2636	Community meetings
	Update ODPEM	Rupert Walters 377-9920	Through disaster committee meetings Maintaining contact with ODPEM by phone
	Update PDC	Rupert Walters 377-9920	Through disaster committee meetings Maintaining contact with ODPEM by phone

Evacuation

The evacuation plan will be a guide for the community to coordinate their efforts with disseminating early warning to ensure timely and orderly evacuation of the vulnerable areas and persons.

Given the size, coastal location and low lying nature of the community, it is recommended that the entire community evacuate during an emergency. However, it must be understood that some residents are inclined to take risks based on past experiences and so will not evacuate.

Table 15: Areas to be evacuated during an Emergency

Area for Evacuation	Priority	Reasons for Evacuating	Assembly Point
	(low, medium, high)		
Block 1	Medium	Population Density, Threat of Tsunami	Boston Field
Block 2	Medium	Population Density, Threat of Tsunami	Rodwood Field
Block 3	Medium	Population Density, Threat of Tsunami	Bus Stop
Block 4	Medium	Population Density, Threat of Tsunami	Waterford Primary School football field
Block 5	Medium	Population Density, Threat of Tsunami	Fifth world Football field
Block 6	Medium	Population Density, Threat of Tsunami	Missionary Church
Block 7	Medium	Population Density, Threat of Tsunami	Waterford community Centre

Block 8	Medium	Population Density, Threat of Tsunami	Waterford Baptist church
Block 9	Medium	Population Density, Threat of Tsunami	Passage Forth Drive

Evacuation Route

In that the event that the sections of the community identified above needs to be evacuated, the following evacuation route and transportation route are to be used. Community members should proceed to the designated shelters as outlined in the table below. It is not necessary to assemble at an assembly point

Table 16: Evacuation Route and Mode of Transportation to Emergency Shelter

Assembly	Shelter	Evacuation Route	Transportation	Resources
Point/s				(people & equipment)
Block 1- Boston	Boston Field Carwash	- Portland East and West then unto	By foot	Block Reps and D-Zone
Field Carwash		Waterford Parkway		Reps with the aid of Bull
				Horns
Block 2 - Rod	Rod Wood Playfield	Trelawny East and West –W. Pky	By foot	Block Reps and D-Zone
Wood Field				Reps with the aid of Bull
				Horns
Block 3 – Bus	Open Land in vicinity	Falmouth East and West	By foot	Block Reps and D-Zone
Terminus	of Waterford Infant			Reps with the aid of Bull
	School			Horns

Block 4-	Tent City at the site	Adir Drive unto Waterford Parkway	By foot	Block Reps and D-Zone
Waterford Primary				Reps with the aid of Bull
School Football				Horns
Field				
Block 5 – World	Waterford Primary	Adir Drive go unto Caymanas Drive	By foot	Block Reps and D-Zone
Football Field	School			Reps with the aid of Bull
				Horns
Block 6 -	Waterford High	Falmouth West unto Waterford	By foot	Block Reps and D-Zone
Missionary Churc	School	Parkway		Reps with the aid of Bull
Hope Temple				Horns
Open Field				
Block 7 -	Waterford High	Trelawny West then unto Waterford	By foot	Block Reps and D-Zone
Waterford	School	Parkway		Reps with the aid of Bull
Community				Horns
Centre				
Block 8 -	Waterford High	Portland East unto Waterford	By foot	Block Reps and D-Zone
Waterford Baptist	School	Parkway		Reps with the aid of Bull
Church				Horns
Block 9 -	Waterford High	Big road unto Passagefort Drive	By foot	Block Reps and D-Zone
Passagefort Drive	School			Reps with the aid of Bull
				Horns

The evacuation procedure for the community is detailed below in Table 17.

Table 17: Evacuation Procedures

ACTIVITY	RESPONSIBILITY
Evaluate threat and liaise with PDC/ODPEM on need for	Rupert Walters
evacuation	377-9920
Alert residents on possible evacuation	Mr. Baldwin Tulloch
	819-8105
Decide on timing	Mr. Baldwin Tulloch
	819-8105
Ensure special needs population is assisted	Ms. Tamika Thomas
	398-5454
Organize transportation	Ms. Opal Neita
	398-6989
Identify route to be used	Ms. Opal Neita
	398-6989
Ensure shelter is available	Ms. Sharon Wheeler
	883-9483
Start Evacuation	Mr. Anthony Wheeler (Blue
	459-2481
Check that all areas have been evacuated	Mr. Anthony Wheeler (Blue
	459-2481
Inform PDC	Rupert Walters
	377-9920

Persons in Waterford, if Evacuation Order is given, should move to friends and relatives in the first instance. Those with private

transportation will leave the community via the evacuation routes identified. Those without transportation will move to the designated assembly points and will be transported to the national arena or to the nearest point outside of the community.

- 1. Data on the following: % of population to be evacuated, each family must be registered- this includes number of persons in household and block number; timing in terms of when people will leave; Each family will must report to the D-Zone Monitors on his or her road or pathway to be ensure that there is documentation as to how you plan to be transported out of the community; number of vehicles needed or that the evacuating population will use, probable destinations of persons evacuating.
- 2. Special Populations to be evacuated first
- 3. People with their own transportation will be taking the same route as the buses and they must also register.
- 4. All persons will be advised via town crier that they should ensure their homes are fully secured as best as possible before leaving.
- 5. Activate emergency transportation resources No pets allowed on buses or in shelters.
- 6. Temporary and Housing solutions at the Arena for those who will not be able to stay with friends and relatives
- 7. Critical Traffic Control Points if necessary
- 8. Coordination with the Waterford CDC, the Portmore Municipal Council, ODPEM and the Police for phased evacuation to take place.
- 9. A contact list of facilities that require assistance or extra time to relocate to other facilities
- 10. Contact list of vulnerable populations Procedures to access the Toll Road if necessary
- 11. Access controls and re-entry into the community coordination procedures between the Gregory Park CDC, Police and PMC

Shelter

Table 18 below highlights the designated shelters for the community. All persons are encouraged to carry food to last them for three days. See Appendix D for list of items needed.

Table 18: List of Official and Unofficial Emergency Shelters

Shelter Name	Access Route	Type of Use	Condition of	Area Served	Shelter Manager &	Agency
& Location	to Shelter		Shelter		Team	Liaison Officer
					(Name, Contact)	(Name, Contact)
Waterford	Waterford	Hurricane and	Good	Entire Gregory	Beverley Leach	Mrs. Phillipa Ricketts-
High School	Parkway to the	Earthquake		Park	Althea Beckford	Edmund
(official)	school				Roy Nelson	
Waterford		Hurricane and	Good	Cedar Grove	Alicia Roxborough	Mrs. Phillipa Ricketts-
Primary School		Earthquake			Sharon Wheeler	Edmund
(official)						

Preparedness Action Plan

The community Action Plan sets out the preparedness activities to be done for a planning cycle

 Table 19:
 Community Preparedness Action Plan

ACTIVITY	RESPONSIBILITY	TIMEFRAME
Clean all drains	Ms. Beverley Leach	At the start of the hurricane season
	428-9625	
Train team members	Mr. Michael Corinaldi	Yearlong activities
	294-2636	
Replenish First aid/SAR kits	Ms. Carol White	Yearlong activities: to ensure items are not
	872-6301	expire
Make arrangements for access to relief and	Mr. Roy Nelson	
emergency supplies*	350-6551	
Start hurricane awareness	Mr. Michael Corinaldi	At the start of the hurricane season
	294-2636	

^{*} Appendix H indicates a list of emergency and relief supplies that the community will need.

RESPONSE AND RELIEF

Instructions for DRM Team

The Waterford Command Centre will be located at the back of the Waterford Infant School. The Waterford Infant School will serve as an assembly point for community members to garner information regarding the effect of the disaster. It is also where volunteers can sign-in for instructions and assignments. Waterford Infant School will also serve as a meeting place where residents will seek to reunite or locate family members or friends.

The Command Center will forward information to the Parish Emergency Operations Centre (PEOC). The Community Disaster Chairman will assume the lead at the Command Center. The Public Education Coordinator will serve as the sole public spokesperson in Waterford. The Waterford Disaster Risk Management Group will also develop an inventory and assess damage, and where feasible, secure the perimeter of dangerous areas. The Waterford Disaster Risk Management Group will have available several bilingual volunteers who will help the Police, Fire and Building Inspectors communicate with residents.

The Chairman shall declare an emergency when a predetermined condition has been met or when advised by the Office of Disaster Preparedness and Emergency Management (ODPEM). Operating procedures will be activated as set out in the relevant Standard Operating Procedures / Plans as outlined in the **APPENDICES A & B.**

Response

Search and Rescue/First Aid/Emergency Medical Care

Residents would need to be trained in the following response activities;

 Table 20:
 Response Procedure – Search and Rescue/First Aid/Emergency Medical Care

Activity	Responsibility	Agency to Report to
Activation of Shelters	Ms. Sharon Wheeler	Parish Council
	883-9483	Parish Disaster Coordinator
		ODPEM
Feeding of Shelterees	Ms. Sharon Wheeler	Parish Council
	883-9483	Parish Disaster Coordinator
Stocking of Shelters	Sharon Wheeler	Parish Council
	883-9483	Parish Disaster Coordinator
Trucking of Water	Ms. Opal Neita	NWC
	398-6989	Parish Council
Alternative Sources of Lighting	Ms. Beverley Leach	JPS representative at Parish
	428-9625	Council
Garbage Removal form shelters	Ms. Opal Neita	Parish Council
	398-6989	NSWMA
Search and Rescue	Mr. Baldwin Tulloch	Fire Bridge

	819-8105	Police
Children Welfare and the Disabled	Ms. Tamika Thomas	Childs Agency
	398-5454	Parish Council
Initial Damage Assessment	Mr. Baldwin Tulloch	Parish Council
	819-8105	
Welfare Assessment	Ms. Tamika Thomas	Ministry of Labour and Social
	398-5454	Security.
Distribution of relief supplies	Ms. Opal Neita	Ministry of Labour and Social
	398-6989	Security.
First Aid	Mr. Roy Nelson	Red Cross
	350-6551	Ministry of Health
Activation of EOC	Rupert Walters	Parish Disaster Coordinator
	377-9920	
Distribution of Food to Shelterees	Sharon Wheeler	MLSS
	883-9483	
Cleaning Up of Households	Ms. Opal Neita	MLSS
	398-6989	

Initial Damage Assessment

Residents would need to be trained to conduct Initial Damage Assessment.

 Table 21:
 Initial Damage Assessors

ACTIVITY	RESPONSIBILITY
Send out rapid assessment team	
Check on:	
Roads opened/closed	Ms. Opal Neita
	398-6989
Roads In need of urgent repair to provide access	Ms. Opal Neita
Trouble in need of argent reputation provides	398-6989
Power:	
Fallen lines, poles transformers	Mr. Roy Nelson 350-6551
Live wires	Mr. Roy Nelson 350-6551
Water and Sewage	
Broken/missing water mains	Mr. Roy Nelson 350-6551
Water available	Mr. Roy Nelson 350-6551
Sewage pipes broken/leaking	Mr. Roy Nelson 350-6551
Describe State of:	

Community	Rupert Walters
	377-9920
Schools	Mr. Michael Corinaldi
	294-2636
Clinic	Ms. Carol White
	872-6301
Church	Ms. Carol White
	872-6301
Shops and businesses	
Boats and fishing gear	
Sea Wall and sea defense	
Mangroves, environment	

Damage Assessment Procedure

The community will undertake a minimum of two types of assessment within a one week period. These assessments will be submitted to the Parish council.

 Table 22:
 Community Damage Assessors

Type of Assessment (Buildings, Agriculture, Welfare etc)	Team Leader (Name, Contact)	Agency Report is to be Submitted to	Time Frame
Initial Assessment			
Buildings, utilities and infrastructure	Mr. Roy Nelson 350-6551	 Ministry of Labour and Social Security Portmore Municipal JPS NWC 	2 days after all clear is given
Welfare	Ms. Tamika Thomas 398-5454	Ministry of Labour and Social SecurityPortmore Municipal	2 days after all clear is given
Agriculture	Mr. Roy Nelson 350-6551	RADA	2 days after all clear is given
Preliminary assessment			
Buildings, utilities and infrastructure	Mr. Roy Nelson 350-6551	Ministry of Labour and Social Security	

		Portmore Municipal	
Welfare	Ms. Tamika Thomas		
	398-5454		
Agriculture	Mr. Roy Nelson	RADA	
	350-6551		

Response Action Plan

Based on the initial damage assessments, the following priorities for response in the Action Plan were identified.

 Table
 23: Community Response Action Plan

RESPONSE ACTIONS IN ORDER OF PRIORITY	RESPONSIBILITY	AGENCY TO REPORT TO
Evacuation Route Management	Ms. Opal Neita 398-6989	Fire Brigade Police Parish Disaster Coordinator
Evacuation	Rupert Walters 377-9920	Parish Disaster Coordinator Portmore Municipal
Trucking of Water	Ms. Opal Neita 398-6989	NWC Portmore Municipal
Alternative Sources of Lighting	Mr. Baldwin Tulloch 819-8105	JPS representative at Portmore Municipal
Search and Rescue	Mr. Roy Nelson 350-6551	Fire Bridge Police
Children Welfare and the Disabled	Ms. Tamika Thomas 398-5454	Childs Agency Portmore Municipal
Initial Damage Assessment	Mr. Roy Nelson 350-6551	Portmore Municipal

Welfare Assessment	Ms. Tamika Thomas 398-5454	Ministry of Labour and Social Security.
Distribution of relief supplies	Ms. Opal Neita 398-6989	Ministry of Labour and Social Security.
First Aid	\$19 ₋ \$105	Red Cross Ministry of Health

Relief

Table 24: Relief Assistance

ACTIVITY	RESPONSIBILITY
Identify members of community who have:	
Received damage	Mr. Roy Nelson 350-6551
Need shelter	Ms. Sharon Wheeler 883-9483
Lost means of income	Ms. Tamika Thomas 398-5454
Need assistance	Ms. Tamika Thomas 398-5454
Identify members of the community in need of psycho-social support or counseling	Ms. Tamika Thomas 398-5454
Compile list and update PDC, ODPEM	Rupert Walters
	377-9920

APPENDIX A – HURRICANE STANDARD OPERATING PROCEDURES (SOPS)

WATERFORD CDRM GROUP HURRICANE - STANDARD OPERATING PROCEDURES (SOPs)

Purpose

The purpose of this Hurricane SOP is to establish the necessary action steps for an effective and safe response to hurricanes that could potentially affect the community of **Waterford**. Hurricanes could result in damages to community infrastructure and facilities, loss of life and property, and other incidents with varying severity from minimal to catastrophic; depending on the intensity of the hurricane. The CDRM Group shall work with government organizations, NGOs/CBOs, private sector and other stakeholders to facilitate the safety of community members. It is the intent of this SOP to maintain clearly defined procedures for before, during and after hurricane events. Hurricanes occur primarily during a distinct season that runs from June 1 to November 30.

Objectives

The concepts and procedures in this SOP are set to:

- Facilitate coordination among community members and the Waterford Community Development Council in preparing for and responding to hurricanes.
- Ensure a logical and sequenced set of actions for community response.
- Assign specific task to ensure collaboration and execution activities.

Threat Assessment

The National Oceanic and Atmospheric Administration, provides an annual forecast for the Hurricane Season. Information regarding forecast is communicated through the Meteorological Service of Jamaica (Met Office) and the ODPEM. The annual anticipated threat for the purpose of this plan includes:

- At least one (1) hurricane event or near miss (with significant wind and rain).
- Significant rain events during the period at least one (1) affecting community.

Basic Planning Assumptions

At least one major Hurricane will probably affect the Waterford Community

- Waterford CDC DRM Team will remain active and functional
- Community members will be responsive Waterford CDC DRM Group programmes, initiatives, warning and other information.
- There is commitment and support from agencies and departments of government to assist community.
- Community is willing to utilize their own resources in preparedness and response.
- Waterford CDC DRM Group will train and establish Community Emergency Response Team(s) (CERTs).

Concept of Operations

These SOPs are designed to establish a concept of operations spanning the direction and control of the disaster from an initial monitoring through post-disaster response, recovery, and mitigation. All activities are community driven, with technical assistance provided by agencies, departments, NGOs and private sector as necessary.

Procedures will be categorized into the following phases:

Phase 1: Prevention, Preparedness and Mitigation (January through to 144 hours before impact).

Phase 2: Alert (144 hours up to 72 hours before impact)

Phase 3: Event and Event Response (72 hours before impact through to 120 hours after landfall/All Clear)

Phase 4: Recovery

ACRONYMS

AAR – After Action Report

CERT – Community Emergency Response Team

CDRMG - Community-based Disaster Risk Management Group

DRM – Disaster Risk Management

EOC – Emergency Operations Center

NEOC – National Emergency Operations Center

NGO – Non Government Organization

ODPEM – Office of Disaster Preparedness and Emergency Management

PDC – Parish Disaster Coordinator/Committee

PEOC – Parish Emergency Operations Center

CDC Community Development Council

DEFINITIONS

All Clear

An All Clear is a statement issued by the pertinent authority when a threat has passed. The *All Clear*, for a Hurricane – is when the storm has passed and the associated strong impacts from winds and rains will no longer affect the country/community.

Emergency Operations Center (EOC)

A multi-agency coordination center that provides support and coordination to the on-scene responders.

Incident

An event that occurs that may lead to an emergency condition.

Tropical Disturbance

A tropical disturbance is a cluster of thunderstorms poorly organized.

Tropical Depression

A tropical depression is a cluster of storms organized around a central circulation with surface wind speeds of 38 mph or less.

Tropical Storm

A tropical storm is a cluster of smaller storms with substantial circular rotation and sustained surface winds of 39-73 mph.

Hurricane

A hurricane is a large tropical storm with winds of 74 mph or greater, moving counterclockwise. In addition to intense winds, hurricanes are accompanied by heavy rains, flooding along the coast, flooding inland and tornadoes.

The Saffir-Simpson Hurricane Scale is a one to five rating based on the hurricane's present intensity. This is used to give an estimate of the potential property damage and flooding expected along the coast from a hurricane landfall. Wind speed is the determining factor of this scale.

Hurricane Categories

Category One Hurricane

A Category One Hurricane has winds of 74 to 95 mph and is typically characterized by *minimal damage*. Storm surge is generally 4 to 5 feet above normal.

Category Two Hurricane

A Category Two Hurricane has winds of 96 to 110 mph and is typically characterized by *moderate damage*. Storm surge is generally 6 to 8 feet above normal.

Category Three Hurricane

A Category Three Hurricane has winds of 111 to 130 mph and is typically characterized by *extensive damage*. Storm surge is generally 9 to 12 feet above normal.

Category Four Hurricane

A Category Four Hurricane has winds of 131 to 155 mph and is typically characterized by *extreme damage*. Storm surge is generally 13 to 18 feet above normal.

Category Five Hurricane

A Category Five Hurricane has winds of greater than 155 mph and is typically characterized by *catastrophic damage*. Storm surge is generally greater than 18 feet above normal.

Warnings and Watches

The National and Regional Weather Service issues the following types of warnings and watches associated with tropical storms:

Tropical Storm Watch

A tropical storm watch is issued when tropical storm conditions, including winds from 39 to 73 mph, pose a possible threat to a specified coastal area within 36 to 48 hours.

Tropical Storm Warning

A tropical storm warning is issued when tropical storm conditions, including winds from 39 to 73 mph, are expected in a specified coastal area within 36 hours or less.

Hurricane Watch

A hurricane watch is issued for a specified coastal area for which a hurricane or a hurricane-related hazard is a possible threat within 36 to 48 hours.

Hurricane Warning

A hurricane warning is issued when a hurricane with sustained winds of 74 mph or higher is expected in a specified coastal area in 36 hours or less.

Flash Flood Watch

A flash flood watch means a flash flood is possible in an area and everyone should stay alert.

Flash Flood Warning

A flash flood warning means a flooding has been report and flash flood is imminent and everyone in the area should take immediate action to protect lives and property.

OPERATING PROCEDURES

Phase 1: Prevention, Mitigation and Preparedness (January through to 5 Days before impact).

Prevention, Mitigation and Preparedness activities as mentioned in these SOPs are specific actions to be taken the Waterford CDC/DRM Coordinators and their teams (drafted support persons) to ensure proper planning and coordination for hurricane emergency. Coordinators should utilize other information and measures highlighted in the CDRM Plan as a guide for other actions.

A (CTIVITIES	RESPONSIBLE PERSON(S)
1.	Continue to support and promote public information and awareness programmes.	Michael Corinaldi – Public Education & Fundraising Coordinator
2.	Sensitize special needs population	Tamieka Thomas – Special Needs Coordinator
3.	Organize how special needs population will be evacuated and transportation required.	Mr. Rupert Waletrs Preparedness Coordinator
4.	Put arrangements in place to have vehicles to be used in evacuation fuelled with petrol	Ms. Opal Neita
5.	Send a reminder/update to the Fire Brigade of the evacuation route for the community. Do a walk through if possible	Mr. Baldwin Tulloch with Support from the Portmore EOC
6.	Sensitization of persons in the community without vehicles of assembly area for transportation to a more safe location.	Michael Corinaldi – Public Education & Fundraising Coordinator
7.	Identify areas in the community where high potential for infrastructure/property damages.	Beverley Leach – Vulnerability & Risk

	Identification Coordinator
8. Ensure DRM teams are aware of all high risk locations in the community.	Beverley Leach – Vulnerability & Risk Identification Coordinator
9. Prepare areas for sheltering persons in need	Sharon Wheeler – Shelter Manager
10. Re-engage community volunteers to provide assistance in shelters and other areas. Consult with PDC for facilitating training or refresher courses.	Sharon Wheeler – Shelter Manager
11. Ensure new developments are assessed and relevant measures put in place to safeguard community.	Mr. Rupert Walters Preparedness/Prevention and Mitigation Coordinator-
12. Organize mitigation and prevention projects and work days with technical guidance from relevant agencies (with the help of the PDC.	Mr. Rupert Walters Preparedness/Prevention and Mitigation Coordinator-

Phase 2: Alert (5 Days up to 72 hours before impact)

ACTIVITIES	RESPONSIBLE PERSON(S)
 Meet and assess the community's state of preparedness for a hurricane Advise community to listen to all weather advisories 	Waterford CDC DRM Group
 Issue warning of threat Alert and notify: PDC that community DRM teams are activated Other CBOs Shelter Managers Response personnel Make available all relevant information on the hazard to the general community. 	Mr. Rupert Walters Preparedness

Pre-check and activate SOPs	Mr. Rupert Walters
2. Alert all trained community first aiders and search and rescue personnel.	Ms. Carol White Ms. Carol White
3. Have first-aid kits prepared	
 Make sure your family goes over the family disaster plan. Make plans for protecting your house, especially the roof, windows and doors. Have flashlight and extra batteries Have portable battery-operated radio and extra batteries Ensure provisions are put in place for emergency food and water. 	Mr. Rupert Walters Preparedness Coordinator Mr. Baldwin Tulloch - Response & Recovery Coordinator
Protecting the community:	
 Trim dead or weak branches from trees Clear all drains that will cause flooding 	Mr. Rupert Walters Preparedness Mr. Baldwin Tulloch - Response & Recovery Coordinator

Listen to all weather advisories and information	Ms. Beverley Leach
from ODPEM, MET office, and communicate	
with PDC.	

Phase 3: Event and Event Response (72 hours before impact through to 5 Days after landfall/All Clear)

ACTIVITIES	RESPONSIBLE PERSON(S)
DRM Team Advise the Community to listen to all weather advisories and remain alert	Mr. Rupert Walters Preparedness Coordinator
Continue to listen to all weather advisories and reports.	Mr. Rupert Walters Preparedness Coordinator

A. HURRICANE WATCH - 48 Hours before Impact

ACTIVITIES	RESPONSIBLE PERSON(S)
 Personal preparation of food supplies Securing official documents Securing home and get rid of all thing around the yard that can be missile in a hurricane Check on neighbours that may need help 	Ms. Carlene Spence
Ensure the Elderly and Physical challenged are notified and assisted to prepare for event.	Mrs. Daphne Pitter – Senior citizen Association Secretary

B. HURRICANE WARNING - 36 Hours before impact

ACTIVITIES	RESPONSIBLE PERSON(S)
1. Activate and brief all community teams	
and volunteers	Michael Corinaldi – Public
2. Test the systems of communication within	Education & Fundraising
the community.	Coordinator
3. If cell phones are to be used ensure credit	
is bought	
4. Ensure phones can be charged	
Activate volunteers to be on standby to assist	Mr. Baldwin Tulloch
with damage assessment. Conduct briefing of	Wif. Baidwin Tunoch
these volunteers	
1. Activate and prepare emergency shelters	Ms. Beverley Leach
2. Deploy relief and welfare volunteers to	
emergency shelters	
	M D 1 I I
Ensure contacts are made with the PDC and other	Ms. Beverley Leach
stakeholders for assessment of shelter facilities if	
necessary.	
Contact PDC and prepare to Initiate evacuation	Mr. Rupert Walters
procedures for the community	wii. Rupoit wancis
procedures for the community	

Re-check arrangements and MOUs with private bus owners and other volunteers in the community.	Mr. Rupert Walters – Preparedness Coordinator
2. Pre-position the following resources to areas which will potentially be cut off:	
 Food stocks/welfare items Communications equipment Manpower Power saws 	
3. Refuel vehicles	
Encourage residents to activate family plans	Mr. Michael Corinaldi – Public Education Coordinator
2. Pre-position resources:	
List these resources	
 equipment, ropes, etc 	
• Food stocks/welfare items	
Communications equipment	
Manpower	

C. 24 Hours before impact

ACTIVITIES	RESPONSIBLE PERSON(S)
Notify PDC of activation of evacuation plan	Mr. Rupert Walters – Preparedness Coordinator
2. Consult PDC on all matters relating to the	
activation of any or all evacuation systems.	
Activate and test local communications links and report to PDC.	Mr. Michael Corinaldi – Public Education Coordinator
report to TBC.	Education Coordinator
Brief community of activation of evacuation and persons to be evacuated: Review evacuation routes and gather your disaster supply kit in case you are instructed to evacuate. Communicate assembly points and deploy marshals. Make contact with shelter managers to receive evacues. Inform PDC of actions to be taken. All electricity and gas supplies should be shut-down when closing businesses or evacuating homes Ensure the Elderly and Physically challenged to be evacuated Ensure registration of all evacuated Check that all needing evacuation are safely evacuated.	Michael Corinaldi – Public Education Coordinator Mr. Baldwin Tulloch – Response and Recovery Coordinator

Monitor radio for hurricane warnings and public information via news releases through ODPEM and Met office Monitor Radios for precautionary tips together with packaged information of the activities of responding agencies.	Michael Corinaldi Public Education & Fundraising Coordinator
Alert community Initial Damage Assessment Team(s).	Mr. Roy Nelson Damage Assessment Coordinator
Confirm lines of credit with merchants to enable easy access to relief supplies after the disaster	Mr. Rupert Walters- Preparedness Coordinator

D. 16 Hours before Impact to Landfall

ACTIVITIES	RESPONSIBLE PERSON(S)
 Maintain contact with PEOC Advise PEOC of weather conditions and state of preparedness 	Mr. Rupert Walters – CDC President Ms. Beverley Leach
3. Confirm arrival and status of evacuees in shelters	
4. Check in with standby teams and community response personnel	

E. THE BLOW

ACTIVITIES	RESPONSIBLE PERSON(S)
Monitor and report events as far as possible.	Mr. Rupert Walters
Maintain contact with PEOC, Shelters and response personnel.	Mr. Rupert Walters

F. AFTERMATH (IMMEDIATELY following the blow to 5 Days after all clear)

ACTIVITIES	RESPONSIBLE PERSON(S)
1. Check with PDC for persons to return home but only after authorities say it is safe to do so. Keep tuned to your local radio or TV station for recovery information. Confirm All Clear	Mr. Michael Carlandhi – Public Education Coordinator
Deploy community damage survey teams or assessors 1. Deploy community response teams to check on vulnerable (elderly and physically challenged) and critical facilities. 2. Check for deaths, injuries and persons needing emergency assistance 3. Conduct first aid and search and rescue operations as necessary 4. Notify PEOC of critical/emergency cases 5. Provide PEOC with status report	Mr. Roy Nelson – Damage Assessment coordinator

\boldsymbol{F} (a) Up to 48 Hours after All Clear

ACTIVITIES	RESPONSIBLE PERSON(S)
	Tamieka Thomas
Provide initial damage survey and needs of the	
community	

1. Provide ground reconnaissance intelligence to the PDC.	Mr. Rupert Walters
2. Assist the Fire Brigade and NWA with road clearing, and search and rescue activities through the PEOC.	
3. Assist with the establishment and staffing of registration centres.	
Beware of downed or loose power lines. Report	Mr. Michael Corinaldi
them immediately to the JPS, Police or Fire	
Department.	
Advise community members to enter their homes with caution:	
 Open windows and doors to ventilate or 	Mr. Anthony Wheeler
dry your home. Do not use candles or	
open flames in doors. Use a flashlight to	
inspect for damage.	
• Check for gas leaks. If they smell gas or	

	hear a blowing or hissing noise, quickly	
	leave the building and leave the doors	
	open. Call the gas company.	
-	Look for electrical system damage. If they	
	see sparks or frayed wires, turn off	
	electricity at the main fuse box.	
•	If they have to step in water to reach the	
	electric box, call an electrician for advice.	
1.	Check for sewage and water-line damage.	Mr. Anthony Wheeler
2.	If you suspect there is such damage, call	
	the NWC company and or PDC.	Mr. Michael Corinaldi
Advise	e community not to drink or prepare food	
with ta	up water until notified it is safe to do so.	

$F\left(b\right)$ 48 Hours to 5 Days After All Clear

ACTIVITIES	RESPONSIBLE PERSON(S)
Constantly advise the community: • To conserve water and food • To stay living at their homes if it	Mr. Michael Corinaldi

is safe to do so	
• To take particular care with	
hygiene and sanitary practices	
Of measures being taken with	
respect to provision of food and	
• •	
water and restoration of public	
utilities	
 Coordinate requests for and offers of assistance through the PEOC. 	Mr. Rupert Walters
2. Coordinate reconnaissance and damage assessment teams through the PEOC	
3. Ascertain the early requirements for Government assistance in re-establishing the community.	
Coordinate the establishment, staffing and management of emergency shelters for	Beverley Leach/ Sharon Wheeler
sustained use in community.	

Encourage persons affected to stay with friends or family as first options.	
Coordinate requests, receipt and distribution of food, clothing and water supplies through the PEOC	
1. Assist with the distribution of supplies	Mr. Baldwin Tulloch Ms. Carlene Spencer/Beverley
2. Assist with the tracing of missing persons	
3. Assist with needs assessments	
4. Assist in the provision of welfare information to persons affected.	Mr. Brown
5. Begin to effect minor repairs to critical facilities and clear road ways and drains	

	Mr. Rupert Walters
Continue to provide feedback and assistance	
to the community through the PDC and	
PEOC.	

Phase 4: Recovery

ACTI	VITIES	RESPONSIBLE PERSON(S)
1.	Mobilize Community members to assist each other with rehabilitation and reconstruction activities.	Mr. Baldwin Tulloch Mr. Anthony Wheeler - Assistance
2.	Encourage community members to rebuild, bearing in mind mitigation measures (build back better).	
3.	Mobilize and conduct repairs to critical facilities and infrastructure (Schools, clinic, water sup	

 Update PDC on recovery activities by external agencies/departments/organizations. Monitor progress and ensure deficiencies are reported. 	Mr. Michael Corinaldi – Public Education Coordinator
Mobilize DRM G to seek assist from NGOs (e.g. Red Cross, Food for the Poor, ADRA and Others) to assist in community recovery initiatives.	Mr. Rupert Walters/PMC
Identify and share Lessons Learnt to enhance future preparedness and response activities: Challenges in responding to incidents Which systems were overburdened? What resources were lacking (human and physical)? How did the community cope? What areas of the SOPs need to be reconsidered?	Mr. Rupert Walters
Revise SOPs as necessary	Mr. Rupert Walters

APPENDIX (A. 2) – EARTHQUAKES - STANDARD OPERATING PROCEDURES (SOP)

WATERFORD CDRM GROUP EARTHQUAKES - STANDARD OPERATING PROCEDURES (SOPs)

Purpose

The purpose of this Earthquake SOP is to establish the necessary action steps for an effective and safe response to earthquakes that could potentially affect the community of **Waterford.** Earthquakes can result in damages to community infrastructure and facilities, loss of life and property, and other incidents with varying severity from minimal to catastrophic; depending on the intensity of the hurricane. The Waterford CDRM Group will work with government organizations, NGOs/CBOs, private sector and other stakeholders to facilitate the safety of community members. It is the intent of this SOP to maintain clearly defined procedures for before, during and after hurricane events.

Earthquake can happen at any time with varying degrees of strengths or magnitudes. The community recognizes that it must be prepared to respond, recover and mitigate against the effects of an earthquake.

Objectives

The concepts and procedures in this SOP are set to:

- Facilitate coordination among community members and the Waterford CDRM Group in preparing for and responding to earthquakes.
- Ensure a logical and sequenced set of actions for community response.
- Assign specific task to ensure collaboration and execution activities.

Threat Assessment

The community of Waterford has some history of earthquakes. The anticipated threat for the purpose of this plan includes at least one event in the next ten years (at any time) that will have a moderate to major effect on most buildings and critical infrastructure.

Basic Planning Assumptions

• At least one moderate earthquake will probably affect the country/community in the next 5-100 years.

- Waterford CDRM Group will remain active and functional
- Community members will be responsive to CDRM Group programmes, initiatives, warning and other information.
- There is commitment and support from agencies and departments of government to assist community.
- Community is will to utilize their own resources in preparedness and response as far as possible.
- CDRM Group will train and establish Community Emergency Response Team(s) (CERTs).

Concept of Operations

These SOPs are designed to establish a concept of operations spanning the direction and control of the disaster from an initial monitoring through post-disaster response, recovery, and mitigation. All activities are community driven, with technical assistance provided by agencies, departments, NGOs and private sector as necessary.

Procedures will be categorized into the following phases:

Phase 1: Prevention, Preparedness and Mitigation (year round).

Phase 2: Event, Event Response, Damage Assessment

Phase 3: Recovery

ACRONYMS

AAR – After Action Report

CERT – Community Emergency Response Team

CDRMG - Community-based Disaster Risk Management Group

DRM – Disaster Risk Management

EOC – Emergency Operations Center

NEOC – National Emergency Operations Center

NGO – Non Government Organization

ODPEM – Office of Disaster Preparedness and Emergency Management

PDC – Parish Disaster Coordinator/Committee

PEOC – Parish Emergency Operations Center

DEFINITIONS

All Clear

An All Clear is a statement issued by the pertinent authority (Earthquake Unit, ODPEM) when a threat has passed. The *All Clear*, for an Earthquake – is when the earthquake has passed and the associated after-shocks or tremors are no longer expected to affect the country/community.

Emergency Operations Center (EOC)

A multi-agency coordination center that provides support and coordination to the on-scene responders.

Incident

An event that occurs that may lead to an emergency condition.

Earthquake

A shaking or rolling motion of the earth's surface caused from a sudden release of energy from below the earth's surface. The release of energy is generally cause by slipping or breakage of rock below the earths surface.

Epicentre

The position on the ground directly above where the slip under the earth's surface first occurs. The magnitude felt is likely to be greatest at this point. The damage is likely to be worst at this point.

After-Shock

Tremors are smaller earthquakes that occur after the main shock is felt. *After-shocks* can occur over a period of a few hours to months after the main shock.

Tremor

The shaking or seismic waves felt or caused by an earthquake or explosion is called a *tremor*.

Magnitude							
	measure of the amou	ant of energy releas	sed during an ea	rthquake. Magr	itude is typically	measured on the	Ritcher Scale
for the Caribbe	in.						

OPERATING PROCEDURES

Phase 1: Prevention, Mitigation and Preparedness

Prevention, Mitigation and Preparedness activities as mentioned in these SOPs are specific actions to be taken by respective CDRM Coordinators and their teams (drafted support persons) to ensure proper planning and coordination for an **earthquake** emergency. Coordinators should utilize other information and measures highlighted in the CDRM Plan to as a guide for other actions.

A (CTIVITIES	RESPONSIBLE PERSON(S)
1.	Continue to support and promote public information and awareness programmes.	Mr. Michael Corinaldi – Public Education & Fundraising Coordinator
2.	Sensitize special needs population	Ms. Tamieka Thomas
3.	Organize how special needs population will be evacuated and transportation required.	Mr. Rupert Walters- Preparedness Coordinator
4.	Put arrangements in place to have vehicles to be used in evacuation fuelled with petrol	Ms. Opal Neita
5.	Send a reminder/update to the Fire Brigade of the evacuation route for the community. Do a walk through if possible	Mr. Rupert Walters - Preparedness Coordinator
6.	Sensitization of persons in the community without vehicles of assembly area for transportation to more safe location.	Mr. Michael Corinaldi— Public Education & Fundraising Coordinator
7.	Identify areas in the community where high potential for infrastructure/property damages.	Ms. Beverley Leach – Vulnerability & Risk Identification Coordinator

8. Ensure DRM teams are aware of all high risk locations in the community.	Ms. Beverly Leach Vulnerability & Risk Identification Coordinator
9. Prepare areas for sheltering persons in need	Mr. Rupert Walters Preparedness Coordinator
10. Re-engage community volunteers to provide assistance in shelters and other areas. Consult with PDC for facilitating training or refresher courses.	Mr. Rupert Walters Preparedness Coordinator
11. Procurement and placement of necessary response equipment and supplies for shelters – mattresses/blankets/sheets, water, first aid kits, hygiene kits, mutual aid agreements (for food), information sheets/pen, notice board, radio communications (base radio, handhelds positioned), contact list, SOP manual.	Ms. Sharon Wheeler Shelter Manager
12. Procurement and placement of necessary response equipment and supplies for evacuation or sector team leaders – including first aid kits, ropes, masking tape, stretchers, splints, sheets.	Ms. Sharon Wheeler Shelter Manager
13. Organize and ensure supplies and systems for damage assessment are in place – damage assessment forms, working pens, means of communication to relevant persons, contact list, field reference guide and SOP manual.	Ms Beverly Leach Damage Assessment Coordinator

14. Liaison for maintenance and to keep open all access routes – main transportation routes and alternative access routes.	Mr. Rupert Walters Prevention & mitigation Coordinator (primary)
	Ms. Lorraine Leach Sector/Evacuation leaders (secondary)
15. Meet and assess the community's state of preparedness for an earthquake	DRM Team
15.1. Community inventory of building quality.	Mr. Rupert Walters Mitigation & Prevention Coordinator
	PMC - Engineering and Planning Department
15.2. Community inventory of road networks and updating of community map.	Mr. Rupert Walters Mitigation & Prevention Coordinator
	PMC - Engineering and Planning Department
15.3. Identify alternative sources of water, sources of alternative/temporary housing solutions	Mr. Rupert Walters Mitigation & Prevention Coordinator
15.4. Put mutual aid agreements in place for emergencies such as earthquakes	Mr. Rupert Walters Preparedness Coordinator
15.5. Ensure new developments are assessed and relevant measures put in place to safeguard community.	Mr. Rupert Walters Mitigation & Prevention Coordinator

15.6.	Organize mitigation and prevent projects and work days with technical guidance from relevant agencies (with the help of the PDC).	Mr. Rupert Walters Mitigation & Prevention Coordinator
16. Organ	nize or initiate & support Drills	
		Mr. Rupert Walters
•	Trained community first aiders	Preparedness Coordinator
•	Search and rescue personnel.	Mr. Michael Corinaldi
	Have first-aid kits prepared	Public Education and Fundraining
	1 1	Coordinator
•	Support for school and business community drills	
17. Make available all relevant information on the hazard to the general community.		
18. Have 1	first-aid kits prepared	
Personal f	or families:	Mr. Michael Corinaldi – Public
		Education Coordinator
	ake sure your family goes over the mily disaster plan.	
	, 1 -	Mr. Baldwin Tulloch –
		Preparedness/Coordinator
		Response & Recovery Coordinator

Protecting the community:	Mr. Michael Corinaldi – Public
 Encourage residents to check and address 	Education Coordinator
building and roofing strength. Keep yards	
clear of debris	Mr. Rupert Walters
	Preparedness Coordinator /
 Keep roads and open lots clear of solid 	Mitigation & Prevention
waste and debris.	Coordinator

Phase 2: THE EARTHQUAKE - The first 3-6 hours immediately following the event

ACTIVITIES	RESPONSIBLE PERSON(S)
Monitor and report events as far as possible.	Mr. Rupert Walters – Preparedness Coordinator
Maintain contact with PEOC, Shelters and response personnel.	Mr. Baldwin Tulloch Response & Recovery Coordinator
Depending on the severity, ensure all buildings are vacated. Account for missing persons.	Mr. Baldwin Tulloch Response & Recovery Coordinator
DRM Team Advise the Community to listen to all advisories and remain alert for after shocks	Mr. Michael Corinaldi – Public Education Coordinator

AFTERMATH (IMMEDIATELY following the tremor up to 5 Days after main event)

ACTIVITIES	RESPONSIBLE PERSON(S)

2.	Check with PDC for persons to return home but only after authorities say it is safe to do so. Keep tuned to your local radio or TV station for recovery information. Confirm All Clear	Mr. Baldwin Tulloch Response & Recovery Coordinator
3.	Deploy Community Response and Damage	
	 Deploy community damage survey teams or assessors Deploy community response teams to check on vulnerable (elderly and physically challenged) and critical facilities. Check for deaths, injuries and persons needing emergency assistance Conduct first aid and search and rescue operations as necessary 	Mr. Baldwin Tulloch Response & Recovery Coordinator
4.	Communicate with Parish Emergency Operations Centre (P-EOC)	Mr. Baldwin Tulloch Response & Recovery Coordinator
	 Provide initial damage survey and needs of the community to PEOC Notify PEOC of critical/emergency cases Provide PEOC with status report – general reconnaissance information on power lines, water/sewage mains, condition of critical infrastructure and facilities (roads, bridges, communication, 	

	hospitals, etc)	
5.	Assist the Fire Brigade and NWA with road clearing, and search and rescue activities through the PEOC .	Mr. Baldwin Tulloch Response & Recovery Coordinator
6.	Assist with the establishment and staffing of registration centres.	Mr. Baldwin Tulloch Response & Recovery Coordinator
7.	Beware of downed or loose power lines. Report them immediately to the JPS, Police or Fire Department.	Mr. Michael Corinaldi Public Education and Fundraising Coordinator
8.	Advise community members to enter their homes with caution and to check for:	Mr. Baldwin Tulloch Response & Recovery Coordinator
	 Sewage leaks in homes/yards. Cordon off area and report to NWC and Parish Disaster Council/PEOC. Water leaks in homes/yards. Report to NWC and Parish Disaster Coordinator/Parish Council/PEOC. Gas leaks. If they smell gas or hear a blowing or hissing noise, quickly leave the building and leave the doors open. Call the gas company. Electrical system damage. If they see sparks or frayed wires, turn off electricity at the main fuse box. 	Assisted by Mr. Anthony Wheeler

If have to step in water to reach the electric box, call an electrician for advice.	
 9. Check for general water/sewage leaks ion the community Check for general sewage and water-line damage in the community. If you suspect there is such damage, call the NWC company and or PDC. Advise community not to drink or prepare food with tap water until notified it is safe to do so. 	Mr. Baldwin Tulloch Response & Recovery Coordinator Mr. Anthony Wheeler – Assistance
 To conserve water and food To stay living at their homes if it is safe to do so To take particular care with hygiene and sanitary practices Of measures being taken with respect to provision of food and water and restoration of public utilities 	Mr. Michael Corinaldi Public Education and Fundraining Coordinator
11. Coordinate requests for and offers of assistance through the PEOC.12. Coordinate reconnaissance and damage	Mr. Baldwin Tulloch Response & Recovery Coordinator Mr. Baldwin Tulloch
assessment teams through the PEOC 13. Ascertain the early requirements for	Mr. Baldwin Tulloch Response & Recovery Coordinator Mr. Baldwin Tulloch

Government assistance in re-establishing the community	Response & Recovery Coordinator
14. Coordinate the establishment, staffing and management of emergency shelters for sustained use in community.	Ms. Sharon Wheeler Ms. Beverley Leach
15. Encourage persons affected to stay with friends or family as first options	Mr. Michael Corinaldi – Public Education Coordinator
15. Coordinate requests, receipt and distribution of food, clothing and water supplies through the PEOC	<u> </u>
Where	
6. Assist with the distribution of supplies	
7. Assist with the tracing of missing persons	Mr. Baldwin Tulloch Response & Recovery Coordinator
8. Assist with needs assessments	
9. Assist in the provision of welfare information to persons affected.	
10. Begin to effect minor repairs to critical facilities and clear road ways and drains	
Continue to provide feedback and assistance to the community through the PDC and PEOC.	Mr. Baldwin Tulloch Response & Recovery Coordinator

Phase 3: Recovery

ACTIVITIES		RESPONSIBLE PERSON(S)
1.	Mobilize Community members to assist each other with rehabilitation and reconstruction activities.	Mr. Baldwin Tulloch Mr. Anthony Wheeler - Assistance
2.	Encourage community members to rebuild bearing in mind mitigation measures (build back better).	
3.	Mobilize and conduct repairs to critical facilities and infrastructure (Schools, clinic, water supplies and others)	
4.	Update PDC on recovery activities by external agencies/departments/organizations.	Mr. Michael Corinaldi
5.	Monitor progress and ensure deficiencies are reported.	
6.	Mobilize CDRMG to seek assistance from NGOs (e.g. Red Cross, Food for the Poor, ADRA and Others) to assist in community recovery initiatives.	Mr. Rupert Walters/PMC

7. Identify and share Lessons Learnt to enhance future preparedness and response activities:	Mr. Rupert Walters
 a. Challenges in responding to incidents b. Which systems were overburdened? c. What resources were lacking (human and physical)? d. How did the community cope? e. What areas of the SOPs need to be reconsidered? 	
8. Revise SOPs as necessary	Mr. Rupert Walters

APPENDIX (A.3) – **FIRE** - **STANDARD OPERATING PROCEDURES** (SOP)

Purpose

The purpose of this Fire SOP is to establish the necessary action steps for an effective and safe response to fires that could potentially affect the community of Waterford. Fires could result in damage to community infrastructure, and facilities, loss of life and property, and other incidents with varying severity from minimal to catastrophic; depending on the intensity of the fire. The CDRM Group shall work with government organizations, NGOs/CBOs, private sector and other stakeholders to facilitate the safety of community members. It is the intent of this SOP to maintain clearly defined procedures for before, during and after fire events.

Objectives

The concepts and procedures in this SOP are set to:

- Facilitate coordination among community members and the CDRM Group in preparing for and responding to hurricanes.
- Ensure a logical and sequenced set of actions for community response.
- Assign specific task to ensure collaboration and execution of activities.

Basic Planning Assumptions

- At least one major Fire will probably affect the country/community
- CDRM Group will remain active and functional
- Community members will be responsive to CDRM Group programmes, initiatives, warning and other information.
- There is commitment and support from agencies and departments of government to assist community.
- Community is willing to utilize their own resources in preparedness and response.
- CDRM Group will train and establish Community Emergency Response Team(s) (CERTs) to reduce the danger to which the community is exposed in the event of a bush or building fire.
- CDRM actively ensure members of their community are aware of possible hazards and how to prevent, mitigate and prepare in the event of likely hazards, including fires.

 The Jamaica Fire Brigade is recognized as the formal First Responder to fires as part of the National Emergency Response Matrix.

Concept of Operations

These SOPs are designed to establish a concept of operations spanning the direction and control of the disaster from an initial monitoring through post-disaster response, recovery, and mitigation. All activities are community driven, with technical assistance provided by agencies, departments, NGOs and private sector as necessary.

Procedures will be categorized into the following phases:

Phase 1: Prevention, Mitigation and Preparedness

Phase 2 (a): Event and Event Response – Building Fires (Homes, Small Businesses)

Phase 2 (b): Event and Event Response – Bush Fires

Phase 3: Recovery

DEFINITIONS

All Clear

An All Clear is a statement issued by the pertinent authority (Fire Department, Police – if the fire department is not present) when a threat has passed. The *All Clear*, for Fire – is when the fire has been fully extinguished and buildings and property are no longer threatened. **Emergency Operations Center (EOC)**

A multi-agency coordination centre that provides support and coordination to the on-scene responders.

Incident

Natural or man-made event that requires the action of emergency services to protect lives, goods and environment.

Fire

•Combustion or Fire is a chemical reaction or series of reactions in which heat and light are evolved. The Factors Necessary for Combustion

HEAT, FUEL and OXYGEN

Heat

• Heat can be created in many ways, some are listed below;

Open Flame

Sparks

Arcs

Friction

Chemical Reaction

Electrical

Fuel

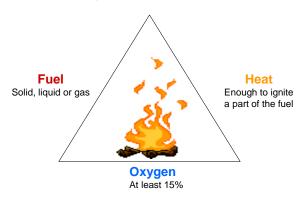
•Fuels are found all three stages of matter some examples of fuels are:

Solids	Liquids	Gases
Cloth	Gasoline	Methane
Paper	Kerosene	Butane
Wood	Alcohol	Propane
Coal	Paint	Acetylene

Oxygen

•21.2% of the earth's atmosphere is oxygen but only 15% is needed for combustion.

Triangle of Combustion



Bush Fire

A fire in the bush or in a forest area that spreads quickly and goes out of control easily.

Emergency Evacuation

The immediate and rapid movement of people away from the threat or actual occurrence of a hazard.

Extinguish

To put out a flame or fire; to cause a flame or fire to cease to burn or shine.

R.A.C.E

Acronym for Rescue, Alert, Contain (confine fire and smoke) and Evacuate or Extinguish.

P.A.S.S.

Acronym for Pull, Aim, Squeeze, Sweep (at base of fire). Use to remind users of fire extinguishers how to properly use a $C0_2$, Dry Powder or Water fire extinguisher.

OPERATING PROCEDURES

Phase 1: Prevention, Mitigation and Preparedness

Prevention, Mitigation and Preparedness activities as mentioned in these SOPs are specific actions to be taken by respective CDRM Coordinators and their teams (drafted support persons) to ensure proper planning and coordination for an **earthquake** emergency. Coordinators should utilize other information and measures highlighted in the CDRM Plan to as a guide for other actions.

ACTIVITIES	RESPONSIBLE PERSON(S)
13. Continue to support and promote public information and awareness programmes.	Mr. Michael Corinaldi Public Education & Fundraising Coordinator
14. Sensitize special needs population	Tamieka Thomas – Special Needs Coordinator
15. Organize how special needs population will be evacuated and transportation required.	Mr. Rupert Waletrs Preparedness Coordinator
16. Put arrangements in place to have vehicles to be used in evacuation fuelled with petrol	Ms. Opal Neita
17. Ensure that appropriate fire extinguishing materials are in place in community centre and shelters.	Mr. Rupert Waletrs Preparedness Coordinator
18. Ensure that First Aid Kits and Rescue equipment are stocked and in good condition for use in the event of an emergency.	Mr. Baldwin Tulloch - Response & Recovery Coordinator
19. Send a reminder/update to the Fire Brigade of the evacuation route for the community. Do a walk through if possible	Mr. Michael Corinaldi Public Education & Fundraising Coordinator
20. Sensitization of residents on fire safety to be conducted on a yearly basis.	Mr. Michael Corinaldi Public Education & Fundraising Coordinator

21. Identify areas in the community where high potential for infrastructure/property damages.	Ms. Beverly Leach – Vulnerability & Risk Identification Coordinator
22. Ensure DRM teams are aware of all high risk locations in the community.	Ms. Beverly Leach – Vulnerability & Risk Identification Coordinator
23. Prepare areas for sheltering persons in need	Sharon Wheeler – Shelter Manager
24. Re-engage community volunteers to provide assistance in shelters and other areas. Consult with PDC and Fire Department for facilitating training or refresher courses.	Sharon Wheeler – Shelter Manager
25. Ensure new developments are assessed and relevant measures put in place to safeguard community.	Mr. Rupert Walters – Prevention & Mitigation Coordinator
26. Organize mitigation and prevent projects and work days with technical guidance from relevant agencies (with the help of the PDC and Fire Departments.	Mr. Rupert Walters – Prevention & Mitigation Coordinator
27. Meet and assess the community's state of preparedness for a fire	Waterford DRM Team
28. Conduct Fire Drills at least once yearly.	

Personal for families and businesses:

- Make sure your family goes over the family disaster plan.
- All family members should know their evacuation plan.
- Store important documents in fireproof box (where possible) or safe.
- Houses should be safely wired. An electrical inspection should be conducted:
 - o For new buildings or building extensions,
 - o For older buildings every 2-3 years; annually where rodents and termites are prevalent or where houses are located by the sea or where corrosion can take place
- Actively practice fire safety when cooking and in use of matches or flammable material, in monitoring children, when smoking, use of electrics and the wiring of buildings, etc.
- Insure house/building, contents and other assets, where possible.
- Have a business continuity plan (businesses).
- Employees / Family members should know exit routes and what to do in case there is a fire. (Have regular drills).

Mr. Rupert Walters Preparedness Coordinator

Mr. Baldwin Tulloch -Response & Recovery Coordinator

Mr. Michael Corinaldi Public Education Coordinator

Protec	ting the community (from bush fires):	Mr. Rupert Walters – Mitigation and Prevention and
•	Trim dead or weak branches from trees	Preparedness Coordinator
•	Keep yards free of debris	
•	Avoid open burning, especially dry season	
•	Remove all dead limbs , needles and debris from gutters	
•	Build fires away from nearby trees or bushes; always have a way to extinguish this fire.	
•	Monitor all fires while they are burning.	
•	Prune all branches around to a height of 8-10 feet.	
•	Ensure trees adjacent to buildings are free of dead or dying wood and moss.	
Protec	ting the community (businesses):	Mr. Rupert Walters – Mitigation and Prevention and
•	Install smoke detectors within Business and institutions	Preparedness Coordinator
•	Exit signs must be fitted to all exit doors. Signs must be written in bold red and white background.	

 All buildings must have proper exits, evacuation routes and emergency assembly areas. 	
 Encourage the usage of fire-resistant materials when building, renovating, or retrofitting structures. 	
 Encourage the storage of combustible/ flammable materials in approved safety containers and keep away from home. 	
Ensure each response team are equipped with the following:	Mr. Rupert Walters – Mitigation and Prevention and
 Knowledge and drills for recognizing types of fire and assessment for response 	Preparedness Coordinator
■ Fire Brigade telephone number and means of emergency telecommunications (mobile phone, radio – if necessary)	
 Sand box and shovels 	
■ Pails and water source (drum)	
 Fire Extinguisher (if possible) 	
■ First Aid kit	
Obtain local building codes and weed abatement ordinances for buildings near wooded areas.	Mr. Rupert Walters – Prevention and Mitigation

	Coordinator
Brief community of activation of evacuation and persons to be evacuated: Review evacuation routes and gather your disaster supply kit in case you are instructed to evacuate. Communicate assembly points and deploy marshals. Make contact with shelter managers to receive evacuees. Inform PDC of actions to be taken. All electricity and gas supplies should be shutdown when closing businesses or evacuating homes Ensure the Elderly and physically challenged to be evacuated and make special arrangement for them.	Mr. Baldwin Tulloch - Response & Recovery Coordinator

DURING A FIRE

REMEMBER: activities for response during a fire can be done at the same time, particularly where a team approach is taken. Studies have shown that persons who practice together are more likely to respond better than those who don't practice at all or irregularly.

DRILLS SAVE LIVES

- **R RESCUE** (the elderly, children, physically or mentally disabled)
- **A ALARM/ASSESS** (simultaneous to immediate rescue)
- **C CORDON/CONFINE** (the area under fire, if possible)
- **E EXTINGUISH** (the fire) OR **EVACUATE** (persons at risk, if safe to the rescuer)

E – EXTINGUISH (the life) OR EVACU	JATE (persons at risk, it safe to
Call out ALARM - If trapped in a fire you cannot out run it.	Persons on or nearby the
Once a fire is detected immediately call the JPS, Police and	scene; Coordinator –
Fire Department.	Response
Once an ALARM is activated:	
At location of fire (buildings):	
 Building should be immediately evacuated. Do not enter a burning building. 	
 Ensure that persons who need assistance while evacuating are assisted (Elderly, Physically Challenge, Children) 	
 Assess the situation. 	
 Establish safety zone. 	
 If a fire is small and its safe attempt to extinguish with a fire extinguisher. 	
 Never allow fire to come between you and the exit path 	
 While evacuating touch closed doors with back of 	

hand before opening. If door is hot or if smoke is visible do not attempt to open.

- Close gas valves and turn off electricity at the main fuse box.
- Remove combustible items (outdoor furniture, umbrellas, tarp coverings, and firewood) from around the home.
- Place valuables that will not be damaged by water, in a pool or pond – if necessary.

At location of fire (bush):

- Quickly assess the situation wind direction & speed, likely path & combustion, risks involved
- Ensure that persons who need assistance while evacuating is assisted (Elderly, Physically Challenge, Children).
- If a fire is small and its safe attempt to extinguish with a fire extinguisher, water or sand. May consider beating the fire, if safe.
- Never allow fire to come between you and the exit path
- Cut off path of fire to homes and farms, if safe to do so
- Remove animals and items that can be moved to

safety, if necessary.

Around the perimeter of the fire:

- Cordon the area and keep persons at a safe distance.
- Ensure persons do not enter a burning building.
- Keep the scene calm. Ensure the comfort/safety of the distraught.

On exit of the building, at the assembly point or safety zone:

- Check for deaths, injuries and persons needing emergency assistance.
- Attend to injured persons. Seek assistance for those who require serious medical intervention.
- Conduct first aid and search and rescue operations as necessary
- Conduct a roll call when students/ staff are assembled (institutions & businesses).
- Have information on the missing and injured available for emergency personnel (fire, EMS or police)

Remind community persons to have contact numbers for the Fire Department and Community Emergency Preparedness and

Mr. Michael Cornaldi - Public

Response Team.	Education Coordinator

AFTER A FIRE

ACTIVITIES	RESPONSIBLE PERSON(S)
1. Constantly advise the community that after fire persons should not re-enter building until authorities say it is safe to do so. Confirm All Clear.	Mr. Michael Corinaldi – Public Education Coordinator
 2. Conduct Damage & Needs Assessment a. Deploy community damage survey teams or assessors (with Parish Council if more than 3 homes/properties are affected) b. Deploy community response teams to check on vulnerable (elderly and physically challenged) and critical facilities. c. Check for associated deaths, injuries and persons needing emergency or psychosocial assistance d. Conduct first aid and search and rescue operations as necessary e. Notify emergency personnel of additional critical/emergency cases 	Mr. Roy Nelson Damage Assessment Coordinator: (a) Mr. Baldwin Tulloch Response & Recovery Coordinator: (b-e)
3. Provide initial damage survey results and needs assessment for the community to Fire Department, Parish Council and other relevant authority (e.g. Social Worker from Ministry of Labour and Social Security)	Mr. Roy Nelson Damage Assessment Coordinator

4. Encourage persons affected to stay with friends or family as first options after a fire.	Mr. Michael Corinald – Public Education and Fundraising Coordinator
5. Coordinate the establishment, staffing and management of emergency shelters for sustained use in community.	Beverley Leach/ Sharon Wheeler
 6. Coordinate requests for and offers of assistance through the Parish Council. Coordinate requests, receipt and distribution of food, clothing and water supplies through the PEOC Assist with the distribution of supplies Assist with needs assessments 	Mr. Baldwin Tulloch Response & Recovery Coordinator with support from Ms. Carlene Spencer/Beverley Leach /Sharon Wheeler/
 Assist in the provision of welfare information to persons affected. 	
7. Assist with the tracing of missing persons	Mr. Baldwin Tulloch Response & Recovery Coordinator
8. Begin to effect minor repairs to critical facilities and clear road ways and public spaces, if affected.	Mr. Baldwin Tulloch Response & Recovery Coordinator
9. Continue to provide feedback and assistance to the community through the PDC and PEOC.	Coordinator - Response & Recovery
10. Mobilize Community members to assist each other with rehabilitation and reconstruction activities.	Mr. Baldwin Tulloch Response & Recovery

	Coordinator Coordinator - Response & Recovery
11. Encourage community members to rebuild bearing in mind mitigation measures (build back better).	Mr. Baldwin Tulloch Response & Recovery Coordinator Mr. Anthony Wheeler - Assistance
12. Mobilize and conduct repairs to critical facilities and infrastructure (Schools, clinic, water supplies and others), if affected.	
13. Update PDC on recovery activities by external agencies/departments/organizations.	Mr. Michael Corinaldi
14. Monitor progress and ensure deficiencies are reported.	Mr. Michael Corinaldi
15. Mobilize CDRMG to seek assist from NGOs (e.g. Red Cross, Food for the Poor, ADRA and Others) to assist in community recovery initiatives, as required.	Mr. Baldwin Tulloch Response & Recovery Coordinator
16. After Action Assessment (Community & community/agency) – to identify and share <i>lessons learnt</i> to improve future preparedness and response activities (de-briefing of incident):	Mr. Rupert Walters Mr. Baldwin Tulloch Response & Recovery Coordinator
 Challenges in responding to incidents Which systems were overburdened? What resources were lacking (human and physical)? How did the community cope? What areas of the SOPs need to be reconsidered? 	
17. Revise SOPs as necessary	Mr. Rupert Walters

APPENDIX B - TERMS OF REFERENCE CDRM GROUP

CDRM Group

The Community Disaster Risk Management (CDRM) Group is that arm of the community which has taken on the role of local level advocacy and planning for Disaster Risk Reduction activities at the community level. All matters relating to prevention, mitigation, preparedness, response and recovery are therefore, the preview of the group. They shall be the team that leads the development of Community DRM Plans and links directly the Parish Disaster Committee and other local level agencies/NGOs regarding disaster management.

<u>N.B</u>

The ODPEM has previously promoted the establishment of Zonal Committees as that local/community level body with responsibilities for Disaster Management. CDRM teams are being postulated as a re-visioning of zonal groups in keeping with current Disaster Risk Reduction (DRR) initiatives. Therefore, for all intent and purposes the groups are interchangeable in name and function. Management and reduction of disaster risk being the major difference/improvement.

Executive Membership

- Chairman
- Vice Chairman
- Secretary
- Treasurer
- Assistant Secretary
- Coordinator Public Education & Fundraising
- Coordinator Vulnerability & Risk Identification
- Coordinator Prevention & Mitigation
- Coordinator Response & Recovery

The executive membership of the DRM Group may assume that of an existing CBO Structure or Zonal Committee. The Coordinators outlined above must be made part of any existing structure to be used.

Community Organization with responsibility for CDRM

- Any existing Community Based Organization (CBO) that is active should be made part of the DRM Group.
- Where there is no existing CBO, the community should form the executive membership of the DRM Group from reliable individuals with leadership qualities in the community.
- Individuals who are not members of an existing CBO may be made part of the DRM Group. These individuals may be:
 - o Assigned/appointed as coordinators only, where there is an active CBO
 - o Assigned/appointed as any part of the executive membership where there is no active CBO.

Naming the CDRM Group

- The DRM group will assume the name of the existing CBO that will carry out the functions of the group OR the name of the existing Zonal Committee.
- Where no CBO exists the name may be decided by the community leadership
- The DRM tag should remain to indicate

Leadership the CDRM Group

Leadership of the group will be the same as that of the existing CBO or Zonal Structure (this includes the already assigned individuals). Where there is no existing group (CBO or Zonal); the persons engaged by the facilitation team and have shown interest should be encouraged to assume responsibilities. The leadership, specifically President and Vice President – should maintain regular dialogue with the Parish Disaster Coordinator for guidance and support.

Frequency of CDRM Meetings

- The group should meet officially on an average bi-monthly (every 2 months).
- However, for existing groups they should include DRM as an agenda item at the regular CBO (E.g. Citizens Association) or Zonal Meetings.
- Special meetings, briefings, and workshop sessions may be called by the execute as is necessary inviting stakeholders as appropriate.

Funding of CDRM Group and Activities

The group is expected to mobilize support of community stakeholders to provide funding for programmes and activities. Other sources of funding will include:

- Fundraising activities
- Proposal writing to private sector and donor agencies
- Donations or Grants
- Parish Disaster Committee
- ODPEM
- Government entities with specific mandates

Interaction with Local Authorities and the Parish Disaster Committee (PDC)

- The President or Vice President of the CDRM group must attend the PDC Meetings, as invited by the Parish Disaster Coordinator.
- The group must provide the Parish Disaster Coordinator with DRM related information that will support community and parish interventions
- The Parish Disaster Coordinator should be invited to attend CDRM Group Meetings on occasions and are deemed an exofficio member of the CDRM Group

Interact with ODPEM and other technical agencies/departments (local or national) ODPEM:

- ODPEM to provide the CDRM Group with technical advice for the development and review of the CDRM Plan through the Parish Disaster Coordinator.
- ODPEM to provide the community with disaster related information through the Parish Disaster Coordinator
- Any request for assistance or information by the CDRM Group must be channeled through the respective Parish Disaster Coordinator.

Other Technical Agencies

• Any official request or engagement of agencies or departments of government regarding training, disaster related information or programming must be channeled through the Parish Coordinator.

• CDRM Groups my however, formally write to agencies/departments regarding the respective agencies functions or execution of same in relation to the community.

Interaction with Councilors, Members of Parliament and other political representatives

- Political representatives must be seen as a significant resource to the CDRM Groups and Communities.
- Sharing of issues, concerns and needs of the community or CDRM group may be facilitated through representation at the Parish Disaster Committee level.
- Initial engagement of political representatives may also be channeled through the Parish Disaster Coordinator.
- The CDRM group after formal introduction through the Parish Disaster Committee may make direct contact with political representatives regarding issues of the community. It is recommended that formal (written) communication be made as far as possible.

Interaction with Private Sector and other NGOs/CBOs

- CDRM Group should recognize existing private sector organizations and NGOs/CBOs within the community as critical stakeholders.
- Parish Disaster Coordinators should be approached to make initial contacts with these groupings on behave of the CDRM group.
- CDRM group may maintain contact (formally and informally), however, it is encourage that the CDRM group executive discuss with representatives from these groups (private sector, NGOs/CBOs) the possibilities of partnerships (mutual help).

Recording keeping by CDRM Group

- Minutes/notes of all meetings of the group should be formally kept in a safe place.
- Correspondence, financials and other documents regarding the CDRM group or community should be safe a secure place.
- A copy of the CDRM Plan must be in the possession of the Parish Council. A copy should also be in any dedicated facility used for meeting and planning.
- General documents kept by the group such as minutes, brochures, financial records and other documents should be held by the President, Secretary or any other executive appointed by the group where a dedicated facility does not exist.

Wider Community Involvement

- CDRM team should constantly engage wider community through meetings, forums, brochures, flyers and pamphlets.
- Views, concerns, and issues of the community regarding disaster matters must be discussed within the group and possible solutions identified.
- Public education and awareness should integral for community involvement.
- CDRM should establish creative initiatives for garnering community support and involvement.

Roles & Functions of the Executive Membership for DRM

Chairman: Assume similar duties as outlined in existing CBO or Zonal Committee

Vice Chairman: Assume similar duties as outlined in existing CBO or Zonal Committee

Secretary: Assume similar duties as outlined in existing CBO or Zonal Committee

Treasurer: Assume similar duties as outlined in existing CBO or Zonal Committee

Assistant Secretary: Assume similar duties as outlined in existing CBO or Zonal Committee

Coordinator – Public Education & Fundraising

- To develop DRM public education programmes for the schools, churches, and CBOs in the community
- To source and distribute Disaster Preparedness brochures and other education material
- To identify Community DRM Training needs and communicate them to the Parish Disaster Coordinator
- To work with the PDC and other partners in organizing training programmes in the community
- Identify sources of funding for educational and training programmes to be conducted
- Provide the Parish Disaster Coordinator (through the President) with updates and status reports on the effectiveness of training and public education and awareness programmes
- Conduct fundraising initiatives to support community DRM objectives.

Coordinator - Vulnerability & Risk Identification

- Identify and Assess historical hazard impacts
- Conduct research on changing hazard risk trends in the community

- Calculate the probability of occurrence of hazard events
- Develop and maintain list of critical facilities at risk
- Conduct vulnerability capacity Assessments
- Prepare vulnerability and risk identification reports to be submitted to the Parish Disaster Coordinator
- Provide the Prevention and Mitigation Coordinator with information on vulnerability and risks in the community.
- Evaluate risk assessments, risk management plans, and risk monitoring results as directed and recommend appropriate actions.
- Ongoing, systematic and consistent observation of hazard-related parameters.
- Ensuring that the data can be located and retrieved by users.
- Takes lead in vulnerability assessment tasks.
- Notifying residents of vulnerable areas to disasters via the DRM Group meetings.
- Estimate expected damage in the event of a disaster.
- Identify the vulnerable assets of the community and the associated risks
- Solicit support of key community members for execution of responsibilities; especially elderly and trained professionals.

Coordinator – Prevention & Mitigation

Duties related to Mitigation

- Assess hazard impacts.
- Identify areas of damage that would require reconstruction to existing codes and regulations.
- Renew and evaluate existing mitigation plans, emergency plans and strategies.
- Organize the development of Prevention and Mitigation Action Plans for implementation with the help of the Parish Disaster Coordinator and larger CDRM.
- Recommend appropriate hazard mitigation measures for reducing the impact of a disaster.

 Review and evaluate existing hazard mitigation plans and other pertinent information, such as, urban renewal, rehabilitation, or master plans.

Duties related to Prevention

- To know the main areas of risk and to take steps to prevent hazard impact/exposure or detect any problems as early as possible.
- To assess training needs and communicate them to the Public Education Coordinator
- To ensure good lines of communication with all coordinators
- Conduct/facilitate community hazard hunts with the help of the Parish Coordinator and CDRM team.

Coordinator – Response & Recovery

- The Response Coordinator has primary responsibility for the coordination and contractual management of the emergency response projects/initiatives.
- Ensure that adequate needs assessments are carried out in accordance with good DRM practice.
- Advice and support where necessary and to monitor the response.
- Recommend relevant and appropriate training where necessary in minimum standards in emergency response.
- Ensure systems are in place for monitoring and evaluating the impact of the disaster.
- Takes lead in damage assessment and disaster recovery tasks.
- Plan and organize disaster recovery activities along with the aid of the Parish Disaster Coordinator
- Report the status of the disaster recovery activity.
- Identifies acceptable recovery time periods.

- Establishes disaster recovery testing methodologies.
- Recommend disaster recovery planning and training activities.
- Provides instructional and informational materials on how to respond during an emergency.
- Develops and maintains SOPs for emergency/disaster response and recovery with the aid of the PDC.
- Plan regular exercises to test community plans
- Monitors the effectiveness of procedures during evacuation drills and revises the procedures as necessary.
- Maintains contact with outside sources participating in reciprocal agreements.
- Ensures that as new equipment, facilities, services, and systems are installed that the disaster response and recovery issues are highlighted and addressed.
- Maintains contact with outside contingency planning professional organizations and local or regional emergency response groups.
- Ensure and recommends establishment of CERTs as appropriate.

APPENDIX C - SPECIAL NEEDS LIST

Vulnerable Group/ Person & Contact Info	Type of Vulnerability (disability &/or hazard	Location of Vulnerable	Next of Kin/ Care Giver & Contact Info.	member	Responsibility (what to do)
Mrs. Toppin	Visually impaired	277 Chakata Way	Sally 988-0346	Alicia/Rodger Block 1	
Doris Tucker	Sickly	275 Portland East			
Mr. Grant	Wheelchair	160 Belview			
Mr. Washington	Cancer		988-5921		
Monica Easy 507-7720	Unable to walk unassisted	1463 Adair Drive	Ceslie Donaldson 873- 2640		
Havia Brown 443-9504	Unable to walk	1443 Adair Drive			
Easton Smith 845-2770	Deaf and unable to Walk	1726 D'Artagon Way	Errol (Grandson) 845-2770		
Millicent Ewart – 988-9227	Blind	1656 D'Artagon Way	Sonny (Husband)		
Andrade Hemmings 448- 2187	Walk with crutch	1652 D'Artagon Way			

Kennett Ricketts 877-3609	Difficult to walk	1508 Kinloss Road			
Rosetta Chambers 988-9316	Difficult to walk	Birram Path		Mrs. Pitter	
Elsie Ingram	Can't walk	Duanvale Road		Mrs. Pitter	
Mrs. Brown	Can't walk	Adair Road		Mrs. Pitter	
Mr. Reid	Can't walk	Lerrismers Road		Mrs. Pitter	To ensure person evacuate the assembly points or Shelter
Michael Clarke	Walk with Crutch	3576 Huntley	Mother		
Mr. Chippy	Shut in	3332 Dhoti Way	Wife		
Papa	Walk slowly	3375 Dhoti Way	Grand Daughter		
Albert Campbell	Broken leg	3728 Chantily Road	Mother		
Miss Inez Clarke	Disabled leg	3776 Annabella Way	Church Family		
Pastor Chambers	Shut in	3687 Adair Drive	Mrs. Chambers		
Mr. Smith	Shut In	3710 Annabella Way	Ms. Palmer		
Mr. Rose	Shut In	3719			
Timothy Graham 374- 5908	Can't walk properly	3007 Kew Close Block 6	Patricia Graham	Otis Pinnock	
Roland Willshire 998-7317	Paralize	3010 Kew Close Block 6	Nuby Willshire	٠.	
Claris Lewis481-9100/573-	Heart Problem, cant		Ann Bradford	"	

0809	by himself				
Lola Walker 891-9265/566-	Paralyze from hip	3043 Kew Close Block	Paul Walker	٠.	
8822		6			
Pamela Sudu 988-7476	Can't walk	2876 Babarum Way	Debbie	"	
		Block 6	Willington		
Paul Taylor 417-1275	Cenile	3150 Simeno Way	Enid Taylor	Rupert Walters	
		Block 6			
Jamilah DaCosta 864-2131	CP Cervical Palsey	3079 Dias Road Block	Erica Clarke	"	
		6			
Steven Asbourn 998-7140	Mentally ill	2981 Logwood Road	Marie Lewin	٠.	
		Block 6			
Angela Lewin 998-7140	Can't Walk	2981 Logwood Road	Marie Lewin	"	
		Block 6			
Glen Barnett	Blind	3058 Falmouth West	Wilma Barnett	٠.	
		Block 6			
G Samuel	Deaf, Can't talk and	3058 Falmouth West	Wilma Barnett	"	
	walk	Block 6			

APPENDIX D- EMERGENCY SUPPLIES TO BE TAKEN TO SHELTER

- Tinned Food mackerel, corned beef, mixed vegetable, sardines etc.
- Salt Fish
- Crackers
- Drinking Water
- Medication
- Lantern or Flashlight
- Bedding or Blankets
- Sponge Foam Pad for sleeping
- Toiletries such as soap, toothbrush, toothpaste, rags, deodorant and shampoo.
- For Babies: Pampers, formulae, cough syrup, soap, baby shampoo, mosquito repellant
- Utensils
- Can Opener
- Books
- Toys for Children
- First Aid Kits

APPENDIX E - TRAINING

It is necessary for members of the community to be trained in several areas of preparedness and response to help them better cope before in after an impact and to also better enable them to help themselves. The following trainings have been identified as being necessary for the community. A list of persons to participate in the trainings is to be confirmed.

Community Member/ Team	Training Activity	Agency or Source	Who responsible to organize	Time Frame
Waterford Zonal	Initial Damage Assessment	ODPEM	Sophia Mitchell	2011
Committee	(IDA)			
Community Youth	Land Based Search and	ODPEM	Sophia Mitchell	By December 2010
Organisation	Rescue			

APPENDIX F - SIMULATION AND DRILLS

The CDRM will organize with the relevant agencies to conduct drills and simulation exercises for fire and earthquake preparedness and response. These exercises will allow for the testing of the disaster plan to show strengths and weakness in the capability of the community to respond during an emergency.

Type of	# Drills per Year	Date of Next	Organizer
Exercise/ Drill			(who responsible)
Earthquake Drill	Once per year	January 2011	Waterford Zonal Committee and PMC
Fire Drill	Once per year	November 2011	Waterford Zonal Committee and PMC
Evacuation Desk Top	Once per year	May 2011	Waterford Zonal Committee and PMC

APPENDIX G - PUBLIC EDUCATION AND AWARENESS

The public education and awareness strategy seeks to increase awareness, provide the community with current information on protective measures for all threats facing the community.

Hazard	Public Education Action	Public Education	Timeline	Responsibility	
		Strategy			
Flooding	Public Education Campaign to	Installation of no dumping	Annually in May	Waterford Zon	nal
	educate residents about the	signs, distribution of		Committee	
	importance of maintaining their	leaflets, flood awareness		(Waterford CDC)	
	drains	days in schools in			
		Waterford			
Earthquake	"Drop cover and Hold"	Use Schools, churches to	Once every quarter	Waterford Zon	nal
		practice the earthquake		Committee	
		procedure		(Waterford CDC)	
Fires	Fire Safety promotion	Ask teachers to deliver	November	Waterford Zon	nal
		session on Fire Safety.		Committee	
Hurricane	Hurricane Awareness for all	Exhibition in the Waterford	May -June	Waterford zonal Committe	ee
	residents	Library and Post Office			

APPENDIX H - EQUIPMENT/ASSETS/RESOURCE LIST

The table identifies the equipment and the quantity the CDRM team requires.

Items the community already has

Table:

Items (Quantity per Item)	Storage Location	Contact Storage	Person	(s)	for	Contact Number
Machetes						
Tipper Trucks						
Back Hoes						
Bush Wackers						

Items required externally

Table:

Items	Quantity	Source	Responsibility
Required		(Agency/ Business)	
Cots	20	PMC	
Blankets	10	PMC	
Mattresses	20	PMC	
Bottled Water	200 cases	PMC	
Rain Coats	20	PMC	

Machetes	50	PMC
Power Saws	14	PMC
Water Boots	20	PMC
First Aid Kit	14	PMC
Flashlights	30	PMC
Ropes	14 x 50 ft	PMC
Tarpaulin	500	PMC
Fire Extinguisher	14	PMC
Lanterns	50	PMC

APPENDIX I – COMMUNITY BACKGROUND

Description of the Community

Waterford is a suburban community situated in the parish of St. Catherine. It has a major thoroughfare (One way in one way out) and has 9 blocks that are separated by lateral drains. The housing stock largely consists of concrete block and steel (99.4%), wood (0.28%) and (brick 0.28%)

The Waterford Community Boundaries are:

Northern Bounds: Ferry

Southern Bounds: Passagefort/Portsmouth

Western Bounds: Caymanas Gardens A/Caymanas

Eastern: Seaview Gardens/Hunts Bay

Demographic Profile

Population Data (SDC Community Profile, 2006)

Estimated No. Household: 4430

> Estimated Population: 16528

Household Head - Male: 50.27%

➤ H/Head – Female: 49.73

Economic Profile:

The main economic activities within the Waterford community include:

- Horse racing

- Vending

- Provision of taxi service

- Gaming and Lottery

- Remittances
- Cosmetology
- Carpentry
- Family Pension

Summary of Main Hazards

Like other communities in Portmore, Waterford is vulnerable to a number of natural hazards based on its geological location. There are several factors that contribute to its vulnerability; however the main one is that the community runs parallel to the Rio Cobre River. In addition, there are several poorly maintained lateral drains that drain into the Waterford canal. Listed below are various hazards that the community is being affected by.

- > Flooding
- ➤ Blocked Drains / Debris
- Overgrown vegetation in drains
- > Youth Violence
- > Squatting
- Illiteracy/ Unemployment
- Sewage overflow
- ➤ Heavy Siltation

Flooding

- 1. Flooding occur as a result of backflow of water which are caused by the stagnant water and the unpaved and poorly maintained Canal
- 2. Flooding normally occurs in the following areas:
 - Houses located in Block 3, 4, 5 and 7 normally affected by flooding
 - Flooding also occur along the e following roadways: Adire Drive, Falmouth, Ramble Road and Timbrel Way

Blocked Drains

- ➤ Lack of maintenance of drain causes overgrowth of vegetation
- ➤ Improper disposal of Garbage by residence contribute to the blocking of drains

Youth Violence

- Housebreaking
- Rape / Carnal Abuse
- Robbery
- Murder
- Domestic Violence

Squatting

Squatting is presented in the following areas:

• Railway Line Community

Illiteracy and Unemployment

The educational level is above average; however 10.64% attained tertiary level. As it relates to income 28.25% earn less than forty thousand Dollars (40,000) monthly and the overall unemployed population is 24.53%

Sewage Overflow

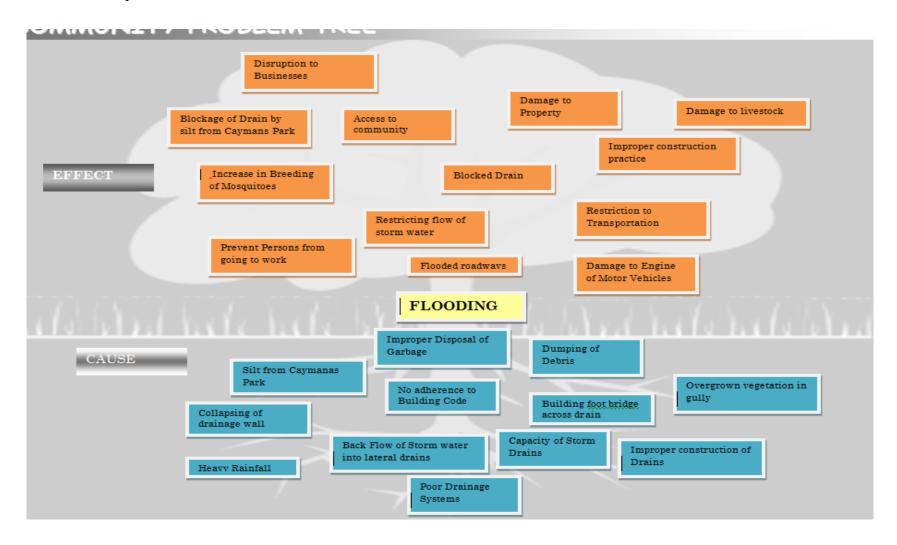
This problem is caused by the Independence City Plant. The Plant malfunction frequently due to a lack of servicing and a growth in population rendering the plant inadequate, therefore whenever it rains sewage water comes up in through the inspection chambers and into backyards via manholes which then run onto the roadways.

Siltation

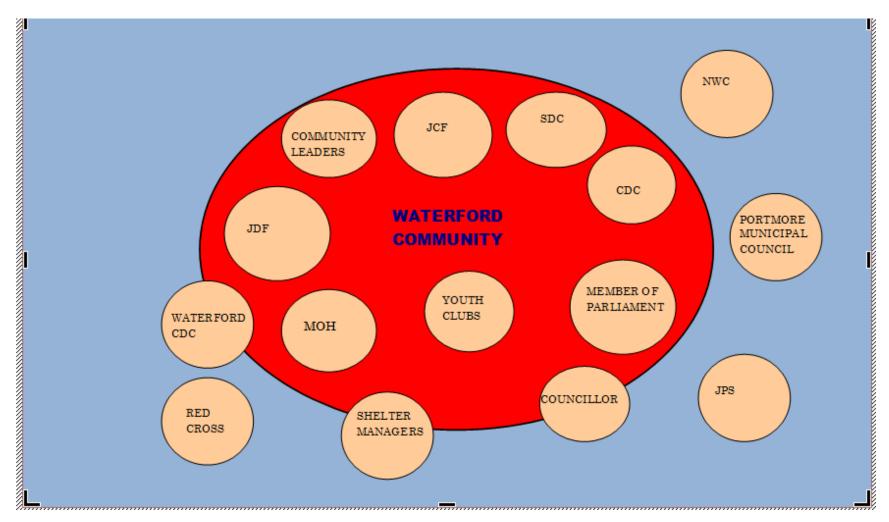
Sand from the Caymanas track runs into drains and gullies causing a blockage and the growth of a lot of vegetation which pose a major threat to the community.

Community Problem Tree

The problem tree visualizes and identifies the hazards that are problematic to the community and the associated causes and effects. The causes are placed at the root of the tree and the effects on the branches.



Community Stakeholder Analysis—ROTI or Dumpling Diagram



Stakeholder Partnerships

The stakeholder analysis represents the relationship between Whitehouse and the different individual groups and organizations and their involvement in supporting the community's activities and programmes. These partnerships are important to assist the community in its drive to reduce the impact of hazards and mobilize the necessary resources to do so.

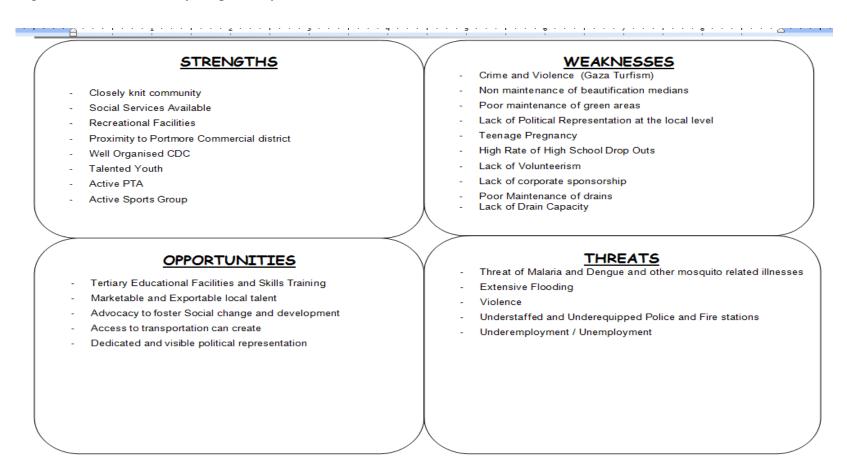
Table: Stakeholder Partnerships

Agency/ Organization/ Representative	Representative Nature of Relationship Contact Person		Contact Number
Jamaica Public Service	Important		
Portmore Fire Station	Most important	Superintendent Lee	895-7763
Councillor	Very Important	Errol Lynch	
Red Cross	Important	Camille Greenland	474-4388
Member of Parliament	Most Important	Collin Fagan	
Portmore Municipal Council	Important	Mrs. Ricketts-Edmund	567-2683
SDC	Most Important	Mr. Lloyd Erskine/ Patrick Watson	342-2411
JDF	Most Important	ODPEM	906-9674
JCF	Most important		
МОН	Most Important	Miss Talbot	
NWA	Important	Lloyd Heron	583-2478
Churches	Important	Ms. Ivy Jarrett	998-9426/704-8462
Shelter Managers	Very Important	Mr. Samuels	342-2902
NWC	Important	Jermaine Jackson	990-0071

Waterford CDC	Very Important	Mr. Rupert Walters	377-9920
Community Leaders	Most Important	Baldwin Tulloch	
Youth Clubs	Most Important		

Community Strengths Weaknesses Opportunities and Threats (SWOT) Analysis

An assessment of the community's strengths, weaknesses, opportunities and threats is vital to identify the internal capacities and the issues or problems which endanger the ability of the community to effectively reduce the vulnerabilities faced. The strengths and weaknesses are internal factors to the community, whilst the opportunities and threats are external forces that can be positive or negative for the community, respectively.



APPENDIX J- ACROYNMS

AAR – After Action Report

CBO - Community Based Organization

CERT – Community Emergency Response Team

CDC- Community Development Committee

CDRMG - Community-based Disaster Risk Management Group

CDRT – Community Disaster Response Team

DRM – Disaster Risk Management

EOC – Emergency Operations Center

JUTC - Jamaica Urban Transit

KSAC – Kingston and St. Andrew Corporation

NEOC – National Emergency Operations Center

NEPA - National Environment Planning Agency

NGO – Non Government Organization

NSWMA - National Solid Waste Management Authority

NWA – National Works Agency

NWC- National Water Commission

ODPEM - Office of Disaster Preparedness and Emergency Management

PDC – Parish Disaster Coordinator/Committee

PEOC – Parish Emergency Operations Center

RADA – Rural Agricultural Development Authority

SDC- Social Development Commission

WRA- Water Resources Authority

UWI – University of the West Indies

APPENDIX K- DEFINITONS

Hurricane

A hurricane is a large tropical storm with winds of 74 mph or greater, moving counterclockwise. In addition to intense winds, hurricanes are accompanied by heavy rains, flooding along the coast, flooding inland and tornadoes.

The Saffir-Simpson Hurricane Scale is a one to five rating based on the hurricane's present intensity. This is used to give an estimate of the potential property damage and flooding expected along the coast from a hurricane landfall. Wind speed is the determining factor of this scale.

All Clear

An All Clear is a statement issued by the pertinent authority when a threat has passed. The *All Clear*, for a Hurricane – is when the storm has passed and the associated strong impacts from winds and rains will no longer affect the country/community.

Emergency Operations Center (EOC)

A multi-agency coordination center that provides support and coordination to the on-scene responders.

Incident

An event that occurs that may lead to an emergency condition.

Tropical Disturbance

A tropical disturbance is a cluster of thunderstorms poorly organized.

Tropical Depression

A tropical depression is a cluster of storms organized around a central circulation with surface wind speeds of 38 mph or less.

Tropical Storm

A tropical storm is a cluster of smaller storms with substantial circular rotation and sustained surface winds of 39-73 mph.

Capacity

A combination of all the strengths and resources available within a community, society or organization that can reduce the level of risk, or the effects of a disaster. Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership and management. Capacity may also be described as capability

Capacity Building

Efforts aimed to develop human skills or societal infrastructures within a community or organization needed to reduce the level of risk.

Climate Change

The climate of a place or region is changed if over an extended period (typically decades or longer) there is a statistically significant change in measurements of either the mean state or variability of the climate for that place or region.

Coping Capacity

The means by which people or organizations use available resources and abilities to face adverse consequences that could lead to a disaster.

Disaster

A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.

Disaster Risk Management

The systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards.

Early Warning

The provision of timely and effective information, through identified institutions, that allows individuals exposed to a hazard to take action to avoid or reduce their risk and prepare for effective response.

Emergency Management

The organization and management of resources and responsibilities for dealing with all aspects of emergencies, in particularly preparedness, response and rehabilitation.

Hazard

A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

Hazard Analysis

Identification, studies and monitoring of any hazard to determine its potential, origin, characteristics and behaviour.

Mitigation

Structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards.

Preparedness

Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations.

Prevention

Activities to provide outright avoidance of the adverse impact of hazards and means to minimize related environmental, technological and biological disasters.

Recovery

Decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk.

Relief/Response

The provision of assistance or intervention during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be of an immediate, short-term, or protracted duration.

Resilience

The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures.

Retrofitting

Reinforcement of structures to become more resistant and resilient to the forces of natural hazards.

Risk

The probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerable conditions.

Structural/Non-Structural Measures

Structural measures refer to any physical construction to reduce or avoid possible impacts of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure.

Non-structural measures refer to policies, awareness, knowledge development, public commitment, and methods and operating practices, including participatory mechanisms and the provision of information, which can reduce risk and related impacts.

Vulnerability

The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards.

Source: The International Strategy for Disaster Reduction; Terminology: Basic Terms of Disaster Risk Reduction. Internet Resource at http://www.unisdr.org/eng/library/lib-terminology-eng%20home.htm