

Project

*IMPROVING CLIMATE DATA AND INFORMATION MANAGEMENT
PROJECT*

Consultancy

UPSCALING OF 15 COMMUNITY DISASTER RISK MANAGEMENT/CLIMATE CHANGE ADAPTATION PLANS



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**Validated Community Disaster Risk Management and Climate Change Adaptation Plan of
BENSONTON, ST. ANN**

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GLOSSARY OF TERMS

This glossary of terms has been extracted and adapted from (i) The International Strategy for Disaster Reduction; Terminology: Basic Terms of Disaster Risk Reduction (2009), (ii) UNDRR Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction (2016) and (iii) ODPEM.

All Clear: An All Clear is a statement issued by the pertinent authority when a threat has passed. In the case of a hurricane/earthquake, is when the storm/earthquake has passed and the associated strong impacts from winds and rains/earthquake will no longer affect the country/community.

Adaptation: The adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. This definition addresses the concerns of climate change and is sourced from the secretariat of the United Nations Framework Convention on Climate Change (UNFCCC). The broader concept of adaptation also applies to non-climatic factors such as soil erosion or surface subsidence. Adaptation can occur autonomously, for example through market changes, or as a result of intentional adaptation policies and plans. Many disaster risk reduction measures can directly contribute to better adaptation.

After-Shock: Tremors or smaller earthquakes that occur after the main shock is felt. After-shocks can occur over a few hours to months after the main shock.

Capacity: The combination of all the strengths, attributes and resources available within a community, society or organization to manage and reduce the risks and strengthen resilience. Capacity may include infrastructure and physical means, institutions, societal coping abilities, as well as human knowledge, skills and collective attributes such as social relationships, leadership and management.

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 Inter-Governmental Panel on Climate Change (IPCC) defines climate change as “a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes, external forcing, or persistent anthropogenic changes in the composition of the atmosphere or land use”.

Coping Capacity: The ability of people, organizations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters.

Disaster: A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its resources.

Disaster Risk Management: Disaster risk management is the application of disaster risk reduction policies, processes and actions to prevent new risk, reduce existing disaster risk and manage residual risk contributing to the strengthening of resilience.

Early Warning System: An interrelated set of hazard warning, risk assessment, communication and preparedness activities that enable individuals, communities, businesses and others to take timely action to reduce their risks.

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

Emergency Services: The set of specialized agencies that have specific responsibilities and objectives in serving and protecting people and property in emergencies.

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

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.

Hazard: A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

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

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 ratings 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.

Earthquake Magnitude: It is a measure of the amount of energy released during an earthquake. This is typically measured on the Richter scale for the Caribbean.

Mitigation: The lessening or limitation of the adverse impacts of hazards and related disasters.

Peak Ground Acceleration: is the maximum acceleration recorded, i.e. the peak value in the acceleration record (accelerogram). It is one of the most used parameters to represent the seismic hazard.

Preparedness: The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.

Prevention: Activities and measures to avoid existing and new disaster risks.

Recovery: The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

Relief/Response: The provision of emergency services and public assistance during or immediately after a disaster to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

Resilience: The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

Retrofitting: Reinforcement or upgrading of existing structures to become more resistant and resilient to the damaging effects of hazards.

Risk: The combination of the probability of a hazardous event and its negative consequences, which result from interaction(s) between natural or anthropogenic hazard(s), vulnerability and exposure.

Structural/Non-Structural Measures: Structural measures: Any physical construction to reduce or avoid possible impacts of hazards, or application of engineering techniques to achieve hazard resistance and resilience in structures or systems. Non-structural measures: Any measure not involving physical construction that uses knowledge, practice or agreement to reduce risks and impacts, in particular through policies and laws, public awareness-raising, training and education.

Tremor: The shaking or seismic waves felt or caused by an earthquake or explosion.

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.

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

Tropical Storm Watch: 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.

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.

Zone: Disaster Risk Management Area/Zone specifically defined area at a local scale in which Disaster Risk Management issues are discussed, planned for and executed. This zone may be one or more communities, depending on the demographics of the community, nature of hazards, established governance structures, and the socio-political environment, as defined by the respective parish.

Zonal Committee: Organized community group within a zone that has accepted the responsibilities for leading the charge of disaster management issues of the zone, has a wide cross representation of the zone and has elected officers to serve as the executive of the committee under the guidance of the Parish Disaster Committee through the Parish Coordinator-Disaster Preparedness.

ABBREVIATIONS

ADRA	Adventist Development and Relief Agency
AAR	After Action Report
CBO	Community Based Organizations
CCA	Climate change adaptation
CDRM	Community Disaster Risk Management
CERT	Community Emergency Response Team (also referred to in this document as DRM Team)
DRM	Disaster Risk Management
EOC	Emergency Operations Centre
GOJ	Government of Jamaica
ICDIMP	Improving Climate Data and Information Management Project
JAS	Jamaica Agricultural Society
MLSS	Ministry of Labour and Social Security
MoHW	Ministry of Health and Wellness
NDC	National Disaster Council
NDRMC	National Disaster Risk Management Council
NEOC	National Emergency Operations Centre
NEPA	National Environment and Planning Agency
NGO	Non-Governmental Organization
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 Centre
PIOJ	Planning Institute of Jamaica
PPCR	Pilot Programme for Climate Resilience
RADA	Rural Agriculture Development Authority
SDC	Social Development Commission
SOP	Standard Operating Procedure

PREAMBLE

Name of the Plan

The name of the plan is the “**Bensonton Disaster Risk Management and Climate Change Adaptation Plan**”.

Background

The Government of Jamaica (GOJ), through the Planning Institute of Jamaica (PIOJ), has executed the Improving Climate Data and Information Management Project (ICDIMP) under the Pilot Programme for Climate Resilience (PPCR). In this framework, PIOJ in collaboration with key partners such as the Office for Disaster Preparedness and Emergency Management (ODPEM) seeks to update existing Community Disaster Risks Management (CDRM) Plans to include risk profiles and community level resilience mitigation and climate change adaptation (CCA) initiatives that can be implemented by the communities.

Purpose of the Plan

This plan provides:

1. The residents with a workable, comprehensive system to plan for and respond to emergencies and disasters to minimize loss of life and property.
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 Bensonton.
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, preparedness, response, recovery and adaptation.

Actors (and contact list)

Table 1. DRM actors and contact details

LEVEL	ACTOR	CONTACT PERSON	TELEPHONE Nº/EMAIL
Community and Parish	Members of the Bensonton Community Disaster Risk Management Group	Kevin Russell Winnifred Johnson	(876) 321-6647 (876) 860-4989
	CERT (Community Emergency and Response Team)	Mikhail James	(876) 436-8099
	St. Ann Municipal Corporation	Alvin Clarke - Parish Disaster Coordinator	(876) 360-7460 disastercoord@gmail.com
	St. Ann Parish Disaster Committee	Alvin Clarke - Parish Disaster Coordinator	(876) 360-7460 disastercoord@gmail.com
	Ministry of Labour and Social Security	Pamiel Scott – Parish manager	pscott@mlss.gov.jm Landline #: 876-972-2470
	Social Development Commission	Hillory McBayne – Parish manager	mcbayneh@sdcc.gov.jm Landline #: 876-975-9626
	Jamaica Fire Brigade	Deputy Superintendent of Fire Windell Patterson	dhstann.jfb@cwjamaica.com Landline #: 876-972-2221
	Jamaica Constabulary Force	Senior Superintendent – Dwight Powell	dwright.powell@jcf.gov.jm Landline #: 876-972-2331
	Ministry of Health	Dr. Patrick Wheatle Medical Officer of Health	(876) 972-2215/2227 drpwheatle@hotmail.com
National	Office of Disaster Preparedness and Emergency Management (ODPEM)	Mrs Allison Gordon Regional Coordinator	(876) 906-9674-5 sgordon@odpem.org.jm

Scope of Plan

The Plan will cover pre and post-impact aspects of disaster risk management, that is, prevention, mitigation, preparedness and response. The Plan will also cover long-term climate change adaptation strategies that will be important for the community to prepare for future variations in climatic conditions. The plan focuses on climate and non-climate natural hazards identified by the community including earthquakes, landslides, hurricanes, flooding and droughts.

Authority

This plan is the Community Disaster Risk Management (DRM) and Climate Change Adaptation (CCA) Plan for the community of Bensonton. It is one of several CDRM and CCA Plans that support the formation of the Zonal Disaster Risk Management and Climate Change Adaptation Committees/Plans for St. Ann.

Under the DRM Act (Section 20), ‘each local authority for a parish shall be responsible for the functions of managing and giving effect to the prevention of, mitigation of, preparation for, response to and recovery from disasters.’ According to section 23(1) of the DRM Act, each Parish Disaster Committee (PDC) in consultation with the Director General shall establish for each parish such number of Zonal Disaster Committees as it considers fit to address zones of particular vulnerability within the parish’ (The DRM Act Section 23c). In effect, the PDC gives guidance and support to the Zonal Disaster Committees and ensures that disaster management and disaster operations are aligned to and consistent with those of the PDC.

The Zonal Disaster Management Framework allows for the division of parishes into more manageable disaster management areas known as Disaster Management Zones or Emergency Management Zone. These management zones permit a more effective distribution of support through advice/guidance, sourcing and provision of resources for risk reduction matters and execution of mitigation activities before, during and after emergency activities.

Each Zonal Disaster Committee is obligated to carry out certain duties within its zone. The functions of a Zonal Disaster Committee shall include the duty to:

- a) Provide public education within the applicable zones regarding disaster preparedness and emergency response;
- b) Liaise with the relevant PDC on matters relating to disaster preparedness and emergency response
- c) Nominate persons to be trained as shelter managers;
- d) Prepare a zonal disaster plan to be incorporated into the Parish Disaster Risk Management Plan’ (Section 23c Disaster Risk Management (DRM) Act).

Local emergency/disaster response planning will trickle down from the Zonal Disaster Committees to the Community Disaster Risk Management (CDRM) Groups and Community Emergency Response Teams (CERTs). See diagram 1 for a visual of the structure from PDC to CERT.

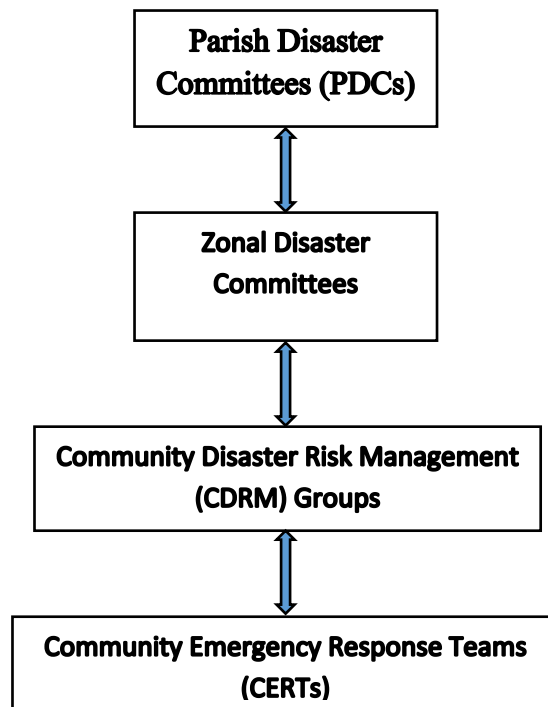


Diagram showing the relationship between the Parish, Zones and CDRMG

Responsibility

The responsibility for updating and testing the plan lies with the Bensonton CDRM Group which will review and test elements of the plan at least once per year and after every major event. The Plan should be updated every 5 years to reflect changes in the dynamics of the community and the implications for disaster 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.

Relationship to Parish and National Plans/Structure

The Bensonton Disaster Risk Management and Climate Change Adaptation Plan represents the operational procedures and strategies to be employed at the community level in response to and preparing for a number of hazards. The community will be supported by and will work through the St. Ann Parish Disaster Committee, and will be closely integrated with the Parish Emergency Operations Centre (PEOC). Therefore, the CDRM Plan will be incorporated into the parish DRM plan as required under section 23(2) (d) of the DRM Act. It will draw on this plan and national plans where necessary for the mounting of an efficient response and preparedness programme. The ODPEM collaborates with the St. Ann Municipal Corporation on Disaster Risk Management matters through the Parish Disaster Committee and the Parish Disaster Coordinator.

Leadership of the CDRM Group

The leadership of the group will be the same as that of the existing CBO (this includes the already assigned individuals). Where no existing group (CBO), the persons engaged by the facilitation team who 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).
- » Special meetings, briefings and workshops may be convened by the implementer as necessary, inviting stakeholders as appropriate.

1 COMMUNITY PROFILE

1.1 Description of the community

Bensonton is a rural community located in St. Ann close to the border of Clarendon. The topography is sloping and one of the main districts, Pedro River is a basin that receives run-off from neighbouring communities. This feature together with the topography makes sections of the community flood-prone. The two other rivers are the McDowell River and Little River. There are several springs and ponds such as Johnson Pond, Dixon Pond, Bamboo Pond, Potato Piece Pond, Cocoon Pond and Edinburg Pond.

The population of the community is 3546 persons 55% of which are males and 45% females. Vulnerable groups comprising children and the elderly account for 39% of the population. According to the Community Profile, (SDC, 2010), the main economic activity is farming and the area is noted for yam, cocoa, sweet potato, cabbage, pumpkin and pepper. Approximately 80% of the population is engaged in this activity. Other means of livelihood include shop keeping, and other artisanal skills such as welders, tilers and electricians

Houses are mainly constructed of concrete and block (68%) and based on the SDC Community Profile, approximately 75% are in good condition. The other materials accounting for 21% of the community are wood and wood and concrete. Piped water from the public source is available for 47% of the community (STATIN, 2011), the source of which is the Pedro River (Social Development Commission). Around 16% of those who receive from the public source are piped into the dwelling, 13% from a standpipe and 9% piped into the yard. Other residents have access to water from individual water harvesting efforts which are further supported by three wayside tanks provided by the municipal corporation, approximately 6% of households receive water supply from the public catchment. Approximately 27% of households receive water from private sources including springs or river which accounts for the majority of the private source.

74% of homes have access to electricity and 25% use kerosene as their source of lighting. According to the SDC, a large percentage of the community has access to telephone services. Only 4% of the community disposes of garbage through public collection while the majority, 86%, burn their garbage. The water closet is the most popular toilet facility and accounts for 68% of households while 36% use pit latrine.

Social amenities are also available. There is one type of TT health centre, eight schools, 14 churches, 2 post offices/postal agencies and 1 community recreational field.

1.1.1 Summary of main hazards

The main hazard that affects Bensonton is flooding resulting from three rivers that are present, the main one being the Pedro River which receives water from Cave Valley, Bog Hole and York Castle. Landslide, drought and bush fires also affect the community.

1.2 Location and districts of community in this Plan

Based on the Social Development Commission's community list, Bensonton consists of 9 districts:

Bensonton (Waltham and Road Pasture)
Concorde (Corner Shop)
Cross Roads
Drummily (Crashy Gras, Pimento Walk and Sterling Street)
Fort George (Speing Hill)

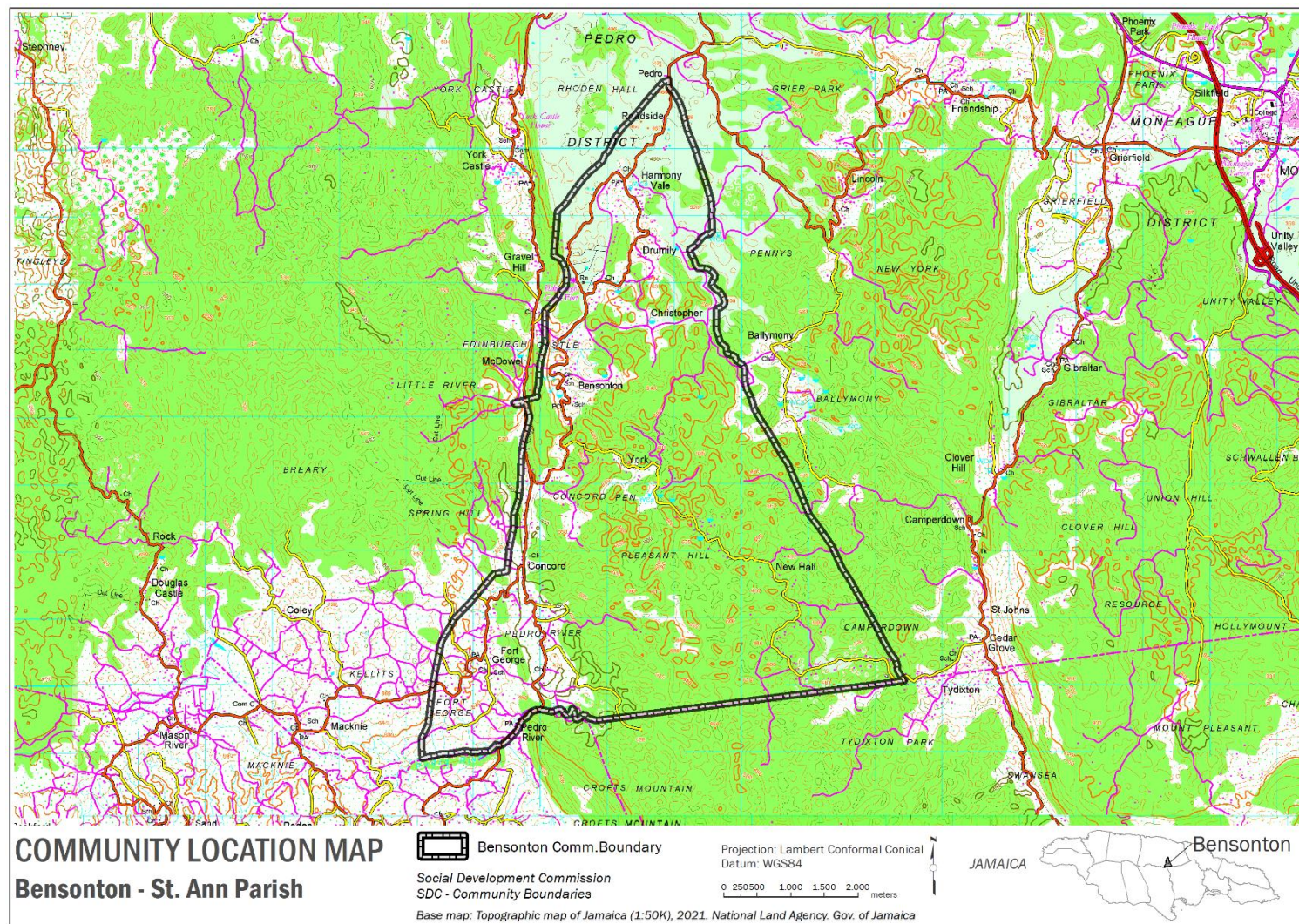
Harmony Vale (Roadside and Sterling Street)
New Hall
Pedro River
York

The community of Bensonton has identified 6 districts that comprise the community. These include:

Table 2. Districts and Coordinators Contact List

#	DISTRICT	TEAM LEADER	CONTACT #	E-MAIL
1.	York.	Paula Spence.	(876) 352-3751	kshaekaynel@gmail.com
2.	New Hall.	KerryAnn Robinson.	(876) 413-2172	-
3.	Harmony Vale.	Mikhail James.	(876) 436-8099	-
4.	Drummily.	Kimekah Smith.	(876) 402-7397	Morrisbrian1981@gmail.com
5.	Bensonton / Waltham.	Evlett Spence.	(876) 449-4486	-
7.	Pedro River.	Neresa Williams.	(876) 363-2492	neresiawilliams@gmail.com

1.2.1 Location map



2 DISASTER RISK MANAGEMENT (DRM) ORGANIZATIONAL STRUCTURE

2.1 National institutions

The institution at the national level that coordinates disaster risk management is the Office of Disaster Preparedness and Emergency Management (ODPEM). The ODPEM is also the secretariat to the National Disaster Risk Management Council (NDRMC) which is chaired by the Prime Minister of Jamaica. The Deputy Chairperson for the NDRMC is the Minister of Local Government and Rural Development, the Ministry under which disaster management falls. The NDRMC leads the planning and coordination of disaster management. Seven committees work to support the National Disaster Council (NDC) – Finance, Planning and Administration, Recovery Planning, Preparedness and Emergency Operations, Emergency Health and Planning, Public Information and Education, Humanitarian and Prevention and Mitigation.

2.2 Parish and Community organizations

At the parish level, the St Ann Municipal Corporation is responsible for coordinating disaster management including working with communities to develop their capacities and their plans. This coordination is done through a Parish Disaster Committee which is chaired by the Mayor (or his designate). This committee comprises several agencies and communities at the parish level. The Parish Disaster Coordinator, the person appointed by each local authority to carry out day-to-day execution of the disaster risk management functions, acts as the advisor to the Parish Disaster Committee.

The Parish Disaster Committee is linked to the national level through the ODPEM and all decisions taken by the PDC are aligned with the national level policies and plans.

Communities are also part of the disaster management organization of the parish and are represented at the parish level through zonal committees (also known as Community Disaster Risk Management Groups). This committee is made up of community members and the community can invite external organizations to participate in their risk reduction activities.

Table 3. DRM Group composition

DRM GROUP POSITION	CONTACT PERSON	TELEPHONE Nº/EMAIL
Chairman	Kevin Russell Winnifred Johnson	(876)-321-6647 / Ruselloneil499@gmail.com (876)-860-4989
Vice Chairman	Paula Spence	(876)- 352-3751 7 kshaekaynel@gmail.com
Secretary	KerryAnn Robinson	(876)- 413-2172
Treasurer	Shavine Ormsby	(876)- 856-6108
Assistant Secretary	Sandean Black	(876)- 365-0471/(876)- 772-7789
Coordinator – Public Education & Fundraising	Shanaya Howell	(876)-499-6156
Coordinator – Vulnerability & Risk Identification	Daedrian Smith	(876)-394-9413
Coordinator – Prevention, Mitigation & Adaptation	Neresia Williams	(876)-363-2492
Coordinator - Response & Recovery	Evlett Spence	(876)-449-4486
Coordinator - Preparedness	Violet Walters and Violet Walters and Jada Grant to assist to assist	(876)-283-5844

CDRM Group will train and establish Community Emergency Response Team(s) (CERTs) that is the operative team under the Response & Recovery Coordinator. At a minimum, CERT includes the following positions:

- » First Aid coordinator and assistants.
- » Initial damage assessment coordinator and assistants.
- » Shelter management coordinator and assistants.
- » Search and rescue coordinator and assistants.
- » Communication (during the crisis) coordinator and assistants.
- » Evacuation coordinator and assistants.

The community should have persons trained in these topics.

2.3 Gaps and challenges

Community Level

- » The community is familiar with the disaster agencies and representatives but there are communication challenges.
- » More assistance is needed in areas affected by drought.

National Level

- » ODPEM has done a lot of work in Pedro River but there is little communication with other areas of the community.

3 DISASTER HISTORY

3.1 History of disasters and coping mechanisms

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

Table 4. Historical Overview of Disasters

DISASTER YEAR	IMPACT	HOW DID THE COMMUNITY RESPOND?
October - December Rainfall, 2020.	<p>Pedro River was flooded, as well as Concorde / Corner Shop.</p> <p>NB: The schools and the clinic are elevated, and not usually flooded.</p> <p>There was crop damage, and animals died in Christopher.</p> <p>The roads are normally safe as they are not flooded.</p>	The heavy rainfall impacted the farmers. Their farms were flooded, and they lost livestock and crops. They had to start over.
Drought 2019-2020.	There were months of no water in New Hall, Christopher, Drummily and surrounding areas.	<p>Residents had to use taxis to carry water in small drums, jugs, and bottles from Pedro River to their homes.</p> <p>Some farmers bought water, but most water trucks are too big for the community roads. Also, the roads are believed to be too bad and they are not worth the journey.</p>
Surface Trough, May 14-16, 2017.	Roads remain inundated.	Community members found alternate routes in and out of the community.

DISASTER YEAR	IMPACT	HOW DID THE COMMUNITY RESPOND?
Chikungunya Outbreak, 2014.	The community had an outbreak of chick -v in Pedro River in 2014, but no other significant health outbreak in recent memory.	» The health centre in the area is fairly equipped and residents believe the community can deal with a moderate outbreak of disease, but nothing major.
Hurricane Sandy, 2012.	Persons were marooned on Pedro River main road, and they were blocked from Concord to Pedro. The water settled in the community for weeks.	» The persons who had flooded homes in Pedro River found shelter with their neighbours. » The community members stayed in as they couldn't use the roads. » JDF and the Coast Guards were also called in to transport persons back and forth from the community.
Tropical Storm Nicole, 2010.	Once there is a storm, Pedro River is flooded.	-
Tropical Storm Tomas, 2010.	NB: The area is flooded whenever there are hurricanes. The water will settle in Pedro for weeks.	The JDF coastal guards provided transportation from one point to another. NB: The water usually rises out of the gully, and covers the roads. It may be up to 3ft. on the road.
Tropical Storm Gustav, 2008.	Pedro River flooded.	Community members seek refuge in whatever homes are not flooded. Boats are used to transport people around the community.
Hurricane Dean, 2007.	Pedro River Flooded.	-
Hurricane Ivan, 2004.	The hurricane destroyed roofs.	The persons from Coley had to move to a shelter, and the ones from Concorde took the initiative to move as a precaution.
Landslide, Feb. 26, 2003.	Main roads were damaged by erosion. New Hall was also affected.	Persons were able to cross the landslides. They weren't so major that roads were blocked.
Hurricane Gilbert, 1988.	The citizens lost a lot. 3 persons drowned as their homes were covered in water.	In the Pedro area, persons moved to the Concorde Sacred Heart Church. Since this event, persons adapted and changed a lot. Some persons moved permanently.

DISASTER YEAR	IMPACT	HOW DID THE COMMUNITY RESPOND?
Upper-level trough / inter-tropical convergence zone / tropical jet stream, May 23-June 6, 1986.	The heavy rainfall caused the vicinity to be flooded out by water and the waters rose for about 6 days.	No data.
Hail, May 30, 1926.	The hail produces heavy rainfall and high winds. Hail has also been experienced as recently as 2021 in McDowell & Concord according to one participant, but definitely in the last 5 years according to all others.	Stay inside.

3.2 Lessons learnt

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

1. Pedro River floods once there are medium to heavy showers, as the community is almost in the river. The river needs to be trained and proper research done on mitigation measures.
2. Pedro River is also flooded from runoff from Cedar Valley, Douglas Castle, Little River and other surrounding areas, so even if there is no rain in the district, the area is still flooded.
3. The other districts are not prone to flooding but experience severe droughts, which can be alleviated by piping water from Pedro River.
4. The districts impacted by drought will also experience regular bush fires, which are even more dangerous as there is no water.
5. The flood gate at Concorde Square needs repair.
6. There is a hazardous area in Bottom Pedro. This is at “Stinking Gut” at Pedro River main road. It is hazardous due to landslides. The road may be blocked from Kellits to Concorde or vice-versa if a severe landslide takes place
7. There are also only wooden light poles at Bottom Pedro which increases the vulnerability of the area.
8. Additionally, the gate in Bottom Pedro at McCallum Shop, which is used to prevent vehicles from entering when the area is flooded needs repair.
9. A sign is needed at Corner Shop, as motorists get lost trying to find Concorde or Kellits.
10. The trees grow very near the light wires in New Hall. The residents need a reporting system, as well as clearance for the continuous maintenance of the trees. The entire community needs tree trimming.
11. In New Hall at the square, they have a landslide issue and need roads to be repaired.
12. A light post replacement program is needed in Bensonton Proper and Harmony Vale.

4 COMMUNITY ASSETS

A community asset (or community resource) is anything that can be used to improve the quality of community life. The five asset categories include:

- » NATURAL: Farming land, community springs, rivers, forests, ocean, etc.
- » PHYSICAL: Infrastructure such as bridge into town, schools, clinics and equipment (tools, machines) for transport, local water management/distribution system, telephone lines, mobile phone towers.
- » FINANCIAL, HUMAN AND SOCIAL: liquid assets such as livestock, professional capacities and knowledge (nurses, police, etc.).

The most important community assets/resources from each category were identified and highlighted in Table 5 below. The priority assets were selected based on their importance to lives and livelihoods in the community.

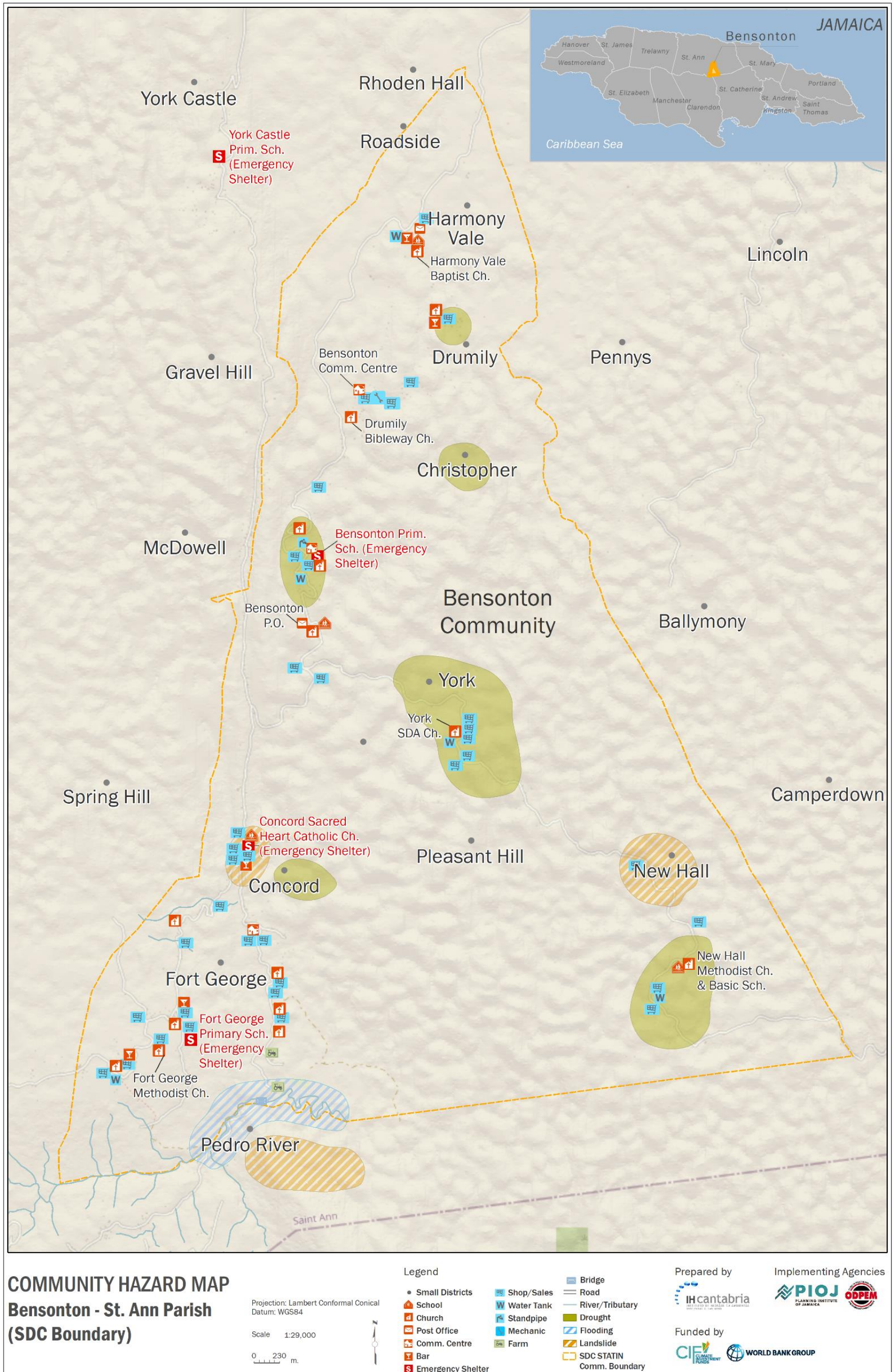
Table 5. Community Assets

ASSET CATEGORY	ASSETS
Natural.	<ul style="list-style-type: none"> » Three rivers: Pedro River, McDowell River and Little River. NB: Pedro River has water, which can be sent to Bensonton. » York and New Hall are far away but they can get water from the nearby rivers, however, in times of drought these nearby rivers are dry.
	» Ponds – Sink Hole in Bensonton Proper.
	<ul style="list-style-type: none"> » Springs – Bun Grung Spring, Spring Rock and Sinking Spring. » There is also a spring in Bensonton, but it has been dried out since 2019 because stones have been removed. » None of the springs is in New Hall, Christopher, or Drummily which are the areas mainly impacted by drought.
	Forested areas – It is a good agricultural land, but the drought affects the farming.
Physical.	Fourteen churches.

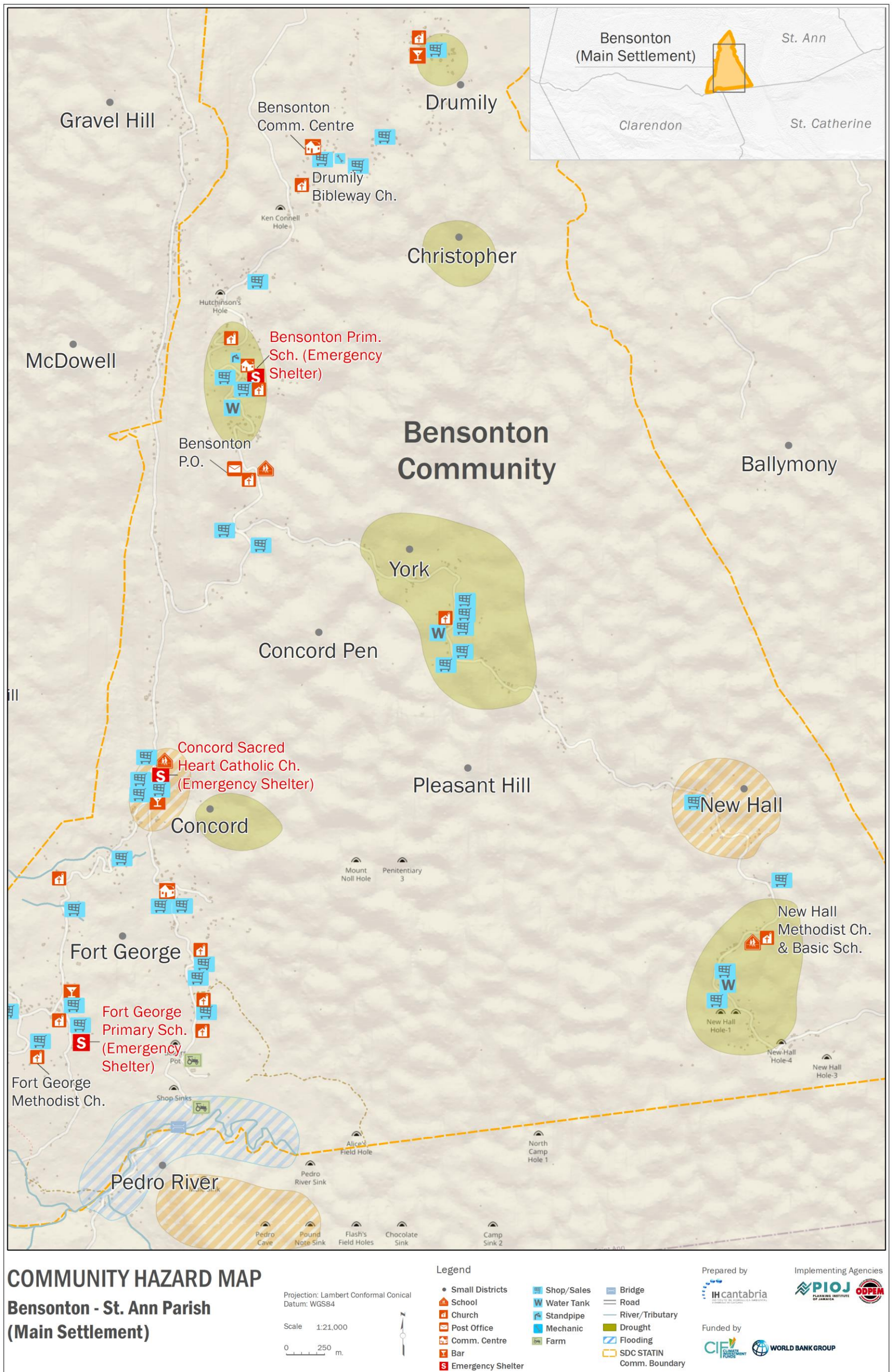
ASSET CATEGORY	ASSETS
	<p>Eight schools: five Basic schools, two Primary schools and one age school. – Waltham Primary School has closed down</p> <p>One playfield</p> <p>Old roads</p> <p>Water supply - Citizens of Pedro River, Concorde and Fort George have access to piped water which is harvested from the Pedro River and managed by Pedro River Benevolent Society. This represents 1/3 of the entire community.</p> <p>NB: Only some parts of Fort George have piped water. The other six districts are dependent on tanks and drums to store their water. There are three public tanks across the community. These are in Bensonton, Harmony Vale and York. WINDALCO could start mining in Harmony Vale shortly.</p> <p>NB: The tanks that are in Bensonton and York (each) are not big enough. However, there are rain catchment tanks in case there are any droughts. The New Hall roads are very narrow, and the water trucks can't get to the catchment area.</p>
Financial, human and social.	Pedro River Benevolent Society.

5 COMMUNITY HAZARD MAP

The Community Hazard Maps were prepared with the involvement of the community during the Community Disaster Risk Management Plan workshop. The hazard maps identify the zones where hazards occur and the assets (houses, roads, shops, schools, shelters etc.) that are located in these zones. The community identified locations where they have historically experienced hazards and drew them on the map. The hand-drawn map can be found in the photo gallery (Appendix K).



Bensonton Community Hazard Map (SDC Boundary) Digitized from Community Input (2021)



Bensonton Community Hazard Map (Main Settlement) Digitized from Community Input (2021).

6 IDENTIFICATION OF CLIMATE AND NON-CLIMATE HAZARDS AND IMPACTED ASSETS

Table 6 identifies (i) climate and non-climate related hazards that the community experiences, and (ii) climate hazards expected to continue to experience into the future considering climate change scenarios. Climate change projected scenarios have been extracted from (CSGM), 2017: State of the Jamaican Climate 2015¹, scenario RCP 8.5, year 2050.

Table 6. Climate and non-climate hazards and their Impacts

HAZARD CATEGORY	HAZARD	PROJECTED SCENARIO WITH CLIMATE CHANGE	FREQUENCY	INTENSITY	ASSETS IMPACTED (FROM LIST)
CLIMATE HAZARD - PRESENT	Flooding.	N/A	Whenever it rains heavily for more than a day in Pedro, it floods. As long as there is a hurricane.	Up to 20ft from the gully to above the roads.	Farmlands, livestock, homes, schools, roads, JPS poles and wires.
	Hurricane- Wind.	N/A	The hilltop communities are affected, especially because of the strong winds. However, the homes are rarely destroyed.	Wind speeds are generally associated with the category hurricane. Concord in particular is affected by heavy winds during hurricanes.	Farmlands, livestock, homes, schools, roads, JPS poles and wires.

¹ Climate Studies Group, Mona (CSGM), 2017: State of the Jamaican Climate 2015: Information for Resilience Building (Summary for Policy Makers). Produced for the Planning Institute of Jamaica (PIOJ), 16 Oxford Road, Kingston 5 Jamaica.

HAZARD CATEGORY	HAZARD	PROJECTED SCENARIO WITH CLIMATE CHANGE	FREQUENCY	INTENSITY	ASSETS IMPACTED (FROM LIST)
	Drought.	N/A	4-5 times a year. In all areas outside Pedro such as York, Concord, New Hall.	Severe.	The entire community, homes farms etc.
	Landslides.	N/A	During ALL heavy rainfall, it leads to the occurrence of landslides, not usually severe. However, if it happens along the road, it can block the residents into their community.	Whenever the communities of Bensonton B (Christopher, Drummily, New Hall) experience landslides, they are usually marooned in their homes. NB: The community members pointed out that they need their drains to be cleared. They're located on a slope, and when it rains the drains overflow and carries down the dirt which causes landslides.	The roads and a few houses in the area.

HAZARD CATEGORY	HAZARD	PROJECTED SCENARIO WITH CLIMATE CHANGE	FREQUENCY	INTENSITY	ASSETS IMPACTED (FROM LIST)
CLIMATE HAZARD – FUTURE CC SCENARIO	Flooding.	N/A			-
	Drought.	Year 2050, the worst emissions scenario (named RCP8.5)	The drying trend in Jamaica: 10% less rainfall in the annual mean. The drying trend is primarily driven by a decrease in late wet season rainfall. A greater decrease in the south and east of Jamaica. The change of annual rainfall in the Bensonton area is expected to decrease by 2.16%.		-
NON-CLIMATE HAZARD	Earthquakes.	N/A	-	-	-
	Landslides – These are not experienced very often.	N/A	-	-	-

7 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 hazards that the community is exposed to, the sensitivity of the different assets within the community to the hazards and the direct and indirect impacts that are anticipated.

Table 7. Community's Vulnerability

HAZARD CATEGORY	HAZARD	VULNERABLE ASSET	DRIVERS OF VULNERABILITY	DIRECT IMPACTS	INDIRECT IMPACTS
CLIMATE HAZARD - PRESENT	Flooding	<p>Flooding impacts all of Pedro River - homes, fields, and business places.</p> <p>Flooding also affects to a lesser extent Concorde and Corner Shop roads.</p>	<p>The area is located close to Rivers Nearby</p> <p>The location of Pedro River means that it suffers from runoff from other areas. Pedro is a valley so water runs from the hill into the valley</p>	<p>» Damage to assets</p> <p>» Communities are marooned</p> <p>» Roadways are impacted. Water from heavy rainfall in New Hall destroyed their roads and drains</p>	<p>» Communities are marooned and cannot access other areas</p>
	Hurricane - Wind	Houses, Cops and animals	Hilly areas are more vulnerable to wind	Houses on the hill lose their roofs from the strong wind Crops are destroyed and animals die	» The market vendors lose profits, and the farmers have to try and source another form of income

HAZARD CATEGORY	HAZARD	VULNERABLE ASSET	DRIVERS OF VULNERABILITY	DIRECT IMPACTS	INDIRECT IMPACTS
	Drought	Homes, farms	<ul style="list-style-type: none"> » Lack of access to water - In some areas of Bensonton there is no water from NWC and they have no rivers or ponds nearby. » Deforestation - They also have less rain due to deforestation. » There is a spring beneath a rock in Bensonton proper from which the community would normally get water, however, community members have been removing the rocks and now the spring is drying up 	<p>There is no water for domestic and other uses, and the schools must close. They try to get a water truck sometimes.</p> <p>In addition, agriculture and livestock died. There is no water to help the citizens protect themselves from Covid-19.</p>	<ul style="list-style-type: none"> » Schools close reducing the teaching time » Residents have to find additional money to pay to truck water » Greater exposure to COVID-19 as there is no water to practice proper handwashing and sanitation » There are also bush fires that destroy the forest.
NON-CLIMATE HAZARD	Earthquakes	Only slight tremors are felt in the community	-	-	-
	Landslides – These are not experienced very often	Roads	-	-	-

8 COMMUNITY CAPACITY ANALYSIS

In order for the community to implement its Disaster Risk Management and Climate Change Adaptation Plan, the community's capacities to cope with and manage disasters were assessed and a listing of these is provided below.

Table 8. Community Capacity

CAPACITY	TYPE OF RESOURCE	TASK
Skills.	<ul style="list-style-type: none"> » Chainsaw operators. » Counsellors, pastors. » Tradesmen, plumbers, farmers, teachers, mason, carpenters. » Divers/Swimmers. » Health aid. » Electrician. 	Assist in the clearing of roads, provide counselling, psychological support, providing food, tradesmen assist in prevention and mitigation.
Knowledge.	<ul style="list-style-type: none"> » Hazard history of the community. » Coping mechanisms. » Knowledge and awareness of the community's vulnerabilities and risk reduction measures. » Early warning systems. » Evacuation procedures. » Elements of disaster preparedness and response. » Trained persons- first aid, initial damage assessment, shelter management, psychosocial support, water and sanitation, light search and rescue. 	Contribute to the development of the community, education and awareness of others and identification of hazard-prone areas.

CAPACITY	TYPE OF RESOURCE	TASK
Networks.	CBOs – Pedrovian Community Benevolent Society.	Provide human resources for transporting the elderly to the emergency shelter. Shelter management.
	Taxi operators, truck operators, and owners of private motor vehicles.	Assist with general transportation of persons from one point to another.
Building/Infrastructures.	Schools, churches.	Served as an emergency shelter.
Means of Care/Medical Care.	Registered nurse, community health aid, nurse.	Provide first aid service and general health care.
Commercial Enterprises.	Commercial Enterprises.	Grocery Shops.

9 DISASTER RISK REDUCTION

Risk reduction measures have been identified according to the information presented in previous sections. This section presents (i) prevention/mitigation and preparedness measures.

Risk reduction measures will take into account official recommendations from Jamaican authorities on prevention of Covid-19 and other diseases, especially during evacuation.

9.1 Prevention and Mitigation

In order to ensure that future developments in the community are 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.

9.1.1 Areas which should not be developed

The following area in the table below was identified by the community as being unsuitable for future development in relation to the hazards and vulnerable elements identified.

Table 9. Areas for No Development

AREA	REASON FOR NO DEVELOPMENT
Areas close to Natural Gullies.	These areas have sinkholes, and it is where the water flows out of the community.

9.1.2 Zoning

The following areas in Table 10 below were identified by the community as being suitable for specific types of development considering hazard and vulnerability elements identified.

Table 10. Suitable Areas for Development

AREA	TYPE OF DEVELOPMENT WHICH WOULD BE SAFE
There were no areas identified for no development.	-

9.1.3 Areas which can be developed with Appropriate Mitigation Activities

Table 11. Special Areas for Development

AREA	MITIGATION MEASURES NEEDED
Pedrovian Benevolent Property.	A retaining wall is needed to prevent a further breakaway.
Pedro River.	Needs cleaning.
Cross Road in Bensonton Proper, beside the road to York, New Hall. There is a plot of government land.	A clinic and a training centre can be built in this area.
Benevolent Society has land beside the Healing Temple Church. It is located at 17 Pedro River.	There can be a multipurpose entity, such as a recreational centre, and a community centre if the land is properly prepared.
Drummily (Edinburgh Castle. The ruins of an old castle)	The community members would like this castle to be used as a tourist attraction. It is believed to be the home of Lewis Hutchinson, the "First Man to be hanged in Spanish Town." There is also a cave at the base of the main road, which can be used as a tourist attraction.

AREA	MITIGATION MEASURES NEEDED
Drummily (Kenky Hole).	There is a sinkhole that is very close to the roadside, a warning sign is needed.
New Hall.	The drains are in place but they are not maintained. They are usually blocked which leads to flooding. They need to be cleaned.
New Hall (at Turn Table).	A drain is turned in the direction of Karen's father's home, and when it rains, the home is flooded. The drain needs enhancement
New Hall (top side Sharon Shop – Pond Gap).	This is a flat piece of land. A large catchment tank can be placed here, to help with the drought issues in the area.
York.	The area needs better roads for the farmers.
Bensonton.	The health centre can be refurbished, and it would serve some sections of Bensonton It is in a central area.

9.1.4 Reducing Community Vulnerability through Disaster Risk Mitigation and Adaptation

The vulnerabilities identified above can be addressed and the impacts of the hazards reduced if the appropriate actions are employed. Disaster Risk Mitigation strategies can be employed to reduce the community's vulnerability to current hazards and adaptation measures employed to plan long term strategies for adjusting to the expected climate change impacts. Several resources will however be required to make these strategies possible and sustainable.

Table 12. Community Action Plan for Disaster Risk Mitigation and Climate Change Adaptation

HAZARDS IDENTIFIED	COMMUNITY RESPONSES	ARE THESE RESPONSES SUITABLE?	ADAPTATION/MITIGATION ACTIONS REQUIRED – EXTERNAL ASSISTANCE	ADAPTATION/MITIGATION ACTIVITIES - DONE WITHOUT EXTERNAL ASSISTANCE	SPECIFIC LOCATION
Flooding.	Community members seek refuge with neighbours.	No.	<ul style="list-style-type: none"> » Proper research is needed on how to train the river in Pedro River – Water Resources Authority, NWA. » Assistance with food and other necessities to be provided quickly when residents are marooned – Municipal Corporation. » Improve community resources for a response such as boats, diving gear, life jackets, rope – JDF, JFB, ODPEM, Municipal Corporation. » Continuous maintenance of drains - Municipal Corporation 	-	Pedro River, Concord and Corner Shop.

HAZARDS IDENTIFIED	COMMUNITY RESPONSES	ARE THESE RESPONSES SUITABLE?	ADAPTATION/MITIGATION ACTIONS REQUIRED – EXTERNAL ASSISTANCE	ADAPTATION/MITIGATION ACTIVITIES - DONE WITHOUT EXTERNAL ASSISTANCE	SPECIFIC LOCATION
Hurricane.	Some of the residents batten down their homes, as well as visit the shelters if they are affected in any way.	No.	<ul style="list-style-type: none"> » Improved drainage – Municipal Corporation, NWA. » Assist with response items – Municipal Corporation. 	<ul style="list-style-type: none"> » Go to the shelters early. » Preparedness - food and other items. » Try to educate themselves on how to prepare for this hazard. 	-
Drought.	<ul style="list-style-type: none"> » Hire transportation to go to Pedro River to fetch water, which is located several miles away. 	No.	<ul style="list-style-type: none"> » They need tanks close to where they live. » They need a water truck to carry water to the communities. » Some of the roads in New Hall and York need to be fixed for the water trucks to be able to enter. » An outbreak of disease is probably due to no water being in the area. 	<ul style="list-style-type: none"> » Build their storage area, and organize themselves. » They also need to practice water harvesting. 	Drummily, Christopher, New Hall, and York.

9.2 Preparedness and Initial response

This section focuses on identifying actions to build the capacities of people to help themselves (not individually but on a community basis) in case of a disaster. In many places, this approach to risk management has proven more efficient than the passive infrastructure-driven strategy based on large state-backed investments.

The preparation covers the knowledge and ability to anticipate, respond and effectively recover the effects of current or probable events or hazard conditions. This includes the development of plans, the storage of resources, training, monitoring, forecasting and warning, among others.

9.2.1 Public education and awareness

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

Table 13. Public Education and Awareness

HAZARD	PUBLIC EDUCATION ACTION	COMMUNICATION CHANNEL	TIMELINE	RESPONSIBILITY
Fire.	Fire Safety Tips.	<ul style="list-style-type: none"> » Print – posters, pamphlets. » Sensitization sessions. 	October annually during fire prevention month.	Coordinator - Public Education and fundraising – Shanoya Howell.
Hurricanes and their secondary hazards.	<ul style="list-style-type: none"> » Define hurricanes, their secondary hazards and impacts. » Hurricane safety and response. » Mitigation Strategies. 	<ul style="list-style-type: none"> » Sensitization session on basic disaster management. » Print – posters pamphlets. 	<ul style="list-style-type: none"> » April and May during hurricane .preparedness month » Annually during the hurricane season June to November. 	Coordinator - Public Education and fundraising – Shanoya Howell.
Earthquake.	<ul style="list-style-type: none"> » Earthquake Preparedness. » How to conduct drills. 	<ul style="list-style-type: none"> » Sensitization session on basic disaster management. 	January during earthquake preparedness month.	Coordinator - Public Education and

HAZARD	PUBLIC EDUCATION ACTION	COMMUNICATION CHANNEL	TIMELINE	RESPONSIBILITY
	» Earthquake response.	» Print – posters pamphlets.		fundraising – Shanoya Howell.
Flooding.	» Explain flooding and its impacts. » Flood safety.	» Sensitization session on basic disaster management. » Print – posters pamphlets. » Social media.	Ongoing and during hurricane preparedness activities.	Coordinator - Public Education and fundraising – Shanoya Howell.

9.2.2 Monitoring and Warning

The following persons (belonging to the CDRM Group) are responsible for monitoring and warning situations of impending disasters (e.g., hurricane, flooding, storm surge, landslide) that may affect the community and disseminate information to the DRM Group.

Table 14. Community Monitoring and Warning Programme

HAZARDS	MONITORING/WARNING METHOD	RESPONSIBILITY	PROCEDURES
Hurricane.	» Listening to the radio for official information. » Television and Social Media.	Coordinator – Public Education and Fundraising » Everton Johnson. » Violet Simpson.	1. The Coordinator – Public Education and Fundraising issues an alert to the zonal group via SMS or internet-based messaging system or through the Red Cross system at Pedro River. 2. A town crier is dispatched to warn the community. 3. Shelter managers are placed on alert.

HAZARDS	MONITORING/WARNING METHOD	RESPONSIBILITY	PROCEDURES
	Farmer's weather forecasts.	Coordinator – Public Education and Fundraising.	Warning sent to the President of the Pedro's River Farmer's Group, and Pedrovian Community Benevolent Society.
Flooding.	Community gauge – At Concord, below Concord Bible Church the gauge is functioning. At Pedro River "Bottom Pedro", both gauges need to be repaired. This is near Berry's Shop below the Church of Christ Church.	Community gauge readers – Violet Walters and Jada Grant to assist and William Flash for the gauge at Concord. Shenoya Powell, Kevin Russell for Pedro River.	1. See flood response plan 2. The church is to be alerted to ring the bell. NB: Pedro River Red Cross has a warning group that is used. The community has a bull horn. (BA).
Drought.	Water tank monitors - to check the water levels for the wayside water tanks	Basil Walton York Community – Lorna Brown Harmony Vale Community – Marie.	-
Hurricane.	Listening to the radio, television and social media for official information.	Coordinator – Public Education and Fundraising --Everton Johnson Violet Simpson.	The Coordinator – Public Education and Fundraising issues an alert to the zonal group via SMS or internet-based messaging system or through the Red Cross system: » A town crier is dispatched to warn the community. » Shelter managers were placed on alert.

9.2.3 Evacuation

The evacuation plan will be a guide for the community to coordinate their efforts by disseminating early warning to ensure timely and orderly evacuation of the vulnerable areas and persons. The evacuation plan will follow recommendations from Jamaican authorities regarding Covid-19 and other diseases, especially during stays in shelters; however, an evacuation order will prevail over any other lockdown/stay at home order or recommendation related to sanitary warnings.

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.

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 15. Areas to be evacuated during an emergency, Evacuation Route and Mode of Transportation to Emergency Shelter

EVACUATION ZONE	EVACUATION ROUTE	SHELTER	TRANSPORTATION	ASSEMBLY POINT COORDINATOR
Concorde.	<p>From Top Concorde, exit the district and head in a southerly direction along the main road in the direction of the square. The church sign is on the left a short distance from the square.</p> <p>From Bottom Concorde head in a northerly direction toward the square until the church is reached.</p>	<p>Concord Sacred Heart Church (official shelter NB: The church at Concord is not big enough for all of the districts.</p> <p>The Pedro Church of Christ is an alternate, but the citizens will be marooned during a flood/flooding.</p>	They can walk, but transportation is required for the elderly and the disabled.	Neressa Williams.

EVACUATION ZONE	EVACUATION ROUTE	SHELTER	TRANSPORTATION	ASSEMBLY POINT COORDINATOR
Pedro River.	The same information is listed above, about both Top and Bottom Concorde.	<p>Concord Sacred Heart Church is the official shelter, however, in times of flood, no one can get to it.</p> <p>The Pedro River Methodist Church is an alternate shelter.</p> <p>The Pedro River citizens also use Mr. Blackwood's house as shelter.</p> <p>The Pedrovian Community Benevolent Society Centre is also a substitute.</p> <p>The Concept Bible Church is an alternate shelter, but it is always flooded.</p> <p>A popular practice in this area is to be build houses with cellars.</p> <p>The community members who are not affected by the flooding will take in others.</p>	At Bottom Pedro, they usually need a boat if the area is flooded. However, before the flooding, they can walk.	Neresa Williams.
Corner Shop.	The same direction as Top Concord, however, the shelter is a mile away from this district.	Concord Sacred Heart Church.	Walk.	Neresa Williams.

EVACUATION ZONE	EVACUATION ROUTE	SHELTER	TRANSPORTATION	ASSEMBLY POINT COORDINATOR
Bensonton / Waltham.	From the district head northerly along the Bensonton to Claremont main road towards the square. The school is on the right side of the road.	Bensonton Primary School. The Waltham Baptist is a suggested shelter for Bensonton. NB: The school is always closed, and they have no access.	The elderly and disabled will need motor vehicles however; others can walk.	Evlett Spence.
Harmony Vale.	From the community, head to the main road. At the main road, turn right and head in a northerly direction along the roadway. In a few metres, the school is located on the right.	Harmony Vale Basic School. Harmony Vale Baptist Church. NB: The Harmony Vale Baptist Church is beside the basic school.	The elderly and disabled will need motor vehicles however; others can walk.	Mikhail James.
Drummily.	From Top Drummily, head south along the main road to the church which is located a few metres from the Bensonton Community Centre. From Bottom Drummily, head south along the main road to the church.	Drummily Bible Way, Church of God (unofficial shelter).	The elderly and disabled will need motor vehicles however; others can walk.	Kimekah Smith.
York.	From the district head to Down Cane road where the community tank is located. The church is next door to the tank (The church is not large).	There is no shelter. The substitutes are New Hall Methodist, and/or Bensonton Primary. NB: New Hall is far away.	The York SDA was suggested, but the community members are not certain about accommodations.	Paula Spence.

EVACUATION ZONE	EVACUATION ROUTE	SHELTER	TRANSPORTATION	ASSEMBLY POINT COORDINATOR
New Hall.	From the district head to the main road. From York, head south along the road, it is on the right but from Ty Dixon, head north and the church is on the left.	New Hall Methodist Church.	The elderly and disabled will need motor vehicles however; others can walk.	KerryAnn Robinson.

Table 16. Evacuation Procedures

ACTIVITY	PERSON RESPONSIBLE
Evaluate threat or liaise with PDC/ODPEM on the need for evacuation.	Chairperson. Kevin Russell. Winnifred Johnson.
Alert residents on possible evacuation.	Coordinator – Preparedness - Evelett Spence.
Decide on timing.	Coordinator - Response & Recovery - Neresia Williams.
Ensure special needs populations are assisted.	Coordinator – Preparedness - Evelett Spence.
Organize transportation.	Coordinator - Response & Recovery - Neresia Williams.
Identify the route to be used.	Coordinator - Response & Recovery - Neresia Williams.
Ensure shelter is available.	Coordinator - Response & Recovery - Neresia Williams.
Register all persons who are evacuating and their destination.	Coordinator - Response & Recovery - Neresia Williams. CERT.
Start evacuation.	Coordinator - Response & Recovery - Neresia Williams.

ACTIVITY	PERSON RESPONSIBLE
Check that all areas are safely evacuated.	Chairperson. Kevin Russell. Winnifred Johnson.
Inform Parish Disaster Committee.	Chairperson. Kevin Russell. Winnifred Johnson.

Table 17 shows the evacuation responsible for each evacuation zone who will monitor that all evacuation activities are being conducted. The evacuation zone responsible will contact the vulnerable group responsible if needed (and vice versa).

Table 17. Evacuation Team

EVACUATION ZONE	PERSON RESPONSIBLE FOR EVACUATION	VULNERABLE GROUP TO EVACUATE	PERSON RESPONSIBLE FOR EVACUATION OF VULNERABLE GROUPS
Concorde.	Neresa Williams.	Elderly and persons with disability.	Neresa Williams. Concorde Senior Citizens Association.
Bensonton.	Evlett Spence.	Elderly and persons with disability.	Evlett Spence. SDC.
Pedro River.	Neresa Williams.	Elderly and persons with disability.	Neresa Williams. Red Cross, Churches, Pedrovian Society, and 4H Club.
Corner Shop.	Neresa Williams.	Elderly and persons with disability.	Neresa Williams. Community members.
Drummily.	Kimekah Smith.	Elderly and persons with disability.	Kimekah Smith.
Harmony Vale.	Mikhail James.	Elderly and persons with disability.	Mikhail James.
York	Paula Spence.	Elderly and persons with disability	Paula Spence.

EVACUATION ZONE	PERSON RESPONSIBLE FOR EVACUATION	VULNERABLE GROUP TO EVACUATE	PERSON RESPONSIBLE FOR EVACUATION OF VULNERABLE GROUPS
New Hall	KerryAnn Robinson.	Elderly and persons with disability (There are many persons with disability in this community).	KerryAnn Robinson.

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

9.2.4 Preparedness Action Plan

The Community Action Plan sets out the preparedness activities to be done for a planning cycle. Among the activities, it must be included 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 weaknesses in the capability of the community to respond during an emergency.

Table 18. Community Preparedness Action Plan

ACTIVITY	RESPONSIBLE PERSON(S)/AGENCY(S)	TIMEFRAME
First Aid.	Red Cross. Red Cross and St. John's Ambulance.	Feb-April. March-May.
Search and Rescue.	Red Cross. Marine Police.	Feb-April.
Shelter Management.	ODPEM.	Feb-April.
Overall Disaster Management.	ODPEM.	Feb-April. March-May.
Safety Training.	Fire Brigade.	March-May.
Boat Handling and Driving.	Marine Police, JDF, and ODPEM.	Feb-April.
Climate Change.	ODPEM.	March-May.
Proposal Writing.	SDC, JSIF.	March-May.
Project Management.	SDC and Mona School of Business.	March-May.

9.2.5 Response and Relief

The Bensonton Command Centre will be located at the Bensonton Primary School. It 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. It will also serve as a meeting place where residents will seek to reunite or locate family members or friends.

The Command Centre will forward information to the Parish Emergency Operations Centre (PEOC). The Community Disaster Chairman will assume the lead at the Command Centre. The Public Education Coordinator will serve as the sole public spokesperson on Bensonton. The Bensonton Disaster Risk Management

Group will also develop an inventory and assess the damage, and where feasible, secure the perimeter of dangerous areas. The Bensonton Disaster Risk Management Group will have available several 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 Appendices G, H and I.

9.2.5.1 Response

Search and Rescue/First Aid/Emergency Medical Care

Table 19. Community Response

ACTIVITY	RESPONSIBLE PERSON(S)/AGENCY(S)	SHORT REPORT
Send out Search and Rescue and First Aid Team to check on:		
Elderly.	Response and Recovery Coordinator – Evelett Spence.	Committee Chair and Parish Disaster Coordinator.
Persons with Disabilities.	Response and Recovery Coordinator – Evelett Spence.	Committee Chair and Parish Disaster Coordinator.
Single Mothers.	Response and Recovery Coordinator – Evelett Spence.	Committee Chair and Parish Disaster Coordinator.
Damaged Buildings and Houses for Occupants.	Response and Recovery Coordinator – Evelett Spence.	Committee Chair and Parish Disaster Coordinator.
Persons Stranded by Floodwater.	Response and Recovery Coordinator – Evelett Spence.	Committee Chair and Parish Disaster Coordinator.
Check for:		
Deaths.	Response and Recovery Coordinator – Evelett Spence.	Committee Chair and Parish Disaster Coordinator.

ACTIVITY	RESPONSIBLE PERSON(S)/AGENCY(S)	SHORT REPORT
Injuries.	Response and Recovery Coordinator – Evelett Spence.	Committee Chair and Parish Disaster Coordinator.
Persons in Need of Emergency Assistance.	Response and Recovery Coordinator – Evelett Spence.	Committee Chair and Parish Disaster Coordinator.
Call for any External Assistance.	Response and Recovery Coordinator – Evelett Spence.	Committee Chair and Parish Disaster Coordinator.
Update PDC, ODPEM.	Response and Recovery Coordinator – Evelett Spence.	Committee Chair and Parish Disaster Coordinator.
Update Community.	Response and Recovery Coordinator – Evelett Spence.	Committee Chair and Parish Disaster Coordinator.

Table 20. Initial Damage Assessors

ACTIVITY		PERSON(S) RESPONSIBLE
Send out rapid assessment team to		
Check on:		
»	Roads opened/closed.	Initial damage assessment coordinator.
»	Roads In need of urgent repair to provide access.	Initial damage assessment coordinator.
Power:		
»	Fallen lines, poles transformers.	Initial damage assessment coordinator.
»	Live wires.	Initial damage assessment coordinator.
Water and Sewage:		
»	Broken/missing water mains.	Initial damage assessment coordinator.
»	Water available.	Initial damage assessment coordinator.
»	Sewage pipes broken/leaking.	Initial damage assessment coordinator.
Describe State of:		
»	Community.	Initial damage assessment coordinator.
»	Schools.	Initial damage assessment coordinator.
»	Clinic.	Initial damage assessment coordinator.
»	Church.	Initial damage assessment coordinator.
»	Shops and businesses.	Initial damage assessment coordinator.
»	Boats and fishing gear.	Initial damage assessment coordinator.

9.2.5.2 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 21. Community Damage Assessors

TYPE OF ASSESSMENT (BUILDING, AGRICULTURE, WELFARE, ETC.)	TEAM LEADER (NAME, CONTACT)	AGENCY REPORT IS TO BE SUBMITTED TO	TIMEFRAME
Situation overview			
Buildings, utilities and infrastructure.	Response and Recovery Coordinator – Evelett Spence.	Municipal Corporation.	Within 8 hours.
Welfare.	Response and Recovery Coordinator – Evelett Spence.	Ministry of Labour and Social Security.	Within 8 hours.
Agriculture.	Lead farmer assigned by the Rural Agriculture Development Authority.	Rural Agriculture Development Authority (RADA).	Within 8 hours.
Initial damage Assessment			
Buildings, utilities and infrastructure.	Response and Recovery Coordinator – Evelett Spence.	Municipal Corporation.	Within 72 hours.
Welfare.	Response and Recovery Coordinator – Evelett Spence.	Municipal Corporation.	Within 72 hours.
Agriculture.	Response and Recovery Coordinator – Evelett Spence.	Municipal Corporation.	Within 72 hours.

9.2.5.3 Response Action Plan

Table 22. Community Response Action Plan

RESPONSE ACTIONS IN ORDER OF PRIORITY	RESPONSIBLE PERSON(S)/AGENCY(S)	AGENCY TO REPORT TO
Evacuation Route Management.	Coordinator - Response & Recovery.	Municipal Corporation – Parish Disaster Coordinator.
Evacuation.	Response and Recovery Coordinator – Evelett Spence.	Municipal Corporation – Parish Disaster Coordinator.
Trucking of water.	Response and Recovery Coordinator – Evelett Spence.	Municipal Corporation – Parish Disaster Coordinator.
Alternative Sources of Lighting.	Response and Recovery Coordinator – Evelett Spence.	Municipal Corporation – Parish Disaster Coordinator.
Search and Rescue.	Search and Rescue Coordinator.	Municipal Corporation – Parish Disaster Coordinator.
Children Welfare and the Disabled.	Response and Recovery Coordinator – Evelett Spence.	Municipal Corporation – Parish Disaster Coordinator.
Initial Damage Assessment.	Response and Recovery Coordinator – Evelett Spence.	Municipal Corporation – Parish Disaster Coordinator.
Welfare Assessment.	Damage Assessment Coordinator.	Ministry of Labour and Social Security

9.2.5.4 Relief

Table 23. Relief Assistance

ACTIVITY	PERSON(S) RESPONSIBLE
Identify members of community who have:	
Received damage.	Damage Assessment Coordinator.
Need shelter.	Shelter Management Coordinator.
Lost means of income.	Response and Recovery Coordinator – Evelett Spence.
Need assistance.	Response and Recovery Coordinator – Evelett Spence.
Identify members of the community in need of psycho-social support or counselling.	Response and Recovery Coordinator – Evelett Spence.
Compile a list and update PDC and ODPEM.	Response and Recovery Coordinator – Evelett Spence.

9.2.6 Recovery

Table 24. Recovery Action Plan

ACTIVITY	PERSON(S) RESPONSIBLE	TIMEFRAME
Identify hazards that could affect the community, identify their potential impact and anticipate possible recovery actions.	Coordinator – Vulnerability and Risk identification.	Before a hazard strikes.
Prepare a summary of the impacts of the event in an easy to read format.	Damage Assessment coordinator.	Within 7 days of the event.
Develop a list of priority activities/ projects based on the damage sustained, hazard history and other criteria agreed upon by the CDRMG. Mobilize the community and get their input.	Coordinator - Response and Recovery Coordinator – Prevention, mitigation and adaptation.	Within one month of the event.
Develop the recovery plan, establishing timeframes for each activity and responsible person.	Coordinator - Response and Recovery.	Within 6 weeks of the event.
Coordinate with the Municipal Corporation and share the recovery plan and ask for assistance with costing.	Chairperson.	Within 7 weeks of the event.
Secure outside help to implement the priority activities (NGOs, Food for the Poor, ADRA, Jamaica Red Cross, government departments, commercial enterprises in the community and the private sector).	Coordinator - Public education and fundraising.	Within 8 weeks of the event.
Get wider community buy-in and support for the implementation of the recovery activities.	Coordinator - Public education and fundraising.	4 – 8 weeks after the event.
Identify skills and capacities that will be needed to implement the recovery projects/activities and conduct training as needed (Safer building/roof training, agriculture training in sustainable farming/livestock techniques, environmental protection etc.).	Coordinator - Public education and fundraising.	4 – 8 weeks after the event.

ACTIVITY	PERSON(S) RESPONSIBLE	TIMEFRAME
Implement Recovery projects/activities: <ul style="list-style-type: none"> » Mobilize community members to assist each other in rehabilitation and reconstruction activities taking into account building codes and inclusion of mitigation measures. » Mobilize the community to assist in the rehabilitation of critical facilities. 	Coordinator – Response and Recovery Coordinator – Prevention, mitigation and adaptation.	Minimum of one month after the event.
Document lessons learnt for the recovery experiences to enhance future recovery planning including updating the plan if necessary.	Coordinator – Response and Recovery.	Ongoing.

APPENDIX A – COMMUNITY EMERGENCY CONTACT LIST

COMMUNITY EMERGENCY CONTACT LIST	CONTACT PERSON	TELEPHONE Nº/EMAIL
CDRM Group President.	Kevin Russell. Winnifred Johnson.	(876)-321-6647. (876)-860-4989.
CERT President.	Salome Williams.	876 (409-1185). Sw123sally@gmail.com .
Police.	Superintendent – Dwight Powell.	(876)-972-2373/7452.
Fireman.	District Officer – Wilton Pettigrew.	(876)-972-2322 / (876)-794-9727.
Ministry of Health.	Dr. Patrick Wheatle.	(876)-972-2215/2227. Drpwheatle@hotmail.com .

APPENDIX B – VULNERABLE POPULATION

This table contains information on the number of vulnerable persons in the community and their location in the districts.

TYPE OF VULNERABILITY (FOR EXAMPLE, ELDERLY, DISABLED, SINGLE MOTHERS....)	NUMBER OF VULNERABLE PERSONS	LOCATION OF VULNERABLE	NEXT OF KIN/CARE GIVER & CONTACT INFO	CDRT/CERT MEMBER RESPONSIBLE
Programme of Advancement Through Health and Education (PATH) Beneficiaries.	137 persons.	York, New Hall, Bensonton, Drumilly, Pedro River, Concord.	N/A	N/A
Persons With Disability.	52 persons.	York, New Hall, Bensonton, Drumilly, Pedro River, Gravel Hill.	N/A	N/A
Elderly.	6 persons.	Drumilly.	N/A	N/A

APPENDIX C – EQUIPMENT ALREADY AVAILABLE IN THE COMMUNITY

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

ITEMS (QUANTITY PER ITEM)	STORAGE LOCATION	CONTACT PERSON(S) FOR STORAGE	CONTACT INFORMATION
Water Boots limited, more needed.	Municipal Corporation.	Alvin Clarke.	(876)-360-7460.
Machetes.	None.	-	-
Shovels.	None.	-	-
Forks.	None.	-	-
Hazardous infection diseases protection materials: masks and alcohol-based gel.	Municipal Corporation.	Alvin Clarke.	(876)-360-7460.

APPENDIX D – ITEMS REQUIRED EXTERNALLY

ITEMS REQUIRED	QUANTITY	SOURCE AGENCY/BUSINESS	CONTACT PERSON(S) FOR STORAGE	CONTACT INFORMATION
First Aid Kits.	Yes – more required – Not sure of the numbers needed.	Ministry of Health, Jamaica Red Cross, Food for the poor.	Alvin Clarke.	(876)-360-7460.
Hazardous infection diseases protection materials: masks.	Not required – Have in stock.	ODPEM, Ministry of Agriculture, RADA, Jamaica Agricultural Society, Jamaica Fire Brigade.	Alvin Clarke.	(876)-360-7460.
Hazardous infection diseases protection materials: alcohol-based gel.	Not required – Have in stock.	ODPEM, Ministry of Agriculture, RADA, Jamaica Agricultural Society, Jamaica Fire Brigade.	Alvin Clarke.	(876)-360-7460.
Shovels.	Yes – more required.	ODPEM, Ministry of Agriculture, RADA, Jamaica Agricultural Society, Jamaica Fire Brigade.	Alvin Clarke.	(876)-360-7460.
Water boots.	Yes – more required.	Hardware, Food for the poor.	Alvin Clarke.	(876)-360-7460.
Heavy duty gloves.	Yes – more required.	ODPEM, Hardware.	Alvin Clarke.	(876)-360-7460.
Rain cloaks.	Yes – more required.	ODPEM, Hardware .	Alvin Clarke.	(876)-360-7460.
Hard hats.	Yes – more required.	Hardware, Food for the Poor, Livestock Association.	Alvin Clarke.	(876)-360-7460.
Machetes.	Yes – none in stock. There is however a chainsaw.	Parish Council, ODPEM, MLSS, Red Cross.	Alvin Clarke.	(876)-360-7460.

ITEMS REQUIRED	QUANTITY	SOURCE AGENCY/BUSINESS	CONTACT PERSON(S) FOR STORAGE	CONTACT INFORMATION
Canvas Stretchers.	Yes – more required – The team has cots.	Hardware, Food for the Poor, Department of Fisheries, Fisherman’s Corp.	Alvin Clarke.	(876)-360-7460.
Crow bars.	Yes - The team has none.	Parish Council, ODPEM, MLSS, Red Cross.	Alvin Clarke.	(876)-360-7460.
Rip/Crosscut Saws.	Yes - The team has none.	Tankweld, Rhino.	Alvin Clarke.	(876)-360-7460.
Axe Saws with extra Blades.	Yes- at least 2 more is needed as there is only one for the entire parish	Wisynco, Hardware.	Alvin Clarke.	(876)-360-7460.
Heavy duty Screw Drivers.	Yes - The team has none.	Ministry of Health, National Water Commission.	Alvin Clarke.	(876)-360-7460.
Large/medium Cold Chisels.	Yes - The team has none.	ODPEM, Hardware.	Alvin Clarke.	(876)-360-7460.
Claw Hammers.	Yes - The team has none.	ODPEM, Hardware.	Alvin Clarke.	(876)-360-7460.
Heavy duty Sledge Hammers.	Yes - The team has none.	Gas Station.	Alvin Clarke.	(876)-360-7460.
Flashlights.		ODPEM, Hardware.	Alvin Clarke.	(876)-360-7460.

APPENDIX E – LIST OF OFFICIAL AND UNOFFICIAL EMERGENCY SHELTERS

List of Official and Unofficial Emergency Shelters

SHELTER NAME AND LOCATION	ACCESS ROUTE TO SHELTER	AREA SERVED	SHELTER MANAGER AND CONTACT DETAILS	OTHER SHELTER TEAM MEMBERS AND KEY CONTACTS FOR FACILITY, AND CONTACT DETAILS
Official Shelters				
Alderton Community Centre.	Alderton, Alderton P.A., St. Ann.	Alderton.	To be confirmed.	(876) 540-6129.
Alderton Primary School.	Alderton, Alderton P.A., St. Ann.	Alderton.	Markland Dick (876) 584-1164.	Mrs. Christine Hall (Building Manager) (876) 540-6129 / (876) 895-9947.
Bensonton Primary School.	See Evacuation Plan.	Bensonton.	David Walker (876) 284-6048.	Marva Johnson (Building Manager) (876) 414-9521.
Concord Catholic Church.	Concord (Pedro River), St. Ann.	Concord (Pedro River).	Monica Joseph (876) 840-0917.	Joan Barrett / Mrs. Lewis (Building Manager) (876) 362-4748 / (876) 842-5823.
Fort Georges Primary School.	Fort George, St. Ann.	Fort George.	Ms. Hyacinth Powell (876) 405-9296.	Rebecca Pinnock (Building Manager) (876) 966-8558 / (876) 427-7284.

SHELTER NAME AND LOCATION	ACCESS ROUTE TO SHELTER	AREA SERVED	SHELTER MANAGER AND CONTACT DETAILS	OTHER SHELTER TEAM MEMBERS AND KEY CONTACTS FOR FACILITY, AND CONTACT DETAILS
McNie All-Age School.	McNie, St. Ann.	McNie.	Ms. Hyacinth Powell (876) 405-9296.	Rebecca Pinnock (Building Manager) (876) 966-8558 /(876) 427-7284.
York Castle Primary School.	York Castle, York Castle P.O., St. Ann.	York Castle.	Ms. Desmarie White (876) 846-0917.	Mrs. Mary Harvey-Brown (Building Manager) (876) 848-4951.

APPENDIX F – EMERGENCY SUPPLIES TO BE TAKEN TO SHELTER BY SHELTEREES

- » Canned 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 repellent.
- » Utensils.
- » Can Opener.
- » Books.
- » Toys for Children.
- » First Aid Kits.
- » Hazardous infection diseases protection materials: masks and alcohol-based gel.
- » Hazardous infection diseases information posters.

APPENDIX G – 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 Bath. 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, the private sector and other stakeholders to facilitate the safety of community members. This SOP intends 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 CDRM Group in preparing for and responding to hurricanes.
- » Ensure a logical and sequenced set of actions for community response.
- » Assign specific tasks to ensure collaboration and execution activities.

Threat Assessment

The National Oceanic and Atmospheric Administration provide an annual forecast for the Hurricane Season. Forecast information is communicated through the Meteorological Service of Jamaica (Met Office) and the ODPEM. The annual anticipated threat for 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 the community.

Basic Planning Assumptions

- » At least one major Hurricane will probably affect the country/community.
- » CDRM Group will remain active and functional.
- » Community members will be responsive to CDRM Group programmes, initiatives, warnings and other information.
- » There is commitment and support from agencies and departments of government to assist the community.
- » The community is willing to utilize its resources in preparedness and response.
- » 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 initial monitoring through post-disaster response, recovery, and mitigation. All activities are community-driven, with technical assistance provided by agencies, departments, NGOs and the 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

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 are expected in a specified coastal area in 36 hours or less.

Flash Flood Watch

Flash Flood Watch is issued when a flash flood is possible in an area. Everyone should stay alert

Flash Flood Warning

Flash Flood Warning is issued when a flash flood is imminent. 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 by respective CDRM 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 to as a guide for other actions.

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
1. Continue to support and promote public information and awareness programmes.	Coordinator – Public Education and Fund Raising	Shanoya Howell
2. Sensitize the special needs population	Coordinator – Public Education and Fund Raising	Shanoya Howell
3. Organize how the special needs population will be evacuated and what transportation is required.	Coordinator - Preparedness	Violet Walters and Jada Grant to assist
4. Put arrangements in place to have vehicles to be used in evacuation fuelled with petrol	Coordinator - Preparedness	Violet Walters and Jada Grant to assist

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
5. Send a reminder/update to the Fire Brigade of the evacuation route for the community. Do a walk through if possible	Coordinator – Preparedness Coordinator - Response & Recovery	Evelett Spence
6. Sensitization of persons in the community without vehicles of assembly area for transportation to safer location.	Coordinator – Public Education and Fund Raising	Shanoya Howell
7. Identify areas in the community where high potential for infrastructure/ property damages.	Coordinator - Vulnerability & Risk Identification	Daedrian Smith
8. Ensure DRM teams are aware of all high-risk locations in the community.	Coordinator - Vulnerability & Risk Identification	Daedrian Smith
9. Prepare areas for sheltering persons in need	Coordinator – Preparedness	Violet Walters and Jada Grant to assist
10. Re-engage community volunteers to provide assistance in shelters and other areas. Consult with PDC for facilitating training or refresher courses.	Coordinator – Preparedness	Violet Walters and Jada Grant to assist
11. Ensure new developments are assessed and relevant measures put in place to safeguard community.	Coordinator - Prevention & Mitigation	Neresia Williams
12. Organize mitigation and prevent projects and work days with technical guidance from relevant agencies (with the help of the PDC.	Coordinator - Prevention & Mitigation	Neresia Williams

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

ACTIVITIES	PERSON(S) RESPONSIBLE
<ol style="list-style-type: none"> 1. Meet and assess the community's state of preparedness for a hurricane 2. Advise community to listen to all weather advisories 	<p>Chairman – Kevin Russell Winnifred Johnson</p>
<ol style="list-style-type: none"> 1. Issue warning of threat 2. Alert and notify: <ul style="list-style-type: none"> » PDC that community DRM teams are activated » Other CBOs » Shelter Managers » Response personnel 3. Make available all relevant information on the hazard to the general community. 	<p>Coordinator – Preparedness - Violet Walters and Jada Grant to assist</p>
<ol style="list-style-type: none"> 1. Pre-check and activate SOPs 2. Alert all trained community first aiders and search and rescue personnel. 3. Have first-aid kits prepared 	<p>Coordinator - Preparedness- Violet Walters and Jada Grant to assist</p>

ACTIVITIES	PERSON(S) RESPONSIBLE
<p>Personal for families:</p> <ul style="list-style-type: none"> » 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. 	<p>Coordinator – Preparedness- Violet Walters and Jada Grant to assist Coordinator - Response & Recovery - Evelett Spence</p>
<p>Protecting the community:</p> <ul style="list-style-type: none"> » Trim dead or weak branches from trees » Clear all drains that will cause flooding 	<p>Coordinator – Preparedness- Violet Walters and Jada Grant to assist Coordinator - Response & Recovery - Evelett Spence</p>
<p>Listen to all weather advisories and information from ODPEM, MET office, and communicate with PDC.</p>	<p>Coordinator – Preparedness- Violet Walters and Jada Grant to assist Coordinator - Response & Recovery - Evelett Spence</p>

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

ACTIVITIES	PERSON(S) RESPONSIBLE
DRM Team Advise the Community to listen to all weather advisories and remain alert	Coordinator – Preparedness- Violet Walters and Jada Grant to assist
Continue to listen to all weather advisories and reports.	Coordinator – Preparedness- Violet Walters and Jada Grant to assist

A. HURRICANE WATCH - 48 Hours before Impact

ACTIVITIES	PERSON(S) RESPONSIBLE
<ol style="list-style-type: none"> 1. Personal preparation food supplies 2. Securing official documents 3. Securing home and get rid of all thing around the yard that can be missile in a hurricane 4. Check on neighbors that may need help 	Coordinator - Response & Recovery - Evelett Spence
Ensure the Elderly and Physical challenged are notified and assisted to prepare for event.	Coordinator - Response & Recovery - Evelett Spence

B. HURRICANE WARNING - 36 Hours before impact

ACTIVITIES	PERSON(S) RESPONSIBLE
<ol style="list-style-type: none"> 1. Activate and brief all community teams and volunteers 2. Test the systems of communication within the community. 3. If cell phones are to be used ensure credit is bought 4. Ensure phones can be charged 	Coordinator - Response & Recovery - Evelett Spence
Activate volunteers to be on standby to assist with damage assessment. Conduct briefing of these volunteers.	Coordinator - Response & Recovery- Evelett Spence
<ol style="list-style-type: none"> 1. Activate and prepare emergency shelters 2. Deploy relief and welfare volunteers to emergency shelters 	Coordinator - Response & Recovery - Evelett Spence
Ensure contacts are made with the PDC and other stakeholders for assessment of shelter facilities if necessary.	Coordinator - Response & Recovery - Evelett Spence
Contact PDC and prepare to Initiate evacuation procedures for the community.	Coordinator - Response & Recovery - Evelett Spence
<ol style="list-style-type: none"> 1. Re-check arrangements and MOUs with private bus owners and other volunteers in the community. 2. Pre-position the following resources to areas which will potentially be cut off: <ul style="list-style-type: none"> » Food stocks/welfare items » Communications equipment » Manpower » Power saws 3. Refuel vehicles 	<p>Coordinator - Response & Recovery - Evelett Spence</p> <p>Coordinator – Preparedness- Violet Walters and Jada Grant to assist</p>

ACTIVITIES	PERSON(S) RESPONSIBLE
<ol style="list-style-type: none"> 1. Encourage residents to activate family plans 2. Pre-position resources: List these resources <ul style="list-style-type: none"> » Equipment, ropes, etc » Food stocks/welfare items » Communications equipment » Manpower 	<p>Coordinator - Response & Recovery - Evelett Spence</p> <p>Coordinator – Preparedness- Violet Walters and Jada Grant to assist</p>

C. 24 HOURS BEFORE IMPACT

ACTIVITIES	PERSON(S) RESPONSIBLE
<ol style="list-style-type: none"> 1. Notify PDC of activation of evacuation plan 2. Consult PDC on all matters relating to the activation of any or all evacuation systems. 	Coordinator - Response & Recovery - Evelett Spence
Activate and test local communications links and report to PDC.	Coordinator - Response & Recovery - Evelett Spence
<p>Brief community of activation of evacuation and persons to be evacuated:</p> <ul style="list-style-type: none"> » 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 shut-down when closing businesses or evacuating homes. » Ensure the Elderly and Physically challenged to be evacuated. 	Coordinator - Response & Recovery - Evelett Spence

ACTIVITIES	PERSON(S) RESPONSIBLE
» Ensure registration of all evacuated. » Check that all needing evacuees are safely evacuated.	
» 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.	Coordinator - Response & Recovery - Evelett Spence
Alert community Initial Damage Assessment Team(s).	Coordinator - Response & Recovery - Evelett Spence
Confirm lines of credit with merchants to enable easy access to relief supplies after the disaster.	Coordinator - Response & Recovery - Evelett Spence

D. 16 HOURS BEFORE IMPACT TO LANDFALL

ACTIVITIES	PERSON(S) RESPONSIBLE
1. Maintain contact with PEOC. 2. Advise PEOC of weather conditions and state of preparedness. 3. Confirm arrival and status of evacuees in shelters. 4. Check in with standby teams and community response personnel.	Chairman - Kevin Russell Winnifred Johnson Vice Chairman – Paula Spence Coordinator - Response & Recovery - Evelett Spence

E. THE BLOW

ACTIVITIES	PERSON(S) RESPONSIBLE
Monitor and report events as far as possible.	Chairman - Kevin Russell Winnifred Johnso Vice Chairman - Paula Spence
Maintain contact with PEOC, Shelters and response personnel.	Coordinator - Response & Recovery - Evelett Spence

F. AFTERMATH (IMMEDIATELY FOLLOWING THE BLOW TO 5 DAY AFTER ALL CLEAR)

ACTIVITIES	PERSON(S) RESPONSIBLE
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	Coordinator - Response & Recovery - Evelett Spence
1. Deploy community damage survey teams or assessors. 2. Deploy community response teams to check on vulnerable (elderly and physically challenged) and critical facilities. 3. Check for deaths, injuries and persons needing emergency assistance. 4. Conduct first aid and search and rescue operations as necessary. 5. Notify PEOC of critical/emergency cases. 6. Provide PEOC with status report.	Coordinator - Response & Recovery - Evelett Spence

G. (a) Up to 48 Hours After All Clear

ACTIVITIES	PERSON(S) RESPONSIBLE
Provide initial damage survey and needs of the community	Coordinator - Response & Recovery - Evelett Spence
<ol style="list-style-type: none"> 1. Provide ground reconnaissance intelligence to the PDC. 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 centers. 	Coordinator - Response & Recovery - Evelett Spence
<p>Beware of downed or lose power lines. Report them immediately to the JPS, Police or Fire Department.</p> <p>Advise community members to enter their homes with caution:</p> <ul style="list-style-type: none"> » Open windows and doors to ventilate or 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. 	Coordinator - Response & Recovery - Evelett Spence
<ol style="list-style-type: none"> 1. Check for sewage and water-line damage. 2. If you suspect there is such damage, call the NWC Company and or PDC. 3. Advice community not to drink or prepare food with tap water until notified it is safe to do so. 	Coordinator - Response & Recovery - Evelett Spence

H. (b) Up to 48 Hours to 5 Days After All Clear

ACTIVITIES	PERSON(S) RESPONSIBLE
<p>Constantly advise the community:</p> <ul style="list-style-type: none"> » 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. 	Coordinator - Response & Recovery - Evelett Spence
<ol style="list-style-type: none"> 1. Coordinate requests for and offers of assistance through the PEOC. 2. Coordinate reconnaissance and damage assessment teams through the PEOC. 3. Ascertain the early requirements for Government assistance in re-establishing the community. 	Coordinator - Response & Recovery - Evelett Spence
<p>Coordinate the establishment, staffing and management of emergency shelters for sustained use in community.</p> <p>Encourage persons affected to stay with friends or family as first options.</p>	Coordinator - Response & Recovery - Evelett Spence
Coordinate requests, receipt and distribution of food, clothing and water supplies through the PEOC.	Coordinator - Response & Recovery - Evelett Spence
<ol style="list-style-type: none"> 1. Assist with the distribution of supplies. 2. Assist with the tracing of missing persons. 3. Assist with needs assessments. 4. Assist in the provision of welfare information to persons affected. 5. Begin to effect minor repairs to critical facilities and clear road ways and drains. 6. Continue to provide feedback and assistance to the community through the PDC and PEOC. 	<p>Coordinator - Response & Recovery - Evelett Spence</p> <p>Chairman - Kevin Russell. Winnifred Johnson</p> <p>Vice Chairman - Paula Spence</p>

PHASE 4: Recovery

ACTIVITIES	PERSON(S) RESPONSIBLE
<ol style="list-style-type: none"> 1. Mobilize Community members to assist each other with rehabilitation and reconstruction activities. 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) 	<p>Coordinator - Response & Recovery - Evelett Spence</p> <p>Coordinator - Prevention & Mitigation - Neresia Williams</p>
<ol style="list-style-type: none"> 1. Update PDC on recovery activities by external agencies/ departments/organizations. 2. Monitor progress and ensure deficiencies are reported. 	<p>Chairman - Kevin Russell. Winnifred Johnson</p> <p>Vice Chairman - Paula Spence</p> <p>Coordinator – Public Education and Fund Raising</p>
<p>Mobilize CDRM Group to seek assist from NGOs (e.g. Red Cross, Food for the Poor, ADRA and Others) to assist in community recovery initiatives.</p>	<p>Chairman - Kevin Russell. Winnifred Johnson</p>
<p>Identify and share Lessons Learnt to enhance future preparedness and response activities:</p> <ul style="list-style-type: none"> » 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? 	<p>Chairman - Kevin Russell. Winnifred Johnson</p> <p>Vice Chairman - Paula Spence</p>
<p>Revise SOPs as necessary</p>	<p>Chairman Kevin Russell. Winnifred Johnson</p> <p>Vice Chairman - Paula Spence</p>

APPENDIX H – EARTHQUAKES – STANDARD OPERATING PROCEDURES (SOP)

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 Bath. 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 earthquake. The CDRM Group shall work with government organizations, NGOs/CBOs, the private sector and other stakeholders to facilitate the safety of community members. This SOP intends to maintain clearly defined procedures for before, during and after earthquake events.

Earthquakes can happen at any time with varying degrees of strength 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 CDRM Group in preparing for and responding to earthquakes.
- » Ensure a logical and sequenced set of actions for community response.
- » Assign specific tasks to ensure collaboration and execution activities.

Threat Assessment

The community of Bath has little history of earthquakes. The anticipated threat for 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.
- » CDRM Group will remain active and functional.

- » Community members will be responsive to CDRM Group programmes, initiatives, warnings and other information.
- » There is commitment and support from agencies and departments of government to assist the community.
- » The community is willing to utilize its 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 initial monitoring through post-disaster response, recovery, and mitigation. All activities are community-driven, with technical assistance provided by agencies, departments, NGOs and the 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
CDRM	Community Disaster Risk Management
DRM	Disaster Risk Management
EOC	Emergency Operations Centre
NEOC	National Emergency Operations Centre
NGO	Non-Government Organization
ODPEM	Office of Preparedness and Emergency Management
PDC	Parish Disaster Coordinator/Committee
PEOC	Parish Emergency Operations Centre

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 Centre (EOC)

A multi-agency coordination centre 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 is caused by a sudden release of energy from below the earth's surface. The release of energy is generally caused by slipping or breakage of rock below the earth's 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

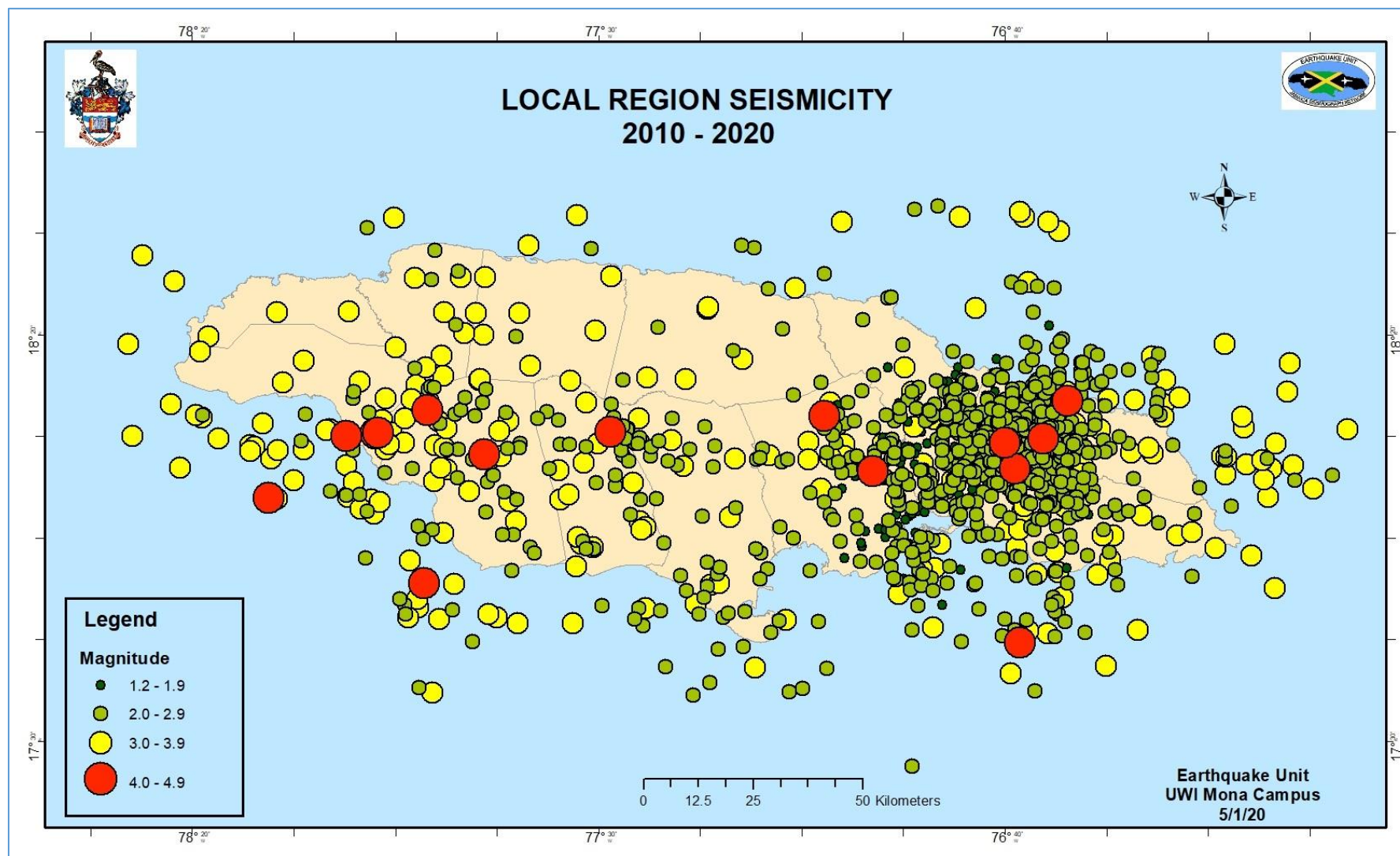
Tremors or smaller earthquakes that occur after the main shock is felt. After-shocks can occur over a few hours to months after the main shock.

Tremor

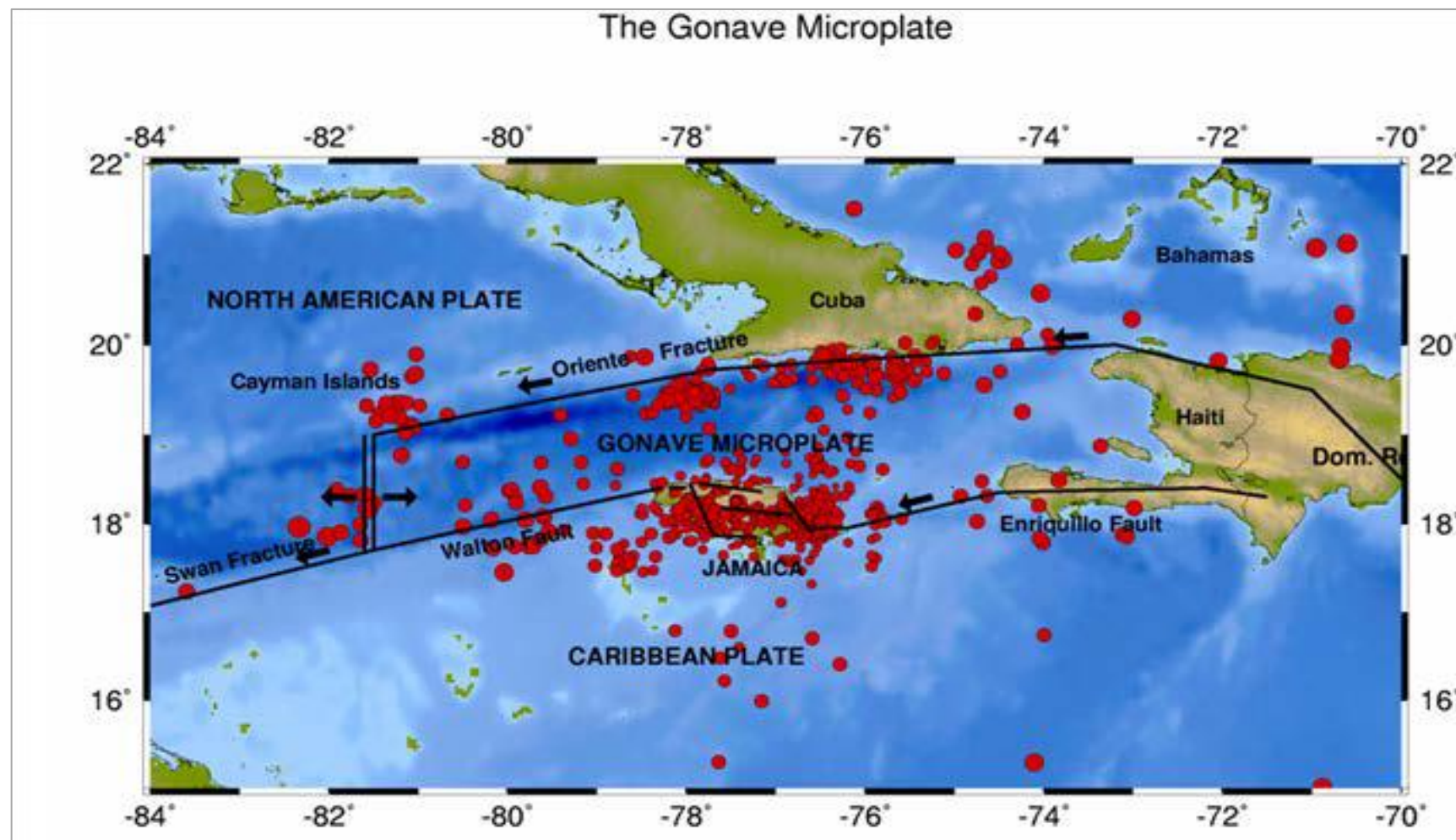
The shaking or seismic waves felt or caused by an earthquake or explosion.

Magnitude

A measure of the amount of energy released during an earthquake. Magnitude is typically measured on the Richter scale for the Caribbean.



Source: http://uwiseismic.com/Downloads/LYNDON_BROWN.pdf.



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	POSITION	PERSON(S) RESPONSIBLE
1. Continue to support and promote public information and awareness programmes.	Coordinator – Public Education and Fund Raising	Shanoya Howell
2. Sensitize special needs population.	Coordinator – Public Education and Fund Raising	
3. Organize how special needs population will be evacuated and transportation required.	Coordinator – Preparedness	Violet Walters and Jada Grant to assist
4. Put arrangements in place to have vehicles to be used in evacuation fueled with petrol.	Coordinator – Preparedness	
5. Send a reminder/update to the Fire Brigade of the evacuation route for the community. Do a walk through if possible.	Coordinator – Preparedness	
6. Sensitization of persons in the community without vehicles of assembly area for transportation to more safe location.	Coordinator – Public Education and Fund Raising	Shanoya Howell
7. Identify areas in the community where high potential for infrastructure/property damages.	Coordinator - Vulnerability & Risk Identification	Daedrian Smith
8. Ensure DRM teams are aware of all high-risk locations in the community.		
9. Prepare areas for sheltering persons in need.	Coordinator – Preparedness	Violet Walters and Jada Grant to assist
10. Re-engage community volunteers to provide assistance in shelters and other areas. Consult with PDC for facilitating training or refresher courses.		

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
11. Ensure new developments are assessed and relevant measures put in place to safeguard community.	Coordinator - Prevention & Mitigation	Neresia Williams
12. Organize mitigation and prevent projects and work days with technical guidance from relevant agencies (with the help of the PDC.	Coordinator - Prevention & Mitigation	
13. 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.	Vice Chairman	Paula Spence
14. 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.	Vice Chairman Coordinator – Preparedness	Paula Spence
15. 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.	Secretary	KerryAnn Robinson
16. Liaison for maintenance and to keep open all access routes – main transportation routes and alternative access routes.	Coordinator - Prevention & Mitigation	Neresia Williams
17. Community inventory of building quality.	Coordinator - Prevention & Mitigation	Neresia Williams
18. Community inventory of road networks and updating of community map.	Coordinator - Prevention & Mitigation	Neresia Williams
19. Identify alternative sources of water, sources of alternative/temporary housing solutions.	Coordinator - Prevention & Mitigation	
20. Put mutual aid agreements in place for emergencies such as earthquakes.	Coordinator – Preparedness	Violet Walters and Jada Grant to assist
21. Meet and assess the community’s state of preparedness for an earthquake	Coordinator – Preparedness	Violet Walters and Jada Grant to assist

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
<p>22. Organize or initiate and support drills</p> <ul style="list-style-type: none"> » Trained community first aiders » Search and rescue personnel » Have first-aid kits prepared » Support for school and business community drills <p>23. Make available all relevant information on the hazard to the general community</p> <p>24. Personal for families: - Make sure your family goes over the family disaster plan</p>	<p>Coordinator – Preparedness</p> <p>Coordinator - Response & Recovery</p> <p>Coordinator – Public Education and Fund Raising</p>	<p>Violet Walters and Jada Grant to assist</p> <p>Neresia Williams</p> <p>Shanoya Howell</p>
<p>25. Protecting the community:</p> <ul style="list-style-type: none"> » Encourage residents to check and address building and roofing strength. Keep yards clear of debris » Keep roads and open lots clear of solid waste and debris. 	<p>Coordinator – Preparedness</p> <p>Coordinator - Prevention & Mitigation</p> <p>Coordinator – Public Education and Fund Raising</p>	<p>Violet Walters and Jada Grant to assist</p> <p>Neresia Williams</p> <p>Shanoya Howell</p>

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

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
1. Monitor and report events as far as possible.	Chairman Vice Chairman	Kevin Russell Winnifred Johnson Paula Spence
2. Maintain contact with PEOC, Shelters and response personnel.	Coordinator - Response & Recovery	Evelett Spence
3. Depending on the severity, ensure all buildings are vacated. Account for missing persons.	Coordinator - Response & Recovery	Evelett Spence
4. DRM Team Advise the Community to listen to all advisories and remain alert for after shocks	Coordinator – Preparedness	Violet Walters and Jada Grant to assist

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

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
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.	Coordinator - Response & Recovery	Evelett Spence
2. Deploy community damage survey teams or assessors		
3. Deploy community response teams to check on vulnerable (elderly and physically challenged) and critical facilities.		
4. Check for deaths, injuries and persons needing emergency assistance.		
5. Conduct first aid and search and rescue operations as necessary.		
6. Notify PEOC of critical/emergency cases.		

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
7. Provide PEOC with status report.	Coordinator - Response & Recovery	Evelett Spence
8. Provide initial damage survey and needs of the community		
9. Provide ground reconnaissance intelligence to the PDC.		
10. Assist the Fire Brigade and NWA with road clearing, and search and rescue activities through the PEOC.		
11. Assist with the establishment and staffing of registration centres.		
12. Beware of downed or lose power lines. Report them immediately to the JPS, Police or Fire Department.	Coordinator - Response & Recovery Coordinator – Public Education and Fund Raising	Evelett Spence Shanoya Howell
13. Advise community members to enter their homes with caution: » Check for sewage leaks in homes/yards. Cordon off area and report to NWC and Parish Disaster Coordinator/Parish Council/PEOC. » Check for water leaks in homes/yards. Report to NWC and Parish Disaster Coordinator/Parish Council/PEOC. » 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 have to step in water to reach the electric » box, call an electrician for advice.	Coordinator - Response & Recovery	Evelett Spence

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
14. Check for general sewage and water-line damage in the community.	Coordinator - Response & Recovery	Evelett Spence
15. If you suspect there is such damage, call the NWC company and or PDC.		
16. Advise community not to drink or prepare food with tap water until notified it is safe to do so.		
17. Constantly advise the community: » 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.		
18. Coordinate requests for and offers of assistance through the PEOC.		
19. Coordinate reconnaissance and damage assessment teams through the PEOC		
20. Ascertain the early requirements for Government assistance in re-establishing the community.	Coordinator - Response & Recovery Vice Chairman Coordinator - Response & Recovery	Evelett Spence Paula Spence Daedrian Smith
21. Coordinate the establishment, staffing and management of emergency shelters for sustained use in community.		
22. Encourage persons affected to stay with friends or family as first options.		

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
23. Coordinate requests, receipt and distribution of food, clothing and water supplies through the PEOC.	Coordinator - Response & Recovery Vice Chairman Coordinator - Response & Recovery	Evelett Spence Paula Spence Daedrian Smith
24. Assist with the distribution of supplies	Coordinator - Response & Recovery	Evelett Spence
25. Assist with the tracing of missing persons		
26. Assist with needs assessments		
27. Assist in the provision of welfare information to persons affected		
28. Begin to effect minor repairs to critical facilities and clear road ways and drains		
29. Continue to provide feedback and assistance to the community through the PDC and PEOC.		

PHASE 3: RECOVERY

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
1. Mobilize Community members to assist each other with rehabilitation and reconstruction activities.	Coordinator - Response & Recovery Coordinator – Public Education and Fund Raising	Evelett Spence Shanoya Howell
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.	Coordinator - Response & Recovery	Evelett Spence
5. Monitor progress and ensure deficiencies are reported.		
6. Mobilize CDRM Group to seek assist from NGOs (e.g. Red Cross, Food for the Poor, ADRA and Others) to assist in community recovery initiatives.		
7. 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?		
8. Revise SOPs as necessary	Chairman	Kevin Russell Winnifred Johnson

APPENDIX I – FIRE STANDARD OPERATING PROCEDURES

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. 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, the private sector and other stakeholders to facilitate the safety of community members. This SOP intends 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 fires.
- » Ensure a logical and sequenced set of actions for community response.
- » Assign specific tasks 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, warnings and other information.
- » There is commitment and support from agencies and departments of government to assist the community.
- » The community is willing to utilize its 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 initial monitoring through post-disaster response, recovery, and mitigation. All activities are community-driven, with technical assistance provided by agencies, departments, NGOs and the 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

Glossary of terms

TERM	MEANING
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 CENTRE (EOC)	A multi-agency coordination centre that provides support and coordination to the on-scene responders.
INCIDENT	A natural or human-induced event that requires the action of emergency services to protect lives, goods and the environment.
FIRE	Combustion or Fire is a chemical reaction or series of reactions in which heat and light are evolved.
FACTORS NECESSARY FOR COMBUSTION	HEAT, FUEL and OXYGEN
WAYS IN WHICH HEAT CAN BE CREATED	OPEN FLAME, SPARKS, ARCS, FRICTION, CHEMICAL REACTION, ELECTRICAL
FUEL	Fuels are found in all three (3) stages of matter: SOLIDS: Cloth, Paper, Wood, Coal LIQUIDS: Gasoline, Kerosene, Alcohol, Paint GASES: Methane, Butane, Propane, Acetylene
OXYGEN	21.2% of the earth's atmosphere is oxygen, but only 15% is needed for combustion.
BUSH FIRE	A fire in the bush or a forest area 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 R escue, A lert, C ontain (confine fire and smoke) and E vacuate or E xtinguish.
P.A.S.S.	Acronym for P ull, A im, S queeze, S weep (at base of fire). Use to remind users of fire extinguishers how to properly use a CO ₂ , Dry Powder or Water fire extinguisher.

Operating procedures

PHASE 1: Prevention 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 a **fire** emergency. Coordinators should utilize other information and measures highlighted in the CDRM Plan to as a guide for other actions.

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
1. Continue to support and promote public information and awareness programmes.	Coordinator – Public Education and Fund Raising	Shanoya Howell
2. Sensitize special needs population.		
3. Organize how special needs population will be evacuated and transportation required.	Coordinator – Preparedness	
4. Put arrangements in place to have vehicles to be used in evacuation fueled with petrol.		
5. Ensure that appropriate fire extinguishing materials are in place in community center and shelters.		
6. Ensure that First Aid Kits and Rescue equipment are stocked and in good condition for use in the event of an emergency.	Coordinator - Response & Recovery	Evelett Spence
7. Send a reminder/update to the Fire Brigade of the evacuation route for the community. Do a walk through if possible.	Coordinator – Preparedness	
8. Sensitization of residents on fire safety to be conducted on a yearly basis.	Coordinator – Public Education and Fund Raising	Shanoya Howell
9. Identify areas in the community where high potential for infrastructure/property damages.	Coordinator - Vulnerability & Risk Identification	Daedrian Smith
10. Ensure DRM teams are aware of all high-risk locations in the community.		

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
11. Prepare areas for sheltering persons in need.	Coordinator – Preparedness	Violet Walters and Jada grant to assist to assist
12. Re-engage community volunteers to provide assistance in shelters and other areas. Consult with PDC and Fire Department for facilitating training or refresher courses.		
13. Ensure new developments are assessed and relevant measures put in place to safeguard community.	Coordinator - Prevention & Mitigation	Neresia Williams
14. Organize mitigation and prevent projects and work days with technical guidance from relevant agencies (with the help of the PDC and Fire Departments.		
15. Meet and assess the community's state of preparedness for a fire.	Chairman	Kevin Russell Winnifred Johnson
16. Conduct Fire Drills at least once yearly.		

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
<p>17. Personal for families and businesses:</p> <ul style="list-style-type: none"> » 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: <ul style="list-style-type: none"> ✓ For new buildings or building extensions; and ✓ 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). 	<p>Coordinator – Preparedness Coordinator - Response & Recovery Coordinator – Public Education and Fund Raising</p> <p>Coordinator – Preparedness Coordinator - Response & Recovery Coordinator – Public Education and Fund Raising</p>	<p>Violet Walters and Jada grant to assist to assist Evelett Spence Shanoya Howell</p> <p>Violet Walters and Jada grant to assist to assist Evelett Spence Shanoya Howell</p>

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
<p>18. Protecting the community (from bush fires):</p> <ul style="list-style-type: none"> » Trim dead or weak branches from trees. » 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. 	<p>Coordinator - Prevention & Mitigation Coordinator – Preparedness</p>	<p>Neresia Williams</p>
<p>19. Protecting the community (businesses):</p> <ul style="list-style-type: none"> » Install smoke detectors within Business and institutions. » 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. 	<p>Coordinator – Preparedness Coordinator - Prevention & Mitigation Coordinator - Prevention & Mitigation Coordinator – Preparedness</p>	<p>Neresia Williams Neresia Williams Violet Walters and Jada grant to assist to assist</p>

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
<p>20. Ensure each response team are equipped with the following:</p> <ul style="list-style-type: none"> » Knowledge and drills for recognizing types of fire and assessment for response; » 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. 	<p>Coordinator - Prevention & Mitigation Coordinator – Preparedness</p>	<p>Neresia Williams Violet Walters and Jada grant to assist to assist</p>
<p>21. Obtain local building codes and weed abatement ordinances for buildings near wooded areas.</p>	<p>Chairman Coordinator – Preparedness</p>	<p>Kevin Russell, Winnifred Johnson Violet Walters and Jada grant to assist to assist</p>
<p>22. Brief community of activation of evacuation and persons to be evacuated:</p> <ul style="list-style-type: none"> » 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 shut-down when closing businesses or evacuating homes. » Ensure the Elderly and physically challenged to be evacuated and make special arrangement for them. 	<p>Coordinator - Response & Recovery Coordinator - Response & Recovery</p>	<p>Evelett Spence Evelett Spence</p>

During the 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)

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
1. Call out ALARM - If trapped in a fire you cannot out run it. Once a fire is detected immediately call the JPS, Police and Fire Department.	Coordinator - Response & Recovery	Evelett Spence

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
<p>2. Once an ALARM is activated: At location of fire (buildings):</p> <ul style="list-style-type: none"> » 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. 	Coordinator - Response & Recovery	Evelett Spence
<p>At location of fire (bush):</p> <ul style="list-style-type: none"> » 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. 		

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
<p><i>Around the perimeter of the fire:</i></p> <ul style="list-style-type: none"> » 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. 	Coordinator - Response & Recovery	Evelett Spence
<p><i>On exit of the building, at the assembly point or safety zone:</i></p> <ul style="list-style-type: none"> » 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) 		
<p>3. Remind community persons to have contact numbers for the Fire Department and Community Emergency Preparedness and Response Team.</p>	Coordinator – Preparedness	Violet Walters and Jada grant to assist to assist

After a fire

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
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.	Coordinator - Response & Recovery	Evelett Spence
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.		
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)		
4. Encourage persons affected to stay with friends or family as first options after a fire.		
5. Coordinate the establishment, staffing and management of emergency shelters for sustained use in community.		
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. » Assist in the provision of welfare information to persons affected.		
7. Assist with the tracing of missing persons.		

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
8. Begin to effect minor repairs to critical facilities and clear road ways and public spaces, if affected.	Coordinator - Response & Recovery	Evelett Spence
9. Continue to provide feedback and assistance to the community through the PDC and PEOC.		
10. Mobilize Community members to assist each other with rehabilitation and reconstruction activities.		
11. Encourage community members to rebuild bearing in mind mitigation measures (build back better).		
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.		
14. Monitor progress and ensure deficiencies are reported.		
15. Mobilize CDRM Group to seek assist from NGOs (e.g. Red Cross, Food for the Poor, ADRA and Others) to assist in community recovery initiatives, as required.		
16. After Action Assessment (Community & community/agency) – to identify and share lessons learnt to improve future preparedness and response activities (de-briefing of incident): <ul style="list-style-type: none"> » 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.	Chairman	Kevin Russell / Winnifred Johnson

APPENDIX J – TERMS OF REFERENCE CDRM GROUP

CDRM Group

The Community Disaster Risk Management (CDRM) Group is the 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 adaptation, 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 with the Parish Disaster Committee and other local level agencies/NGOs regarding disaster management.

Executive Membership

- » Chairman
- » Vice-Chairman
- » Secretary
- » Treasurer
- » Assistant Secretary
- » Coordinator – Public Education and Fundraising
- » Coordinator – Vulnerability and Risk Identification
- » Coordinator – Prevention, Mitigation and Adaptation
- » Coordinator - Response and Recovery
- » Coordinator - Preparedness

The executive membership of the CDRM Group may assume that of an existing Community Based Organization (CBO) Structure. The coordinators outlined above must be made part of any existing structure to be used.

Community Organization with responsibility for CDRM

- » Any existing CBO that is active should be made part of the CDRM Group.
- » Where there is no existing CBO, the community should form the executive membership of the CDRM 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:
 - Assigned/ appointed as coordinators only, where there is an active CBO.
 - Assigned/ appointed as any part of the executive membership where there is no active CBO.

Naming the CDRM Group

- » The CDRM 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 CDRM tag should remain to indicate.

Leadership of the CDRM Group

The leadership of the group will be the same as that of the existing CBO (this includes the already assigned individuals). Where there is no existing CBO, the persons engaged by the facilitation team and who 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 executive as is necessary, inviting stakeholders as appropriate.

Funding of CDRM Group and Activities

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

- » Fundraising activities.
- » Proposal writing to the 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 ex- officio member of the CDRM Group.

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

ODPEM:

- » ODPEM is to provide the CDRM Group with technical advice for the development and review of the CDRM Plan through the Parish Disaster Coordinator.
- » ODPEM is 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 channelled 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 channelled through the Parish Coordinator.
- » CDRM Groups may, however, formally write to agencies/departments regarding the respective agency's functions or execution of the same concerning the community.

Interaction with Councillors, 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 channelled 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 behalf of the CDRM Group.
- » CDRM Group may maintain contact (formally and informally), however, it is encouraged that the CDRM Group executive discusses 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 in a safe and 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 meetings 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 the 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 be integral for community involvement.
- » CDRM should establish creative initiatives for garnering community support and involvement.

Roles and Functions of the Executive Membership for DRM

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

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

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

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

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

Coordinator – Public Education and 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 educational 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 education 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.
- » Facilitate the delivery of risk transfer awareness sessions with national agencies such as the National Health Fund, NIS, etc.

Coordinator – Vulnerability and 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 a 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, Mitigation and Adaptation 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.
- » Ensure 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 the support of key community members for the execution of responsibilities, especially the elderly and trained professionals.

Coordinator – Prevention, Mitigation and Adaptation

Duties Related to Mitigation and Adaptation

- » 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, Mitigation and Adaptation Action Plans for implementation with the help of the Parish Disaster Coordinator and larger CDRM.
- » Along with Coordinator – Public Education and Fundraising, facilitate strategies that will raise awareness of hazard risks and measures to be taken to avoid/reduce the impacts.

- » Recommend appropriate hazard mitigation and adaptation measures for avoiding or reducing the impact of a disaster at the household and community level.
- » 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 and 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 following good DRM practice.
- » Advice and support where necessary and 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.
- » Take 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.
- » Identify acceptable recovery time periods.
- » Establish disaster recovery testing methodologies.
- » Recommend disaster recovery planning and training activities.
- » Provide instructional and informational materials on how to respond during an emergency.
- » Develop and maintain SOPs for emergency/disaster response and recovery with the aid of the PDC.
- » Plan regular exercises to test community plans.
- » Monitor the effectiveness of procedures during evacuation drills and revise the procedures as necessary.

- » Maintain contact with outside sources participating in reciprocal agreements.
- » Ensure that as new equipment, facilities, services, and systems are installed that the disaster response and recovery issues are highlighted and addressed.
- » Maintain contact with outside contingency planning professional organizations and local or regional emergency response groups.
- » Ensure and recommends the establishment of CERTs as appropriate. At least, it should include the following positions:
 - First Aid coordinator and assistants.
 - Initial damage assessment coordinator and assistants.
 - Shelter management coordinator and assistants.
 - Search and rescue coordinator and assistants.
 - Communication (during the crisis) coordinator and assistants.
 - Evacuation coordinator and assistants.

Coordinator – Preparedness

- » Coordinate the preparation of and update of the preparedness aspects of the community's disaster risk management plan such as the evacuation plans and sheltering.
- » Organize, initiate and support drills.
- » Coordinate with community and external stakeholders to ensure the community is prepared for all priority hazards.
- » Make available all information on hazards to the community.
- » Coordinate with the community to ensure families have a family disaster plan.
- » Organize and coordinate the deployment of CERTs and other community volunteers.
- » Coordinate the establishment, staffing and management of emergency shelters.
- » Develop an inventory of the community's resources and ensure they are maintained and replenished as necessary. These include food, welfare items, equipment and personnel.
- » Ensure the community contact list is updated.
- » Ensure that mutual aid agreements are in place and are current to meet the needs of the community.
- » Advocate for the establishment of community early warning or alert systems and mobilize the community to participate in the maintenance of the system.

APPENDIX K – PHOTO GALLERY



The water level in the ponds at Pedro River is almost at critical levels
Source: St Ann Municipal Corporation.

