

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
New River, St Elizabeth**

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Prepared by:



Working team:

*Ignacio Aguirre Ayerbe
Disaster Risk Management Specialist*

*María Merino
Coastal Management Specialist*

*Georgia Crawford
Sociologist*

*Karema A. Mitchell
Disaster Risk Management Specialist*

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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 exploit 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

AAR	After Action Report
ADRA	Adventist Development and Relief Agency
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
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 **“New River Disaster Risk Management and Climate Change Adaptation Plan”**.

Background

The Government of Jamaica (GOJ), through the Planning Institute of Jamaica (PIOJ), is executing 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 of 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 New River.
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 and adaptation.

Actors (and Contact List)

Table 1. DRM Actors and Contact Details

LEVEL	ACTOR	CONTACT PERSON	TELEPHONE Nº/EMAIL
Community and Parish	Disaster Risk Management Group (DRMG)	Melody Garwood	(876) 518-4839
	CERT (Community Emergency and Response Team)	Etawnya Robinson	(876) 419-6491
	St Elizabeth Municipal Corporation	Ms. Ornella Lewis – Parish Disaster Coordinator	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
	St Elizabeth Parish Disaster Committee	Ms. Ornella Lewis – Parish Disaster Coordinator	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
	Ministry of Labour and Social Security (MLSS)	Ms. Michelle Senior – Parish Manager	michelle.senior@mlss.gov.jm
	Social Development Commission	Ms. Elizabeth Sanderson – Field Officer	singhsanderson@yahoo.com
	Jamaica Fire Brigade	Superintendent Mr. DeSouza	dhstelizabeth.jfb@cwjamaica.com
	Jamaica Constabulary Force	Narda Simms – Deputy Superintendent of Police	narda.simms@jcf.gov.jm
	Ministry of Health and Wellness (MoHW) (Southern Regional Health Authority)	Dr. Tonia Dawkins-Beharie – Medical Officer of Health	stelizabethmoh@gmail.com
National	Office of Disaster Preparedness and Emergency Management (ODPEM)	Mrs Camille Beckford-Palmer Regional Coordinator, South	(876) 906-9674-5 cbeckford@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 New River. 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. Elizabeth.

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.

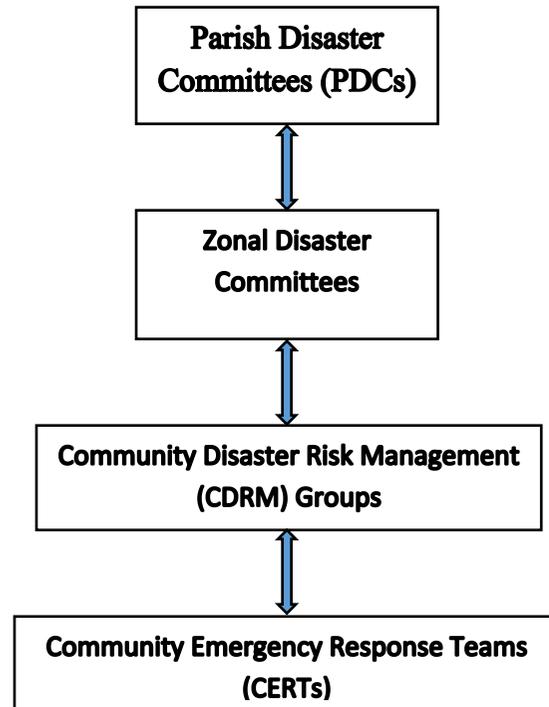


Diagram showing the relationship between the parish zones and the CDRMG

Responsibility

The responsibility for updating and testing the plan lies with the New River 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 New River 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. Elizabeth 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. Elizabeth 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

New River is a small community located on the northern periphery of the town of Santa Cruz, St Elizabeth. The community has a very flat topography and is part of the Upper Black River Morass. As a result, it is very flood-prone. Because of its location in the Black River morass, flooding is primarily influenced by rainfall in the upper reaches of the Black River Watershed, which extends into the parish of Trelawny. As the wetland drains the runoff, the water level rises and this causes flooding of the community, sometimes beginning three days after a rainfall event. The surrounding vegetation is very thick and typical of that of wetlands.

Based on the Statistical Institute of Jamaica's 2011 population census, the population of this community (based on the Enumeration Districts covering the community) is approximately 658 persons. The population is evenly distributed in terms of gender with approximately 50% male and 50% female. In terms of age distribution, around 61% of the population is made up of children and the elderly.

Educational attainment is relatively low for the community with half the population educated at the primary level, and 38% and 3% have achieved secondary and tertiary education respectively.

Approximately 46% of New River's population is employed, 27% in home duties and the remaining individuals are either unemployed, students or inactive. The main livelihood of the community is farming and fishing. Farming includes crop cultivation and livestock rearing and to some extent poultry, specifically egg hatcheries. The community also supplies some materials to the craft industry such as "thatch" because of its abundance in the wetlands. Some residents are self-employed and are involved in micro-enterprises such as carpentry and shopkeeping.

Concrete and block are the outer wall materials used for 90% of the houses, followed by wood and nog making up a combined 6%. Electricity is used in most households (92%) and others use kerosene and other means. Over 90% of the community is served by the National Water Commission and water from trucks, springs and other private sources is used by the remaining households. The public collection is the main method of garbage disposal for the community and is collected for 90% of the households, and the remaining are either burned or dumped. Toilet facilities are generally not shared (80%) in the community, however, 17% are shared.

1.1.1 Summary of main hazards

The main hazard faced by the community is flooding which is based on its location in the Upper Black River morass. Flooding affects all aspects of community life, destroying crops and livestock. The community also faces challenges with hurricanes due mainly to the wind damage that occurs which also affect crops, and damage fish pots, homes and businesses.

1.2 Location and districts of community in this Plan

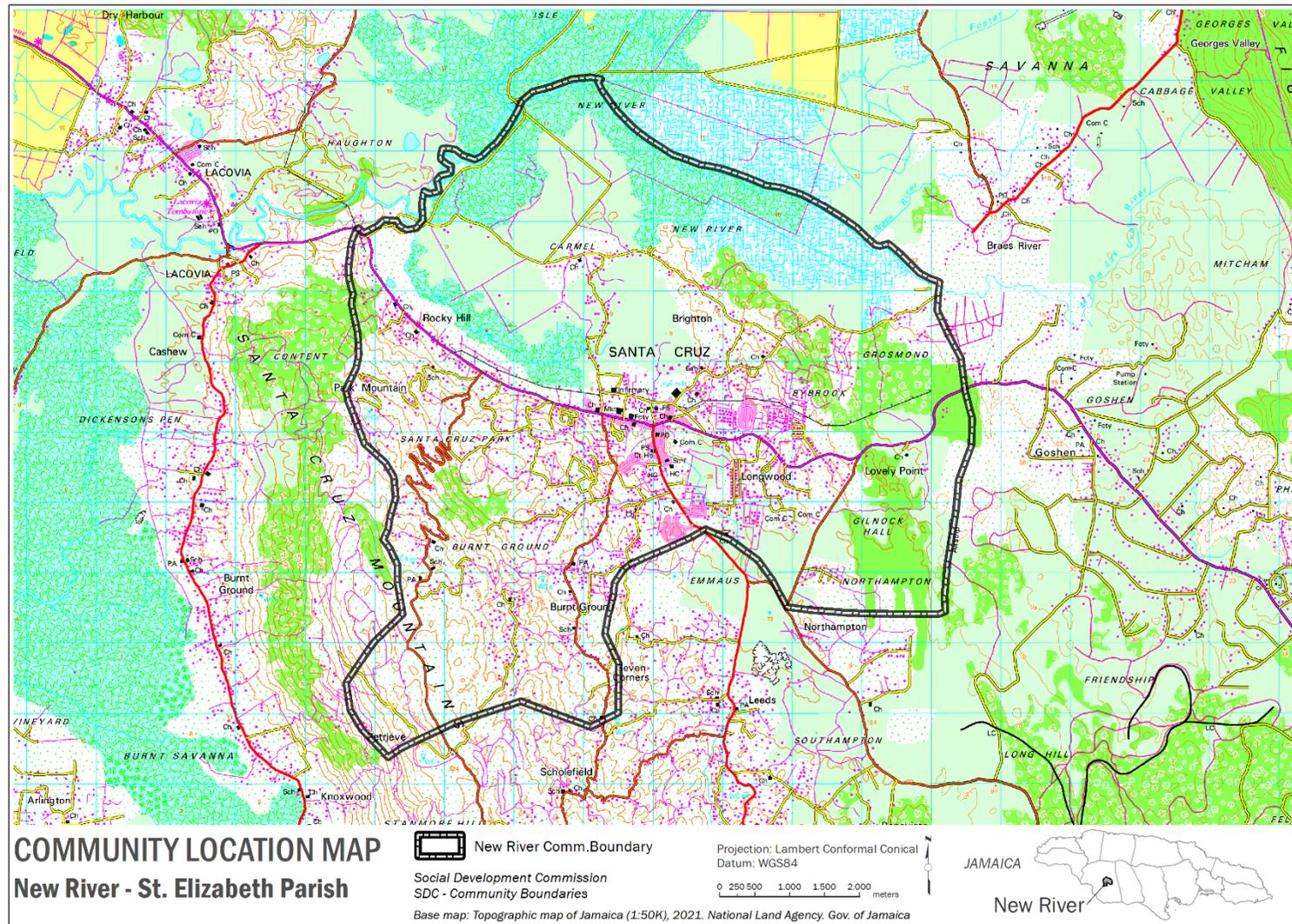
The Social Development Commission (SDC) includes New River as one of several districts comprising the community of Santa Cruz.

Table 2. Districts and Coordinators Contact List

The following are the districts that the community identifies as comprising New River and the coordinators for those districts.

#	DISTRICT	TEAM LEADER	CONTACT #	E-MAIL
1.	Lower Prosper	Slater Garwood	(876) 772-0784	-
2.	New River Proper	President of New River Committee David Scott Kingsley Clarke	(876) 531-9966 (876) 543-6196	kingsgualo53@gmail.com
3.	Top Burnt Ground	Melody Dockery Garwood	(876) 341-4998	-

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. There are seven committees that work to support the 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 Elizabeth 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 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	Melody Garwood	(876) 341-4998
Vice Chairman	Kadian Dunkley	(876) 332-8864
Secretary	Nacar Rose	(876) 495 6537
Treasurer	Abigail Brown	(876) 518 8560
Assistant Secretary	Annalise Dockery	(876) 533 9102
Coordinator – Public Education & Fundraising	Ashari Campbell	(876) 346-5850
Coordinator – Vulnerability & Risk Identification	Monique Daley	(876) 539-4283
Coordinator – Prevention, Mitigation & Adaptation	Kingsley Clarke	(876) 543-6196
Coordinator - Response & Recovery	Blossom Hanson	(876) 389-3330

CDRM Group will train and establish Community Emergency Response Team(s) (CERTs) that is the operative team under the Response & Recovery Coordinator. At 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 claims that agencies with responsibility for disasters are only present in the community during disasters. This is a claim they insist on and specify that they do not take into account the needs of the community or appropriate measures to assist the community with disaster management.

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?
Heavy Rainfall 2021	There was tremendous flooding. The water rose very high.	They stayed inside and try to repair the houses.
Heavy Rainfall —Sep, Oct and Nov 2020	There was tremendous flooding. The water rose very high.	They stayed inside and try to repair the houses.
Dengue Outbreak, 2019	The community had a significant outbreak of Dengue in 2019.	The Ministry of Health conducted fogging. That helped to improve the situation.
Hurricane Dean, 2007	This hurricane had a minor impact on the community.	-
Nov- Jan rains, 2004	A lot of houses and businesses were closed due to being flooded.	No data.
Hurricane Ivan, 2004	Economic sector: economic activities such as fishing and farming were affected as fish pots were lost, ground provisions were lost, livestock drowned and farming produce was lost (e.g.: fruit trees fell).	No data.
	Housing: some roofs were lost. Residents were marooned in their homes.	Monetary grants to fix roofs were provided by PATH. Roof repair (Zinc) grants were also given to repair roofs.

DISASTER YEAR	IMPACT	HOW DID THE COMMUNITY RESPOND?
Flood, 2002	Housing: Only residents from Wanstead and Old Morass were marooned.	Soldiers issued donations (food, blankets etc.), tractors came to transport persons out (evacuate), and persons moved to shelters.
Hurricane Gilbert, 1988	Economic sector: Damage to farming produce .	
	Housing: damaged houses.	Use of chain saws to cut fallen trees. There was much community effort in rebuilding.
Flood, 1986	Housing: residents marooned in their homes and roofs were blown off	-
Hurricane Charlie, 1951	Economic sector: animals, ground provisions.	-
	Housing: loss of roofs.	Community effort in rebuilding.
Hurricane 1933	Housing: roofs and provisions were lost.	Affected persons moved to higher grounds or stayed with family or unaffected persons. Canoes were used to transport persons.

3.2 Lessons learnt

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

1. It is impossible to prevent flooding in New River as it is in a low-lying area and the river runs right through the community, hence all houses must be built on stilts.
2. New River is flooded via ponding hence citizens can see the waters rising and the flood coming. The flooding, therefore, does not happen immediately after it rains but can take up to a week to occur as the water runs off from other areas into the community.
3. The major dams in the areas were to be supported by pumps of which only 2 were installed. The pumps are no longer operational and so the water can't be pumped out of the area.
4. There was also a flood gate and pump at the dam closest to the road which helped to reduce the length of time the area was flooded; those are no longer in operation and need to be replaced.
5. Wanstead road is too low and needs to be elevated by at least 1 meter.
6. When there is flooding the main road out of the community cannot be used, hence the alternate road through Brighton needs to be maintained.
7. New River is 3,000 acres, of that amount Caramel district is 700 acres. However, only 300 acres of Caramel are solid ground, the rest is marsh.
8. Persons should not be allowed to live in the marshlands or the ponds, those there should be relocated.
9. Persons who insist on building in the marshlands and ponds must build their house foundations 4ft high as the water is 3 ft high. However, they would also need boats to sail out like persons in Honduras, Belize and Nicaragua.

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, local river, forests on north side of town, ocean (fish).
- » 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.).

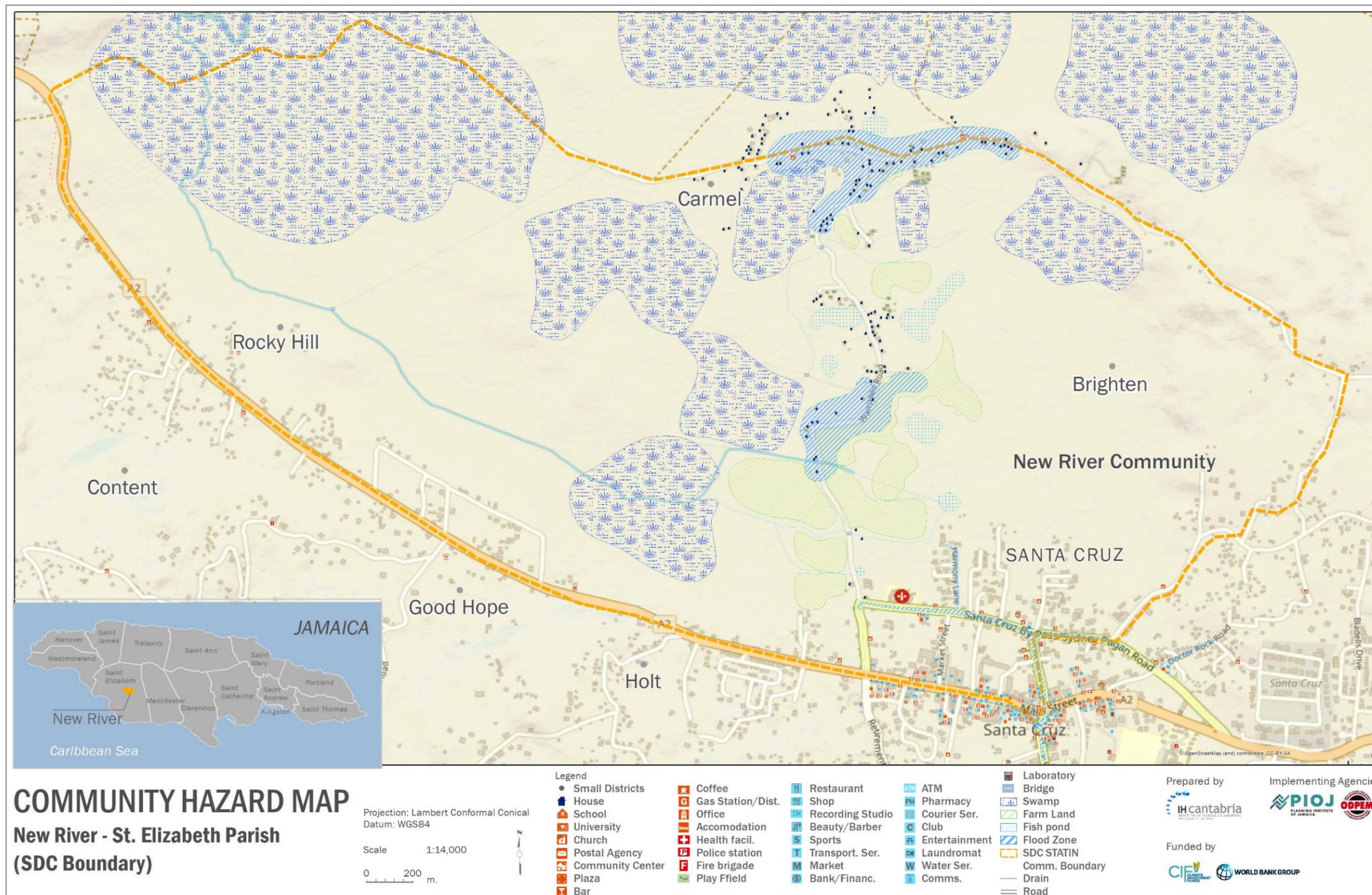
The most important community assets/resources from each category were identified and highlighted in Table 5 below. The priority assets were selected based on their importance to lives and livelihoods in the community.

Table 5. Community Assets

ASSET CATEGORY	ASSETS
Natural	There are very good farms (pasture land)
	This area is good for fishing
	This area contains good wetlands
Physical	There are many shops
Social	There is a basic school located in the area
	There are two churches
	Red Cross Office and Salvation Army office located in the area
Human	A first-aid trained person is always available

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).



New River Community Hazard Map digitized from community input

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	3 times per year	3 – 4 ft	Farms, roads, houses, buildings, churches. schools, infirmary
	Hurricanes	N/A	Once per year	Mainly tropical-storm-force winds. However, hurricane-force winds are experienced depending on the hurricane category	Farms, roads, houses, buildings, churches. schools
	Fires	N/A	Every two years	Small fires that usually burn out on their own	Farmlands

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.

CLIMATE HAZARD – FUTURE CC SCENARIO	Hurricanes	Tropical storm/ hurricane genesis, frequency and tracks are similar to what has been experienced in the very recent past (last two decades), but intensities (rainfall rates and wind speeds) are significantly increased. This is consistent with an increase in the occurrence of higher category storms in the future under climate change i.e. there may not be more storms but when they do occur they will be more intense.			Farms, roads, houses, buildings, churches. schools
NON-CLIMATE HAZARD	Earthquakes	N/A	Not regularly	Every 3 – 4 years	Buildings

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	Homes	<ul style="list-style-type: none"> » How they are constructed and where they are located 	<ul style="list-style-type: none"> » Displacement of residents and flooded homes » Blocked roads 	-
		Roads	<ul style="list-style-type: none"> » Drains not cleaned » The main road is too low (not raised above flood levels) » Insufficient drains 	<ul style="list-style-type: none"> » Roads blocked » Residents, taxi drivers and farmers affected 	<ul style="list-style-type: none"> » Transport price increases » Food delivery to the area is delayed » Farmers can't get products to market » Teachers can't get to schools
		Farms and livestock	<ul style="list-style-type: none"> » Location in a low-lying area » An excess drought that dries the wetlands causes the peat or morass to lose its ability to quickly absorb and store water, leading to flooding 	<ul style="list-style-type: none"> » Farms are saturated and causes a loss of production » Loss of animals 	<ul style="list-style-type: none"> » Economic impact as well as the social impact on farmers and all linkage industries

HAZARD CATEGORY	HAZARD	VULNERABLE ASSET	DRIVERS OF VULNERABILITY	DIRECT IMPACTS	INDIRECT IMPACTS
		Sewer system	» Location in the flood zone	<ul style="list-style-type: none"> » Settling and stagnation of water » Overflowing of sewage on the road 	» Health issues
	Drought	Homes, Farms	» Droughts don't happen regularly but when they do, Burnt Ground is most affected	<ul style="list-style-type: none"> » The community has to purchase water » Burnt Ground purchases water constantly 	
	Hurricane	Same as flooding			
NON-CLIMATE HAZARD	Earthquakes	Although the community is close to three major fault lines there have been no major earthquakes			

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	Chainsaw operators	Assist in the clearing of roads
	2 counsellors, pastors	Provide psychological support
	3 tradesmen, plumber, farmer, teacher, mason, carpenter	Assist in prevention and mitigation
Knowledge	Hazard history of the community	Contribute to the development of the community, education and awareness of others and identification of hazard-prone areas
	Coping mechanisms	
	Knowledge and awareness of the community's vulnerabilities and risk reduction measures	
	Early Warning Systems	
	Evacuation Procedures	
	Knowledge of some elements of disaster preparedness and response	
Networks	Trained persons – first aid, initial damage assessment and shelter management	Provide human resources who will assist in moving the elderly to emergency shelters, shelter management
	Community Based Organizations	
Transportation	Taxi operators, truck operators, owners of private motor vehicles	Assist with general transportation of persons from one point to another
Building/Infrastructures	Schools and churches	Serve as emergency shelters
Means of Care/Medical Care	Registered nurse, community health aid	Provide healthcare services and general healthcare during emergencies
Commercial Enterprises	Grocery shops	Provide quick access to food during an emergency

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 the 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, the 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(s) in Table 9 below was/were 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
There are no safe areas for development in the community because the entire community is located in a flood-prone area	

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
Lower Prosper – Green House + Centre	Roofs needed for green house.
New River – Basic School	The basic school can be placed here. The existing building is very old and should be replaced with new construction.
New River – Community Centre	This area has no buildings, only the open lot.
Top Burnt ground – Community Centre	A community centre is needed and could be safely located here.

9.1.3 Areas which can be developed with Appropriate Mitigation Activities

Table 11. Special Areas for Development

AREA	MITIGATION MEASURES NEEDED
The community did not identify any areas that can be developed with mitigation	

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	Stay inside; prepare when the community observes the water level rising and go to shelter if necessary	No	<ul style="list-style-type: none"> » Raising the level of the road. It needs has to be investigated to determine if raising the road will cause water to flow into the homes and cause flooding – Municipal Corporation and NWA » Installing pumps and flood gates – Water Resources Authority and Municipal Corporation » Maintaining and repairing the drains – Municipal Corporation 	Do not build in the pond	All of New River Proper
Hurricane/Wind	Prepare – batten down and follow the guidelines	Yes	<ul style="list-style-type: none"> » Supply of materials to help batten down, for example, ply boards, zinc sheeting » Assist with food supply – Food for the Poor, Jamaica Red Cross, Municipal Corporation 	The community will organize itself so that it can quickly assist each other	All of the community
Drought	<ul style="list-style-type: none"> » Buy water » Conserve water » Fetch water from the spring 	No	<ul style="list-style-type: none"> » NWC needs to truck water to the community or via pipelines - NWC » Need wayside tanks (parish tanks) to be installed in the community so that water can be stored – Municipal Corporation 	Expand water storage – organize to purchase more tanks and get more storage containers	

HAZARDS IDENTIFIED	COMMUNITY RESPONSES	ARE THESE RESPONSES SUITABLE?	ADAPTATION/MITIGATION ACTIONS REQUIRED – EXTERNAL ASSISTANCE	ADAPTATION/MITIGATION ACTIVITIES - DONE WITHOUT EXTERNAL ASSISTANCE	SPECIFIC LOCATION
Earthquakes	Respond according to ODPEMs guidelines whenever a tremor is felt	Yes	Assistance with earthquake drills	Organize drills	All of the community

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 from 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, 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
Flooding	Public education on the importance of maintaining drains	Signage – install no dumping signs Flyers – flood awareness	Annually in May during disaster preparedness month	Coordinator – Public Education & Fundraising
Earthquake	Promote proper earthquake response – “Drop, Cover, Hold”	Drills – schools and churches would be ideal to practice drills	January during earthquake awareness month and quarterly after that	Coordinator – Public Education & Fundraising
Fires	Fire safety promotion	Public education sessions – ask teachers to assist with providing information on fire safety	October during fire safety awareness week	Coordinator – Public Education & Fundraising
Hurricanes	Hurricane awareness for all residents	Exhibition – these can be held at the Library and Post Office	May- during hurricane preparedness month and for the entire hurricane season (June to November)	Coordinator – Public Education & Fundraising

9.2.2 Monitoring and Warning

The following persons (belonging to the CDRM Group) are responsible for monitoring and warning in situations of impending disasters (e.g., hurricanes, flooding) 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	Public Education and Fundraising Coordinator	<ol style="list-style-type: none"> 1. The Coordinator - Public Education and Fundraising issues an alert to the zonal group via SMS or internet-based messaging system 2. A town crier is dispatched to warn the community 3. Shelter managers placed on alert
	Marine weather forecasts	Public Education and Fundraising Coordinator	<ol style="list-style-type: none"> 1. Warning sent to the President of the Fisherman’s Cooperative
Flooding	Community gauge (the existing gauge was removed)	Community gauge reader (when the water starts rising the gauge cannot be accessed)	<ol style="list-style-type: none"> 2. The gauge reader alerts the various districts via telephone

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 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 experiences and so will not evacuate.

The following evacuation routes and transportation routes 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
New River	<p>From New River, travel south along the Wanstead to Santa Cruz Road until its intersection with Santa Cruz Bypass/Pagan Drive. Continue to institution drive by the fire station then across the stop light unto Coke drive. The shelter is the school on the left after the police station. (This route might have flooding/ NOT SAFE)</p> <p>Enter back Brighton, then right to Brighton Road which leads to Santa Cruz. Then, first left to Olive Park; then right to the road that leads to Main Street unto the traffic light; then left on to Coke Drive. The school is on left after the police station (2nd route has a sinkhole/NOT SAFE).</p> <p>Go to the T- junction, turn right on to Back Brighton then second left to Smith Housing Scheme. Follow main through the scheme to T-Junction in Olive Park then left then right to Main Street then continue from Main Street as above.</p>	<p>1. Santa Cruz Primary</p> <p>2. Mount Sinai Baptist Church</p> <p>3. Little Mount Zion Church</p>	<p>Motor vehicles.</p> <p>N/B: Persons who are marooned would need heavy-duty vehicles to evacuate them. Vehicles that use diesel fuel are preferred to avoid shutting off in the water.</p> <p>Boats.</p> <p>In 2010, a boat had to be used.</p>	David Scott
Olive Park	Exit Olive Park, turn left to the main road and the church is on the left 5 chains down the main road.	Longwood Church of God	Drive or walk	Harlin Grizzle

Table 16. Evacuation Procedures

ACTIVITY	PERSON RESPONSIBLE
Evaluate threat or liaise with PDC/ODPEM on need for evacuation	Chairman - Melody Garwood
Alert residents on possible evacuation	Coordinator - Preparedness
Decide on timing	Coordinator - Response & Recovery - Blossom Hanson
Ensure vulnerable groups are assisted	Coordinator – Preparedness
Organize transportation	Coordinator - Response & Recovery - Blossom Hanson
Identify route to be used	Coordinator - Response & Recovery - Blossom Hanson
Register all persons who are evacuating and their destination	Coordinator - Response & Recovery - Blossom Hanson CERT: Etawnya Robinson
Start evacuation	Coordinator - Response & Recovery - Blossom Hanson
Check that all areas are safely evacuated	Chairman – Melody Garwood
Inform Parish Disaster Committee	Chairman - Melody Garwood

Table 17 shows the community representative responsible for evacuating each evacuation zone and for monitoring all evacuation activities being conducted. The representative responsible for each evacuation zone will contact the representative in charge of the vulnerable groups or the vulnerable individuals (and/or vice versa). Appendix E highlights the designated shelters for the community. All persons are encouraged to take food to last them for three days. See Appendix D for list of items needed.

Table 17. Evacuation Team

EVACUATION ZONE	PERSON RESPONSIBLE FOR EVACUATION	VULNERABLE GROUP TO EVACUATE	PERSON RESPONSIBLE FOR THE EVACUATION OF VULNERABLE GROUPS
New River	Community members	Elderly and disable	Holy Cross Catholic church assists sometimes
Olive Park	Community members N/B: the infirmary is impacted by flooding	The institution is located at a place called Backstreet, bordered by Harmony Lane and Wanstead	The Municipal Corporation will be responsible for the infirmary

9.2.4 Preparedness Action Plan

The Community Action Plan sets out the preparedness activities to be done for a planning cycle, including 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 capacity of the community to respond during an emergency.

Table 18. Community Preparedness Action Plan

ACTIVITY	RESPONSIBLE PERSON(S)/AGENCY(S)	TIMEFRAME
First Aid training	Red Cross, ODPEM	Feb-April
<ul style="list-style-type: none"> » Overall, first response training » Sensitization and disaster preparedness work shop. N/B: improvement and upgrade of evacuation routes are imperative.	ODPEM, National Environment and Planning Agency (NEPA) Municipal Corporation, SDC, Community Health Aid	Feb-April
Evacuation Training – this is necessary because approximately 40% of Olive Park’s population is elderly.	ODPEM (NEPA) Municipal Corporation, SDC, Community Health Aid	Feb-April

9.2.5 Response and Relief

The New River Command Centre will be located at the St Elizabeth Technical High 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 in New River. The New River Disaster Risk Management Group will also develop an inventory and assess the damage, and where feasible, secure the perimeter of dangerous areas. The New River 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 – Blossom Hanson	Committee Chair and Parish Disaster Coordinator
Persons with Disabilities	Response and Recovery Coordinator – Blossom Hanson	Committee Chair and Parish Disaster Coordinator
Single Mothers	Response and Recovery Coordinator – Blossom Hanson	Committee Chair and Parish Disaster Coordinator
Damaged Buildings and Houses for Occupants	Response and Recovery Coordinator – Blossom Hanson	Committee Chair and Parish Disaster Coordinator
Persons Stranded by Floodwater	Response and Recovery Coordinator – Blossom Hanson	Committee Chair and Parish Disaster Coordinator
Check for:		
Deaths	Response and Recovery Coordinator – Blossom Hanson	Committee Chair and Parish Disaster Coordinator
Injuries	Response and Recovery Coordinator – Blossom Hanson	Committee Chair and Parish Disaster Coordinator

ACTIVITY	RESPONSIBLE PERSON(S)/AGENCY(S)	SHORT REPORT
Persons in Need of Emergency Assistance	Response and Recovery Coordinator – Blossom Hanson	Committee Chair and Parish Disaster Coordinator
Call for any External Assistance	Chairman – Melody Garwood	Committee Chair and Parish Disaster Coordinator
Update PDC, ODPEM	Chairman – Melody Garwood	Committee Chair and Parish Disaster Coordinator
Update Community	Chairman – Melody Garwood	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
» River embankments	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 Municipal Corporation.

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	Blossom Hanson - Coordinator - Response & Recovery	Municipal Corporation	Within 8 hours
Welfare	Blossom Hanson - Coordinator - Response & Recovery	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	Blossom Hanson - Coordinator - Response & Recovery	Municipal Corporation	Within 72 hours
Welfare	Blossom Hanson - Coordinator - Response & Recovery	Municipal Corporation	Within 72 hours
Agriculture	Blossom Hanson - Coordinator - Response & Recovery	Municipal Corporation	Within a week after the water recedes. It could be up to one month depending on how long it takes to recede.

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	Blossom Hanson - Coordinator - Response & Recovery	Municipal Corporation – Parish Disaster Coordinator
Evacuation	Blossom Hanson - Coordinator - Response & Recovery	Municipal Corporation – Parish Disaster Coordinator
Trucking of Water	Blossom Hanson - Coordinator - Response & Recovery	Municipal Corporation – Parish Disaster Coordinator
Alternative Sources of Lighting	Blossom Hanson - Coordinator - Response & Recovery	Municipal Corporation – Parish Disaster Coordinator
Search and Rescue	Search and Rescue Coordinator	Municipal Corporation – Parish Disaster Coordinator
Children Welfare, elderly and persons with disabilities	Blossom Hanson - Coordinator - Response & Recovery	Municipal Corporation – Parish Disaster Coordinator
Initial Damage Assessment	Blossom Hanson - Coordinator - Response & Recovery	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:	
Sustained damage	Damage Assessment Coordinator
Need shelter	Shelter Management Coordinator
Lost means of income	Blossom Hanson - Coordinator - Response & Recovery
Need assistance	Blossom Hanson - Coordinator - Response & Recovery
Need for psycho-social support or counselling	Blossom Hanson - Coordinator - Response & Recovery
Compile list and update PDC, ODPEM	Blossom Hanson - Coordinator - Response & Recovery

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	Monique Daley - 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 by the CDRMG. Mobilize the community and get their input	Blossom Hanson - Coordinator - Response and Recovery Kingsley Clarke - Coordinator – Prevention, Mitigation and Adaptation	Within one month of the event
Develop the recovery plan, establishing timeframes for each activity and responsible person	Blossom Hanson - 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	Melody Garwood - Chairman	Within 7 weeks of the event
Secure outside help to implement the priority activities (NGO's, Food for the Poor, Adventist Development and Relief Agency - ADRA, Jamaica Red Cross, government departments, commercial enterprises in the community and private sector)	Ashari Campbell - 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	Ashari Campbell - Coordinator - Public Education and Fundraising	4 – 8 weeks after 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 trainings in climate-smart agriculture, environmental protection etc.)	Ashari Campbell - Coordinator - Public Education and Fundraising	4 – 8 weeks after 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 	Blossom Hanson - Coordinator – Response and Recovery Kingsley Clarke - 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	Blossom Hanson - Coordinator – Response and Recovery	Ongoing

APPENDIX A – COMMUNITY EMERGENCY CONTACT LIST

COMMUNITY EMERGENCY CONTACT LIST	CONTACT PERSON	TELEPHONE Nº/EMAIL
CDRM Group President	Melody Garwood	(876) 518-4839
CERT President	Etawnya Robinson	(876) 419-6491
Police	Narda Simms	narda.simms@jcf.gov.jm
Fireman	Superintendent Mr. DeSouza	dhstelizabeth.jfb@cwjamaica.com
Ambulance	Dr. Sonia Beharie	stelizabethmoh@gmail.com
Health	Dr. Sonia Beharie	stelizabethmoh@gmail.com

APPENDIX B – VULNERABLE POPULATION

This table has information on the vulnerable population in the community and their location by district.

TYPE OF VULNERABILITY (FOR EXAMPLE, ELDERLY, DISABILITY, SINGLE MOTHERS....)	NUMBER OF VULNERABLE PERSON & CONTACT INFO	LOCATION OF VULNERABLE	NEXT OF KIN/CARE GIVER & CONTACT INFO	CDRT/CERT MEMBER RESPONSIBLE
PATH Beneficiaries	50 persons	New River	N/A	Committee Chair and Parish Disaster Coordinator
Persons With Disabilities	14 persons	New River	N/A	Committee Chair and Parish Disaster Coordinator
Elderly	1 person	New River	N/A	Committee Chair and Parish Disaster Coordinator

APPENDIX C – EQUIPMENT ALREADY AVAILABLE IN THE COMMUNITY

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

ITEMS (QUANTITY PER ITEM)	STORAGE LOCATION	CONTACT PERSON(S) FOR STORAGE	CONTACT NUMBER
Water Boots	Limited amount at Municipal Corporation	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Machetes	The community currently does not have any of these items in stock	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Shovels		Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Forks		Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Hazardous infection diseases protection materials: masks and alcohol-based gel sanitiser		Limited amount at Municipal Corporation	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com

APPENDIX D – ITEMS REQUIRED EXTERNALLY

ITEMS REQUIRED	QUANTITY	SOURCE AGENCY/BUSINESS	CONTACT PERSON(S) FOR STORAGE	CONTACT INFORMATION
First Aid Kits	Yes required – The community is not sure of the quantity needed	Ministry of Health, Jamaica Red Cross, Food for the Poor	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Hazardous infection diseases protection materials: masks	Yes, some required	ODPEM, Ministry of Agriculture, RADA, Jamaica Agricultural Society, Jamaica Fire Brigade	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Hazardous infection diseases protection materials: alcohol-based gel sanitisers	Yes, some required	ODPEM, Ministry of Agriculture, RADA, Jamaica Agricultural Society, Jamaica Fire Brigade	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Shovels	Yes, none in storage	ODPEM, Ministry of Agriculture, RADA, Jamaica Agricultural Society, Jamaica Fire Brigade	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Water boots	Yes, more required	Hardware, Food for the Poor, Department of Fisheries, Fisherman’s Corp	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Heavy duty gloves	Yes, none in storage	ODPEM, Hardware	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com

ITEMS REQUIRED	QUANTITY	SOURCE AGENCY/BUSINESS	CONTACT PERSON(S) FOR STORAGE	CONTACT INFORMATION
Rain cloaks	Yes – more required	ODPEM, Hardware	Ms. Ornella Lewis	876 8903343/ 6340768 scemc.cdc@gmail.com
Hard hats	Yes – none in storage	Hardware, Food for the Poor, Livestock Association	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Machetes	Yes – none in storage	Parish Council, ODPEM, MLSS, Red Cross	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Canvas Stretchers	Yes – none in storage	Hardware, Food for the Poor, Department of Fisheries, Fisherman’s Corp	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Crow bars	Yes – Team has none	Parish Council, ODPEM, MLSS, Red Cross	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Rip/Crosscut Saws	Yes – Team has none	Tankweld, Rhino	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Power saws	Yes- just one. More is required	Wisynco, Hardware,	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Heavy duty Screw Drivers	Yes – Team has none	Ministry of Health, National Water Commission	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com

ITEMS REQUIRED	QUANTITY	SOURCE AGENCY/BUSINESS	CONTACT PERSON(S) FOR STORAGE	CONTACT INFORMATION
Large/medium Cold Chisels	Yes – Team has none	ODPEM, Hardware	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Claw Hammers	Yes- Team has none	ODPEM, Hardware	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Heavy duty Sledge Hammers	Yes- Team has none	Gas Station	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com
Flashlights	Yes, more is required.	ODPEM, Hardware	Ms. Ornella Lewis	(c) (876) 634-8768 (o) (876) 890-3343 stemc.pdc@gmail.com

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 Shelter				
St. Elizabeth Technical High School		Santa Cruz, New River		
Unofficial Shelters				
The Santa Cruz Primary and Junior High School	Road from Brighton	New River	Mr. Kingsley Clarke (876) 543-6196	
New River Primary School	Evacuation routes are detailed above in the evacuation table	New River and Olive Park	Mr. Kingsley Clarke (876) 543-6196	

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 sanitisers
- » 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	Ashari Campbell
2.	Sensitize special needs population	Coordinator – Public Education and Fund Raising	Ashari Campbell
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 fuelled 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 Coordinator - Response & Recovery	Blossom Hanson
6.	Sensitization of persons in the community without vehicles of assembly area for transportation to more safe location.	Coordinator – Public Education and Fund Raising	Ashari Campbell
7.	Identify areas in the community where high potential for infrastructure/ property damages.	Coordinator - Vulnerability & Risk Identification	Monique Daley

ACTIVITIES		POSITION	PERSON(S) RESPONSIBLE
8.	Ensure DRM teams are aware of all high-risk locations in the community.	Coordinator - Vulnerability & Risk Identification	Monique Daley
9.	Prepare areas for sheltering persons in need	Coordinator – Preparedness	-
10.	Re-engage community volunteers to provide assistance in shelters and other areas. Consult with PDC for facilitating training or refresher courses.	Coordinator – Preparedness	-
11.	Ensure new developments are assessed and relevant measures put in place to safeguard community.	Coordinator – Prevention, Mitigation and Adaptation	Kingsley Clarke
12.	Organize mitigation and prevent projects and work days with technical guidance from relevant agencies (with the help of the PDC.	Coordinator - Prevention & Mitigation	Kingsley Clarke

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

ACTIVITIES		PERSON(S) RESPONSIBLE
1.	Meet and assess the community’s state of preparedness for a hurricane	Chairman – Melody Garwood
2.	Advise community to listen to all weather advisories	
1.	Issue warning of threat	Coordinator - Preparedness
2.	Alert and notify:	
	<ul style="list-style-type: none"> » PDC that community DRM teams are activated » Other CBOs 	

ACTIVITIES	PERSON(S) RESPONSIBLE
<ul style="list-style-type: none"> » Shelter Managers » Response personnel <p>3. Make available all relevant information on the hazard to the general community.</p>	
<p>1. Pre-check and activate SOPs</p> <p>2. Alert all trained community first aiders and search and rescue personnel.</p> <p>3. Have first-aid kits prepared</p>	Coordinator - Preparedness
<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</p> <p>Coordinator - Response & Recovery – Blossom Hanson</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</p> <p>Coordinator - Response & Recovery - Blossom Hanson</p>
<p>Listen to all weather advisories and information from ODPEM, MET office, and communicate with PDC.</p>	<p>Coordinator – Preparedness</p> <p>Coordinator - Response & Recovery - Blossom Hanson</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
Continue to listen to all weather advisories and reports.	Coordinator – Preparedness

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 neighbours that may need help 	Coordinator - Response & Recovery - Blossom Hanson
Ensure the Elderly and persons with disabilities are notified and assisted to prepare for event.	Coordinator - Response & Recovery - Blossom Hanson

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 	Coordinator - Response & Recovery - Blossom Hanson

ACTIVITIES	PERSON(S) RESPONSIBLE
4. Ensure phones can be charged	
Activate volunteers to be on standby to assist with damage assessment. Conduct briefing of these volunteers.	Coordinator - Response & Recovery - Blossom Hanson
1. Activate and prepare emergency shelters 2. Deploy relief and welfare volunteers to emergency shelters	Coordinator - Response & Recovery - Blossom Hanson
Ensure contacts are made with the PDC and other stakeholders for assessment of shelter facilities if necessary.	Coordinator - Response & Recovery - Blossom Hanson
Contact PDC and prepare to Initiate evacuation procedures for the community.	Coordinator - Response & Recovery - Blossom Hanson
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	Coordinator - Response & Recovery - Blossom Hanson Coordinator – Preparedness
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 	Coordinator - Response & Recovery - Blossom Hanson Coordinator – Preparedness

ACTIVITIES	PERSON(S) RESPONSIBLE
» Manpower	

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 - Blossom Hanson
Activate and test local communications links and report to PDC.	Coordinator - Response & Recovery - Blossom Hanson
<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 persons with disabilities to be evacuated. » Ensure registration of all evacuated. » Check that all needing evacuees are safely evacuated. 	Coordinator - Response & Recovery - Blossom Hanson
» Monitor radio for hurricane warnings and public information via news releases through ODPEM and Met office.	Coordinator - Response & Recovery - Blossom Hanson

» Monitor Radios for precautionary tips together with packaged information of the activities of responding agencies.	
Alert community Initial Damage Assessment Team(s).	Coordinator - Response & Recovery - Blossom Hanson
Confirm lines of credit with merchants to enable easy access to relief supplies after the disaster.	Coordinator - Response & Recovery - Blossom Hanson

D. 16 HOURS BEFORE IMPACT TO LANDFALL

ACTIVITIES	PERSON(S) RESPONSIBLE
1. Maintain contact with PEOC.	Chairman – Melody Garwood
2. Advise PEOC of weather conditions and state of preparedness.	Vice Chairman – Kadian Dunkley
3. Confirm arrival and status of evacuees in shelters.	Coordinator - Response & Recovery - Blossom Hanson
4. Check in with standby teams and community response personnel.	Hanson

E. THE BLOW

ACTIVITIES	PERSON(S) RESPONSIBLE
Monitor and report events as far as possible.	Chairman – Melody Garwood Vice Chairman – Kadian Dunkley
Maintain contact with PEOC, Shelters and response personnel.	Coordinator - Response & Recovery - Blossom Hanson

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 - Blossom Hanson
1. Deploy community damage survey teams or assessors. 2. Deploy community response teams to check on vulnerable (elderly and persons with disabilities) 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 - Blossom Hanson

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 - Blossom Hanson
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 centres.	Coordinator - Response & Recovery - Blossom Hanson

ACTIVITIES	PERSON(S) RESPONSIBLE
<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. 	<p>Coordinator - Response & Recovery - Blossom Hanson</p>
<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. 	<p>Coordinator - Response & Recovery - Blossom Hanson</p>

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. 	<p>Coordinator - Response & Recovery - Blossom Hanson</p>

<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. 	<p>Coordinator - Response & Recovery - Blossom Hanson</p>
<p>Coordinate the establishment, staffing and management of emergency shelters for sustained use in community. Encourage persons affected to stay with friends or family as first options.</p>	<p>Coordinator - Response & Recovery - Blossom Hanson</p>
<p>Coordinate requests, receipt and distribution of food, clothing and water supplies through the PEOC.</p>	<p>Coordinator - Response & Recovery - Blossom Hanson</p>
<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 - Blossom Hanson Chairman – Melody Garwood Vice Chairman – Kadian Dunkley</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 - Blossom Hanson</p> <p>Coordinator - Prevention, Mitigation and Adaptation – Kingsley Clarke</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 – Melody Garwood</p> <p>Vice Chairman – Kadian Dunkley</p> <p>Coordinator – Public Education and Fund Raising – Ashari Campbell</p>
<p>Mobilize CDRM Group to contact NGOs (e.g. Red Cross, Food for the Poor, ADRA and others) to seek assistance in community recovery initiatives</p>	<p>Chairman – Melody Garwood</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 – Melody Garwood</p> <p>Vice Chairman – Kadian Dunkley</p>
<p>Revise SOPs as necessary</p>	<p>Chairman – Melody Garwood</p> <p>Vice Chairman – Kadian Dunkley</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

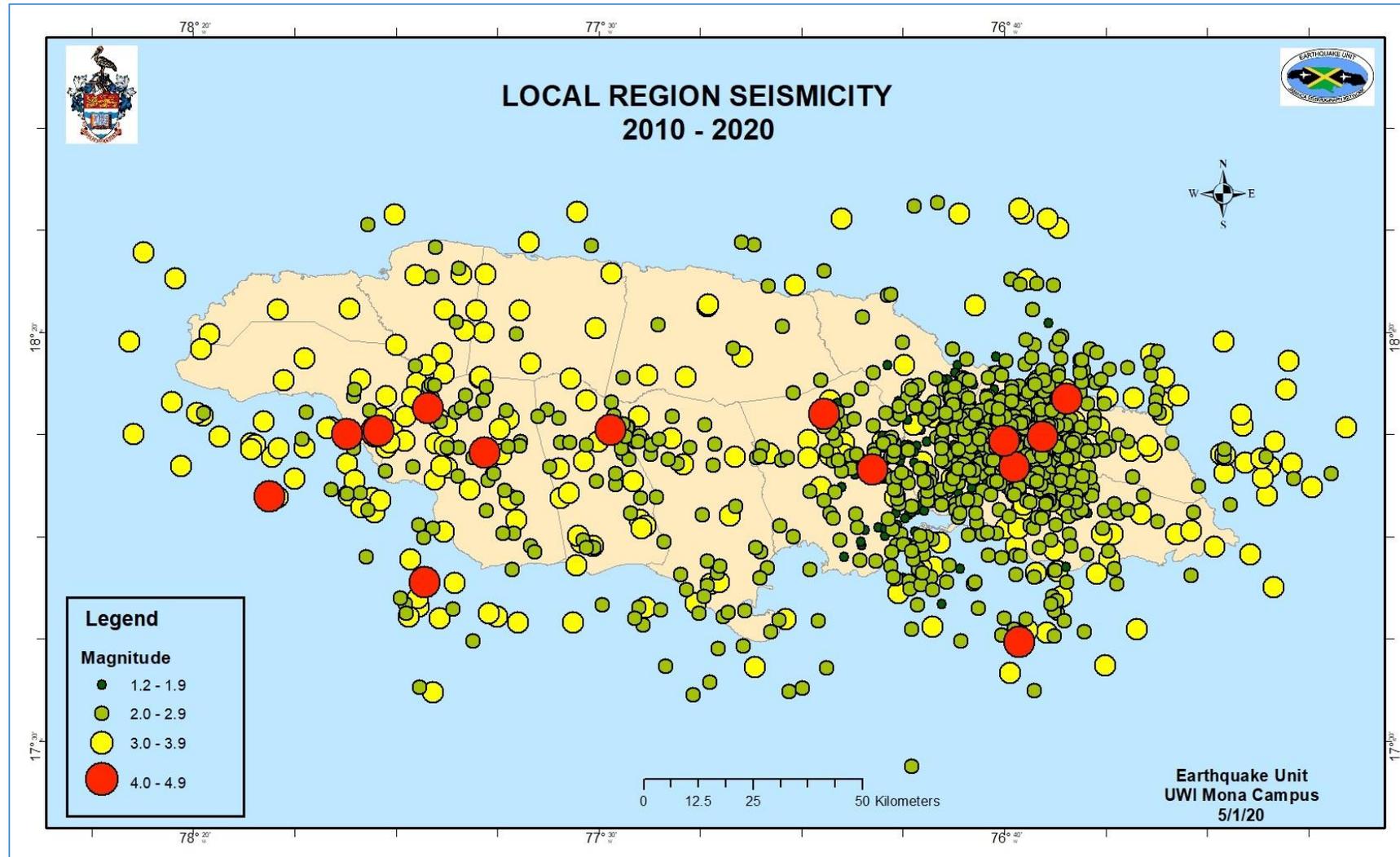
Tremors or smaller earthquakes that occur after the main shock is felt. After-shocks can occur over a few hours to months after the main shock.

Tremor

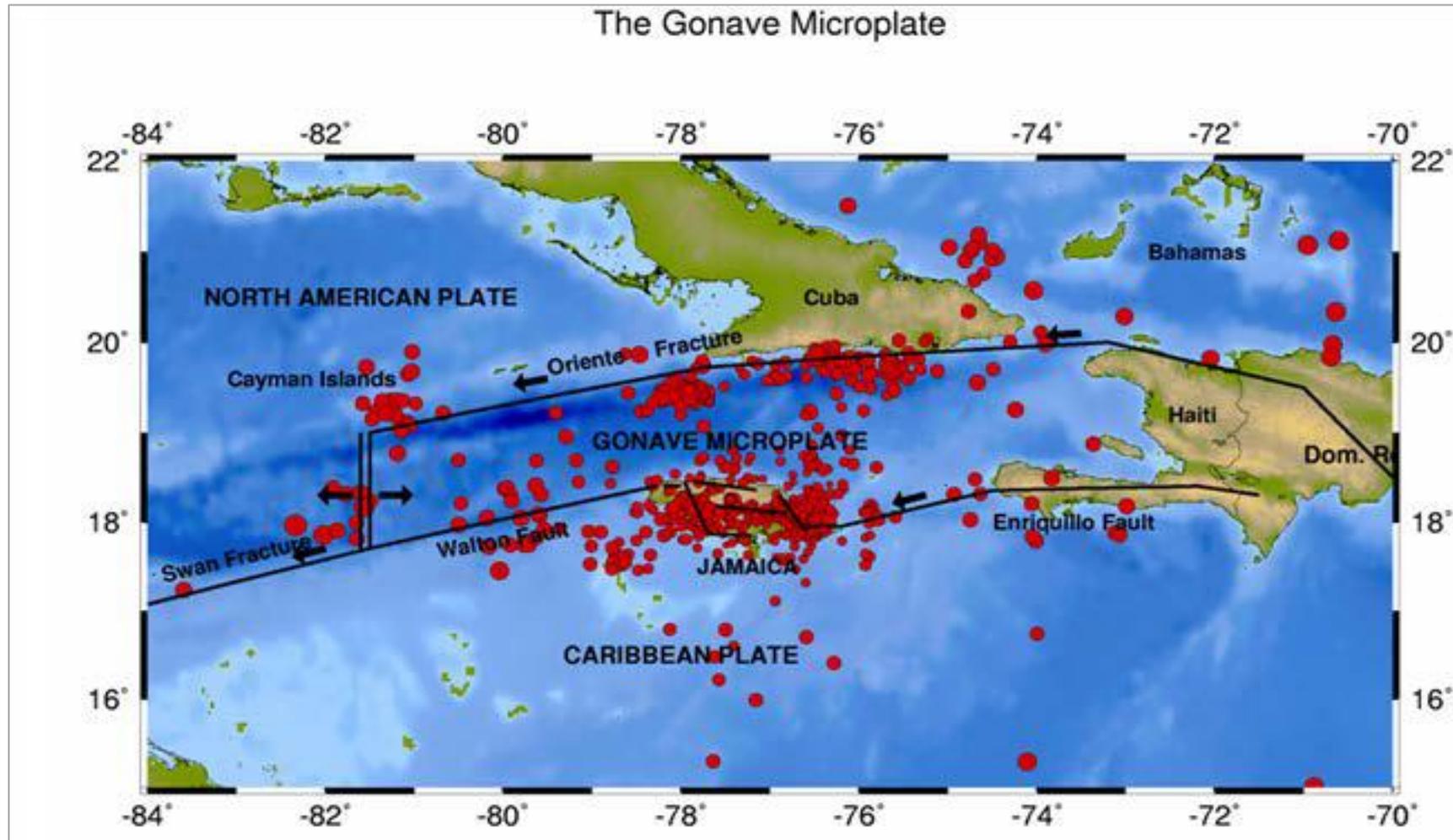
The shaking or seismic waves felt or caused by an earthquake or explosion.

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	Ashari Campbell
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	-
4.	Put arrangements in place to have vehicles to be used in evacuation fuelled 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	Ashari Campbell
7.	Identify areas in the community where high potential for infrastructure/property damages.	Coordinator - Vulnerability & Risk Identification	Monique Daley
8.	Ensure DRM teams are aware of all high-risk locations in the community.	Coordinator - Vulnerability & Risk Identification	
9.	Prepare areas for sheltering persons in need.	Coordinator – Preparedness	

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
10. Re-engage community volunteers to provide assistance in shelters and other areas. Consult with PDC to facilitate training or refresher courses.	Coordinator – Preparedness	-
11. Ensure new developments are assessed and relevant measures put in place to safeguard community.	Coordinator - Prevention, Mitigation and Adaptation	Kingsley Clarke
12. Organize mitigation and prevent projects and work days with technical guidance from relevant agencies (with the help of the PDC).	Coordinator - Prevention, Mitigation and Adaptation	
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	Kadian Dunkley
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	Kadian Dunkley
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	Nacar Rose
16. Liaison for maintenance and to keep open all access routes – main transportation routes and alternative access routes.	Coordinator - Prevention, Mitigation and Adaptation	Kingsley Clarke
17. Community inventory of building quality.	Coordinator - Prevention, Mitigation and Adaptation	Kingsley Clarke
18. Community inventory of road networks and updating of community map.	Coordinator - Prevention, Mitigation and Adaptation	Kingsley Clarke
19. Identify alternative sources of water, sources of alternative/temporary housing solutions.	Coordinator - Prevention, Mitigation and Adaptation	

ACTIVITIES		POSITION	PERSON(S) RESPONSIBLE
20.	Put mutual aid agreements in place for emergencies.	Coordinator – Preparedness	-
21.	Meet and assess the community’s state of preparedness for an earthquake	Coordinator – Preparedness	-
22.	Organize or initiate and support drills <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 	Coordinator – Preparedness Coordinator - Response & Recovery	Blossom Hanson
23.	Make available all relevant information on the hazard to the general community	Coordinator – Public Education and Fund Raising – Ashari Campbell	
24.	Personal for families: - Make sure your family goes over the family disaster plan		
25.	Protecting the community: <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. 	Coordinator – Preparedness Coordinator - Prevention, Mitigation and Adaptation Coordinator Public Education and Fund Raising	Kingsley Clarke Ashari Campbell

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	Melody Garwood Kadian Dunkley
2.	Maintain contact with PEOC, Shelters and response personnel.	Coordinator - Response & Recovery	Blossom Hanson
3.	Depending on the severity, ensure all buildings are vacated. Account for missing persons.	Coordinator - Response & Recovery	Blossom Hanson

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
4. DRM Team Advise the Community to listen to all advisories and remain alert for after shocks	Coordinator – Preparedness	-

AFTERMATH (IMMEDIATELY following the event 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	Blossom Hanson
2. Deploy community damage survey teams or assessors		
3. Deploy community response teams to check on vulnerable (elderly and persons with disabilities) 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.		
7. Provide PEOC with status report.		
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	Blossom Hanson

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
	Coordinator – Public Education and Fund Raising	Ashari Campbell
<p>13. Advise community members to enter their homes with caution:</p> <ul style="list-style-type: none"> » Check for sewage leaks in homes/yards. Cordon off area and report to NWC and Parish Disaster Coordinator/Municipal Corporation/PEOC. » Check for water leaks in homes/yards. Report to NWC and Parish Disaster Coordinator/ Municipal Corporation/PEOC. » Check for gas leaks. If they smell gas, 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	Blossom Hanson
14. Check for general sewage and water-line damage in the community.		
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.		
<p>17. 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 		

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
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.		
21. Coordinate the establishment, staffing and management of emergency shelters for sustained use in community.	Coordinator - Response & Recovery Vice Chairman Coordinator - Vulnerability & Risk Identification	Blossom Hanson
22. Encourage persons affected to stay with friends or family as first options.		Kadian Dunkley
23. Coordinate requests, receipt and distribution of food, clothing and water supplies through the PEOC.		Monique Daley
24. Assist with the distribution of supplies	Coordinator - Response & Recovery	Blossom Hanson -
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	Blossom Hanson Ashari Campbell
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	Blossom Hanson
5.	Monitor progress and ensure deficiencies are reported.		
6.	Mobilize CDRM Group to seek assistance from NGOs (e.g. Red Cross, Food for the Poor, ADRA and others) for community recovery initiatives.		
7.	Identify and share Lessons Learnt to enhance future preparedness and response activities: <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? 		
8.	Revise SOPs as necessary	Chairman	Melody Garwood

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	Ashari Campbell
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 fuelled with petrol.		
5.	Ensure that appropriate fire extinguishing materials are in place in community centre 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	Blossom Hanson
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	Ashari Campbell

ACTIVITIES		POSITION	PERSON(S) RESPONSIBLE
9.	Identify areas in the community where high potential for infrastructure/property damages.	Coordinator - Vulnerability & Risk Identification	Monique Daley
10.	Ensure DRM teams are aware of all high-risk locations in the community.		
11.	Prepare areas for sheltering persons in need.	Coordinator – Preparedness	-
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 and Adaptation	Kingsley Clarke
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	Melody Garwood
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 – Blossom Hanson Coordinator – Public Education and Fund Raising</p>	<p>Blossom Hanson Ashari Campbell</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 and Adaptation Coordinator – Preparedness</p>	<p>Kingsley Clarke</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 - Prevention, Mitigation and Adaptation Coordinator – Preparedness</p>	<p>Kingsley Clarke</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 and Adaptation Coordinator – Preparedness</p>	<p>Kingsley Clarke</p>
<p>21. Obtain local building codes and weed abatement ordinances for buildings near wooded areas.</p>	<p>Chairman Coordinator – Preparedness</p>	<p>Melody Garwood</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 persons with disabilities are evacuated and make special arrangement for them. 	<p>Coordinator - Response & Recovery</p>	<p>Blossom Hanson</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, persons with disabilities)**
- 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 – Blossom Hanson	
2. Once an ALARM is activated: At location of fire (buildings): <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, persons with disabilities, Children). » Assess the situation. » Establish safety zone. » If a fire is small and it's safe to 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. 		Blossom Hanson

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
<ul style="list-style-type: none"> » 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. 		
<p><i>At location of fire (bush):</i></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, persons with disabilities, 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. 		
<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. 		
<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 		

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
<ul style="list-style-type: none"> » 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	

After a fire

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
<p>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.</p>		
<p>2. Conduct Damage & Needs Assessment</p> <ul style="list-style-type: none"> a. Deploy community damage survey teams or assessors (with Municipal Corporation if more than 3 homes/properties are affected). b. Deploy community response teams to check on vulnerable (elderly and persons with disabilities) 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. 	Coordinator - Response & Recovery	Blossom Hanson

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
3. Provide initial damage survey results and needs assessment for the community to Fire Department, Municipal Corporation 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 Municipal Corporation. <ul style="list-style-type: none"> » 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.		
8. Begin to effect minor repairs to critical facilities and clear road ways and public spaces, if affected.		
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.		

ACTIVITIES	POSITION	PERSON(S) RESPONSIBLE
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	Melody Garwood

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.

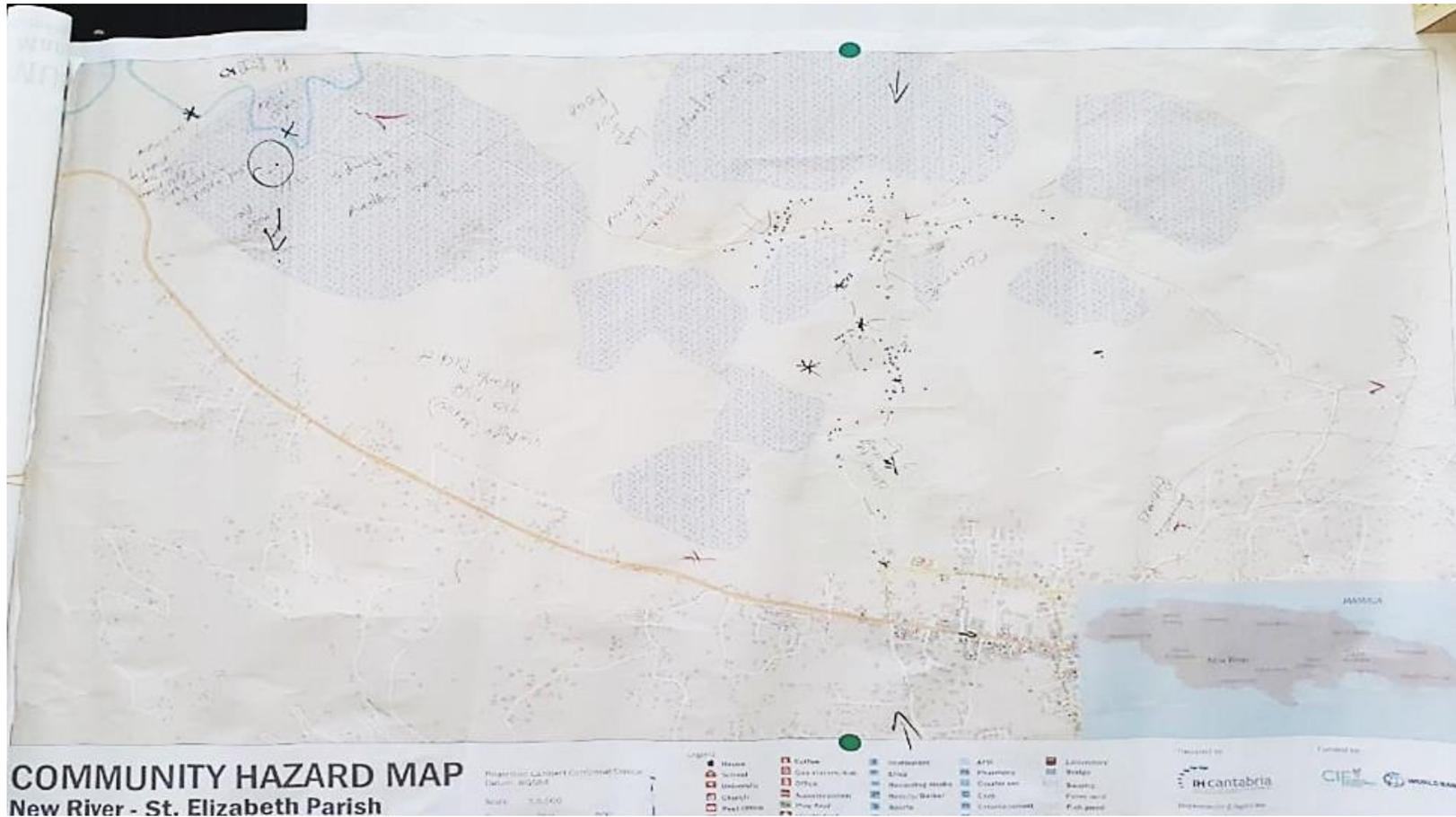
APPENDIX K – PHOTO GALLERY



Flooding in New River 2002
Source: ODPEM



Flooding in New River, November 2020
Source: St Elizabeth Municipal Corporation



Community Hazard Map Prepared by New River Community