



# **COMMUNITY DISASTER RISK MANAGEMENT PLAN**

**For  
Llandewey, St. Thomas**



*Facilitated through the*  
**Building Disaster Resilient Communities Project,**  
**An Office of Disaster Preparedness and Emergency Management (ODPEM) Project**  
**Funded by the Canadian International Development Agency**

*in collaboration with the*  
***St. Thomas Parish Council***  
*and other partners.*

***Prepared October 2010***

***Revised January 2012***



## TABLE OF CONTENTS

	<b>PAGE</b>
Glossary of Terms .....	4
Abbreviations .....	7
Preamble .....	8
Community Profile .....	11
Llandewey Community Boundary.....	13
Disaster Risk Management Organization Structure .....	14
Terms of Reference CDRM Group Concept .....	18
<b>PR Pre-Impact</b>	
PR1 Historical Overview of Disasters .....	26
Community Hazard Map .....	29
Community Problem Tree.....	30
SWOT Analysis .....	31
PR2 Future Hazards .....	32
PR3 Vulnerability Summary, Possible Impact & Corrective Actions to Reduce Community Vulnerability ...	34
PR4 Reducing Vulnerability .....	36
PR5 Priority Listing of Hazards .....	40
PR6 Capacity and Resource Analysis .....	41
PR7 Areas for No Development .....	42
PR8 Areas for Development .....	43
PR9 Special Areas for Development .....	44
PR10 Community Mitigation Activities .....	45
PR11 Mitigation Activities Requiring external assistance .....	47
PR12 Mitigation Action Plan.....	48
PR13 Risk Transfer .....	51
PR14 Training .....	52
PR15 Public Awareness and Education .....	53

PR16	Community Monitoring Programme .....	54
PR17	Community Early Warning system .....	55
PR18	Community Early warning Activity and Responsibility .....	56
PR19	Areas to be Evacuated .....	57
PR20	Evacuation Routes and Mode of Transportation to Emergency Shelters .....	58
PR21	Evacuation Procedures .....	59
PR22	List of Official and Unofficial Emergency Shelters .....	62
PR23	Preparedness Action Plan .....	64
PR24	Simulations and Drills .....	65

**PO – POST IMPACT**

PO1	Response and Relief .....	66
PO2	Initial Damage Assessors .....	68
PO3	Community Damage Assessors .....	70
PO4	Community Response Action Plan .....	71
PO5	Welfare and Relief .....	72
PO6	Community Recovery Action Plan .....	73

**APPENDICES:**

<i>Appendix A</i>	- <i>Vulnerable Population .....</i>	74
<i>Appendix B</i>	- <i>Emergency Supplies Available in community .....</i>	76
<i>Appendix C</i>	- <i>Emergency Supplies Required .....</i>	77
<i>Appendix D</i>	- <i>Emergency Supplies To Be Taken To Shelter.....</i>	79
<i>Appendix E</i>	- <i>Stakeholder Partnerships .....</i>	80
<i>Appendix F</i>	- <i>Photo Gallery .....</i>	83
<i>Appendix G</i>	- <i>Hurricane SOP .....</i>	85
<i>Appendix H</i>	- <i>Earthquake SOP .....</i>	104
<b>Acknowledgement</b>	.....	<b>119</b>

## GLOSSARY OF TERMS

TERM	MEANING
<b>CAPACITY:</b>	A combination of all the strengths and resources available within a community, society or organization that can reduce the level of risk, or the effects of a disaster. Capacity may include physical, institutional, social or economic means as well as <i>skilled personal</i> or collective attributes such as leadership and management. Capacity may also be described as capability.
<b>CAPACITY BUILDING:</b>	Efforts aimed to develop human skills or societal infrastructures within a community or organization needed to reduce the level of risk.
<b>CLIMATE CHANGE:</b>	The climate of a place or region is changed if over an extended period (typically decades or longer) there is a statistically significant change in measurements of either the mean state or variability of the climate for that place or region.
<b>COPING CAPACITY:</b>	The means by which people or organizations use available resources and abilities to face adverse consequences that could lead to a disaster
<b>DISASTER:</b>	A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.
<b>DISASTER RISK MANAGEMENT:</b>	The systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards.
<b>EARLY WARNING:</b>	The provision of timely and effective information, through identified institutions, that allows individuals exposed to a hazard to take action to avoid or reduce their risk and prepare for effective response.
<b>EMERGENCY</b>	The organization and management of resources and responsibilities for dealing with all

TERM	MEANING
<b>MANAGEMENT:</b>	aspects of emergencies, in particularly preparedness, response and rehabilitation.
<b>HAZARD:</b>	A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.
<b>HAZARD ANALYSIS:</b>	Identification, studies and monitoring of any hazard to determine its potential, origin, characteristics and behaviour.
<b>HURRICANE</b>	<p>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.</p> <p>The Saffir-Simpson Hurricane Scale is a one to five rating based on the hurricane's present intensity. This is used to give an estimate of the potential property damage and flooding expected along the coast from a hurricane landfall. Wind speed is the determining factor of this scale.</p>
<b>MITIATION:</b>	Structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards.
<b>PREPAREDNESS:</b>	Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations.
<b>PREVENTION:</b>	Activities to provide outright avoidance of the adverse impact of hazards and means to minimize related environmental, technological and biological disasters.
<b>RECOVERY:</b>	Decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk.
<b>RELIEF/RESPONSE:</b>	The provision of assistance or intervention during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be

TERM	MEANING
	of an immediate, short-term, or protracted duration.
<b>RESILIENCE:</b>	The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures.
<b>RETROFITTING:</b>	Reinforcement of structures to become more resistant and resilient to the forces of natural hazards
<b>RISK:</b>	The probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerable conditions.
<b>STRUCTURAL/NON-STRUCTURAL MEASURES:</b>	<p><b>Structural measures</b> refer to any physical construction to reduce or avoid possible impacts of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure.</p> <p><b>Non-structural measures</b> refer to policies, awareness, knowledge development, public commitment, and methods and operating practices, including participatory mechanisms and the provision of information, which can reduce risk and related impacts.</p>
<b>VULNERABILITY:</b>	The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards.

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

## **ABBREVIATIONS**

CBDRM	Community-Based Disaster Risk Management
CBO	Community Based Organization
CERT	Community Emergency Response Team
DRM	Disaster Risk Management
IDB	Inter-American Development Bank
MP	Member of Parliament
NEPA	National Environment Planning Agency
NGO	Non-Governmental Organisation
NSWMA	National Solid Waste Management Authority
NWA	National Works Agency
ODPEM	Office of Disaster Preparedness and Emergency Management
PDC	Parish Disaster Coordinator/Committee
RADA	Rural Agricultural Development Authority
MLSS	Ministry of Labour and Social Security

## **PREAMBLE**

### **Name of the Plan**

The name of the plan is the “**Llandewey Community Disaster Risk Management Plan**”.

### **Purpose of the Plan**

This plan provides:

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

### **Actors**

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

### **Scope of Plan**

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



## **Authority**

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

## **Responsibility**

The responsibility for updating and testing the plan lies with the Llandewey CDC. This plan is a “living” document, as conditions change (new roads, new houses and residents etc) the plan will have to be revised. The recommended period for review and subsequent revision is at least once per year after every major event.

## **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 Llandewey Community Based Disaster Risk Management Plan represents the operational procedures and strategies to be employed at the community level in response to, recovery from and in preparation for a number of hazards. The community will be supported by and will work through the District Sub-Committee of the Parish Disaster Committee and will be closely integrated with the PEOC. Therefore the community disaster risk management plan will draw on other existing parish plans and

national plans where necessary for the mounting of an efficient response and preparedness programme. The ODPEM collaborates with the St. Thomas Parish Council on Disaster Risk Management matters through the Parish Disaster Committee and the Coordinator. The Standard Operating Procedures (SOP's) contained in the plan reflect national SOP's.

## COMMUNITY PROFILE

### POPULATION

The 2001 STATIN Population Census shows the Llandewey community having a population of 2,361. This is a 2% increase from 1,936 persons in 1991. The population is projected to increase to 2,878 persons in 2011 and 3,508 persons by the year 2021.

Population: \_\_\_\_\_

Men \_\_\_\_\_% Women \_\_\_\_\_%

Age distribution

Children under 16: \_\_\_\_\_%

17-65 years: \_\_\_\_\_%

Seniors: \_\_\_\_\_%

Disabled: \_\_\_\_\_%

Shut-Ins: \_\_\_\_\_%

### DESCRIPTION OF THE COMMUNITY:

The Llandewey community is a farming community located in the hills of Western St. Thomas. The community comprises seven districts, namely **Easington, Smithfield, Llandewey, Ramble, River Head, Windsor Forest and Goat Ridge**. The Llandewey community houses several infrastructures such as five schools, Post Office, Health Centre, Police Station, and a P.C. Bank. This community is also the home of several historical sites. In 1692 the community of Llandewey felt the wrath of an earthquake. This resulted in the district of Mount Sinai being sunk. This area is now known as Judgment Cliff.

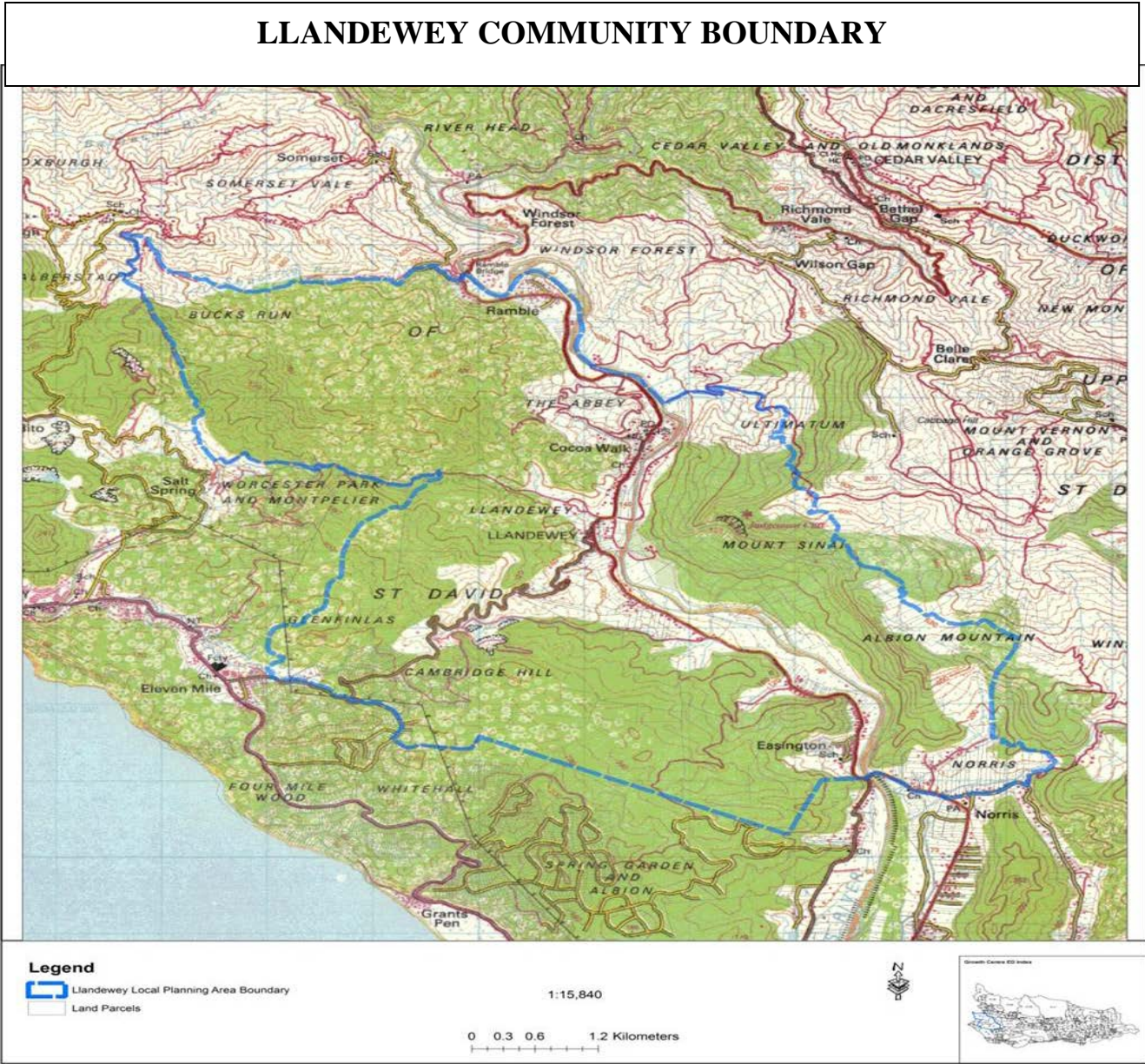
The district of Easington was formerly the capital of Saint David's. In the district there was the Easington market, a courthouse, a prison cell and a swinging bridge. A monument is located in the Easington Park identifying the location where Paul Bogle rested on his way to Spanish Town. Easington was also known for its cultivation of bananas in the 1900s.

## SUMMARY OF MAIN HAZARDS

The Llandewey community is characterized by rugged terrain and forested areas comprising of semi-deciduous trees. The community is also traversed by the Yallahs and the Norris rivers. The Yallahs River channel has widened extensively by the undertaking of improper quarrying operations coupled with forces of weathering. Quarrying activities also take place in the Cambridge Hills and this activity result in the loss of topsoil and vegetation. This also results in massive soil erosion contributing to numerous occurrences of landslide/rock falls in the Llandewey community and unto the main road. These operations further cause pollution, siltation and the flooding of downstream bodies.

Its Soil Type also is a major contributor to the frequency of landslide which the community had been experience from as far back as the 1600's. In 1692 an entire section of the community was sank as a result of a major earthquake causing a devastating landslide. Due to it geological location, the community had also been consistently damaged by the frequent hurricanes which the island has been experienced. These hurricanes cause the community to be flooded, roads were damaged and cut-off, bridges washed away, lives were lost and resident had lost property and livestock. The community was also left without utilities for prolonged periods.

The map below shows Llandewey community boundary, however; districts covered under this disaster risk plan includes; **Easington, Smithfield, Llandewey, Ramble, River Head, Windsor Forest and Goat Ridge.**



## Disaster Risk Management (DRM) Organizational Structure

The table outlines the membership of the committee and the roles and responsibility of each member.

EXECUTIVE MEMBERSHIP POST	NAME/RESPONSIBILITY	TELEPHONE	ADDRESS	EMAIL
Chairman	Ms. Florence Marsh	353-7790	Ramble Dist., Llandewey PO	
Vice Chairman	Ms. Sharon Bennett	361-5857	Ramble Dist., Llandewey PO	
Secretary	Ann-Kay Luton	449-1116	Llandewey Dist., Llandewey PO	annkayluton@yahoo.com
Asst. Secretary	Daneisha Whitton	399-0348	Llandewey Dist., Llandewey PO	
Treasurer	Joette Dawson	401-1825	Llandewey Dist., Llandewey PO	
Asst. Treasurer	Not Assigned			
Coordinator- public Education	Mrs. Jacqueline Howell-Reid	485-6175	River Head Dist. Llandewey P.O	
Coordinator – fund Raising	Mrs. Jacqueline Howell-Reid	485-6175	River Head Dist. Llandewey P.O	
Coordinator – Vulnerability and Risk Identification	Mr. Oshane Morgan	423- 5805	Ramble Dist., Llandewey PO	Oshanemorgan06@yahoo.com
Coordinator- Prevention and Mitigation	Rodrae Kellyman	5721429	River Head Dist. Llandewey P.O	
Coordinator – Preparedness, Response and Recovery	Curzan Simpson	860-8602	River Head Dist. Llandewey P.O	
Public Relation Officer	Not Assigned			

## CONTACT LIST

NAME	SKILLS/ORGANIZATION	ADDRESS	TELEPHONE
<b>LAW AND ORDER</b>			
Lincoln Morgan	District Constable	River Head Dist. Llandewey P.O	387-3859
Mavis Thompson	District Constable	Smithfield Dist Llandewey P.O	424- 2170, 442-0651
Sgt. Desmond Howell	Sub-officer	Llandewey Dist. Llandewey P.O	733-0487, 8844502
<b>MEDICAL CARE</b>			
Ms K. Senior Ms. Walker Ms Simpson-Clarke	Nurse Nurse Nurse	Windsor Forest Dist. Llandewey P.O Llandewey Dist. Llandewey P.O	
<b>SHELTERS</b>			
Fitzroy Legister Jerry Blake Mavis Thompson	Easington Primary School	Easington Dist. Easington Dist. Smithfield Dist	886-4048
Ann-Kay Luton Horace Ogilvie	Bethesda All Age School	Llandewey Dist. Llandewey P.O	449-1116, 552-8812 396- 5108
<b>SCHOOLS</b>			
Jacqueline howell-reid	River Head Basic School.	Llandewey Dist.	485- 6179
	Bethesda All Age	Llandewey P.O	
Robert Brown	Easington Primary School	Easington Dist., Llandewey P.O	

<b>NAME</b>	<b>SKILLS/ORGANIZATION</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
<b>CDRM COMMUNITY EXECUTIVES</b>			
Ms. Florence Marsh	Chairman	Ramble Dist., Llandewey PO	353-7790
Ms. Sharon Bennett	Vice Chairman	Ramble Dist., Llandewey PO	361-5857
Ms. Ann-Kay Luton	Secretary	Llandewey Dist., Llandewey PO	449-1116
Ms. Daneisha Whitton	Asst. Secretary	Llandewey Dist., Llandewey PO	399-0348
Ms. Joette Dawson	Treasurer	Llandewey Dist., Llandewey PO	401-1825
Not Assigned	Asst. Treasurer	`	
Mrs Jacqueline Howell- Reid	Coordinator- Public Education	River Head Dist. Llandewey P.O	485-6175
Mrs Jacqueline Howell- Reid	Coordinator- Fund Raising	River Head Dist. Llandewey P.O	485-6175
Mr Oshane Morgan	Coordinator – Vulnerability and Risk Identification	Ramble Dist., Llandewey PO	423- 5805
Mr. Rodrae Kellyman	Coordinator- Prevention and Mitigation	River Head Dist. Llandewey P.O	5721429
Mr. Curzan Simpson	Coordinator – Preparedness, Response and Recovery	River Head Dist. Llandewey P.O	860-8602
Mrs Jacqueline Howell- Reid	Public Relation Officer	River Head Dist. Llandewey P.O	485-6175
<b>CERT TEAM LEADERS</b>			
Curzan Simpson	Team leader	River Head Dist. Llandewey P.O	860-8602
<b>COMMUNITY BASE ORGANIZATIONS</b>			
Fitzroy Legister	Easington Primary School PTA	Easington Dist., Llandewey P.O	886-4048



<b>NAME</b>	<b>SKILLS/ORGANIZATION</b>	<b>ADDRESS</b>	<b>TELEPHONE</b>
Samjea Whitton	Llandewey Youth Club	Llandewey Dist., Llandewey PO	429- 9876
Horace Ogilvie	Llandewey JAS	Llandewey Dist., Llandewey PO	449-6958
Daneisha Whitton	Llandewey Women's Group	Llandewey Dist., Llandewey PO	399-0348
Howard Mc Pherson	Llandewey CDC	Llandewey Dist., Llandewey PO	852-7030
Andrea Morgan-Francis	Bethlehem Basic School PTA	Bethlehem Dist, Llandewey PO	354-4493
Sharon Bennette	Bethesda All Age School PTA	Bethesda Dist, Llandewey PO	361-5857
Malachi Morgan	Western St. Thomas Bee Farmer's Association		562-2120
Carlos Shepherd	Ramble Youth Club	Ramble Dist., Llandewey PO	847-4221
Florence Marsh	Ramble Basic School PTA	Ramble Dist., Llandewey PO	353-7790
Charlton Turner	River Head Youth Club	River Head Dist. Llandewey P.O	428-0879
Curzan Simpson	River Head Basic School PTA	River Head Dist. Llandewey P.O	860-8602
<b>AGENCIES/KEY STAKEHOLDERS</b>			
Miss Millicent Blake	St. Thomas, Parish Disaster Coordinator		
Miss Sophia Mitchell	ODPEM, Regional Coordinator	2-4 Haining Road, Kingston	928-5111-4; 430-5585
James Robertson	Member of Parliament		
Gary Henry	Councilor		

## **TERMS OF REFERENCE CDRM GROUP**

### **CDRM Group**

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

### **N.B**

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

### **Executive Membership**

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

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

### **Community Organization with responsibility for CDRM**

- Any existing Community Based Organization (CBO) that is active should be made part of the DRM Group.
- Where there is no existing CBO, the community should form the executive membership of the DRM Group from reliable individuals with leadership qualities in the community.
- Individuals who are not members of an existing CBO may be made part of the DRM Group. These individuals may be:
  - 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 DRM group will assume the name of the existing CBO that will carry out the functions of the group OR the name of the existing Zonal Committee.
- Where no CBO exists the name may be decided by the community leadership
- The DRM tag should remain to indicate

### **Leadership the CDRM Group**

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

### **Frequency of CDRM Meetings**

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

### **Funding of CDRM Group and Activities**

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

- Fundraising activities

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

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

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

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

**ODPEM:**

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

**Other Technical Agencies**

- Any official request or engagement of agencies or departments of government regarding training, disaster related information or programming must be channeled through the Parish Coordinator.
- CDRM Groups may however, formally write to agencies/departments regarding the respective agencies functions or execution of same in relation to the community.

**Interaction with Councilors, Members of Parliament and other political representatives**

- Political representatives must be seen as a significant resource to the CDRM Groups and Communities.

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

#### **Interaction with Private Sector and other NGOs/CBOs**

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

#### **Recording keeping by CDRM Group**

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

#### **Wider Community Involvement**

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

## **Roles & Functions of the Executive Membership for DRM**

<b>Chairman:</b>	Assume similar duties as outlined in existing CBO or Zonal Committee
<b>Vice Chairman:</b>	Assume similar duties as outlined in existing CBO or Zonal Committee
<b>Secretary:</b>	Assume similar duties as outlined in existing CBO or Zonal Committee
<b>Treasurer:</b>	Assume similar duties as outlined in existing CBO or Zonal Committee
<b>Assistant Secretary:</b>	Assume similar duties as outlined in existing CBO or Zonal Committee

### **Coordinator – Public Education & Fundraising**

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

### **Coordinator – Vulnerability & Risk Identification**

- Identify and Assess historical hazard impacts
- Conduct research on changing hazard risk trends in the community
- Calculate the probability of occurrence of hazard events
- Develop and maintain list of critical facilities at risk
- Conduct vulnerability capacity Assessments
- Prepare vulnerability and risk identification reports to be submitted to the Parish Disaster Coordinator
- Provide the Prevention and Mitigation Coordinator with information on vulnerability and risks in the community.
- Evaluate risk assessments, risk management plans, and risk monitoring results as directed and recommend appropriate actions.

- Ongoing, systematic and consistent observation of hazard-related parameters.
- Ensuring that the data can be located and retrieved by users.
- Takes lead in vulnerability assessment tasks.
- Notifying residents of vulnerable areas to disasters via the DRM Group meetings.
- Estimate expected damage in the event of a disaster.
- Identify the vulnerable assets of the community and the associated risks
- Solicit support of key community members for execution of responsibilities; especially elderly and trained professionals.

### **Coordinator – Prevention & Mitigation**

#### Duties related to Mitigation

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

#### Duties related to Prevention

- To know the main areas of risk and to take steps to prevent hazard impact/exposure or detect any problems as early as possible.
- To assess training needs and communicate them to the Public Education Coordinator

- To ensure good lines of communication with all coordinators
- Conduct/facilitate community hazard hunts with the help of the Parish Coordinator and CDRM team.

### **Coordinator – Response & Recovery**

- The Response Coordinator has primary responsibility for the coordination and contractual management of the emergency response projects/initiatives.
- Ensure that adequate needs assessments are carried out in accordance with good DRM practice.
- Advice and support where necessary and to monitor the response.
- Recommend relevant and appropriate training where necessary in minimum standards in emergency response.
- Ensure systems are in place for monitoring and evaluating the impact of the disaster.
- Takes lead in damage assessment and disaster recovery tasks.
- Plan and organize disaster recovery activities along with the aid of the Parish Disaster Coordinator
- Report the status of the disaster recovery activity.
- Identifies acceptable recovery time periods.
- Establishes disaster recovery testing methodologies.
- Recommend disaster recovery planning and training activities.
- Provides instructional and informational materials on how to respond during an emergency.
- Develops and maintains SOPs for emergency/disaster response and recovery with the aid of the PDC.
- Plan regular exercises to test community plans
- Monitors the effectiveness of procedures during evacuation drills and revises the procedures as necessary.
- Maintains contact with outside sources participating in reciprocal agreements.
- Ensures that as new equipment, facilities, services, and systems are installed that the disaster response and recovery issues are highlighted and addressed.



- Maintains contact with outside contingency planning professional organizations and local or regional emergency response groups.

Ensure and recommends establishment of CERTs as appropriate.

## HAZARD HISTORY

### History of Hazards and Coping Mechanisms

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

**Table PR1: Historical Overview of Disasters**

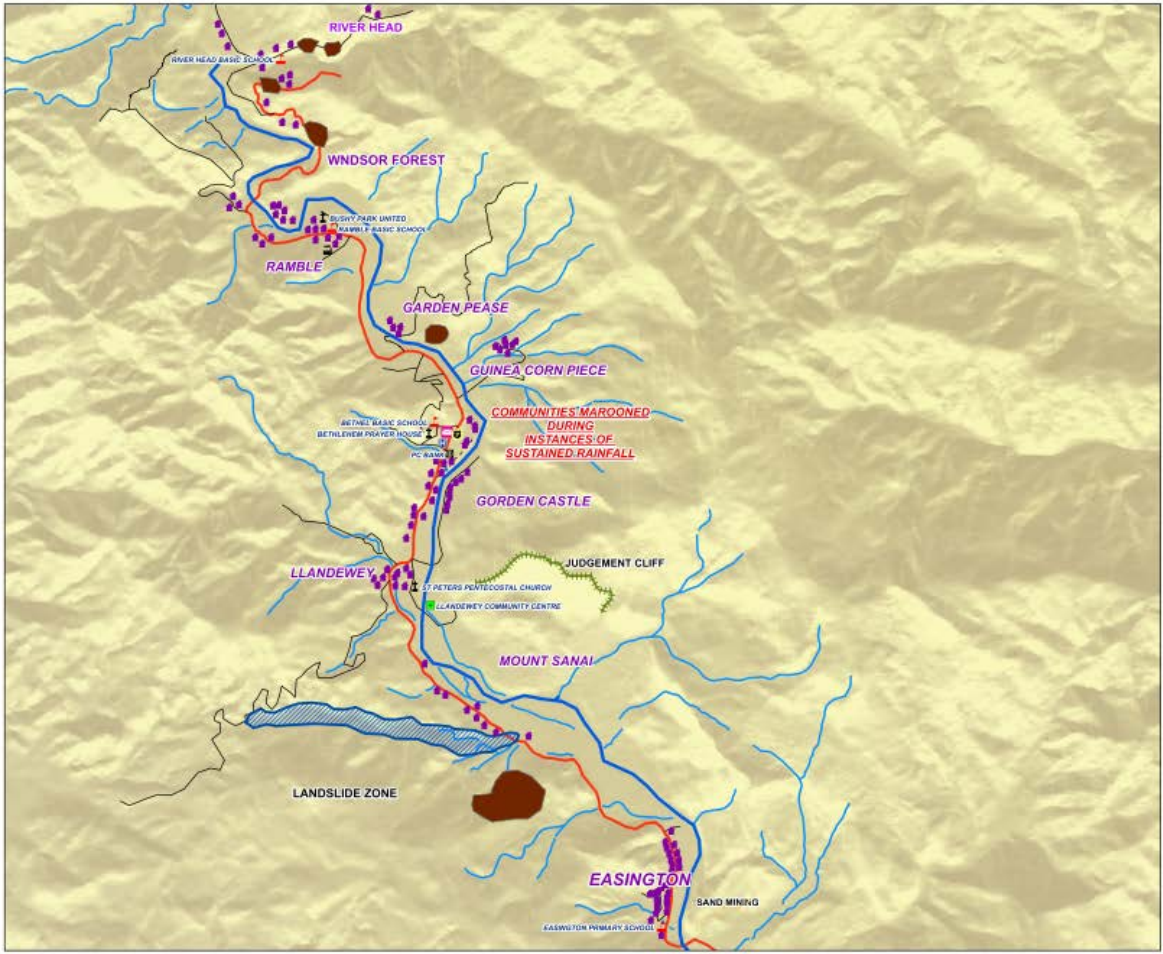
<b>Hazard, Year</b>	<b>Impact</b>	<b>How did the Community Cope?</b>
Earthquake, 1692	Entire community sank with the residents	Community did not cope, only one man, one donkey, one dog and a rooster was saved.
Flood, 1906	A house washed away in the River Head district with seven persons.	Residents assisted with counseling of traumatized family members. They also received assistance from external organizations.
Flood, 1979	Community flooded and the road was rendered impassable. This also resulted in the loss of produce and livestock.	Residents assisted in the cleaning up of the community and the reopening of the road. Assistance was also granted from external organization.

Hazard, Year	Impact	How did the Community Cope?
Hurricane, 1988	Community was flooded, roads were cut-off, bridge washed away, and lives were loss as well as houses. The community was also left without utilities for prolonged periods.	Residents found alternatives to getting across the river, assisted in the rebuilding, reroofing and strengthening of houses. They also assisted through the sharing of produce harvest and recovered. Assistance was also received from external sources.
Hurricane, 2002	Community was flooded. Produce, livestock and infrastructures were loss.	Residents assisted in the reroofing of houses. They also assisted through the sharing of produce harvest and recovered. Assistance was also received from external sources.
Hurricane, 2004	Community was flooded and roofs, livestock and produce were loss.	Residents assisted in the reroofing of houses. They also assisted through the sharing of produce harvest and recovered. Assistance was also received from external sources.
Hurricane, 2005	Community was flooded, a house was washed away roofs were damaged and destroyed, livestock and produce were loss.	Residents assisted in the reroofing of houses and provide shelter for those without housing. They also assisted through the sharing of produce harvest and recovered. Assistance was also received from external sources.

<b>Hazard, Year</b>	<b>Impact</b>	<b>How did the Community Cope?</b>
Flood, 2006	Community suffered from flooding, land slippage and blocked roads	Residents assisted in the cleaning up of the community and the opening of the road. Assistance was also granted from external organization.
Hurricane, 2007	Community was flooded, suffered land slippage, residents left marooned by blocked roads.	Residents assisted in the cleaning up of the community and the opening of the road. Residents had to walk across flooded roadways or have their fare tripled. Assistance was also granted from external organization.
Tropical Storm, 2008	Community was flooded, house was washed away roofs were damaged and destroyed, lives were loss livestock and produce were loss.	Residents assisted in the reroofing of houses and provide shelter for those without housing. They also assisted through the sharing of produce harvest and recovered. Assistance was also received from external sources.
Tropical Storm, 2010	Community experienced flooding and landslide, loss of roofs, roadways made impassable, loss of properties and livestock.	Residents assisted in the cleaning up of the community and the opening of the road. Residents had to walk across flooded roadways or have their fare tripled. Assistance was also granted from external organization.

# HAZARD MAP

## COMMUNITY HAZARD MAP - LLANDEWEY, ST THOMAS



### LEGEND

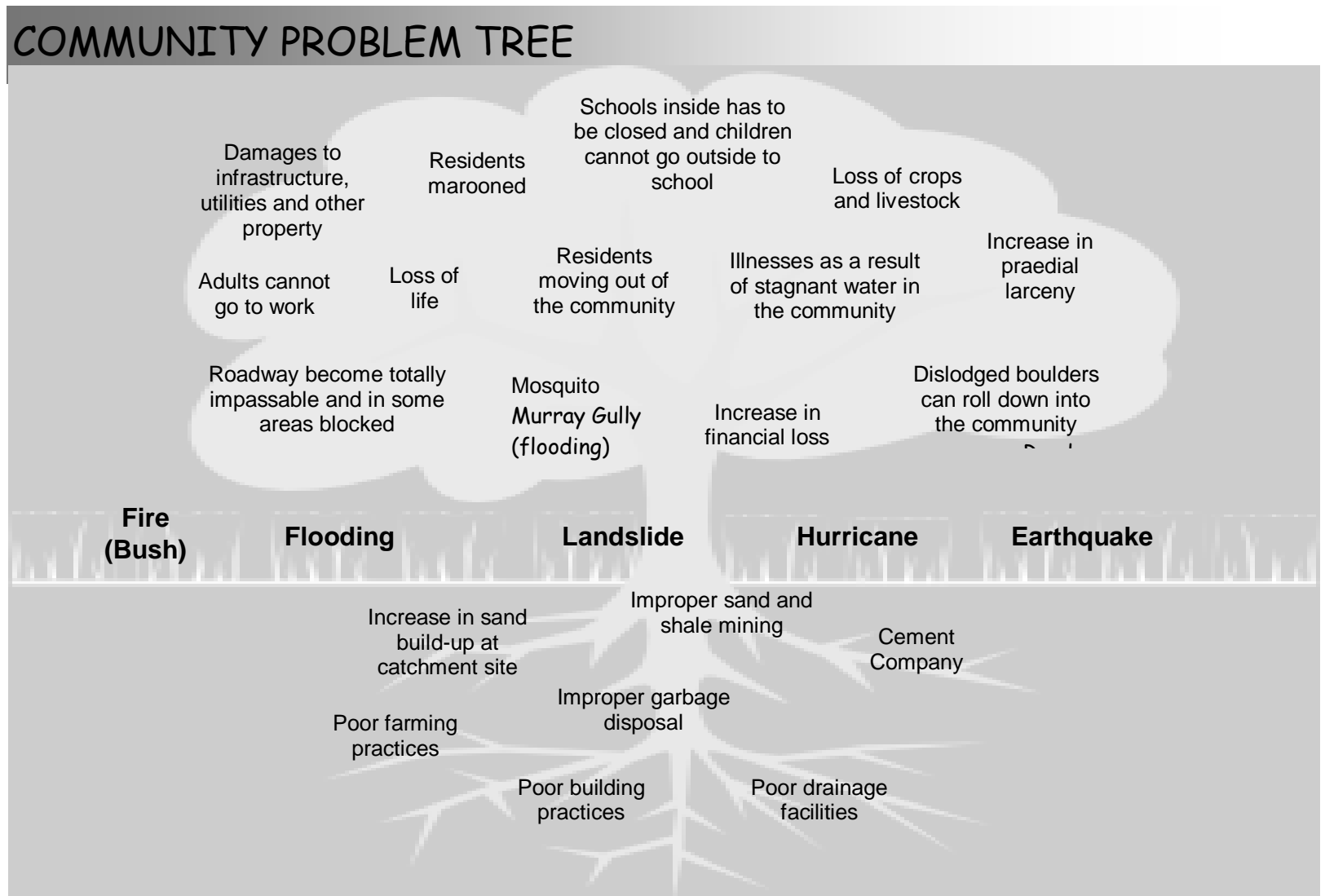
- HOUSE
- BANK
- CEMETERY
- CHURCH
- COMMUNITY CENTRE
- FACTORY
- HEALTH CENTRE
- POLICE STATION
- POST OFFICE
- SCHOOL
- TRIBUTARY (YALLAHS)
- YALLAHS RIVER
- MAJOR ROADS
- MINOR ROADS
- TRACK
- FLOOD ZONE
- LANDSLIDE



Canadian International Development Agency / Agence canadienne de développement international  
 PRODUCED BY ODPEM AND THE COMMUNITY OF LLANDEWEY, ST THOMAS BDRP PROJECT

## Community Problem Tree

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



# Community S.W.O.T Analysis

## STRENGTHS

What are your advantages?

1. Several functioning CBOs and churches
2. Farming, Small Business
3. Schools, Police Station, Health Centre, Post Office, Bank, and Community Centre. Teachers, Police, Soldiers.
4. Access to landlines and wireless technology.
5. River, Land, Sand, Shale
6. Historical sites

## WEAKNESSES

What could be improved?

- |   |                                 |
|---|---------------------------------|
| 1. More attendance at CBOs              | 12. River training              |
| 2. Political representatives are absent | 13. Sand & Shale mining         |
| 3. Job creation                         | 14. Fencing of school compounds |
| 4. Training opportunities               |                                 |
| 5. Level of education                   |                                 |
| 6. Water facilities                     |                                 |
| 7. Use of pit latrine                   |                                 |
| 8. Road conditions                      |                                 |
| 9. Lack of service vehicle              |                                 |
| 10. Lack of internet access             |                                 |
| 11. Disposal of garbage                 |                                 |

## OPPORTUNITIES

Where good is facing you?

1. Road rehabilitation to be funded by Chinese
2. Assistance for Bee Farmers from SRC
3. Bank loans
4. Assistance for farmers from RADA
5. Community / sporting exposure

## THREATS

What obstacles do you face?

1. Murray Gully (flooding)
2. Flooding
3. Boulders (houses & shops)
4. Ramble bridge
5. Illegal connections
6. Rivers
7. Praedial larceny
8. Lack of school fencing
9. Improper roofing for school

### Identification of Future Hazards

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

**Table PR2: Future Hazards**

HAZARD	POSSIBLE IMPACT
Bush Fire- Savannah Cocoa Walk Windsor Forest Goat Ridge Manhem Pass	<ul style="list-style-type: none"> <li>• Damage to livestock, property and to some extent houses</li> <li>• Damage to utility wires and poles</li> <li>• Damage Agricultural Lands which results in lost of income and affect the livelihood of the community.</li> </ul>
Flooding - Llandewey Community	<ul style="list-style-type: none"> <li>• Contamination of water sources</li> <li>• Contribute to water Borne diseases</li> <li>• Damage to houses and other structures in community</li> <li>• Residents marooned</li> <li>• Death and injury of residents</li> <li>• Flooded Roads become inundated and impassable.</li> <li>• Loss of Farm Livestock and agriculture</li> </ul>
Earthquakes- Llandewey Community	<ul style="list-style-type: none"> <li>• Disruption of sewage system which may cause sewage to</li> </ul>



HAZARD	POSSIBLE IMPACT
	<p>enter water sources, eg. rivers.</p> <ul style="list-style-type: none"> <li>• Damage to houses and other structures in community</li> </ul>
Hurricane- Llandewey Community	<ul style="list-style-type: none"> <li>• Damage to houses, livestock and agricultural farms</li> <li>• Potential of Flooding</li> </ul>

### Identification of Community Vulnerability

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

**Table PR3: Vulnerability Summary and Approximate Value of Elements at Risk**

HAZARD	VULNERABLE ASSET AND POSSIBLE IMPACT	APPROXIMATE VALUE OF ELEMENT AT RISK
<b>Hurricane/ Flooding</b>	<b>Bank</b> – Hurricane	To be determined
	<b>Roadways</b> – Damaged and/or blocked	“
	<b>Police Station</b> – Structural Damage	
	<b>Health Centre</b> - Structural Damage, damage to equipments, disruption of service.	
	<b>Ramble Basic School</b> – structural damage, disruption of school system, damage to school files.	
	<b>River Head Basic School</b> - structural damage, disruption of school system, damage to school files.	
	<b>Ramble Community Centre</b> - structural damage,	
	<b>Bethesda All Age</b> - structural damage, disruption of school system, damage to school files.	
	<b>Bethlehem Basic</b> – structural damage, disruption of school system, damage to school files.	“

HAZARD	VULNERABLE ASSET AND POSSIBLE IMPACT	APPROXIMATE VALUE OF ELEMENT AT RISK
	<b>Post Office</b> - structural damage, damage to documents.	
<b>Earthquake</b>	<b>Road</b> – damage to road network	“
	<b>Houses</b> - Damaged and/or destroyed	“
<b>Landslide</b>	<b>Health Centre</b> -soil erosion in vicinity Post office-mud and rubble damage structure <b>Farm Lands</b> -damage to crops	“

## Reducing Community Vulnerability

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

**Table PR3: Corrective Actions to Reduce Community Vulnerability**

HAZARD	VULNERABLE ASSETS	CORRECTIVE ACTIONS
Flooding	Houses Farms Roads People Infrastructures	Identify and enforce no-building zones by use of signs and public education Public education: proper farming practices Maintenance of drains and roads as well as better construction of roads River training
Hurricane	Houses Farms Roads People Infrastructures	Identify and enforce no-building zones by use of signs and public education Public education: proper farming practices Maintenance of drains and roads as well as better construction of roads

HAZARD	VULNERABLE ASSETS	CORRECTIVE ACTIONS
		River training
Bush Fires	Farms	Public education: proper farming practices
Earthquake	Houses and other infrastructures	Public education: earthquake awareness
Landslide	Houses Farms Roads People Infrastructures	Identify and enforce no-building zones by signs and public education Public education: proper farming practices Build retaining walls

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

**Table PR4: Reducing Llandewey Vulnerability**

VULNERABILITY	CORRECTIVE ACTIVITIES/ACTION	RESOURCES NEEDED
<b>A. Environmental</b>		
Bush fire	<ul style="list-style-type: none"> <li>• Public education about proper farming practices</li> <li>• Establish fire post</li> </ul>	Input from RADA, NEPA and St Thomas brigade to establish fire posts.
Rock Falls/ landslide	<ul style="list-style-type: none"> <li>• Reforestation</li> <li>• Public Education on farming practices</li> <li>• Retaining walls</li> <li>• Signs and Signal</li> </ul>	Input from responsible agencies eg. NEPA, ODPEM, Parish Council, NWA
Solid waste disposal	<ul style="list-style-type: none"> <li>• Public education on proper garbage disposal and recycling</li> </ul>	Regularized collection from NSWMA
<b>B. Social/Economic</b>		
Unemployment	<ul style="list-style-type: none"> <li>• Get private &amp; public sector involve to construct community centre</li> </ul>	Funding from CHASE,JSIF, Digicel Foundation
High Level of predial larceny	<ul style="list-style-type: none"> <li>• Get private &amp; public sector involve to construct community centre               <ul style="list-style-type: none"> <li>• Greater Job Creation</li> <li>• Higher level of Law Enforcement Present</li> </ul> </li> </ul>	Funding from CHASE,JSIF, Digicel Foundation, Peer Councilors, Security and Law Enforcement
Poor development Practices	<ul style="list-style-type: none"> <li>• Sensitization of where to construct buildings</li> </ul>	St. Thomas Parish Council, NEPA, ODPEM

VULNERABILITY	CORRECTIVE ACTIVITIES/ACTION	RESOURCES NEEDED
	<ul style="list-style-type: none"> <li>• Conformity to building regulations</li> </ul>	
Civic amenities	<ul style="list-style-type: none"> <li>• Proper water supply</li> </ul>	
<b>C. Health Related</b>		
<p>Contaminated Water, Threat of epidemic outbreak of Gastrointestinal disease</p> <p>Damage to Water sources</p>	<ul style="list-style-type: none"> <li>• Boil Water before use</li> <li>• Public Education on importance to practice conservation measures, proper water storage, entrapment of rain water, treatment of water sources for mosquito larva, proper disposal of cans, tyres and other containers that can collect water.</li> </ul>	Ministry of health, Parish Council, ODPEM
<b>D. Political</b>		
Lack of political support from Member of Parliament and Councilor	<ul style="list-style-type: none"> <li>• Better representation from our political members</li> <li>• Awareness of community needs and support community activities</li> </ul>	

### Priority Listing of Hazards

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

IMPACT
High - 3
Medium - 2
Low - 1
None - 0

PROBABILITY OF OCCURRENCE
Very Likely - 3
Likely - 2
Unlikely - 1

**Table PR5: Priority Listing of Hazards**

Hazard	Probability of Occurrence	IMPACT ON COMMUNITY					
		People	Buildings	Infrastructure	Critical Facilities	Livelihoods	Total
Flooding	2	3	1	3	2	2	22
Landslides	3	3	1	3	3	3	39
Fire (Bush)	3	1	1	1	2	3	24
Earthquake	2	1	1	1	1	1	10



## Community Resources and Capacity Analysis

In order for the community to implement its Community Based Disaster Risk Management Plan, an analysis of the community's resources and capacities to cope and manage disasters was assessed and a listing of these is provided below.

**Table PR6: Community Capacity**

Capacity (Skills)	Type of Resource	Task
Knowledge	Teachers, Schools, Elderly, Historians	Impart knowledge and document history of the community
Skills	Carpenters, Teachers, Mason, Furniture maker, Technicians, Electricians, Cosmetologist, Dress-makers, Welders, Tilers, Barbers, Housekeepers, Caterers, Interior decorators, Musicians, Artists	Provide goods and services to the community and elsewhere.
Networks	CBOs Partner Plan (P.C. Bank)	Governs and encourages savings
Transportation	Taxi, Market trucks, Private vehicles, Bicycle, Bike	Facilitates mobility
Building / Structures	Shale sites, Sand sites, Block sites, Community Center	Provide building materials and house resource centre
Means of care	Basic Schools	Provide early childhood education
Medical Care	Health centre	Provide health care
Means of communication	Landlines, Radio, CB radios, Media, Cell phones, Media runners	Facilitate communication
Commercial enterprises	Shops Quarries	Provide for the basic needs Provide employment and finance

## MITIGATION

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

### Areas Which Should Not Be Developed

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

**Table PR7: Areas for No Development**

Area	Reason
Guinea Corn Piece	Residents marooned in periods of prolonged rainfall
Gordon Castle	Residents marooned in periods of prolonged rainfall
Orange Tree	Residents marooned in periods of prolonged rainfall
Top Smithfield up to Murray Gully	Area prone to heavy flooding and landslide
Mandella Lane, Llandewey	Area floods and residents are marooned by the Yallahs River and Spring Coast

## Zoning

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

**Table PR8: Suitable Areas for Development**

Area	Type of Development which would be safe
Llandewey Community Centre Playfield	Mini Stadium
Ramble Community Centre Playfield	Mini Stadium
Windsor forest playfield	Mini stadium
Windsor Forest Land	Housing
River Head Land	Housing
Easington land	Housing
Easington playfield	Mini Stadium
Llandewey land	Community Park and Recreational Area

**Areas Which Can Be Developed With Appropriate Mitigation Activities**

These are “special areas” in the community which could be developed or could be made safer if certain mitigation activities were implemented.

**Table PR9: Special Areas for Development**

<b>AREA</b>	<b>MITIGATION MEASURES NEEDED</b>
<b>Ramble</b>	<b>Mitigation measure such as drains to facilitate water runoffs and also retaining walls where landslides occur should be implemented in order to minimize effects of disasters.</b>

## Community Mitigation Activities

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

**Table PR10: Community Mitigation Activities**

HAZARD	ACTIVITY	TIMEFRAME
Flooding	Public education: <ul style="list-style-type: none"> <li>• Building in no-building zones</li> <li>• Proper farming practice</li> </ul> Proper garbage disposal River training Regular drain cleaning and maintenance NSWMA to provide regular waste pick-up schedule	Ongoing
Hurricane	Public education: <ul style="list-style-type: none"> <li>• Building in no-building zones</li> <li>• Proper farming practice</li> </ul> Proper garbage disposal River training Regular drain cleaning and maintenance NSWMA to provide regular waste pick-up schedule	Ongoing
Bush Fires	Public education	Ongoing

HAZARD	ACTIVITY	TIMEFRAME
	<ul style="list-style-type: none"> <li>• Proper Farming Practices</li> </ul> Establish fire posts	
Earthquake	Public education <ul style="list-style-type: none"> <li>• Earthquake awareness</li> </ul> Enforce building codes	Over the next one year
Landslide	Public education <ul style="list-style-type: none"> <li>• No building zones</li> <li>• Proper farming practices</li> </ul> Tree planting Building Retaining walls	Ongoing

### Mitigation Activities Requiring External Help

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

**Table PR11: Mitigation Activities Requiring External Help**

HAZARD	ACTIVITY	AGENCY
Flooding and Hurricane	<ul style="list-style-type: none"> <li>• Enforcement of Building Codes</li> <li>• River training</li> <li>• Collection of garbage</li> <li>• Cleaning and maintenance of drains</li> <li>• Enforcement of No-Building Zones</li> </ul>	<ul style="list-style-type: none"> <li>• Parish Council &amp; NEPA</li> <li>• National Works Agency</li> <li>• NSWMA</li> <li>• National Works Agency</li> <li>• Parish Council &amp; NEPA</li> </ul>
Landslides	<ul style="list-style-type: none"> <li>• Enforcement of No-Building Zones</li> <li>• Farming Practices Education</li> <li>• Tree Planting</li> <li>• Building Retaining Walls</li> </ul>	<ul style="list-style-type: none"> <li>• Parish Council &amp; NEPA</li> <li>• RADA</li> <li>• Forestry Dept. &amp; P.C.</li> <li>• National Works Agency (NWA)</li> </ul>
Fires (Bush)	<ul style="list-style-type: none"> <li>• Farming Practices Education</li> <li>• Establish Fire Post</li> </ul>	<ul style="list-style-type: none"> <li>• RADA and NEPA</li> <li>• Jamaica Fire Brigade, Parish Council, ODPEM, NWC</li> </ul>
Earthquake	<ul style="list-style-type: none"> <li>• Earthquake Awareness Education</li> <li>• Enforce Building Codes</li> </ul>	<ul style="list-style-type: none"> <li>• ODPEM</li> <li>• Parish Council &amp; NEPA</li> </ul>

## Mitigation Action Plan

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

**Table PR12: Community Mitigation Action Plan**

<b>Hazard Impact</b>	<b>Mitigation Required</b>	<b>Areas for Improvement</b>	<b>Timeframe for Action Plan</b>	<b>Priority Ranking</b>	<b>Resource</b>
<b>Flood</b> Damage and destruction of houses, damages to crops and livestock, roadway impassable, residents marooned death and injury of residents.	Public education: <ul style="list-style-type: none"> <li>• Building in no-building zones</li> <li>• Proper farming practice</li> </ul> Proper garbage disposal River training Regular drain cleaning and maintenance NSWMA to provide regular waste pick-up schedule	Llandewey Community	As soon as possible	High	Money Man-power Tractor / Backhoe NSWMA Rep.(trucks) RADA Parish Council ODPEM NWA NEPA
<b>Hurricane</b> Damage and	Public education: <ul style="list-style-type: none"> <li>• Building in no-building</li> </ul>	Llandewey Community	As soon as possible	High	Money Man-power



<b>Hazard Impact</b>	<b>Mitigation Required</b>	<b>Areas for Improvement</b>	<b>Timeframe for Action Plan</b>	<b>Priority Ranking</b>	<b>Resource</b>
destruction of houses, damages to crops and livestock, roadway impassable, residents marooned death and injury of residents.	<p>zones</p> <ul style="list-style-type: none"> <li>• Proper farming practice</li> </ul> <p>Proper garbage disposal</p> <p>River training</p> <p>Regular drain cleaning and maintenance</p> <p>NSWMA to provide regular waste pick-up schedule</p>				Tractor / Backhoe NSWMA Rep.(trucks) RADA Parish Council ODPEM NWA NEPA
<b>Landslide</b> Damage and destruction of houses, damages to crops and livestock, roadway impassable, residents	<p>Public education</p> <ul style="list-style-type: none"> <li>• No building zones</li> <li>• Proper farming practices</li> </ul> <p>Tree planting</p> <p>Retaining walls</p>	<p>Windsor Forest</p> <p>River Head</p> <p>Goat Ridge</p> <p>Smithfield</p> <p>Section of Llandewey by</p> <p>Long Wall</p> <p>Ramble</p>	As soon as possible	<p>High</p> <p>High</p> <p>High</p> <p>High</p> <p>Medium–</p> <p>Low</p>	<p>Money</p> <p>Man-power</p> <p>Tractor /</p> <p>Backhoe</p> <p>NSWMA</p> <p>Rep.(trucks)</p> <p>RADA</p> <p>Parish Council</p> <p>ODPEM</p> <p>NWA</p>

<b>Hazard Impact</b>	<b>Mitigation Required</b>	<b>Areas for Improvement</b>	<b>Timeframe for Action Plan</b>	<b>Priority Ranking</b>	<b>Resource</b>
marooned, death and injury of residents, and houses cave in.					NEPA Forestry Department
<b>Fires (Bush)</b> Damage to crops and livestock	Public education <ul style="list-style-type: none"> <li>• Proper Farming Practices</li> </ul> Establish fire posts	Savannah Cocoa Walk Windsor Forest Goat Ridge Manhem Pass	As soon as possible	High High High High	NEPA Fire department NWA ODPEM Parish Council Money Man Power JDF NWC
<b>Earthquakes</b> Damages to buildings and other infrastructures	Public education <ul style="list-style-type: none"> <li>• Earthquake awareness</li> </ul> Enforce building codes	Llandewey Community	Over the next one year	Low	NEPA NWA Parish Council Man Power

## Risk Transfer

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

**TABLE PR13: TRAINING**

<b>INFORMAL risk transfer options</b>	Community dues- Collect special dues at CBOs meetings outside of the regular dues. This will be given to affected contributors.
	Fundraising activities- Different events will be undertaken/hosted as a mean of raising funds. This fund will be lodged into the account at the P.C. Bank. The money will later be withdrawn to assist affected residents in times of disaster.
	Partner plan- within the CDC, the umbrella organization, the CBOs members will contribute as a group towards a partner plan. When the draw is received it will be used to assist affected members or to address the main contributor to the hazard.
<b>FORMAL risk transfer options</b>	Insurance- The organization will open two insurance policies, one for farmers and one for household owners. This will be done to increase the likelihood of the members to receive insurance coverage and at a lower premium.
	Bank Partner Plan- within the CDC, the umbrella organization, the CBOs members will contribute as a group towards a partner plan. When the draw is received it will be used to assist affected members or to address the main contributor to the hazard.

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

**TABLE PR14: TRAINING**

<b>Community Member/ Team</b>	<b>Training Activity</b>	<b>Agency or Source</b>	<b>Who responsible to Organize</b>	<b>Time Frame</b>
Community Disaster Risk Team	Search & Rescue	ODPEM	Florence Marsh	Completed
Community Disaster Risk Team	First Aid	Red Cross ODPEM	Florence Marsh	Completed
Horace Ogilvie	Damage Assessment	ODPEM	Florence Marsh	Completed
Community Disaster Risk Team	Shelter Management	ODPEM	Florence Marsh	December 2010
Community Disaster Risk Team	Farming Practices	RADA	Florence Marsh	January 2011
Community Disaster Risk Team	Radio Communication	ODPEM	Florence Marsh	May 2011
Community Disaster Risk Team	Psycho-Social	ODPEM	Florence Marsh	April 2011
Community Disaster Risk Team	Self Defense	JDF	Florence Marsh	February 2011

**PR15 : 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.

<b>Hazard</b>	<b>Public Education Action</b>	<b>Public Education Strategy</b>	<b>Timeline</b>	<b>Responsibility</b>
Flooding	Building in no-building zones Building codes Proper farming practices	Public education seminars	Within the next 3 months	RADA Parish Council
Hurricane	Building in no-building zones Building codes Proper farming practices	Public education seminars	Within the next 3 months	RADA Parish Council
Landslide	Proper farming practices	Public education seminars	Within the next 3 months	RADA NEPA
Earthquake	Building codes	Public education seminars	Over the next one year	Parish Council
Fire(Bush)	Proper farming practices	Public education seminars	Over the next one year	RADA NEPA Forestry

**PREPAREDNESS AND INITIAL RESPONSE**

**Monitoring**

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

**Table PR16: Community Monitoring Programme**

<b>SITUATION</b>	<b>RESPONSIBILITY</b>
Hazardous or dangerous situations in the community	Oshane Morgan
Listening to the radio for official information	Curzan Simpson
Monitoring marine weather forecasts	Curzan Simpson
Liaising with the Parish Disaster Committee and Coordinator and ODPEM	Curzan Simpson and Horace Ogilvie
Other	Ms. Fiona Lynch

## Warning

The community must be alerted to the possibility of a threat or dangerous situation. Table 14 identifies the traditional warning systems to be used by residents to warn of impending disasters- hurricane/flooding, landslide, storm surge and fire for protection of the community.

**Table PR17 : Traditional Early Warning System**

Hazard	Method of Delivery	Target Group	Responsibility
Flood	Word of mouth Cell phones	Entire Community	Community Disaster Team
Hurricane	Word of mouth Cell phones Media	Entire Community	Community Disaster Team
Landslide	Word of mouth Cell phones	Entire Community	Community Disaster Team
Fire (Bush)	Word of mouth Cell phones	Entire Community	Community Disaster Team
Earthquake	Word of mouth Cell phones	Entire Community	Community Disaster Team

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

**Table PR18: Early Warning Activity and Responsibility**

<b>HAZARD</b>	<b>ACTIVITY</b>	<b>RESPONSIBILITY</b>	<b>MEANS</b>
<b>Hurricane and Flooding</b>	Ringing the church bell, calling on cell phone, monitoring media	Ms. Florence Marsh Ms. Ann-Kay Luton Mr. Simpson	Cell phone, walk and announce to each resident
<b>Landslide</b>	Informing the community when and where a landslide happens.	CDRM Team	Word of mouth
<b>Earthquake</b>	Public education about what to do in such event Earthquake drills.	CDRM Team	Pamphlets and fliers as well as training activities.



## Evacuation

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

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

**Table PR19: Areas to be evacuated during an Emergency**

HAZARD	Area for Evacuation	Reasons for Evacuating
Hurricane / Flooding	Guinea Corn Piece	Residents are marooned in times of prolonged rainfall
	Orange Tree	Residents are marooned in times of prolonged rainfall
	Residents are marooned in times of prolonged rainfall	
	Riverhead	Residents are marooned in times of prolonged rainfall
Fire (Bush)	Hills of Llandewey	Threat to property e.g. Farm and livestock
Earthquake	Church st., ramble	Believe that the area is on a Earthquake belt

## Evacuation Route

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

**Table PR 20: Evacuation Route and Mode of Transportation to Emergency Shelter**

Area for Evacuation	Priority (High, Medium, Low)	Shelter	Evacuation Route	Transportation Mode	Resources
Guinea Corn Piece	High	Bethesda All Age School	Llandewey Ramble Main Rd.	<ul style="list-style-type: none"> <li>• Walking</li> <li>• Private Motor</li> </ul>	Stove, Mattress, Blankets, Tarpaulin, Lanterns
Orange Tree	High	Bethesda All Age School	Llandewey Ramble Main Rd.	<ul style="list-style-type: none"> <li>• Walking</li> <li>• Private Motor</li> </ul>	Stove, Mattress, Blankets, Tarpaulin, Lanterns
Gordon Castle	High	Bethesda All Age School	Llandewey Ramble Main Rd.	<ul style="list-style-type: none"> <li>• Walking</li> <li>• Private Motor</li> </ul>	Stove, Mattress, Blankets, Tarpaulin, Lanterns

**Table PR21: Evacuation Procedures**

<b>ACTIVITY</b>	<b>RESPONSIBILITY</b>
Residents will be notified of any hazard threatening the island and the community	CDRM Team Members
Residents will participate in evacuation drills	CDRM Team Members
Residents will be educated as to the necessary items that they should take with them to the shelters	Horace Ogilvie
Residents will be notified of the shelters in their area and will be given detailed directions.	CDRM Team Members
Residents living across the river will be advised to evacuate at least 24 hours prior to the impending hazard	Horace Ogilvie, Oshane Morgan
Residents living across the river, on river banks, in flood prone areas, and in unstable houses will be advised to evacuate to the shelters	Horace Ogilvie, Oshane Morgan
Check that all areas are evacuated	Curzan Simpson, Rodrae Kellyman , Oshane Morgan
Inform parish disaster committee	Curzan Simpson
Ensure that shelter are available	Horace Ogilvie

## Evacuation Team

District/ Area	Evacuation Team/ Person	# Households in Area	Vulnerable Group & #'s to evacuate	Team Responsibility
Easington	Fitzroy Legister Jerry Blake Donna Sewell	75	Residents living on the river bank.	To ensure that the residents evacuate the area and move to the shelter as soon as possible.
Smithfield	Mavis Thompson	12	Residents of top Smithfield	To ensure that the residents evacuate and move to the appropriate shelter as soon as possible.
Ramble	Oshane Morgan Sharon Bennette Leyland Shepherd Florence Marsh	123	Guinea Corn Piece (4 households)	To ensure that the residents get across the river within 24hrs prior to the community feeling the full impact of the hazard.
Llandewey	Ann-Kay Luton Daneisha Whitton Joette Dawson Horace Ogilvie Howard McPherson Jacqueline Howell-Reid	108	Gordon Castle (2 Households) Orange Tree (7 Households)	To ensure that the residents get across the river within 24hrs prior to the community feeling the full impact of the hazard.

<b>District/ Area</b>	<b>Evacuation Team/ Person</b>	<b># Households in Area</b>	<b>Vulnerable Group &amp; #'s to evacuate</b>	<b>Team Responsibility</b>
River Head	Curzan Simpson	63		To ensure that the vulnerable residents evacuate and go to the designated shelters.
Windsor Forest	S. Bright Sonia Shepherd	84		To ensure that the vulnerable residents evacuate and go to the designated shelters.
Goat Ridge	Rodrae Kellyman Eunice Shand Cecil Kellyman	17		To ensure that the vulnerable residents evacuate and go to the designated shelters.

## Shelter

Table 19 below highlights the designated shelters for the community. All persons are encouraged to carry food to last them for three days. See Appendix D for list of items needed.

**Table PR22: List of Official and Unofficial Emergency Shelters**

<b>Shelter Name &amp; Location</b>	<b>Access Route to Shelter</b>	<b>Type of Use</b>	<b>Condition of Shelter</b>	<b>Area Served</b>	<b>Shelter Manager &amp; Team (Name, Contact)</b>	<b>Agency Liaison Officer (Name, Contact)</b>
Easington Primary School	From Norris and Woodbourne, take the first left turn after the Easington bridge. From Smithfield, proceed on the Easington main road and take the first right turn at the complex.	Hurricane Flood	Satisfactory	Norris Woodbourne Easington Smithfield	Fitzroy Legister Jerry Blake Mavis Thompson	Fitzroy Legister
Bethesda All Age School	From Ramble, proceed on the Llandewey main road and take the	Hurricane Flood	Unsatisfactory	Guinea Corn Piece Orange Tree Gordon Castle Llandewey	Ann-Kay Luton 449-1116, 552-8812 Horace Ogilvie	Ann-Kay Luton 449-1116, 552-8812

<b>Shelter Name &amp; Location</b>	<b>Access Route to Shelter</b>	<b>Type of Use</b>	<b>Condition of Shelter</b>	<b>Area Served</b>	<b>Shelter Manager &amp; Team (Name, Contact)</b>	<b>Agency Liaison Officer (Name, Contact)</b>
	right turn at Cocoa Walk Road or Murray Shop. From Llandewey, proceed on the main road and take the left turn at Cocoa Walk Road or Murray shop.				449-6958 Daneisha Whitton	

### Preparedness Action Plan

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

**Table PR23: Community Preparedness Action Plan**

<b>ACTIVITY</b>	<b>RESPONSIBILITY</b>	<b>TIMEFRAME</b>
Clean all drains	Curzan Simpson, Parish Council	Twice per year.
Train team members	ODPEM, Red Cross	Once per year.
Replenish First aid/SAR kits	Not Assigned	Not Assigned
Make arrangements for access to relief and emergency supplies*	CDRM Team, Parish Council, PDC	February to March each year
Start hurricane awareness	Mrs Jacqueline Howell- Reid	June to end of year



## **SIMULATION AND DRILLS**

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

**Table PR24**

<b>Type of Exercise/ Drill</b>	<b># Drills per Year</b>	<b>Date of Next</b>	<b>Organizer (who responsible)</b>
Earthquake Drill	Once per year	January 2012	Llandewey Zonal Committee
Fire Drill	Once per year	October 2012	Llandewey Zonal Committee
Flooding & Hurricane Simulation	Once per year	May 2012	Llandewey Zonal Committee

## **RESPONSE AND RELIEF**

### **TABLE PO1: Instructions for DRM Team**

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

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

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

**Response**

***Search and Rescue/First Aid/Emergency Medical Care***

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

ACTIVITY	RESPONSIBILITY	SHORT REPORT
<b>Send out Search and Rescue and First Aid Team to check on:</b>		
Elderly	CDRM Team	Zonal Chairman and Parish Disaster Coordinator
Persons with Disabilities	CDRM Team	Zonal Chairman and Parish Disaster Coordinator
Single Mothers	CDRM Team	Zonal Chairman and Parish Disaster Coordinator
Damaged buildings and houses for occupants	Radrae Kellyman, Fitzroy Legister Jerry Blake, Curzan Simpson, Oshane Morgan	Zonal Chairman and Parish Disaster Coordinator
Persons stranded by floodwater	Curzan Simpson	Zonal Chairman and Parish Disaster Coordinator
<b>Check for:</b>		
Deaths, Injuries	Patrick Ogilvie, Curzan Simpson	Zonal Chairman and Parish Disaster Coordinator
		Zonal Chairman and Parish Disaster Coordinator
Persons in need of emergency assistance	Curzan Simpson	Zonal Chairman and Parish Disaster Coordinator
Call for any external assistance	Florence Marsh, Curzan Simpson	Zonal Chairman and Parish Disaster Coordinator
Update PDC, ODPEM	Florence Marsh, Curzan Simpson, Ann Kay Luton	Zonal Chairman and Parish Disaster Coordinator
Update Community	CDRM Team	Zonal Chairman and Parish Disaster Coordinator

**Table 21: Response Procedure – Search and Rescue/First Aid/Emergency Medical Care**

*Initial Damage Assessment*

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

**Table PO2: Initial Damage Assessors**

ACTIVITY	RESPONSIBILITY
Send out rapid assessment team	
Check on:	
Roads opened/closed	Oshane Morgan, Ann-Kay Luton
Roads In need of urgent repair to provide access	Oshane Morgan, Ann-Kay Luton
Power:	
Fallen lines, poles transformers	Horace Ogilvie, Curzan Simpson
Live wires	Horace Ogilvie, Curzan Simpson
Water and Sewage	
Broken/missing water mains	Horace Ogilvie
Water available	Horace Ogilvie, Curzan Simpson
Sewage pipes broken/leaking	Not Applicable
Describe State of:	
Community	Florence Marsh, Curzan Simpson
Schools	Horace Ogilvie
Clinic	
Church	Horace Ogilvie

Shops and businesses	Individuals
Boats and fishing gear	Not Applicable
Sea Wall and sea defense	Not Applicable
Mangroves, environment	Not Applicable

### Damage Assessment Procedure

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

**Table PO3: Community Damage Assessors**

Type of Assessment ( Buildings, Agriculture, Welfare etc)	Team Leader (Name, Contact)	Agency Report is to be Submitted to	Time Frame
Initial Assessment		Parish council, PDC, ODPEM	momentarily
Buildings, utilities and infrastructure	Horace Ogilvie	Parish council, PDC, ODPEM	momentarily
Welfare	Horace Ogilvie	Parish council, PDC, ODPEM	momentarily
Agriculture	Horace Ogilvie	Parish council, PDC, ODPEM	momentarily
Preliminary assessment		Parish council, PDC, ODPEM	momentarily
Buildings, utilities and infrastructure	Horace Ogilvie	Parish council, PDC, ODPEM	momentarily
Welfare	Horace Ogilvie	Parish council, PDC, ODPEM	momentarily
Agriculture	Horace Ogilvie	Parish council, PDC, ODPEM	momentarily

*Response Action Plan*

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

**TABLE PO4: Community Response Action Plan**

<b>RESPONSE ACTIONS IN ORDER OF PRIORITY</b>	<b>RESPONSIBILITY</b>	<b>AGENCY TO REPORT TO</b>
Evacuation Route Management	Zonal Committee	
Evacuation	Ann-Kay Luton-Llandewey, Florence Marsh -Ramble, Curzan Simpson Jacqueline Howell-Reid	St Thomas Parish Council, ODPEM, Police
Trucking of Water	Curzan Simpson	ODPEM
Alternative Sources of Lighting	Community Members	
Search and Rescue	Zonal Committee	ODPEM, Police
Children Welfare and the Disabled	Zonal Committee	
Initial Damage Assessment	NIS Office Persons	NIS Office
Welfare Assessment	NIS Office Persons	NIS Office
Distribution of relief supplies	Curzan Simpson	NIS Office , St Thomas Parish Council, ODPEM
First Aid	Not Assigned	

**Relief**

**TABLE PO5: Relief Assistance**

ACTIVITY	RESPONSIBILITY
Identify members of community who have:	
Received damage	Ms. Florence Marsh Curzan Simpson
Need shelter	Ms Ann-Kay Luton Horace Ogilvie
Lost means of income	Curzan Simpson Oshane Morgan
Need assistance	Curzan Simpson Oshane Morgan
Identify members of the community in need of psycho-social support or counseling	Florence Marsh
Compile list and update PDC, ODPEM	Ms. Florence Marsh Ms. Sharon Bennett



## RECOVERY

### Recovery Action Plan

TABLE PO6: Community Recovery Action Plan

ACTIVITY	PRIORITY	RESPONSIBILITY	TIMEFRAME	COST
Initial clean up of roads	1	Curzan Simpson Oshane Morgan	Immediately after the event has passed and assessment are done	To be determined
Returning of shelterees to residences	2	Horace Ogilvie	As soon as all clear is given	To be determined
Shutting down of shelters	2	Horace Ogilvie Fitzroy Legister Jerry Blake Mavis Thompson	Soon as shelterees are returned and it is ok to do so	To be determined
Coordination of relief assistance	1	Mrs. Jacqueline Howell-Reid Curzan Simpson	As soon as possible	To be determined
Restoration of utilities	1	Relevant agencies	As soon as possible	To be determined

**APPENDIX A – VULNERABLE POPULATION**

<b>VULNERABLE GROUP/PERSON</b>	<b>TYPE OF VULNERABILITY (DISABILITY/HAZARD)</b>	<b>LOCATION OF VULNERABLE</b>	<b>NEXT OF KIN/CARE GIVER &amp; CONTACT</b>	<b>CDRT/CERT MEMBER RESPONSIBLE</b>	<b>RESPONSIBILITY (WHAT TO DO)</b>
Tom	Blind	Ramble	Dottie Bartley	Oshane Morgan	Take to shelter if necessary, check on health status
Annie	Bed ridden	Ramble	Dottie bartley	Oshane Morgan	Take to shelter if necessary, check on health status
Lillian McDowell	Unsound mind	Ramble		Oshane Morgan	Take to shelter if necessary, check on health status
Andrew Newell	Unsound mind	Ramble		Oshane Morgan	Take to shelter if necessary, check on health status
Elisha Brian	No legs, blind	Ramble	Pearl Brian	Oshane Morgan	Take to shelter if necessary, check on health status
Steven Carr	Disabled	Ramble		Oshane Morgan	Take to shelter if necessary, check on health status
Rachael Davis	Elderly	Ramble	Iroy Morrison	Oshane Morgan	Take to shelter if necessary, check on health status
Thelma Smith	Alzheimer	Ramble	Bull Smith	Oshane Morgan	Take to shelter if necessary, check on health status

<b>VULNERABLE GROUP/PERSON</b>	<b>TYPE OF VULNERABILITY (DISABILITY/HAZARD)</b>	<b>LOCATION OF VULNERABLE</b>	<b>NEXT OF KIN/CARE GIVER &amp; CONTACT</b>	<b>CDRT/CERT MEMBER RESPONSIBLE</b>	<b>RESPONSIBILITY (WHAT TO DO)</b>
Edgerton Shepherd	Elderly (blind)	Windsor forest	Sonya shepherd	Sonya Shepherd	Take to shelter if necessary, check on health status
Hector Case	Cancer, partially bed ridden	Windsor forest	Denise case	Sonya Shepherd	Take to shelter if necessary, check on health status
Agatha Gillings	elderly	Windsor forest	Sophia Kellyman	Sonya Shepherd	Take to shelter if necessary, check on health status
Millicent Morgan	Parkinson disease	Windsor forest	Rocky Morgan	Sonya Shepherd	Take to shelter if necessary, check on health status
Rudolph Brown	Mentally ill	Windsor forest	Community persons	Sonya Shepherd	Take to shelter if necessary, check on health status
Millicent Ford	Aged	Windsor forest	Andrew Ford	Curzon Simpson	Take to shelter if necessary, check on health status
Ethel Shepherd		Windsor forest		Curzon Simpson	
Buck Davis		Windsor forest		Curzon Simpson	
Dorris Rennie		Windsor forest		Curzon Simpson	
Madam Prendergas	Aged	Windsor forest		Ann-Kay Luton	Take to shelter if necessary

**APPENDIX B – EQUIPMENT/ASSETS/RESOURCE LIST**

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

*Items the community already has*

***Emergency Supplies available in Community***

<b>Items (quantity per item)</b>	<b>Storage Location</b>	<b>Contact Person/s For Storage</b>	<b>Contact Number</b>
Tractors	Individual's home	George Murray	858-0443
Chain Saw			
Machete			
Forks			
Shovels			
Rain Cloaks & Boots			
Lantern			
Kerosene Oil			
Matches & Lighters			
Flashlights			

**APPENDIX C - Items required externally**

<b>Items Required</b>	<b>Quantity</b>	<b>Source (Agency/ Business)</b>	<b>Responsibility</b>
Blanket	25	ODPEM, Parish Council, Red Cross, Hardware stores	Ms. Florence Marsh, Curzan Simpson
Mattress	25	ODPEM, Parish Council, Red Cross, Hardware stores	Ms. Florence Marsh, Curzan Simpson
Lantern	10	ODPEM, Parish Council, Hardware stores	Ms. Florence Marsh, Curzan Simpson
Kerosene Oil	10 Gallon	Individuals, Hardware stores	Ms. Florence Marsh
Matches	1 Case	Hardware Store, Individuals, ODPEM	Ms. Florence Marsh, Curzan Simpson
Lighters	12	Hardware Store, Individuals, ODPEM	Ms. Florence Marsh, Curzan Simpson
Backhoe / Tractor	2	Parish Council, NWA	Ms. Florence Marsh, Curzan Simpson
FIRST-AID KIT	7	Red Cross, ODPEM, Ministry of Health	Ms. Florence Marsh, Curzan Simpson
Rain Cloak / Boots	14	ODPEM, Parish Council, Hardware stores	Ms. Florence Marsh, Curzan Simpson
Helmets	14	ODPEM, Parish Council, Hardware stores	Ms. Florence Marsh, Curzan Simpson
Flashlights	14	ODPEM, Parish Council, Hardware stores	Ms. Florence Marsh, Curzan Simpson
Machete	7	ODPEM, Parish Council, Red	Ms. Florence Marsh,

<b>Items Required</b>	<b>Quantity</b>	<b>Source (Agency/ Business)</b>	<b>Responsibility</b>
		Cross, Hardware stores, RADA	Curzan Simpson
Forks	14	Hardware Stores, RADA	Ms. Florence Marsh, Curzan Simpson
Tarpaulin	7	ODPEM, Parish Council, Hardware stores	Ms. Florence Marsh, Curzan Simpson
Shovels	12	Hardware Store, Individuals, ODPEM	Ms. Florence Marsh, Curzan Simpson
Claw Hammers	12	Hardware Stores	Ms. Florence Marsh, Curzan Simpson

## **APPENDIX D – EMERGENCY SUPPLIES TO BE TAKEN TO SHELTER**

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

## APPENDIX E - Stakeholder Partnerships

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

**Table :** Stakeholder Partnerships

Agency/ Organization/ Representative	Nature of Relationship	Contact Person	Contact Number
Political Representatives	Poor	James Robertson	
Councilor	Little or no support to community projects	Gary Henry	
Churches	Satisfactory		
NWC	Provide Water		
NWA	Construct roads and Clear blocked roads		
JPS	Unsatisfactory		
JFB	Unsatisfactory		
NSWMA	Unsatisfactory		
Tank weld	Unsatisfactory		
RADA	Training and technical assistance	Terrence Glover	982-2205
Forestry	Unsatisfactory		
ODPEM	Training, funding through agencies, technical assistance, support to	Sophia Mitchell	



Agency/ Organization/ Representative	Nature of Relationship	Contact Person	Contact Number
	community programmes		
MOH	Medical care, public education	Nurse Carr	
MOE	Satisfactory	Yvonne Edmonson	325-7361
Media	Unsatisfactory		
CBOs	Satisfactory	Howard McPherson	852-7030
SDC	Technical assistance and support to community activities	Mr. Ralph	342-2546
Police	Satisfactory	Sydney Gordon	733-0487
MLSS	Satisfactory		
St. Thomas Parish Council	Support to community programmes, fix roads		

Stakeholder Analysis continued

## Community Stakeholder Analysis- The Boston Box

<p style="text-align: center;"><b><u>Cash Cow / Steady Ship</u></b></p> <p style="text-align: center;"><b>High importance and Low potential</b></p> <ul style="list-style-type: none"> <li>• Media</li> <li>• Political representatives</li> <li>• CBOs</li> <li>• NWA</li> <li>• NWC</li> <li>• JPS</li> <li>• MOE</li> <li>• NEPA</li> <li>• JFB</li> <li>• NSWMA</li> </ul>	<p style="text-align: center;"><b><u>Rising Star</u></b></p> <p style="text-align: center;"><b>High importance and High potential</b></p> <ul style="list-style-type: none"> <li>• Churches</li> <li>• ODPEM</li> <li>• CBOs</li> <li>• SDC</li> <li>• MOH</li> <li>• Police</li> <li>• MLSS</li> </ul>
<p style="text-align: center;"><b><u>Question Mark</u></b></p> <p style="text-align: center;"><b>Low importance and Low potential</b></p>	<p style="text-align: center;"><b><u>Dog/Brick Wall</u></b></p> <p style="text-align: center;"><b>Low importance and High potential</b></p> <ul style="list-style-type: none"> <li>• Tank weld</li> </ul>

**APPENDIX F – Photo Gallery**





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

### **Objectives**

The concepts and procedures in this SOP are set to:

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

### **Threat Assessment**

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

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

### **Basic Planning Assumptions**

- At least one major Hurricane will probably affect the country/community

- CDRM Group will remain active and functional
- Community members will be responsive to CDRM Group programmes, initiatives, warning and other information.
- There is commitment and support from agencies and departments of government to assist community.
- Community is will to utilize their own 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 an initial monitoring through post-disaster response, recovery, and mitigation. All activities are community driven, with technical assistance provided by agencies, departments, NGOs and private sector as necessary.

Procedures will be categorized into the following phases:

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

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

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

Phase 4: Recovery

## **Hurricane Categories**

### **Category One Hurricane**

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

### **Category Two Hurricane**

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

### **Category Three Hurricane**

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

### **Category Four Hurricane**

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

### **Category Five Hurricane**

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

## **Warnings and Watches**

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

### **Tropical Storm Watch**

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

### **Tropical Storm Warning**

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

**Hurricane Watch**

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

**Hurricane Warning**

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

**Flash Flood Watch**

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

**Flash Flood Warning**

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



## **OPERATING PROCEDURES**

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

Prevention, Mitigation and Preparedness activities as mentioned in these SOPs are specific actions to be taken 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.

<b>ACTIVITIES</b>	<b>POSITION</b>	<b>RESPONSIBLE PERSON(S)</b>
1. Continue to support and promote public information and awareness programmes.	Coordinator – Public Education and Fund Raising:	Mrs Jacqueline Howell- Reid
2. Sensitize special needs population	Coordinator – Public Education and Fund Raising:	Mrs Jacqueline Howell- Reid
3. Organize how special needs population will be evacuated and transportation required.	Coordinator- Preparedness:	Mr. Curzan Simpson
4. Put arrangements in place to have vehicles to be used in evacuation fuelled with petrol	Coordinator- Preparedness:	Mr. Curzan Simpson
5. Send a reminder/update to the Fire Brigade of the evacuation route for the community. Do a walk through if possible	Coordinator- Preparedness:	Mr. Curzan Simpson
6. Sensitization of persons in the community without vehicles of assembly area for transportation to more safe location.	Coordinator – Public Education and Fund Raising:	Mrs Jacqueline Howell- Reid

<b>ACTIVITIES</b>	<b>POSITION</b>	<b>RESPONSIBLE PERSON(S)</b>
7. Identify areas in the community where high potential for infrastructure/property damages.	Coordinator – Vulnerability & Risk Identification:	Mr Oshane Morgan
8. Ensure DRM teams are aware of all high risk locations in the community.	Coordinator – Vulnerability & Risk Identification:	Mr Oshane Morgan
9. Prepare areas for sheltering persons in need	Coordinator- Preparedness:	Mr. Curzan Simpson
10. Re-engage community volunteers to provide assistance in shelters and other areas. Consult with PDC for facilitating training or refresher courses.	Coordinator- Preparedness:	Mr. Curzan Simpson
11. Ensure new developments are assessed and relevant measures put in place to safeguard community.	Coordinator – Prevention & Mitigation	Mr. Curzan Simpson
12. Organize mitigation and prevent projects and work days with technical guidance from relevant agencies (with the help of the PDC.	Coordinator – Prevention & Mitigation	Mr. Curzan Simpson

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

ACTIVITIES	RESPONSIBLE PERSON(S)
<ol style="list-style-type: none"> <li>1. Meet and assess the community's state of preparedness for a hurricane</li> <li>2. Advise community to listen to all weather advisories</li> </ol>	<p><b>DRM Team</b></p>
<ol style="list-style-type: none"> <li>1. Issue warning of threat</li> <li>2. Alert and notify:               <ul style="list-style-type: none"> <li>• PDC that community DRM teams are activated</li> <li>• Other CBOs</li> <li>• Shelter Managers</li> <li>• Response personnel</li> </ul> </li> <li>3. Make available all relevant information on the hazard to the general community.</li> </ol>	<p>Mr. Curzan Simpson Mrs Jacqueline Howell- Reid</p>
<ol style="list-style-type: none"> <li>1. Pre-check and activate SOPs</li> <li>2. Alert all trained community first aiders and search and rescue personnel.</li> <li>3. Have first-aid kits prepared</li> </ol>	<p>Mr. Curzan Simpson</p>

ACTIVITIES	RESPONSIBLE PERSON(S)
<p>Personal for families:</p> <ul style="list-style-type: none"> <li>▪ Make sure your family goes over the family disaster plan.</li> <li>▪ Make plans for protecting your house, especially the roof, windows and doors.</li> <li>▪ Have flashlight and extra batteries</li> <li>▪ Have portable battery-operated radio and extra batteries</li>   <li>▪ Ensure provisions are put in place for emergency food and water.</li> </ul>	<p>Mr. Curzan Simpson</p>
<p>Protecting the community:</p> <ul style="list-style-type: none"> <li>▪ Trim dead or weak branches from trees</li> <li>▪ Clear all drains that will cause flooding</li> </ul>	<p>Mr. Rodrae Kellyman Mr. Curzan Simpson</p>
<p>Listen to all weather advisories and information from ODPEM, MET office, and communicate with PDC.</p>	<p>Ms. Florence Marsh  Mr. Curzan Simpson</p>

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

ACTIVITIES	RESPONSIBLE PERSON(S)
DRM Team Advise the Community to listen to all weather advisories and remain alert	Mr. Curzan Simpson
Continue to listen to all weather advisories and reports.	Mr. Curzan Simpson

**A. HURRICANE WATCH - 48 Hours before Impact**

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

**B. HURRICANE WARNING - 36 Hours before impact**

ACTIVITIES	RESPONSIBLE PERSON(S)
<ol style="list-style-type: none"> <li>1. Activate and brief all community teams and volunteers</li> <li>2. Test the systems of communication within the community.</li> <li>3. If cell phones are to be used ensure credit is bought</li> <li>4. Ensure phones can be charged</li> </ol>	Mr. Curzan Simpson
<p>Activate volunteers to be on standby to assist with damage assessment. Conduct briefing of these volunteers.</p>	Mr. Curzan Simpson
<ol style="list-style-type: none"> <li>1. Activate and prepare emergency shelters</li> <li>2. Deploy relief and welfare volunteers to emergency shelters</li> </ol>	Mr. Curzan Simpson
<p>Ensure contacts are made with the PDC and other stakeholders for assessment of shelter facilities if necessary.</p>	Mr. Curzan Simpson
<p>Contact PDC and prepare to Initiate evacuation procedures for the community.</p>	Mr. Curzan Simpson
<ol style="list-style-type: none"> <li>1. Re-check arrangements and MOUs with</li> </ol>	Mr. Curzan Simpson

ACTIVITIES	RESPONSIBLE PERSON(S)
<p>private bus owners and other volunteers in the community.</p> <p>2. Pre-position the following resources to areas which will potentially be cut off:</p> <ul style="list-style-type: none"> <li>▪ Food stocks/welfare items</li> <li>▪ Communications equipment</li> <li>▪ Manpower</li> <li>▪ Power saws</li> </ul> <p>3. Refuel vehicles</p>	
<p>1. Encourage residents to activate family plans</p> <p>2. Pre-position resources: List these resources</p> <ul style="list-style-type: none"> <li>• equipment, ropes, etc</li> <li>• Food stocks/welfare items</li> <li>• Communications equipment</li> <li>• Manpower</li> </ul>	<p>Mr. Curzan Simpson</p>

**C. 24 Hours before impact**

ACTIVITIES	RESPONSIBLE PERSON(S)
<ol style="list-style-type: none"> <li>1. Notify PDC of activation of evacuation plan</li> <li>2. Consult PDC on all matters relating to the activation of any or all evacuation systems.</li> </ol>	Mr. Curzan Simpson
<p>Activate and test local communications links and report to PDC.</p>	Mr. Curzan Simpson
<p>Brief community of activation of evacuation and persons to be evacuated:</p> <ul style="list-style-type: none"> <li>▪ Review evacuation routes and gather your disaster supply kit in case you are instructed to evacuate.</li> <li>▪ Communicate assembly points and deploy marshals.</li> <li>▪ Make contact with shelter managers to receive evacuees.</li> <li>▪ Inform PDC of actions to be taken.</li> <li>▪ All electricity and gas supplies should be shut-down when closing businesses or evacuating homes</li> <li>▪ Ensure the Elderly and Physically challenged to be evacuated</li> <li>▪ Ensure registration of all evacuated</li> <li>▪ Check that all needing evacuees are safely evacuated.</li> </ul>	Mr. Curzan Simpson



ACTIVITIES	RESPONSIBLE PERSON(S)
<p>Monitor radio for hurricane warnings and public information via news releases through ODPEM and Met office</p> <p>Monitor Radios for precautionary tips together with packaged information of the activities of responding agencies.</p>	Mr. Curzan Simpson
Alert community Initial Damage Assessment Team(s).	Mr. Curzan Simpson
Confirm lines of credit with merchants to enable easy access to relief supplies after the disaster	Mr. Curzan Simpson

**D. 16 Hours before Impact to Landfall**

ACTIVITIES	RESPONSIBLE PERSON(S)
<ol style="list-style-type: none"> <li>1. Maintain contact with PEOC</li> <li>2. Advise PEOC of weather conditions and state of preparedness</li> <li>3. Confirm arrival and status of evacuees in shelters</li> <li>4. Check in with standby teams and community response personnel</li> </ol>	<p>Ms. Florence Marsh  Ms. Sharon Bennett  Mr. Curzan Simpson</p>

**E. THE BLOW**

ACTIVITIES	RESPONSIBLE PERSON(S)
Monitor and report events as far as possible.	Ms. Sharon Bennett
Maintain contact with PEOC, Shelters and response personnel.	Mr. Curzan Simpson

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

ACTIVITIES	RESPONSIBLE PERSON(S)
<ol style="list-style-type: none"> <li>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</li> </ol>	Mr. Curzan Simpson
<ol style="list-style-type: none"> <li>1. Deploy community damage survey teams or assessors</li> <li>2. Deploy community response teams to check on vulnerable (elderly and physically challenged) and critical facilities.</li> <li>3. Check for deaths, injuries and persons needing emergency assistance</li> <li>4. Conduct first aid and search and rescue operations as necessary</li> <li>5. Notify PEOC of critical/emergency cases</li> <li>6. Provide PEOC with status report</li> </ol>	Mr. Curzan Simpson

**F (a) Up to 48 Hours after All Clear**

ACTIVITIES	RESPONSIBLE PERSON(S)
Provide initial damage survey and needs of the community	Mr. Curzan Simpson
<ol style="list-style-type: none"> <li>1. Provide ground reconnaissance intelligence to the PDC.</li> <li>2. Assist the Fire Brigade and NWA with road clearing, and search and rescue activities through the PEOC .</li> <li>3. Assist with the establishment and staffing of registration centers.</li> </ol>	Mr. Curzan Simpson
<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"> <li>▪ 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.</li> <li>▪ Check for gas leaks. If they smell gas or hear a blowing or hissing noise, quickly</li> </ul>	Mr. Curzan Simpson

ACTIVITIES	RESPONSIBLE PERSON(S)
<p>leave the building and leave the doors open. Call the gas company.</p> <ul style="list-style-type: none"> <li>▪ Look for electrical system damage. If they see sparks or frayed wires, turn off electricity at the main fuse box.</li> <li>▪ If they have to step in water to reach the electric box, call an electrician for advice.</li> </ul>	
<ol style="list-style-type: none"> <li>1. Check for sewage and water-line damage.</li> <li>2. If you suspect there is such damage, call the NWC Company and or PDC.</li> <li>3. Advice community not to drink or prepare food with tap water until notified it is safe to do so.</li> </ol>	Mr. Curzan Simpson

**F (b) 48 Hours to 5 Days After All Clear**

ACTIVITIES	RESPONSIBLE PERSON(S)
<p>Constantly advise the community :</p> <ul style="list-style-type: none"> <li>• To conserve water and food</li> <li>• To stay living at their homes if it is safe to do so</li> <li>• To take particular care with hygiene and sanitary practices</li> <li>• Of measures being taken with respect to provision of food and water and restoration of public utilities</li> </ul>	Mr. Curzan Simpson

<b>ACTIVITIES</b>	<b>RESPONSIBLE PERSON(S)</b>
<ol style="list-style-type: none"> <li>1. Coordinate requests for and offers of assistance through the PEOC.</li> <li>2. Coordinate reconnaissance and damage assessment teams through the PEOC</li> <li>3. Ascertain the early requirements for Government assistance in re-establishing the community.</li> </ol>	Mr. Curzan Simpson
<p>Coordinate the establishment, staffing and management of emergency shelters for sustained use in community.</p> <p>Encourage persons affected to stay with friends or family as first options.</p>	Mr. Curzan Simpson
<p>Coordinate requests, receipt and distribution of food, clothing and water supplies through the PEOC</p>	Mr. Curzan Simpson
<ol style="list-style-type: none"> <li>1. Assist with the distribution of supplies d</li> <li>2. Assist with the tracing of missing persons</li> <li>3. Assist with needs assessments</li> <li>4. Assist in the provision of welfare</li> </ol>	Mr. Curzan Simpson

ACTIVITIES	RESPONSIBLE PERSON(S)
<p>information to persons affected.</p> <p>5. Begin to effect minor repairs to critical facilities and clear road ways and drains</p>	
<p>Continue to provide feedback and assistance to the community through the PDC and PEOC.</p>	<p>Mr. Curzan Simpson</p>

**Phase 4: Recovery**

ACTIVITIES	RESPONSIBLE PERSON(S)
<p>1. Mobilize Community members to assist each other with rehabilitation and reconstruction activities.</p> <p>2. Encourage community members to rebuild bearing in mind mitigation measures (build back better).</p> <p>3. Mobilize and conduct repairs to critical facilities and infrastructure (Schools, clinic, water supplies and others)</p>	<p>Mr. Rodrae Kellyman</p>
<p>1. Update PDC on recovery activities by external agencies/departments/organizations.</p>	<p>Ms. Florence Marsh Ms. Sharon Bennett Mr. Curzan Simpson</p>

ACTIVITIES	RESPONSIBLE PERSON(S)
2. Monitor progress and ensure deficiencies are reported.	
Mobilize CDRMG to seek assist from NGOs (e.g. Red Cross, Food for the Poor, ADRA and Others) to assist in community recovery initiatives.	Ms. Florence Marsh Ms. Sharon Bennett Mr. Curzan Simpson
<p>Identify and share Lessons Learnt to enhance future preparedness and response activities:</p> <ul style="list-style-type: none"> <li>▪ Challenges in responding to incidents</li> <li>▪ Which systems were overburdened?</li> <li>▪ What resources were lacking (human and physical)?</li> <li>▪ How did the community cope?</li> <li>▪ What areas of the SOPs need to be reconsidered?</li> </ul>	CDRM TEAM
Revise SOPs as necessary	CDRM TEAM

## **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 **Llandewey**. 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, private sector and other stakeholders to facilitate the safety of community members. It is the intent of this SOP to maintain clearly defined procedures for before, during and after earthquake events.

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

### **Objectives**

The concepts and procedures in this SOP are set to:

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

### **Threat Assessment**

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



## **Basic Planning Assumptions**

- At least one moderate earthquake will probably affect the country/community in the next 5-100 years.
- CDRM Group will remain active and functional
- Community members will be responsive to CDRM Group programmes, initiatives, warning and other information.
- There is commitment and support from agencies and departments of government to assist community.
- Community is will to utilize their own resources in preparedness and response as far as possible.
- CDRM Group will train and establish Community Emergency Response Team(s) (CERTs).

## **Concept of Operations**

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

Procedures will be categorized into the following phases:

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

**Phase 2:** Event, Event Response, Damage Assessment

**Phase 3:** Recovery

## **ACRONYMS**

AAR – After Action Report

CERT – Community Emergency Response Team

CDRMG – Community-based Disaster Risk Management Group

DRM – Disaster Risk Management

EOC – Emergency Operations Center

NEOC – National Emergency Operations Center

NGO – Non Government Organization

ODPEM – Office of Preparedness and Emergency Management

PDC – Parish Disaster Coordinator/Committee

PEOC – Parish Emergency Operations Center

## **DEFINITIONS**

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

**Emergency Operations Center (EOC)**

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

**Incident:** An event that occurs that may lead to an emergency condition.

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

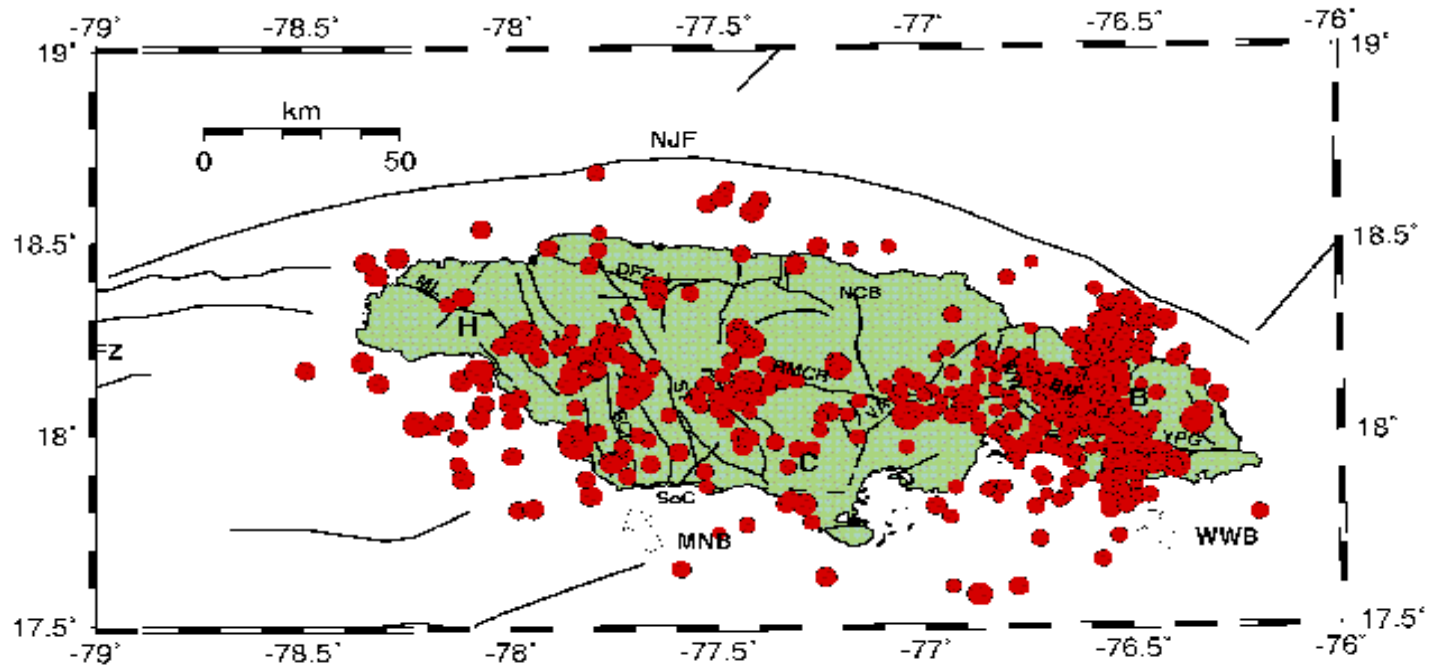
**Epicentre:** The position on the ground directly above where the slip under the earth's surface first occurs. The magnitude felt is likely to be greatest at this point. The damage is likely to be worst at this point.

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

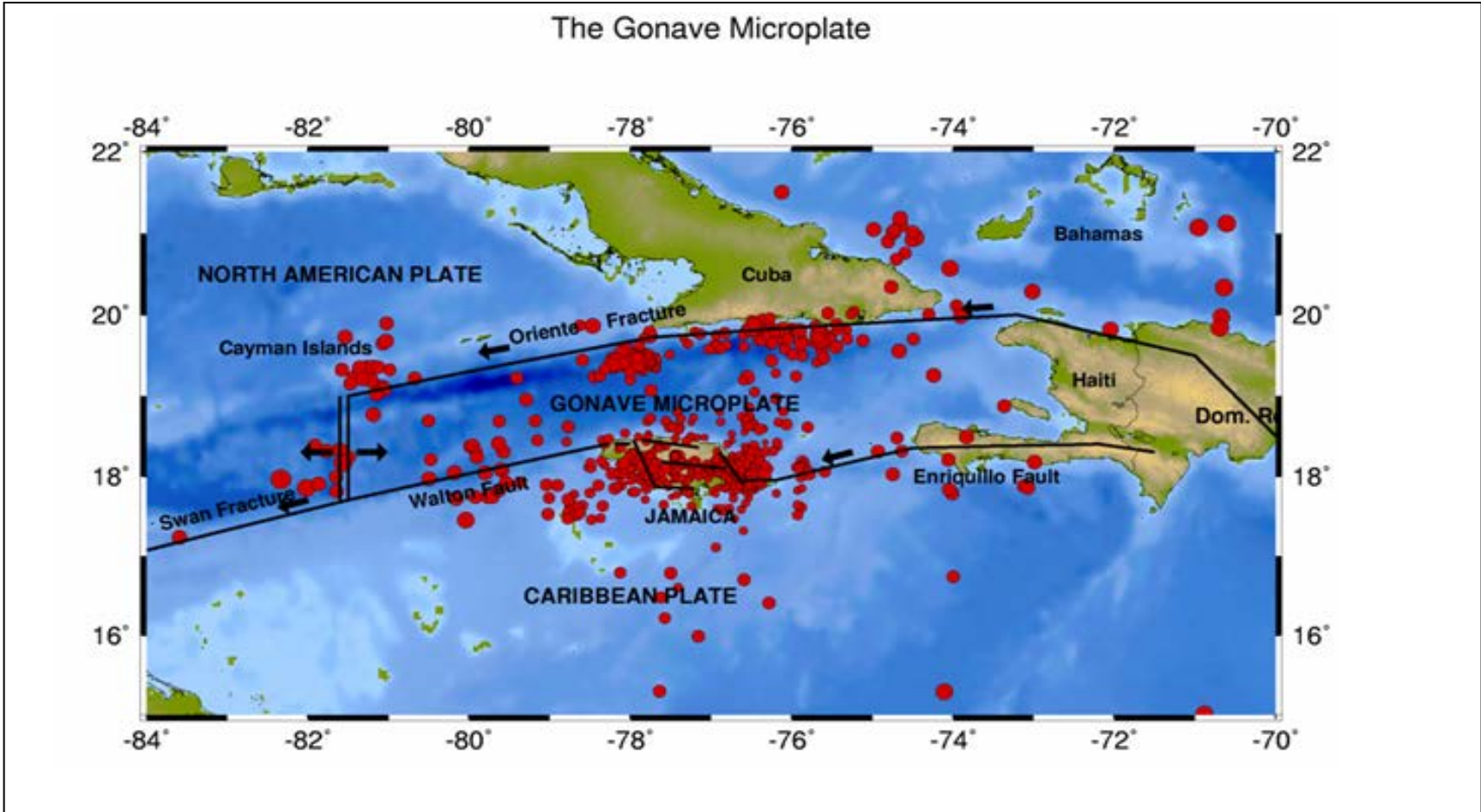
**Tremor:** The shaking or seismic waves felt or caused by an earthquake or explosion is called a *tremor*.

**Magnitude:** *Magnitude* is a measure of the amount of energy released during an earthquake. Magnitude is typically measured on the Richter Scale for the Caribbean.

### JAMAICA SEISMICITY 1997-2007



### The Gonave Microplate



## **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.

<b>ACTIVITIES</b>	<b>POSITION</b>	<b>RESPONSIBLE PERSON(S)</b>
13. Continue to support and promote public information and awareness programmes.	Coordinator – Public Education & Fundraising	Mrs Jacqueline Howell- Reid
14. Sensitize special needs population	Coordinator – Public Education & Fundraising	
15. Organize how special needs population will be evacuated and transportation required.	Coordinator - Preparedness	Mr. Curzan Simpson
16. Put arrangements in place to have vehicles to be used in evacuation fuelled with petrol	Coordinator - Preparedness	
17. Send a reminder/update to the Fire Brigade of the evacuation route for the community. Do a walk through if possible	Coordinator - Preparedness	
18. Sensitization of persons in the community without vehicles of assembly area for transportation to more safe location.	Coordinator – Public Education & Fundraising	Mrs Jacqueline Howell- Reid
19. Identify areas in the community where high potential for infrastructure/property damages.	Coordinator – Vulnerability & Risk Identification	Mr Oshane Morgan
20. Ensure DRM teams are aware of all high risk locations in the community.	Coordinator – Vulnerability & Risk Identification	
21. Prepare areas for sheltering persons in need	Coordinator - Preparedness	Mr. Curzan Simpson
22. Re-engage community volunteers to provide assistance in shelters and other areas. Consult with PDC for facilitating training or refresher courses.	Coordinator - Preparedness	
23. Ensure new developments are assessed and relevant measures put in place to safeguard community.	Coordinator – Prevention & Mitigation	Mr. Rodrae Kellyman

ACTIVITIES	POSITION	RESPONSIBLE PERSON(S)
24. Organize mitigation and prevent projects and work days with technical guidance from relevant agencies (with the help of the PDC.	Coordinator – Prevention & Mitigation	Mr. Vernal Ashmead
25. 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.	Shelter Manager	Horace Ogilvie
26. 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	Coordinator - Preparedness	Mr. Curzan Simpson
27. 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.	Coordinator – Damage Assessment	Mr. Curzan Simpson
28. Liaison for maintenance and to keep open all access routes – main transportation routes and alternative access routes	Coordinator – Prevention & Mitigation (primary) Sector/Evacuation leaders (secondary)	Mr. Rodrae Kellyman
29. Community inventory of building quality	Coordinator – Mitigation & Prevention (working with Supt. Of Works and Planning Director – Parish Council)	Mr. Rodrae Kellyman
30. Community inventory of road networks and updating of community map	Coordinator – Mitigation & Prevention (working with Supt. Of Works and Planning Director – Parish Council)	Mr. Rodrae Kellyman
31. Identify alternative sources of water, sources of	Coordinator – Mitigation and	

ACTIVITIES	POSITION	RESPONSIBLE PERSON(S)
alternative/temporary housing solutions	Prevention	
32. Put mutual aid agreements in place for emergencies such as earthquakes	Coordination – Preparedness	Mr. Curzan Simpson
33. Meet and assess the community’s state of preparedness for an earthquake	DRM Team	Ms. Florence Marsh and Team
34. Organize or initiate and support drills <ul style="list-style-type: none"> <li>• Trained community first aiders</li> <li>• Search and rescue personnel</li> <li>• Have first-aid kits prepared</li> <li>• Support for school and business community drills</li> </ul> 35. Make available all relevant information on the hazard to the general community 36. Personal for families: - Make sure your family goes over the family disaster plan	Coordinator – Preparedness &  Coordinator Response & Recovery	Mr. Curzan Simpson
37. Protecting the community: <ul style="list-style-type: none"> <li>• Encourage residents to check and address building and roofing strength. Keep yards clear of debris</li> <li>• Keep roads and open lots clear of solid waste and debris.</li> </ul>	Coordinator – Mitigation and Prevention/Coordinator - Preparedness	Mr. Rodrae Kellyman  Mr. Curzan Simpson



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

<b>ACTIVITIES</b>	<b>POSITION</b>	<b>RESPONSIBLE PERSON(S)</b>
Monitor and report events as far as possible.	CDRM Team – President/V.P	Ms. Florence Marsh / Ms. Sharon Bennett
Maintain contact with PEOC, Shelters and response personnel.	Coordinator - Response & Recovery	Mr. Curzan Simpson
Depending on the severity, ensure all buildings are vacated. Account for missing persons.	Coordinator – Response and Recovery.	
DRM Team Advise the Community to listen to all advisories and remain alert for after shocks	Coordinator - Preparedness	Mr. Curzan Simpson

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

<b>ACTIVITIES</b>	<b>POSITION</b>	<b>RESPONSIBLE PERSON(S)</b>
2. Check with PDC for persons to return home but only after authorities say it is safe to do so. Keep tuned to your local radio or TV station for recovery information. Confirm All Clear	Coordinator - Response & Recovery	Mr. Curzan Simpson
7. Deploy community damage survey teams or assessors	Coordinator - Response & Recovery	
8. Deploy community response teams to check on vulnerable (elderly and physically challenged) and critical facilities.		
9. Check for deaths, injuries and persons needing emergency assistance		
10. Conduct first aid and search and rescue operations as necessary	Coordinator – Response & Recovery	
11. Notify PEOC of critical/emergency cases		
12. Provide PEOC with status report		

ACTIVITIES	POSITION	RESPONSIBLE PERSON(S)
Provide initial damage survey and needs of the community	Coordinator - Response & Recovery	Mr. Curzan Simpson
<ol style="list-style-type: none"> <li>4. Provide ground reconnaissance intelligence to the PDC.</li> <li>5. Assist the Fire Brigade and NWA with road clearing, and search and rescue activities through the PEOC .</li> <li>6. Assist with the establishment and staffing of registration centres.</li> </ol>	Coordinator - Response & Recovery	Mr. Curzan Simpson
<p>Beware of downed or loose 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"> <li>▪ Check for sewage leaks in homes/yards. Cordon off area and report to NWC and Parish Disaster Coordinator/Parish Council/PEOC.</li> <li>▪ Check for water leaks in homes/yards. Report to NWC and Parish Disaster Coordinator/Parish Council/PEOC.</li> <li>▪ 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.</li> <li>▪ Look for electrical system damage. If they see sparks or frayed wires, turn off electricity at the main fuse box.</li> <li>▪ If have to step in water to reach the electric</li> </ul>	<p>Coordinator - Response &amp; Recovery</p> <p>Coordinator – Response &amp; Recovery</p> <p>Coordinator – Response &amp; Recovery</p>	Mr. Curzan Simpson

box, call an electrician for advice.		
<ol style="list-style-type: none"> <li>4. Check for general sewage and water-line damage in the community.</li> <li>5. If you suspect there is such damage, call the NWC company and or PDC.</li> <li>6. Advise community not to drink or prepare food with tap water until notified it is safe to do so.</li> </ol>	Coordinator - Response & Recovery	Mr. Curzan Simpson

ACTIVITIES	POSITION	RESPONSIBLE PERSON(S)
<p><b>Constantly advise the community :</b></p> <ul style="list-style-type: none"> <li>• To conserve water and food</li> <li>• To stay living at their homes if it is safe to do so</li> <li>• To take particular care with hygiene and sanitary practices</li> <li>• Of measures being taken with respect to provision of food and water and restoration of public utilities</li> </ul>	Coordinator - Response & Recovery	Mr. Curzan Simpson
<ol style="list-style-type: none"> <li>4. Coordinate requests for and offers of assistance through the PEOC.</li> <li>5. Coordinate reconnaissance and damage assessment teams through the PEOC</li> <li>6. Ascertain the early requirements for Government assistance in re-establishing the community.</li> </ol>	Coordinator - Response & Recovery	Mr. Curzan Simpson

ACTIVITIES	POSITION	RESPONSIBLE PERSON(S)
<ul style="list-style-type: none"> <li>• Coordinate the establishment, staffing and management of emergency shelters for sustained use in community.</li> <li>• Encourage persons affected to stay with friends or family as first options.</li> </ul>	Coordinator - Response & Recovery	Mr. Curzan Simpson
Coordinate requests, receipt and distribution of food, clothing and water supplies through the PEOC	Coordinator - Response & Recovery	Mr. Curzan Simpson
<ol style="list-style-type: none"> <li>6. Assist with the distribution of supplies</li> <li>7. Assist with the tracing of missing persons</li> <li>8. Assist with needs assessments</li> <li>9. Assist in the provision of welfare information to persons affected</li> <li>10. Begin to effect minor repairs to critical facilities and clear road ways and drains</li> <li>11. Continue to provide feedback and assistance to the community through the PDC and PEOC.</li> </ol>	Coordinator - Response & Recovery	Mr. Curzan Simpson

### **PHASE 3: RECOVERY**

ACTIVITIES	POSITION	RESPONSIBLE PERSON(S)
<p>4. Mobilize Community members to assist each other with rehabilitation and reconstruction activities.</p> <p>5. Encourage community members to rebuild bearing in mind mitigation measures (build back better).</p> <p>6. Mobilize and conduct repairs to critical facilities and infrastructure (Schools, clinic, water supplies and others)</p>	<p>CDRM Team, Public Education and Fundraising Coordinator</p> <p>CDRM Team, Coordinator – Response and Recovery</p>	<p>Mrs Jacqueline Howell- Reid</p> <p>Mr. Curzan Simpson</p>
<p>7. Update PDC on recovery activities by external agencies/departments/organizations.</p> <p>8. Monitor progress and ensure deficiencies are reported.</p>	<p>Coordinator – Response and Recovery</p>	<p>Mr. Curzan Simpson</p>
<p>6. Mobilize CDRMG to seek assist from NGOs (e.g. Red Cross, Food for the Poor, ADRA and Others) to assist in community recovery initiatives.</p>	<p>Coordinator – Response and Recovery</p>	<p>Mr. Curzan Simpson</p>
<p>7. Identify and share Lessons Learnt to enhance future preparedness and response activities:</p> <ul style="list-style-type: none"> <li>▪ Challenges in responding to incidents</li> <li>▪ Which systems were overburdened?</li> <li>▪ What resources were lacking (human and</li> </ul>	<p>Coordinator – Response and Recovery &amp;</p>	<p>Mr. Curzan Simpson</p>

ACTIVITIES	POSITION	RESPONSIBLE PERSON(S)
physical)? <ul style="list-style-type: none"> <li>▪ How did the community cope?</li> <li>▪ What areas of the SOPs need to be reconsidered?</li> </ul>	CDRM Team Leader	Ms. Florence Marsh
Revise SOPs as necessary	CDRM Team Leader & Stakeholders	Ms. Florence Marsh and Team

## Acknowledgment

---

The Llandewey Disaster Preparedness Zonal Committee wishes to thank the Office of Disaster Preparedness (OD PEM) and the Canadian International Development Agency (CIDA) for partnering with us in developing this very important document. Disaster Risk Management at the Community Level Indeed needs to be properly organized and managed as the community members are the first responders in any emergency. This plan clearly outlines all the critical areas of disaster management – prevention, mitigation, preparedness, response and recovery. We are convinced that this document will greatly assist the residents of our community in not only preparing for disasters, but also enhancing our response capacity.

The Zonal Committee wishes to express our gratitude to the facilitators: Mrs. Allison Gordon, Regional Disaster Coordinator- ODPEM, Miss Millicent Blake, Parish Disaster Coordinator – St. Thomas Parish Council, Mr. Andre Walker, CDP Project Assistant and Mr. Horace Glaze, Senior Director, Preparedness and Emergency Operations Divisions – ODPEM for their support in developing this document.

We anticipate a continued working relationship and trust that you will continue to support disaster risk management activities in the community.

Regards,

Ms. Florence Marsh

Chairman

Llandewey Disaster Preparedness Zonal Committee

# Acknowledgement



The Office of Disaster Preparedness and Emergency Management (ODPEM) take this opportunity to express profound appreciation to the Canadian International Development Agency (CIDA) for funding the development of this very important and relevant document. The organization recognizes the sacrifice, time, dedication and commitment of the leadership and members of the Llandewey Zonal Committee and the Parish Disaster Coordinator, Miss Millicent Blake for contributing so ably to this Community Disaster Risk Management Plan.

Your level of involvement has demonstrated that you have accepted and owned the disaster risk management process in your community and are willing to play your part for a safer community.

This document is yours for use. Improve on it where you see necessary it is the beginning of the process, not the end.

We stand ready to continue to support your organization in whatever way possible as together we build a safer community.

Thank you.

Sophia Mitchell,  
Regional Disaster Coordinator/Plan Development Facilitator  
ODPEM  
January 20, 2012