October Tropical Wave

Preliminary Damage Assessment Report No.1

Reports as of October 13, 2008

| Introduction | 2 |
|---|----|
| Concept of Operations | 3 |
| SECTORS | 3 |
| 1. Emergency Services | 3 |
| 2. Agriculture | 3 |
| a. Agriculture | 3 |
| b. Fisheries | 3 |
| c. Forestry | 3 |
| 3. Education | |
| 4. Health | 4 |
| 1 Gros Islet Polyclinic | 4 |
| 2 Golden Hope Hospital | |
| 3. Senior Citizen Home | 5 |
| 5. Tourism | 5 |
| 6. Utilities | 5 |
| a. Cable and Wireless | 5 |
| b. Digicel | 6 |
| c. LUCELEC | 6 |
| d. WASCO | 7 |
| 7. Infrastructure | 9 |
| 8. Chamber of Commerce | 9 |
| Appendix | 10 |
| Types of Assessment Reports for Emergency Relief and Short-term Restoration | |

Introduction

Saint Lucia experienced continuous rains commencing Monday October 6, 2008. By October 9^{th} , the Met Office had issued a sever weather warning:

Residents in areas prone to landslides and flooding should be vigilant.

Below is the 6 am weather report for October 11, 2008

An upper level trough in association with a tropical wave will continue to produce cloudiness, showers and isolated thunder-storms over the Lesser Antilles.

Two other tropical waves located over the central and Eastern Atlantic are moving westward near 12 mph.

Initial Situation Overviews were conduced by the District Disaster Committees commencing October 11, 2008. The committees indicated that there was no need for the opening of emergency shelters.



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Concept of Operations

This is a Damage Assessment Report which encompasses a preliminary Detailed Sector Report [DSR]. The Initial Situational Overview [ISO] took place on October 11 and 12. The information from the ISO allowed the DANA Committee to determine immediate actions necessary to respond to the effects of the events, should it be required.

The objective of this stage in the Damage Assessment process is to obtain a general overview of the damages.

SECTORS

1. Emergency Services

- Fallen trees at Entrepôt cleared by the Service
- Flooding at Bishops Gap Service cleared clogged drain
- Beausejour: Rescue exercise on person trapped in flooded vehicle
- Monier: Debris blockage due to landslide
- Flooding ta Gros Islet Village: Persons in trapped in house.
- Massade: Flooding
- Marina: Boat flooded
- La Borne Road impassable
- Union: Flooding persons trapped

2. Agriculture

- a. Agriculture
 - No report to date
- b. Fisheries
 - i. Flooding at the Aqua Culture Station in Union with the fencing opposite Dame Pearlette Louisy School flattened.
- c. Forestry
 - No report to date



Aqua Culture Station Fence - Union

3. Education

- a. Report of landslide near the Morne Du Don School
- b. Flooding at the Dame Pearlette Louisy School
- c. Landslides at the Babonneau Secondary School



4. Health

Floor at Dame Pearlette Louisy School

The main impact of the system considered in this report is the ingress of rain through defective roofs (leaks) and swamping of floors and other interior areas of buildings due to overwhelmed drainage systems. A minor landslide on the north western side of the Gros Islet Polyclinic and severe runoff from the hillside (Police Training School Hill summit) into the work areas of the Golden Hope Hospital interrupted the services to the emergency care, outpatients' clinics, and inpatients care at the two mentioned facilities on Monday 13th October 2008. The Senior Citizens Home, Malgretoute, Soufriere reported flooding of the dining hall and kitchen floors to the extent that these areas were not usable for patients services.

Generally, the Health Care Facilities have not been severely affected; consequently services have not been disrupted.

The restoration costs of the minor damages are as follows:

1 GROS ISLET POLYCLINIC

- 1.1 removal and disposal of soil from landslide
- 1.2 reconstruction of retaining wall and drain
- 1.3 repair collateral damages (plumbing, sidewalk, etc.)

2 GOLDEN HOPE HOSPITAL

- 2.1 construction of sub-terrain drainage system
- 2.2 construction of open boxed R.C. drain and culvert
- 2.3 repairs to collateral damages

3. SENIOR CITIZEN HOME

- 3.1 reinstatement of roof over kitchen & dining building
- 3.2 repairs to roof cover over main dormitory building
- 3.3 reinstatement of plumbing system including water pump

5. Tourism

North

- Some flooding of Golf Courses
- No physical damages
- Some beach erosion which is expected to regenerate

South

• Some minor flooding

West

- Some flooding which is usual for such weather
- No damages to report

Small properties

• No damages reported

6. Utilities

a. Cable and Wireless

Network Infrastructure:

- Two joints box moved as result of land slippage in two areas namely; Trois Piton and La Croix. Work was undertaken to release strain on cables by suspending them in the event of more slippage.
- One pole leaning in the union area due to eroded soil. Contractors attending to it.
- Two CATV amps burnt is Soufriere resulting in approximately sixty customers being out. Problem resolved.
- CATV in La-Borne affected. Approximately sixty customers affected. Problem resolved.

Commercial:

C&W Store at GableWoods Mall was flooded. Approximately three feet of water came into the compound and impacted the store. The area is not known to flood to that extent in the past. Normal preventative procedures were executed yesterday. A small quantity of stock was impacted for which the value is currently being quantified.

The Store was cleaned yesterday but remains closed to the public. We anticipate reopening the store by Wednesday 15th October 2007. Customers are being advised of closure of the store via radio announcements and TV scroll.

b. Digicel

- No water damage
- Limited lightening damage

c. LUCELEC

Inclement weather throughout the morning and early afternoon of Saturday October 11, 2008 adversely affected segments of LUCELEC's Transmission and Distribution System. The most serious after effects of the Weather System were experienced by LUCELEC customers who were supplied from Union Substation. Circuits emanating from this substation were denergized by Control personnel, or faulty line equipment between 1:26 p.m. and 1:58 p.m. when the Union River overflowed its banks and water entered into the Substation building causing the substation to go off line.

Customers in the following areas were affected by power outages:

Corinth, Marisule and environs; Union and environs La Clery, and environs, Vide Bouteille, Summersdale and Bisee Marchand and environs, Bocage and Balata Babonneau and surrounding areas including Monchy, Plateau, Monier, Garrand and Bogius

LUCELEC technical personnel commenced restoration efforts as soon as weather conditions permitted and flooding had receded. All affected circuits had to be inspected before re-energization given the fact that there had been reports of landslides and flooding in a number of areas. Circuits were re-energized from neighbouring substations (Castries and Reduit) on a segment-by-segment basis once the 11,000 and 415/240 volt Distribution Systems had been checked.

Power was restored to approximately 95% of affected customers between 4:52 p.m. and 8:56 p.m on Saturday 11th October. The remaining areas, with the exception of a small area in Bisee (some industrial/commercial and three

domestic customers), received supply when Union Substation was returned to fully operational status at 2:27 a.m. on Sunday 12th October.

Electricity supply was restored to customers in the Bisee area at 4:43 p.m. on Sunday 12th October after a defective transformer was replaced.

d. WASCO

The following is a list of damages encountered to the Water and Sewerage (WASCO) Ltd. raw and potable water transmission network and potable distribution network. Also included is a list of the potential areas affected and the anticipated time of completing repairs.

However, the system will require time to recharge which is not included in the anticipated time of completion.

| Damage | Affected Communities | Anticipated time | Remarks | | | |
|--|-------------------------------------|------------------------------|---------------|--|--|--|
| 8 | | for completing | | | | |
| | | repairs | | | | |
| | | | | | | |
| Southern Services | s jurisdiction contains all the con | | La Verdue | | | |
| eastward to Dennery and south to Vieux Fort. | | | | | | |
| Clogged Delcer raw | Morne La Croix, Fond Jn | U | Supervisor is | | | |
| water mains | Tibe, Chateau Belair, Sulphur | | still working | | | |
| | Springs, Stine Field, Union | - | on rectifying | | | |
| | Vale, La Pointe, Industry, | 1 0 | the problem. | | | |
| | Morne Sion, Feitte, Martin, | - | | | | |
| | La Riche, Upper Reunion, | - | | | | |
| | Reunion, Inner Circle, | 1 | | | | |
| | Cafeierre, Dugard Asou Caye, | - | | | | |
| | Debreuil, Roblot, Piaye, | | | | | |
| | Sapphire, Parc Lane, Tete | | | | | |
| | Morne and Anse Cirton | decent condition. | | | | |
| 20 lengths of 4 inch | Canaries community, Flora | - | | | | |
| PVC raw water | Villa, Belevedere | damage has been | | | | |
| mains washed away | | repaired and | | | | |
| | | water was | | | | |
| | | entering the filter | | | | |
| | | at 12:00pm, 13 th | | | | |
| | | October 2008. | | | | |
| | | | | | | |
| Northern Services jurisdiction ranges from Cap Estate southward to Bexon and Anse la Raye | | | | | | |
| 12 inch raw water | Carellie, Yorke Hill, Chase | Depends on | | | | |
| main closed and 4 | Gardens, Sunbilt, Cedars, | Ministry of | | | | |
| inch water main | Bois Patat, Agard, Balata, | Communications | | | | |

| damaged due to a land slide at Ti Rocher, Castries. | Morne Du Don, Derriere Morne, Bocage, Ti Rocher, Forestierre, Entrepot, Ravine Chabot, Water Works, Hill Crest Gardens | of works. Efforts are being made to supply communities via the very same mains but at a reduced rate for fear of the weight of the water causing additional damage. This line will be monitored. | |
|--|--|--|--|
| Damage gravity lines and pump at Hill 20. The plant is also experiencing high turbidity levels and therefore closed from the 9 th till present | Monier, Babonneau, Plateau to Boguis and Desrammeaux / La Borne. | The plant is operation at less than 50%. Gravity lines are still being repaired. | |
| Anse La Raye is experiencing high turbidity levels and has been closed for two (2) weeks now. | Anse La Raye and Au Tabor | Plant is still closed due to high turbidity. | |
| 4 inch potable water mains damage at Cacao | Cacao community | 13 th October 2008 | |
| | Wastewater Service | l S | |
| Sewer system backup within the Rodney Bay area | Rodney Bay | Work is in progress with anticipation the system will be back to normal by 13 th October 2008 | |

7. Infrastructure

• Ministry of works to submit in a separate report

8. Chamber of Commerce

• No report to date

Original signed by A. L. Dawn French

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A. L. Dawn French Director Operations - Emergency Operations Centre

> Compiled by A. L. Dawn French Director National Emergency Management Organisation

Appendix Types of Assessment Reports for Emergency Relief and Short-term Restoration

| Type of assessment | Time Period | Purpose | Responsibility |
|---|---|--|--|
| Initial Situation Overview [ISO] | 4 – 8 hours after the disaster has occurred and/or the <i>All Clear</i> given | To provide a "snap shot" of the situation. | District Committee |
| Initial Damage Assessment [IDA] | 12 - 24 hours after the disaster has occurred | To provide information on overall damages and causalities and needs to permit allocation of critical supplies in the first 24 hours after a disaster. | District Committee |
| Detailed Sector Report [DSR] | 24 - 36 hours after disaster occurs | To summarize data on overall damages and causalities by Sector. | Sector Agencies |
| National Damage Assessment Report #1 | 48 hours after disaster | Summary of Information provided over time in the ISO, IDA and the DSR. It also provides more details on damages in order to continue the allocation of emergency resources. | DANA Committee |
| National Damage Assessment Report #2 | 7 days after disaster | Revision and update on the First DANA Report | DANA Committee |
| National Damage Assessment Report #3 | 14 days after disaster | Revision and update on the Second DANA Report. This process can be repeated as needed. | DANA Committee |
| Macro Socio Economic Report | From 21 days after the disaster has occurred. | Starting with the DANA Reports a sector- by-sector analysis of the impact of the event is produced. Sectors are grouped into four categories: Social Productive Infrastructural and Environment. | OECS Secretariat with DANA Committee |