



Early Warning System. Response Capabilities, Saint Lucia



LIST OF WATERSHEDS OF ST. LUCIA

- 1 Salee Lapins
- 2 Esperance
- 3 Dauphins
- 4 Marquis
- 5 Grande Anse
- 6 Fond D'Or
- 7 Dennery
- 8 Riviere Galet
- 9 Mamiku
- 10 Fond
- 11 Volet
- 12 Troumassec
- 13 Micoud
- 14 Canelles
- 15 Roame
- 16 Vieux Fort
- 17 Black Bay
- 18 Laborie
- 19 Piaye
- 20 Balemboche

0 4 8 km
0 4 8 mi

Saint Lucia



LIST OF WATERSHEDS OF ST. LUCIA

- 21 Doree
- 22 Choiseul
- 23 L'lvrogne
- 24 Pitons
- 25 Soufriere
- 26 Mamin
- 27 Canaries
- 28 Ans La Verdue
- 29 Grande Riviere
de Anse Lay Raye
- 30 Petit Riviere de
Anse La Raye
- 31 Roseau
- 32 Mt. Bellevue
- 33 Cul de Sac
- 34 Castries
- 35 Choc
- 36 Bois D'Orange
- 37 Cap

GOALS OF EWS

- Ownership of the EWS by the community (people centered)
- Empowering of the Communities in disaster mangement
- To lessen the impacts of these hazards.
- To train personel within the Community on hazard management
- To replicate the project in other Communities

Kinds of Early Warning Systems

- Computer “popups eg. Bambox applications. Easy Accessible, Minimal Cost, provides information
- Smart Applications, Mass Emails/SMS -Vibrate, Alarm, flash.
- Broadcast Applications (radio, televisions)
- Radar Sensor Application
- RDS receivers: sound loud sirens, display messages and tune into FM radio stations broadcasting alert messages automatically. These units are able to be activated even if power is off.
- Sirens (VHF radio signals)



Radar Sensor (SMS)



Radar Sensor SMS messaging response

Information from Water-level Recorder or Rain gauge

Met Services/WRMA

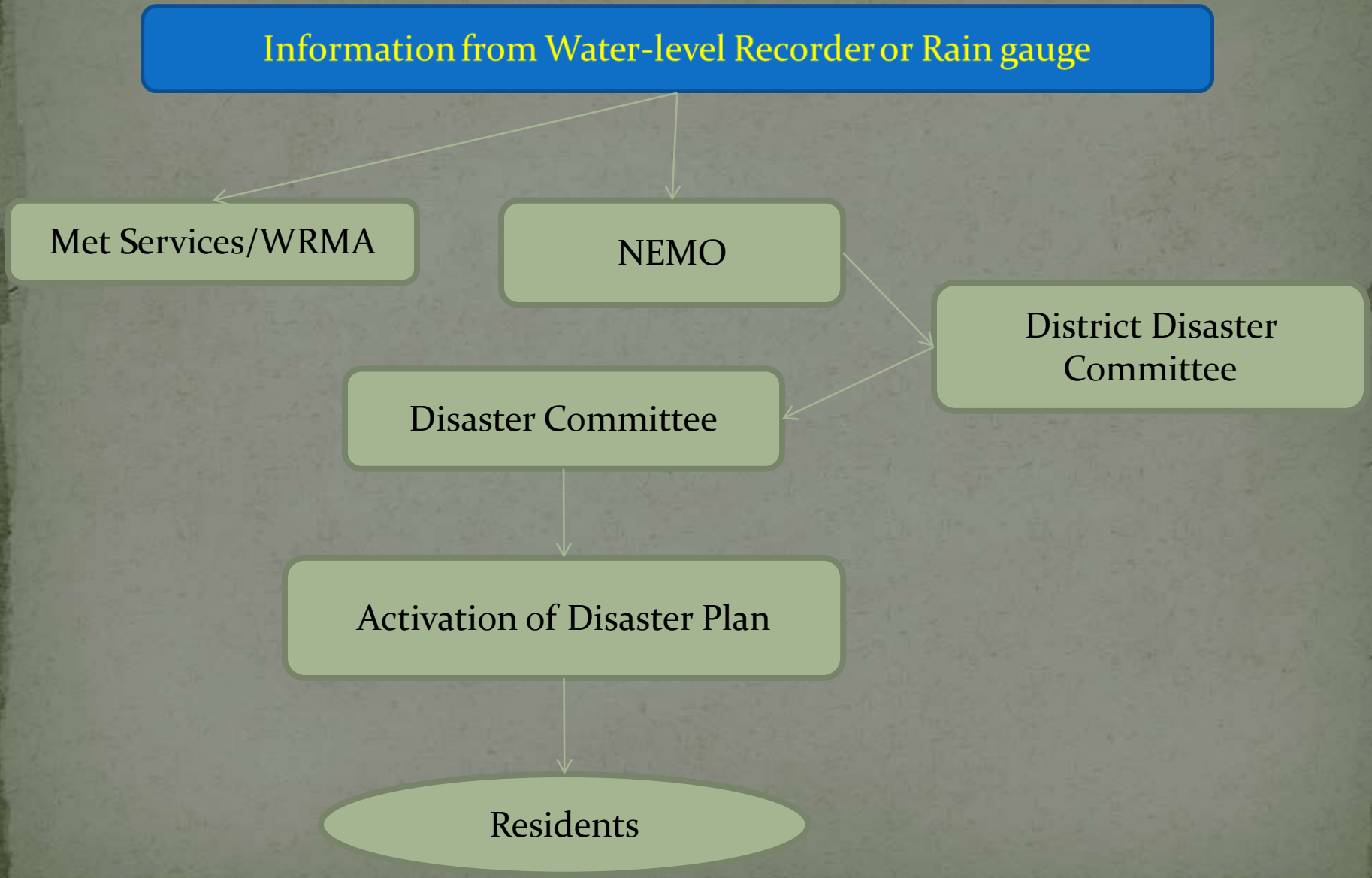
NEMO

District Disaster
Committee

Disaster Committee

Activation of Disaster Plan

Residents



Smartphone Application



Email messaging



Siren System



Data logger



Rain gauge, broadcasting

Feed rainfall data

Too much rain will trigger Alarm

Feed discharge data

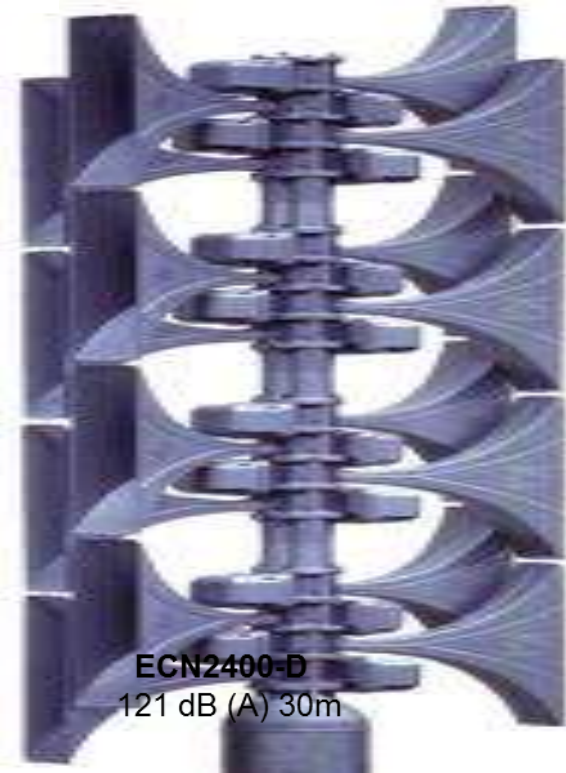


Micro Processor:
Data Analysis for
Threshold Development

Control system will
start siren alarm



Alarm system: siren pole



ECN2400-D
121 dB (A) 30m



Stream flow gauge, broadcasting

Siren and Messaging Warning Levels

- Caution Level: Threshold has been breached
- Inundation is likely, flooding is imminent persons asked to evacuate.
- Evacuation Level:.....Move to safety
- All Clear: Risk no longer exist.

Questions asked????

- Do the warnings reach those at risk ?
- Do persons understand the message?
- Do they react/respond to the messages?
- Are they adhering to the drill training exercises
- Do they understand the risk at hand?

.....for a proper response, the messaging have to be

- Relevant
- Clarity
- Credibility
- Consistent/Standardized
- Scalability

Cause for EWS response to be effective it must be sound, understood, scientific, technically based and people oriented.

Response Mechanism/Agencies

- NEMAC (*PM chair, Cab sec deputy, Dir. NEMO exfficio*)
- NEMO (*command center*)
- Flood and Drought Mitigation Committee
- District Disaster Committees
- Disaster Sub-Committees
- National Committees (*telecoms, transport, shelters etc.*)
- Red Cross
- Saint John's

Other EWS monitoring Sites. Carib-HYCOS



Opportunities

- It promotes a multi sectorial integrated approach.
- Solicit more technical assistance for hazard mitigation.
- Establishing a legal and policy framework for hazard management.
- Helps to fine tune the Community disaster plan.
- Enforces proper building code and safety regulations.
- Encourage vulnerability assessment at the house hold level.
- Training.

Lessons Learnt

- Brought the Community together.
- Encourages proper planning and management to reduce the impact of hazards in the vulnerable communities.
- Realization that hazards are a normal part of environmental occurrences, but disasters are enhanced by poor planning.
- Assist in updating the Community hazard master plan.
- Constant need to improve basic response information/dissemination



Thank you.

Questions??