



HAZARD MANAGEMENT CAYMAN ISLANDS



ANNUAL REPORT 2019

Foreword from the Director



Given the 50 percent reduction in human capital resources (decreasing from 12 to 5 staff in 2019), Hazard Management Cayman Islands (HMCI) performed well above expectations in 2019.

It was an active hurricane season with 18 named storms and 6 hurricanes, but the Cayman Islands came through 2019 without experiencing major impacts or disasters. The most intense Hurricane of the season, Hurricane Dorian devastated parts of the Bahamas and the Cayman

Islands was able to provide significant support, deploying the Royal Cayman Islands Police Service (RCIPS) helicopter and medical relief teams to assist Bahamas in the aftermath.

Two small earthquake tremors; one in March and the other in December generated a handful of felt reports and towards the end of the year (in December) there was a Nor'wester that was accompanied with big enough swells to cause a number of shipping containers to be swept off the dock, and into the sea off George Town Harbour. The same storm resulted in minor structural damage to a few locations along North Church Street.

With many of the original members of HMCI either being redeployed to other Government Departments or retiring, two new faces joined the Department; Patree Walcott was seconded over from the RCIPS and Leslie (Lennox) Vernon was seconded to HMCI from the Department of Public Safety Communications (DPSC). Additionally, over the course of 2019 HMCI's planning and Preparedness Officer, Teresita DaSilva matured into a more managerial role and took on greater responsibilities at HMCI.

While 2019 was in some respects a 'rebuilding' year, HMCI was still able to make solid gains in a number of areas, including the continued development of hazard specific plans more robust

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warehouse standards and procurement of relief supplies, training and an increased

focus on mental health as well as situational awareness.

HMCI also successfully rolled out Phase One of the National Emergency Notification System (Radio Interrupt) and delivered a robust training and public awareness program, which included establishment of a new Community Emergency Response Team in Savannah Meadows, and increased focus on the needs of the elderly in disasters.

HMCI looks forward to building on the structures created in 2019 to ensure our preparedness, mitigates, response and recovery to any future large scale emergencies is an effective and robust one.

A handwritten signature in blue ink, appearing to read 'Danielle Coleman', followed by a long horizontal flourish.

Ms. Danielle Coleman
Director, Hazard Management Cayman
Islands (HMCI)
December 2019

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EMAP Earthquake Plan workshop 2019

Context

Hazard Management Cayman Islands

(HMCI) is responsible for the National Emergency Operations Centre and coordinating the national response for all hazards, man-made and natural.

We take the threat of hurricanes and other hazards very seriously and continually strive to be more proactive and dynamic in our efforts to protect our people, property and economy from harm.

So far this year, the following activities have been undertaken by HMCI to ensure the Cayman Islands are better prepared for all hazards.

Disaster Response Plans

Office of the Auditor General, the Department of Children and Family Services and the Needs Assessment Unit to centralize all relief in the aftermath of an emergency to ensure that it is distributed appropriately and can be accounted for.

There was a concerted effort to develop and refine our Disaster Response Plans this year and in February 2019, with the assistance of Emergency Management Accreditation Programme (EMAP)/Foreign & Commonwealth Office (FCO), HMCI hosted a multi-agency stakeholder's workshop to develop an Earthquake Response Plan.

Significant work has gone into finalizing the National Oil Spill Plan. To that end, HMCI is working closely with Department of Environment, the Ministry of Health and other stakeholder agencies to ensure that all operational response elements are appropriately assigned and agreed, and that ongoing training and simulation exercises are incorporated in departmental work plans and budgetary allocations.

HMCI drafted a Hazardous Materials Plan in 2018 and will continue working with stakeholders in Q4, with a goal of implementation in 2020/2021.

The National Relief Plan is currently under revision and HMCI is working with Voluntary Agency partners, such as the Cayman Islands Red Cross and ADRA, the



EMAP Earthquake Plan workshop 2019

Prospect, West Bay, North Sound Gardens,
Savannah and Cayman Brac.

Community Emergency Response Teams (CERTs)

HMCI has regular engagement with the CERT teams which includes a monthly training open to all CERTs and an annual CERT Appreciation Reception.

Planning is also underway for a two (2) day disaster challenge in 2020 with all CERTs, to ensure all volunteers who serve their community in this capacity, have adequate ongoing practical disaster response training and experience.

Building capacity at the grass roots level

is considered a key strategy for building resilience. To this end, HMCI and the Cayman Islands Red Cross (CIRC) developed a plan to provide training to 2 new Community Emergency Response Teams (CERTs) in 2019. Training consists of 40 hours and covers topics such as First Aid/CPR, Search and Rescue, Vulnerability and Capacity Assessment, Damage Assessment and Fire Safety.

Training was conducted in the second quarter of 2019 for a team in Savannah Meadows who graduated in Q 3. HMCI and CIRC had intended to conduct training in Little Cayman in Q4 however due to scheduling difficulties of key stake holders, this training will be conducted in 2020.

Furthermore 52 CERT members were trained in Cayman Brac last year and currently there are functional teams in



Mass Casualty Management Training

Shelters and Relief Supplies Warehouse

HMCI ensures that emergency shelters are prepared and ready to operate at all times. This includes stocking them with the necessary provisions, making sure the generators are maintained and working should the need arise and ensuring that staffing resources including Shelter Managers and volunteers, child protection officers, Police Officers, Environmental Health Officers, First Aid volunteers and Doctors/ Nurses in the case of the Emergency Medical Centres are trained and readily available.

The annual training for Shelter Managers and Volunteers was conducted by HMCI and the Department of Children & Family Services on the 27th and 28th May.

Shelter capacity currently stands at 8% in Grand Cayman and HMCI has partnered with the Public Works Department to undertake a comprehensive Shelter Assessment which will inform plans for capacity expansion. In March 2019, Cabinet approved a grant to the Bodden Town Church of God which will enable the completion of the building to the approved Emergency Shelter Standard and HMCI is

also involved in a project to increase capacity at the John Gray High School. HMCI has also worked throughout 2019 with private companies to ensure they can accommodate their own staff to lighten the burden on current public shelters; including training shelter managers.

Furthermore, having recognized that some residents refuse to leave their homes to seek safe shelter in the advance of a hurricane without their pets, HMCI has worked closely with Dept. of Agriculture/Education and St. Matthews University to initiate two Animal friendly shelters this year.

Significant work has been done to revamp the HMCI Relief Warehouse this year which has included a full inventory count, building of shelves, training of staff in warehouse management and a mapping exercise.

Three (3) staff members from HMCI and the Auditor General's Office received training in the electronic tracking system known as Logistics Support System in order to track relief supplies during activation. In 2020, HMCI plans to ensure that relief supplies at its warehouse are electronically tracked and accountable. HMCI will continue to procure relief stock and pursue warehousing 'best practice' to ensure value for money.

Simulation Exercises

These exercises are vital for inter-agency coordination and for testing and improving hazard specific plans. Also, in the absence of activations, drills help build familiarity and muscle memory for the many stakeholders involved.

In 2019, HMCI hosted a wide range of exercises and plans are in place to continue this in 2020. The Caribe Wave Tsunami Exercise was conducted in March 2019. HMCI shifted the historical focus from a communications exercise to a table top discussion between all First Response Agencies and the Department of Tourism to determine roles and responsibilities impacted by a tsunami. In preparation for the exercise, HMCI produced 3D maps for tsunami vertical evacuation of George Town and Seven Mile Beach and facilitated a follow up meeting to ensure Action Points were acted on.

The Annual Hurricane Exercise was conducted on 23rd and 24th May. It was very well attended and incorporated a full activation of the NEOC and focused on Response, Recovery and Continuity of Operations.

HMCI also provides support to other Government Departments and entities such as the Port Authority, Civil Aviation and NGOs such as the Red Cross in the execution of their annual exercises.

First Responders Training

In April, HMCI hosted a Mass Casualty Management (MCM) Training and MCM Instructor Training which was co-facilitated by a representative of the Pan American Health Organization (PAHO).

The intensive week-long training concluded with an overnight exercise, where police, fire, medics and other responders worked together on a range of scenarios that included a stadium collapse, a gang fight involving multiple victims, a large transportation accident and hazardous materials spills etc. The Instructor training was an additional week.

A second Mass Casualty Management Training was initially scheduled for Cayman Brac in November, but this has been rescheduled for 2020.

A three (3) day Strategic Incident Command Training (ICS) hosted by HMCI in September was attended by Senior Managers from a range of first response agencies, including the Royal Cayman Islands Police Service (RCIPS), Cayman Islands Fire Service (CIFS), Department of

Environmental Health (DEH), Department of Environment (DoE), etc. The ICS is a system designed to be used or applied from the time an incident occurs until the requirement for management and operations no longer exist. ICS can be used to cope with incidents of any kind or complexity.

In 2020/21, HMCI will continue to offer a Mass Casualty Course and an Incident Command Course for first responders. The breadth and range of various training exercises will be increased to include large-scale evacuation drills, as well as hazardous materials and oil spill response exercises. There is also discussion about an exercise involving the cruise lines as it is recognized that this is a critical area.

HMCI recognizes that a well-trained Urban Search and Rescue Team is a vital asset to provide appropriate post-impact response, especially following a damaging earthquake, major fire or after a hurricane where buildings have been damaged or collapsed.

Planning has already started with Cayman Islands Fire Service (CIFS) to identify a core group of officers who will undertake this training and HMCI will continue to develop the team and provide continued training and exercises to ensure that it is sustainable, effective and ready to be deployed in response to a wide range of post impact scenarios.

National Day of Preparedness

As in previous years, the National Day of Preparedness was celebrated on Discovery Day – 20th May 2019. HMCI staff were present at the four-participating hardware stores every Saturday during the month of May to meet with residents and discuss their personal preparedness plans for hurricanes and other hazards. Residents were invited to enter a raffle to win a preparedness kit which was sponsored by each hardware stores.

Public Awareness and Outreach

HMCI takes a proactive approach to public awareness throughout the year and regularly attends Radio/ TV programs/ issues press releases, etc. HMCI's Website and social media (Facebook and Twitter) are updated on a weekly basis with the objective of expanding our Facebook following by 25% in 2019 and establishing an Instagram and YouTube presence. HMCI is also looking into using cartoons, live

video from previous incidents and other forms of videography to enhance customer engagement.

HMCI conducted a media blitz on 1st June that included Hurricane preparedness tips on rotation across 4 radio stations at a rate of 100 messages per day. HMCI staff and colleagues from a number of partner agencies took part in numerous media appearances throughout the day.

HMCI also coordinates the delivery of a number of hazard awareness presentations to various Government Departments, Churches, local businesses and Schools during the year. In 2019, HMCI in partnership with Cayman Islands Red Cross has presented to over 2,000 school children of various ages. The focus of the outreach was expanded this year to include the elderly and approximately 160 older persons and caretakers have received presentations thus far.

HMCI provides input for the annual hurricane supplement and distributes thousands of Hurricane Awareness booklets and a Children's All Hazard Activity Booklet during the lead up to the season.

Direct engagement at public events such as the Ritz Carlton Health Fair, Career Fairs, the Agriculture Show and the Seventh Day Adventist Health Expo are also strategies that HMCI uses annually to spread the preparedness message.



Hazard Awareness presentation with Clifton Hunter students

National Emergency Operations Centre (NEOC)

events. These charts are used as quick reference guide for all activations.

Maintaining the readiness of the NEOC

Emergency Support Teams (EST) is an important factor in ensuring that the NEOC is ready to operate at all times. HMCI conducts quarterly NEOC activation drills for staff and support services (IT/Facilities) and equipment checks are carried out monthly.

HMCI has also held meetings in April/May with Cluster Managers and all 17 ESTs to ensure maximum readiness. At these meetings the ESTs reviewed their respective portions of the main Hazard Management Plan, familiarized themselves with their roles and if necessary, updated their Standard Operating Procedures.

Each year the main Plan is then updated to reflect any changes recommended by the ESTs and lessons learned from exercises or activations.

HMCI updates and maintains the NEOC contact lists to ensure they are current. We have also produced comprehensive flow charts that provide a step by step guide to activation for all rapid and slow onset



EMAP Earthquake Plan workshop 2019

Elderly

Throughout 2019, HMCI has been working with the Department of Children and Family Services to significantly increase outreach efforts and to provide additional interventions and support for elderly persons in the Cayman Islands.

The 'frail elderly' have been identified as a particularly vulnerable sub group in the aftermath of disasters, and HMCI has embarked on a programme of providing presentations at care homes and residential facilities, and also meeting directly with the elderly in the district community groups.

HMCI is also encouraging Community Emergency Response Team (CERT) groups to offer greater awareness and support to the frail elderly and persons with disabilities in their communities. Medic alert kits were distributed to seniors so vital family contact information and medical details can be quickly retrieved by responding ambulance crews, therefore speeding up response in an emergency situation.

Mental Health

Significant steps have been taken this year in regards to integrating mental health into emergency response. HMCI has been working closely with the Ministry of Health and the Health Services Authority to ensure there are mental health professionals and appropriate facilities in Shelters and the NEOC.

Furthermore stress management workshops have become a bi-monthly occurrence at HMCI for all staff. In 2020, HMCI will continue to explore viable options to strengthen capacity in this area.

Relief Distribution and the Collaborative Cash Program

HMCI is working with Government partners (Auditor General Office/ Needs Assessment Unit/ Department of Children and Family Services) and Auxiliaries/Non-Government partners (CIRC/ Adventist Disaster Relief Agency (ADRA etc.) to re-design the Relief Distribution process. The

intention is to develop a centralized Assessment and Relief location where aid from each agency will be stored and subsequently distributed in accordance with an agreed plan and methodology.

HMCI is also working in partnership with the CIRC, Department of Community Rehabilitation and the Needs Assessment Unit to establish a Collaborative Cash Program that will serve to complement the existing In-Kind Relief distribution items. Feedback will be sought from Cabinet once the program is further developed.

Development of the National Emergency Notifications System

In 2018, HMCI, in collaboration with the Department of Public Safety and Communication commenced the installation of Phase I of the National Emergency Notification System (NENS) - an integrated, versatile radio interrupt system solution to support emergency alerts for the Cayman Islands.

In 2019, the installation of this radio interrupt technology was completed at all radio stations island wide. Training for Operators and Administrators has been conducted and a number of system tests were successfully carried out. The finalization of Standard Operating Procedures (SOP's) and the agreement of MOUs with all Radio Operators was completed. A system of monthly checks of the existing Radio Interrupt that was implemented in Phase I in 2019 will commence in 2020 to ensure the public are aware of these alerts and that they are reliable.

In 2020 and 2021, HMCI will focus on completing the full implementation, including training of system users and public testing, of Phase II of the National Emergency Notification System - the implementation of a comprehensive mobile strategy for emergency notification, via a Mobile Alert app.

The Mobile Alert app will provide advanced, real-time, location-specific alerts, designed to keep Cayman Islands residents and visitors informed and safe. Public safety officials will be able initiate notifications via the mobile applications. A mobile-friendly registration process will allow Cayman Islands residents and visitors to freely download the app in a simple and fast way to register for emergency alerts.

The goal is to include cell broadcast alerts which would enable Government to rapidly send emergency messages directly to all cell phones within range of communications towers across the Cayman Islands. This is similar to the Amber Alert system in the United States. Eventually, the plan is to have the technology in place to allow for emergency alerts to be sent remotely from a single platform – in other words a single message will be sent simultaneously to radio stations, tv, cell phones, and so on.

Crisis Hub

In 2019, HMCI, in collaboration with the Governor's Office and the Cayman Islands Red Cross, implemented the FCO's "Crisis Hub", an 'affected' or 'missing' person's tool that provides a standardized approach for handling casualty tracking, missing persons and evacuations.

In 2020, we hope to conduct a number of training drills with call takers at the Casualty Bureau, as well as developing the relationship with the Crisis Management Department (CMD) at FCO, London, to ensure there is external support with call taking and that a Caymanian representative is embedded at CMD during activation.

HMCI will continue to work closely with the Cayman Islands Government Office London to identify this person so that they can provide localized information to CMD.

Situational Dashboard

HMCI has developed a situational dashboard this year that integrates real time information (locally, regionally and globally) which will serve as a vital decision-making tool for the NEOC. In 2020, HMCI will continue to increase its capabilities by providing improved identification of flood prone areas - both current and historical, communities affected, critical infrastructure impacted, and nearest shelters during and in the aftermath of a large-scale emergency.

HMCI has also used ArcGIS to conduct impact assessments for incremental sea level rise scenarios, identified critical infrastructure and road corridors at risk. In 2020, documents will be developed to identify strategies to prevent, protect and mitigate against the potential threats and impacts.

Continuity of Operations Plans

Continuity of Operations Plans (COOP)

for Government Authorities are produced and updated annually to ensure that Government Departments and Agencies can resume their critical functions and services as soon as possible following an impact.

HMCI is reviewing all 89 Department COOP plans this year to ensure that they include the required level of detail. In addition, we have provided training and enhancing quality control measures to ensure that plans are fit for purpose.

National Disaster Fund

In 2019, amendments were made to The Disaster Preparedness and Hazard Management Law 2016 to formally establish the National Disaster Fund, which existed previously but was not protected

by any legislative framework. Each year significant funds from General Revenue and the surplus of HMCI's budget is added to this fund, and provided that we are not impacted, that money will continue to grow and be available if required to fund relief operations in the aftermath of a disaster.

OT's Rapid Deployment Team

Lessons learned from Hurricanes Irma and Maria in 2017 and most recently Hurricane Dorian this year, highlighted the need for an Overseas Territories Rapid Deployment Team that could be swiftly deployed to provide support to an impacted territory. HMCI and the Governor's Office are leading the region in the establishment of an Overseas Territories Rapid Deployment Team. Each territory will pre-identify skills and resources that can be swiftly deployed to provide support for an impacted territory.

Members of the team will have specialist skills such as medical relief, communications, logistics, damage assessment and Emergency Operations Centre coordination etc. In addition, assets such as the RCIPS helicopter and Cayman

Airways airlift may be brought into service to assist an impacted territory.

By pre-determining these useful skills and resources within each territory, and securing response commitments from each territory to support each other in the aftermath of an impact, it is anticipated the Rapid Deployment Team will provide a useful support mechanism that results in a more efficient and coordinated response when it is needed most.

HMCI, in partnership with the Governor's Office, continues to promote this concept and it is envisioned that the agreement will be formalized through a Caribbean Overseas Territories Memorandum of Understanding in 2020.

Caribbean Community (CARICOM) which offers a wide range of services to

participating states, a number of which will be of significant benefit to the Cayman

Islands. HMCI is currently facilitating a capability audit that involves stakeholder agencies across several Ministries and staff from HMCI, the Ministry and the Governor's

Office will join representatives from other member countries at the Annual CDEMA Conference in early December to learn first-hand about upcoming opportunities for training and capacity building in 2020 and 2021.

CDEMA Membership

In June 2019, the Cayman Islands Government initiated formal discussions with the Caribbean Disaster Emergency Management Agency CDEMA, about membership in the organization.

CDEMA is a regional inter-governmental agency for disaster management in the

Closing Remarks

HMCI would to thank all its key stakeholders, partners both in the public and private sector as well as the public for continuing to play an important role in keeping the Cayman Islands safe and resilient



Hurricane Exercise Debriefing in June 2019