

ANNUAL REPORT 2017

HAZARD MANAGEMENT CAYMAN ISLANDS



"Building Resilient Communities Today for Disasters of Tomorrow"

HAZARD MANAGEMENT CAYMAN ISLANDS



ANNUAL REPORT 2017

January 2018

HAZARD MANAGEMENT CAYMAN ISLANDS

Mailing Address

P.O. Box 118
Grand Cayman KY1-9000
CAYMAN ISLANDS

Shipping Address

Government Administration Building
133 Elgin Ave.
Grand Cayman
CAYMAN ISLANDS

Ph.: 345 945-4624 (Main)
345 244-3141 (Direct)

www.caymanprepared.ky

HAZARD MANAGEMENT CAYMAN ISLANDS ANNUAL REPORT 2017

Table of Contents

FOREWORD.....	3
VISION	4
MISSION STATEMENT	4
ABOUT US	4
BUDGET AND OUTPUTS	5
STRATEGIC PLAN 2016-2021	6
HURRICANE SEASON 2017	6
PREPAREDNESS/ PUBLIC AWARENESS	8
Public Education Programme	8
Agriculture Show	10
Hurricane Hunter Visit	10
International Day for Disaster Risk Reduction (IDDR)	11
Community Emergency Response Teams (CERT)	12
National Day of Preparedness	13
CONTINUITY OF OPERATIONS PLANS (COOP)	13
GOVERNMENT DEPARTMENT and STATUTORY AUTHORITY TRAINING AND ADVICE.....	14
PRIVATE SECTOR TRAINING AND ADVICE	14
RESPONSE.....	15
Shelter Management Training	15

Disaster Exercises	15
Tsunami Exercise	15
Annual Hurricane Exercise.....	16
Consulate Exercise	17
SOL FIRE	17
HMCI's Response to Hurricane Irma in the Overseas Territories	18
Voluntary Agency Responders Emergency Support Team (VARs)	18
Earthquakes	19
RECOVERY	20
MITIGATION.....	20
COMMUNICATION	20
National Radio Communication System	20
HMCI Activities	21
HMCI Staff.....	21
LIFETIME ACHIEVEMENT AWARD	22
Conferences and Seminars.....	22
OTHER MATTERS.....	25
RFA Mounts Bay	25
Staff Secondment	26
Looking Forward	27
Appendix A	30
A Thousand Words	40



HAZARD MANAGEMENT CAYMAN ISLANDS ANNUAL REPORT 2017

FOREWORD

McCleary Frederick, Director

The Cayman Islands was blessed with not being seriously affected by tropical cyclones despite a busy hurricane season. This provided an opportunity for the Cayman Islands to assist other overseas territories that had been devastated from hurricanes. There were many changes in the operational environment however, we continue to improve the resiliency of communities for our residents and visitors through our comprehensive hazard management plan.

Hazard Management Cayman Islands reached a few milestones in 2017 that should be recognized, the most significant being the coming into force of *The Disaster Preparedness and Hazard Management Law, 2016*.

The Disaster Preparedness and Hazard Management Law, 2016

After many drafts and submissions to Cabinet dating back to 2005 The Disaster Preparedness and Hazard Management Law was finally passed by the Legislative Assembly the 24th of October 2016. The provisions of the Disaster Preparedness and Hazard Management Law, 2016, shall come into force on the 22nd day of August 2017.

Motorola Contract

The quest to upgrade the National Public Safety Radio System that began in 2013 culminated with the signing of an agreement with Motorola Solutions on Thursday, 14 December 2017. The Cayman Islands will soon be home to the most modern radio system for public safety and emergency communications in the Caribbean.

As always, HMCI ***"Building Resilient Communities Today for Disasters of Tomorrow"***.

VISION

MAKING CAYMAN BETTER THROUGH COMPREHENSIVE HAZARD MANAGEMENT: –

- PREVENTION
- MITIGATION
- PREPAREDNESS
- RESPONSE
- RECOVERY

MISSION STATEMENT

Enhance the Cayman Islands resiliency to disasters with full community participation. This will involve participation in the National approach to Comprehensive Hazard Management through mitigation, preparedness, response and recovery thereby ensuring the preservation of human life, property and economic recovery.

ABOUT US

The Hazard Management Department of the Cayman Islands has overall responsibility for the national hazard risk management program, including preparedness, response, mitigation and recovery.

HMCI is responsible for the National Radio Communication System which provides Public Safety Officers with the capability to communicate during emergencies and other incidents. The system also provides reliable communication in non-emergency situations and to other government agencies.

HMCI has responsibility for the National Emergency Operations Centre (NEOC), which is activated to direct and coordinate the response to national threats and maintaining the National Hazard Management plans for threats such as hurricanes and earthquakes.

HMCI also has responsibility for:

- developing and implementing policies and programs to achieve and maintain an appropriate state of national preparedness for coping with all emergency situations which may affect the Islands;
- encouraging and supporting disaster preparedness and mitigation measures in the Islands in collaboration with community based organizations, private agencies and voluntary agencies, respectively;



- providing appropriate training programs and consulting services related to all aspects of disaster preparedness, disaster mitigation, loss reduction and disaster management;
- planning and implementing programs to enhance public awareness and understanding of disaster related issues, emergency management, hazard prevention and other similar matters

BUDGET AND OUTPUTS

The Budget allocation covers a period of 18 months from July 2016 through to December 2017. The allocations are split into two Budgets 1 July – 31 December 2016 \$790,680, budget for 1 January 2017 – 31 December 2017 was \$2,370,020. The Department has six outputs that establish the departments' priorities and strategies and define the expenditure and performance indicators within the immediate financial year. A summary of the outputs for the 2016/2017 fiscal year are provided below.

- **NEM 1 National Disaster Preparedness**

Maintain a state of maximum preparedness through the provision of necessary resources and ensure the existence of hazard management plans from community to national level, and for all sectors. Coordinate and monitor the implementation of the national disaster risk management program through: • Public Awareness • Training • Development and Maintenance of Disaster Plans.

- **NEM 2 Policy Advice & Ministerial Servicing**

Provide policy advice to the Ministers, Deputy Governor, Chief Officers, Government Departments and others on matters relating to national hazard management and disaster preparedness. The provision of technical advice to the Ministry, Government agencies and the private sector on telecommunication matters.

- **NEM 3 Hazard Mitigation**

A cooperative proactive partnership of the public, private sectors to build a culture of safety and resilience, to encourage and facilitate implementation of mitigation measures and minimize the consequences of natural and other disasters.

- **NEM 4 National Disaster Response**

Provide the tools and support needed to ensure National Response readiness in the event of any national disaster. The provision of assistance during or immediately after a disaster for the preservation of life and the provision of basic essential supplies and services for those people affected. Managing and deploying telecommunications equipment and personnel.

- **NEM 6 Emergency Shelters Management and Preparedness Activities**

Provide Shelter Management activities and ensure availability of shelters during and after a disaster. Maintain Emergency Generators and other essential facilities for shelter operations.

- **NEM 8 Technical Services for Telecommunication System**

Provision of technical services required for the planning, operating and maintaining of the telecommunication system infrastructure: Switching, Radio, Communication and ancillary equipment to support all Government Agencies.

STRATEGIC PLAN 2016-2021

With the assignment of a new Minister and Chief Officer HMCI Strategic Plan should be reviewed in 2018 to ensure that the strategies and vision of the new ministry is captured in the plan. The Strategic Plan 2016-2021 was revised to reflect changes from a review of the departments operations and previous plan. The following are some of the key strategies of the plan:

- Ensure the best possible Shelter environment for the population of the Cayman Islands through continued development and enhancement of infrastructure and equipment
- Ensure that the Islands have adequate Early Warning and Notification systems for all hazards (Improving Early Warning Systems) and enhancing Emergency Communication
- Enhance the country's resilience through an informed public and facilitate the strengthening of community resilience through organization and training (Building Community Resilience)
- Provide guidance and a legal framework for the reduction of risk and vulnerability to the physical and built environment through mitigation
- Comprehensive Disaster Plan Development

The plan also identified service needs and gaps such as:

- Mitigation – No Staff to advance the mitigation program.
- Seismic data analysis - no local resource to scientifically analyze the information that is generated following a seismic event.
- Dedicated Recovery Fund – no provisions made for annual contribution to a disaster recovery fund.

HURRICANE SEASON 2017

Simon Boxall

The 2017 Atlantic hurricane season was an extremely active season featuring 17 named storms, six of which became major hurricanes (Category 3 or above), however once again, the Cayman Islands was spared from significant impacts. The 2017 season goes down in the history books as the costliest season on record, with a preliminary estimate of more than \$300 billion USD in losses. Most of the financial losses were the result of three hurricanes; Hurricanes Harvey, Irma and Maria.

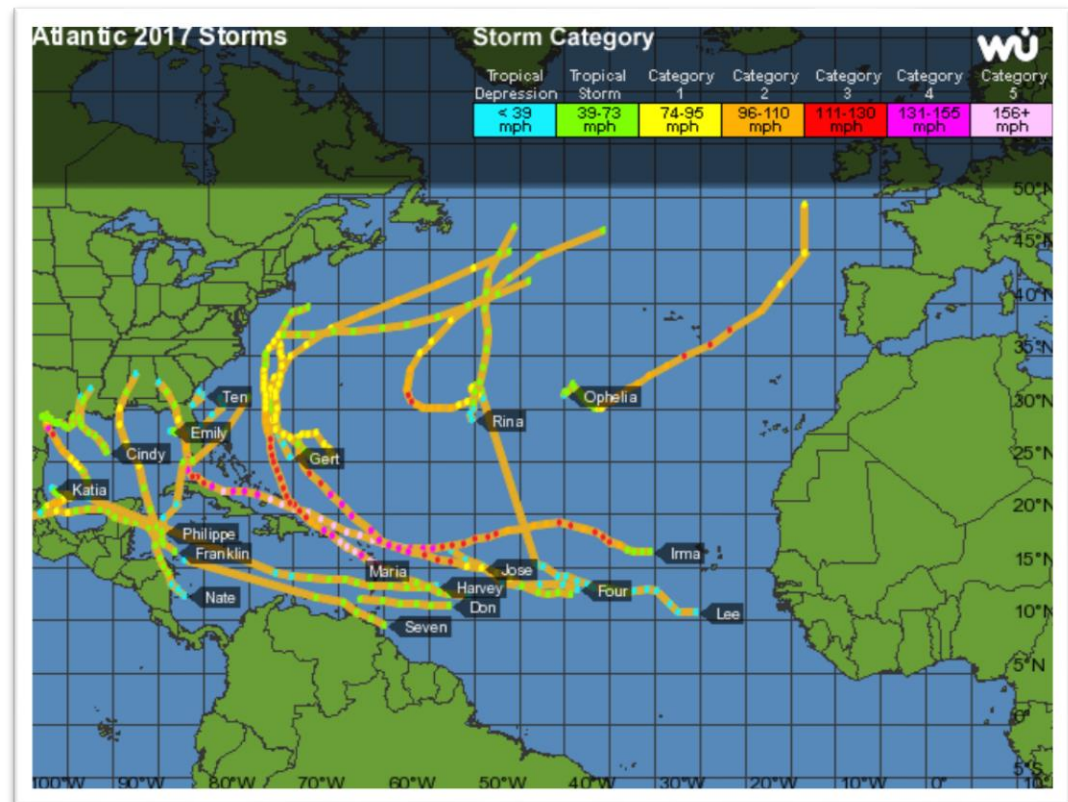
The season officially began on June 1 and ended on November 30, and there was a potential threat early for the Cayman Islands on June 16th when weather statements were issued by the Cayman Islands National Weather Service (CINWS) for Tropical Storm Bret, warning of flooding of low lying areas, 20 to 25 knot winds and very rough seas with wave heights of 6 to 8 feet. A marine warning was issued for the Cayman Islands, but Bret passed well south bringing some rain and rough seas.

On August 6th Tropical Storm Franklin formed over the northwest Caribbean about 200 miles south of Grand Cayman, but Franklin tracked west making landfall on the Yucatan Peninsula.

By August 17th residents began closely watching the progress of Tropical Storm Harvey as it approached the Caribbean Sea. Harvey tracked west passing about 240 miles south of Cayman Islands and brought heavy rain, but otherwise little in the way of impact. By August 19th Harvey had weakened to a mere tropical depression and the storm proceeded to move north of Honduras and then across the Yucatan Peninsula before reemerging in the Gulf of Mexico.

The 2017 hurricane season continued to keep residents on edge when on October 3rd a broad area of low pressure formed over the southwestern Caribbean off the coast of Nicaragua. On October 5th the low pressure developed into tropical storm Nate and on October 6th the CINWS issued a marine warning as TS Nate passed 280 miles west of Grand Cayman bringing fresh SE winds and rough seas.

Finally, on October 23rd residents began watching another area of low pressure which formed off the eastern coast of Nicaragua. The system moved very slowly north and would pass 90 miles west of Grand Cayman and a severe weather alert was issued for the Cayman Islands.



PREPAREDNESS/ PUBLIC AWARENESS

Simon Boxall

HMCI conducted a media blitz for the start of the hurricane season that included partner agencies who are involved in the national response mechanism. There were numerous media appearances on radio and television, speeches produced for the Governor and Premier, and providing content for hurricane supplements. This year messages from HMCI Director, McCleary Frederick were produced and prominently featured in both the Cayman Reporter and Compass supplements.

The use of social media was a key component of HMCI's public education outreach plan in 2017 Hazard Management's Twitter and Facebook pages have made great forward strides in both reach and relevance in 2017. We intend to continue to grow and consolidate our social media capacity in 2018.

- **Facebook:** 185 postings on which generated
380,000 views
2,050 views per posting average
- **Twitter:** 114 posts
72,000 views
630 views per posting average
- **Cayman Prepared:** 37,000-page views
6,500 new visitors from the Cayman Islands
32 press releases posted

In addition to the social media campaign:

- HMCI updated, edited and reprinted the Hurricane Information kit and the Children's All Hazards booklet. The Children's booklet was distributed directly to students in the schools
- Representatives of HMCI made 19 appearances on Radio stations in 2017 such as Crosstalk, Talk Today, For the Record and the Business Buzz
- HMCI also made several appearances on the Cayman Now show and the Big Issue.

Public Education Programme

SCHOOLS AWARENESS PROGRAM

The school awareness program continues to expand, in 2017, Teresita, Dani and Simon conducted 17 awareness sessions over a six-week period. The presentations have been revised to make them more interactive and relevant.

- May 22 St Ignatius (X 2)
- May 25 St Ignatius and Truth for Youth
- May 26 Truth for Youth and St. Ignatius
- May 30 Prospect Primary (X2)
- June 2 Cayman Brac Schools (X 4)
- June 5 Cayman Prep and High School
- June 6 Red Bay Primary
- June 7 Montessori by the Sea
- June 12 John A. Cumber
- June 13 Savannah Primary
- June 14 John A. Cumber

HMCI also assisted UCCI student Kirsten Rankine with information for her university project presentation and display on hazards, and Grady Ebanks was supported with his Tsunami Awareness Project.

TROPICAL SHIPPING WORKSHOP

Danielle Coleman

HMCI was invited again this year to help with the organization and facilitation of the Tropical Shipping Disaster Management workshop, titled "Building a Culture of Preparedness-when seconds count". This year's theme of 'Building Community Resiliency through Strategic Private-Public Partnerships' very much focused on the importance of collaboration and private-public partnerships. Other key stakeholders included Cayman Islands Chamber of Commerce, Cayman Islands Tourism Association, and the Disaster Management Coordinator for the UK Overseas Territories. An excellent presentation was given on Cyber Security threats and response mechanisms as well as group discussions on the 'Economic Impact of Disasters' and the 'Reputational Damage of Cyber Crimes Breaches'.

HMCI assisted with the logistics, speech writing, a presentation and facilitation of group assignments.

RITZ HEALTH FAIR

Danielle Coleman

HMCI is always looking for engaging ways to get the "Preparedness message" across to the public. This year, HMCI set up a presentation booth at the Ritz Health Fair event and shared ideas with Ritz Staff of ways to ensure they are "All Hazard ready". Hurricane supplies were demonstrated and HMCI branded items distributed.

Agriculture Show

Simon Boxall

Once again HMCI had a display booth at the Agriculture Show on Ash Wednesday. The theme this year focused on strategies for reducing risk to the threats from hurricanes, earthquake and flooding. As usual the Agriculture Show drew thousands of people and provided an effective opportunity for HMCI to engage hundreds of residents first hand, and discuss with them their plans and level of preparedness for hurricanes and a range of other hazards. HMCI conducted a preparedness survey at the event, to gain feedback and insight into the effectiveness the HMCI public education strategy. 146 residents participated with the following results:

- 77 percent have discussed preparedness issues with their families
- 76 have supplies of non-perishable food and water to last 5 days
- 85 percent feel they are informed enough to adequately plan for disasters and hazards
- 76 percent have actively looked-for information about preparing for hazards
- 80 percent are aware of the location of their nearest hurricane shelter
- 60 percent have gone through CPR and first aid training at some point
- 84 percent of people feel that the country is prepared for hazards

Hurricane Hunter Visit

Simon Boxall

The Cayman Islands National Weather Service (CINWS) and Hazard Management Cayman Islands (HMCI) welcomed pilots, crew of the Hurricane Hunter and staff of the National Hurricane Center in Miami to Owen Roberts International Airport's General Aviation Terminal on Wednesday, 26 April 2017, during a one-day trip to promote hurricane readiness. The visit was part of the National Oceanic and Atmospheric Administration's (NOAA) 2017 *Hurricane Awareness Tour*. The 53rd Weather Reconnaissance Squadron, a flying unit of the United States Air Force, which operates the WC-130J aircraft as its weather data collection platform.



Around 1,000 school students and members of the public had the rare opportunity to step into the world of the Hurricane Hunters, take a tour through the plane and hear the stories from the crew on what it's like to fly into the eye of a storm. Students were bused to the airfield from a dozen different schools.

NOAA hurricane experts, Director of the National Hurricane Center in Miami, Dr. Rick Knabb, and senior hurricane specialist Dr. Lixion Avila led a public workshop at the Ritz-Carlton. Around 40 people attended the conference which gave insight into the advancements of weather radar, how scientists collect hurricane information and alert affected regions immediately when forecast models indicate a threat. Dr. Knabb encouraged the audience to always be prepared and aware of hazards that come with hurricanes, like heavy winds and rain that can pose major threats during and after a storm. Dr. Knabb also emphasized the dangers and devastation that can be caused by storm surge. Later in the day, radio listeners tuned-in to Radio Cayman's Talk Today show to hear more from the experts, as they took

calls and answered the public's questions on air.

International Day for Disaster Risk Reduction (IDDR)

Teresita DaSilva

October 13th is observed as the International day of Disaster Reduction. This year's theme was "Reducing the number of affected people by disasters by 2030".

To participate in International day of Disaster Reduction, HMCI collaborated with Cayman Islands Red Cross ("CIRC") to provide a 3-day information exhibition for various primary school classes from October 10-12th. The objective was to provide students with the knowledge to reduce their risk before, during and after a disaster.

Staff from HMCI and CIRC met students from 5 primary schools quizzing them on their knowledge and providing them with valuable information that could aid in reducing their risks during any event.

Community Emergency Response Teams (CERTs)

Danielle Coleman

In partnership with Cayman Islands Red Cross (CIRC), significant work was done in 2017 to re-engage with current CERTs and re-design the 2018 CERT program. The year got off to a good start with the graduation of Clifton Hunter High School Campus CERT Graduation on the 25th January.

Throughout the year, HMCI and CIRC met regularly with established CERTS to determine the status of each CERT, its current active membership, to identify what work had been done by the CERT over the last 12 months and how the CERT intends to move forward. Among other things, training needs were identified and is currently underway which includes the scheduling of certifiable First Aid training and the CERT Annual Refresher. The 6-hour CERT Refresher training served to refresh CERT member's basic response skills and knowledge, to share best practices and lessons learnt from CERT in the 'field' as opposed to in the 'classroom', to discuss lessons learnt from the CERT Regional response to Hurricane Irma (i.e. lessons learnt from other Overseas Territories) and to determine how CERTs would be sustained moving forward.

The entire CERT Basic Training manual, exercises and presentations, which will be rolled out in 2018, has been updated this year to keep up to speed with current practices and make more engaging. The CERT Refresher was also re-designed. As with all our revised CERT training material, courses have become more modern, increasingly participatory and engaging.

The CERT Challenge 2017 was a Vulnerability and Capacity Assessment (VCA) Challenge. CERTs were tasked with conducting a community field assessment to identify the various natural and manmade hazards that could affect their community. An outcome of the assessment was for the CERTs to identify three (3) potential mitigation projects that would help mitigate identified hazards impacting their community. CERTs presented their findings at a stakeholder meeting late November a panel of three (3) judges. The panel consisted of the Deputy Governor, Honourable Franz Manderson, HMCI Director, McCleary Frederick and CIRC Director, Jondo Obi.

The result was very close between West Bay, Prospect and North Sound Gardens. Prospect CERT was awarded first place. In second place, West Bay CERT and North Sound Garden came in third place.

National Day of Preparedness

Simon Boxall

May 15th was observed as National Day of Preparedness in the Cayman Islands. This year the theme was "Know your Risks, Make a Plan, Get a Kit, Stay Informed!"

National Day of Preparedness is observed on a public holiday, Discovery Day and is intended to encourage residents to take the opportunity to review their respective family plans and prepare for the hurricane season and any other natural disaster.

National Day of Preparedness activities are featured on CITN news, CIGTV news, Social Media (Facebook, Twitter), Print Media, Government Websites (GIS, GOV, Cayman Prepared) and on Radio Cayman, also a message from the Deputy Governor Chairman of the National Hazard Management Council.

HMCI staff visit several local hardware stores on weekends in the month of May, to directly engage residents about disaster preparedness and their family preparedness plan, encourage them to assemble a disaster preparedness kit and provide brochures and other disaster preparedness. This year over 400 residents entered the draws to win a preparedness kit, with each of the six hardware stores donating a kit and the winners being drawn on live TV (Crosstalk) on June 1st.

CONTINUITY OF OPERATIONS PLANS (COOP)

Danielle Coleman

As a country we spend much time preparing for hurricanes and other potential hazards affecting our islands but what about the aftermath? How do we function if a category 5 hurricane destroys Government offices or if all communication networks are down? What happens if key staff members are off island or can't get to work in the aftermath of a catastrophe? How do we continue to operate and provide critical functions without internet, or if important documents are destroyed?

HMCI works closely with the Portfolio of Civil Service (PoCS) to ensure that Departmental plans are submitted annually to determine the answer to such questions (and many more). HMCI assists by providing COOP guidance to departments and by reviewing and providing feedback once COOP plans are submitted.

This year HMCI worked closely with Facilities Management, the Strategic Reforms Unit, Public Prosecutions Unit, Ministry of District Admin, Tourism & Transport, Ministry of Home Affairs and the Ministry of Planning, Lands, Agriculture and Housing. However given the fundamental importance of such information, HMCI strongly encourages all Departments to submit their COOP in 2018.

GOVERNMENT DEPARTMENT and STATUTORY AUTHORITY TRAINING AND ADVICE

Simon Boxall

Hazard Management assisted many Government Departments with their preparedness, mitigation and response plans in 2017. Eight presentations were delivered to health care workers who go through hazard awareness training annually as a requirement of their annual licensing. In addition, awareness presentations were given to Customs and Immigration Officers and there were meeting with Department of Tourism Officials to align our hazard awareness messages and to assist them with emergency exercise formats. Other ministries, authorities and agencies that received policy guidance or support included the Cayman Water Authority, Department of Planning, the Ministry of Community Affairs, the Cayman Islands Fire Service, Royal Cayman Islands Police Service, the Premier's Office and the Department of Children and Family Services. HMCI staff also met with the Older Persons 2016-2035 Implementation Planning Task Force, and an Older Persons and Persons with Disabilities Draft Policy Paper was produced to design a more inclusive planning philosophy for persons with disabilities, access and functional needs.

PRIVATE SECTOR TRAINING AND ADVICE

Simon Boxall

Hazard Management assisted several private companies with their preparedness, mitigation and response activities in 2017, these included CUC, Home Gas, First Cayman Insurance, St. Mathews University, BNP Paribas, Progressive Distributors, Fosters and Harney's law firm.

RESPONSE

Shelter Management Training

Danielle Coleman

HMCI supported its partner agency, Department of Children and Family Services (DCFS) again this year with the training of 160 persons in a 2-day Shelter Management Training held at Prospect Primary School. HMCI assisted with the review / printing of training material, drafting of case studies, promotion of the training and co-facilitation of the case studies.

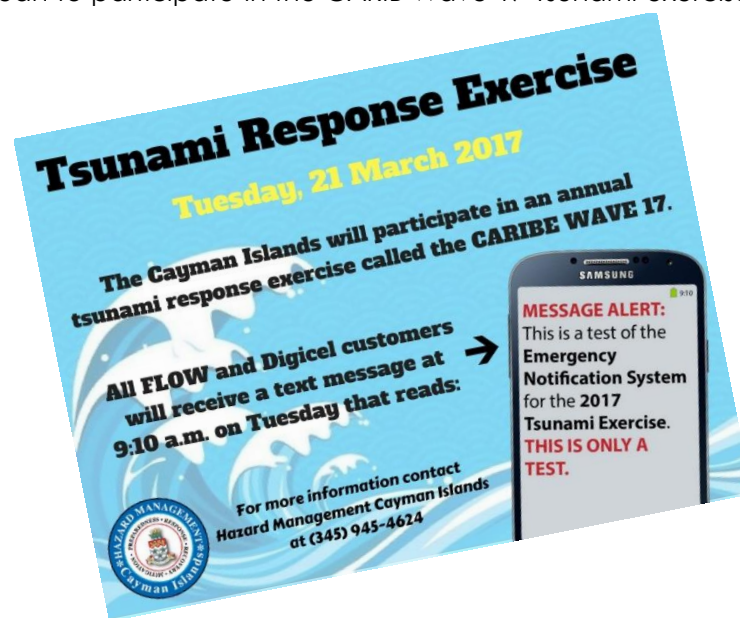
Disaster Exercises

Tsunami Exercise

Teresita DaSilva

On 21 March 2017, the Cayman Islands joined other localities in the Caribbean to participate in the CARIB Wave 17 Tsunami exercise. The tsunami exercise was accompanied by a vigorous public relations campaign, with public service announcements and messages going out on radio, television, and social media. The purpose of the exercise was to evaluate the Islands response plans, increase tsunami preparedness and improve coordination throughout the region. The exercise also provided an opportunity for HMCI to partner with the Utility Regulation and Competition Office and telecom service providers to test mass text notification capability to provide emergency messages to residents.

Flow and Digicel were required to send a mass text message to all customers notifying them of the tsunami exercise. The exercise identified weaknesses in the capabilities of the current telecommunication network providers. Based on the survey results it was concluded that text messaging was not a viable method for emergency notification. HMCI and OfREG have been investigating other options telecommunication network providers. Once the exercise was completed a final text was sent with a survey monkey link requesting the public to evaluate the success of



the exercise. The tsunami exercise survey elicited an excellent response with close to 1,400 residents providing feedback and hundreds of people taking the time to include written comments and suggestions. The survey overwhelming indicated that residents feel that a mass public notification system is vital for public safety.

Annual Hurricane Exercise

Teresita DaSilva

The annual hurricane exercise was held on May 3rd, 2017 at the National Emergency Operation Centre (NEOC). The objectives of the exercise were to:

- Promote inter-agency coordination in disaster situations
- Review Plan checklists to amend and revise as appropriate
- Practice coordination and communication activities between response sections
- Provide an orientation to the process of working in groups for NEOC operations and procedures
- Enhance the understanding of disaster roles and responsibilities
- Provide a refresher on WebEOC
- Identify areas that may need strengthening, and
- Develop training opportunities to meet the response and recovery objectives

The exercise was well attended with approximately 80% of all Clusters represented including the Policy Group and Call Takers. This allowed for substantial interaction between the Clusters. Prior to providing scenario injects, a table top exercise was conducting requiring each EST to answer questions pertaining to each stage of the warning phase. This provided the various Clusters with the opportunity to gain a better understanding of the roles and responsibilities assigned to each EST. Following this, numerous injects were disseminated through WebEOC allowing all groups, including Policy



Group, to actively participate throughout the entire exercise. Cluster Managers were also given the opportunity to practice delivering Situation Reports (SitReps) to the Policy Group. A summary of lessons learnt was recorded which will be used to amend and improve preparedness and response components of the National Plan.

Consulate

Teresita DaSilva

Hazard Management Cayman Islands is committed to increasing the Cayman Islands resiliency and ensuring the Islands are prepared for and can respond to all hazards. All Consular Representatives were invited to participate in a Hurricane tabletop exercise on June 15th, 2017. Consular representatives from Canada, France, Jamaica, Philippines, and the United Kingdom were in attendance. In addition, a representative from the Cayman Islands Airport Authority (CIAA) and the Department of Immigration (DOI) were invited to provide information in their respective fields. The objective of the exercise was to re-engage with consulates to determine responsibilities and manage expectations in the event of a large-scale emergency. A list of scenarios was provided to the group of representatives to gain a better understanding of their capabilities. Consulate members were provided with the opportunity to get clarification from CIAA and DOI regarding issues identified from the scenarios. A summary of action points was recorded that will be used to enhance the functionality of Consulates.

SOL FIRE

Simon Boxall

On the evening of July 23rd, a report was made to 911 of a fire at the Sol wholesale petroleum facility located on South Church Street. Officers from CIFS, RCIPS and HMCI responded to the scene and a precautionary evacuation order was established for a one-mile radius around the South Church Street facility and restricted access to the area with road blocks.

Upon investigation it was determined that a large storage tank containing approximately 15,000 barrels of diesel fuel had an internal fire in the upper levels of the tank. HMCI began posting public notifications to radio stations and social media about the fire and access restrictions, at the same time, contact was made with Red Cross Director regarding opening the Red Cross Shelter to shelter evacuees if needed.

At approximately 8 pm, a joint command of CIFS, HMCI and RCIPS was established on the grounds of the Sunset House Hotel. At 2:45 am (July 24th) the fire in the Sol tank was finally extinguished and Chief Fire Officer issued the 'All Clear.' The Evacuation Order was then lifted, and residents could return to their homes. A debrief was held with residents from the affected area many of whom raised concerns of lack of communication and the dangers associated with the facilities. Suggestions were made to improve the emergency notification to residents in the area in the event of an emergency. In addition, a debrief was held on August 1st, 2017 with

the first responders which highlighted many issues as the result of the multi-agency nature of the incident. It also highlighted communications challenges experienced by residents and first responders.

As a consequence of the Sol Fire incident, response strategies for 'major incident' type events that don't involve the activation of the NEOC, but which still present a significant communications challenge, or the potential for reputational risks was discussed. A Major Incident Plan has been drafted and HMCI, OfReg and the service providers are exploring ways to improve emergency notification for residents in the areas around hazardous materials storage facilities.

HMCI's Response to Hurricane Irma in the Overseas Territories

Danielle Coleman

In the wake of Hurricane Irma and the destruction caused to other Overseas Territories (OT), namely Anguilla, British Virgin Islands and Turks and Caicos, HMCI assisted in the disaster response efforts. Working with Governments in the OTs and other stakeholders, HMCI (along with the Cayman Islands Government) provided both personnel and relief items to these affected areas. Such items included Tarpaulins, jerry cans, hygiene kits. Director McCleary Frederick deployed to Anguilla after the passing of Hurricane Irma and assisted with NEOC Operations. Deputy Director of Preparedness and Planning, Danielle Coleman deployed to BVI on a secondment with British Red Cross as Disaster Manager for a month. Working in collaboration with Department of Disaster Management (BVI Government) and other stakeholders, Danielle's role included conducting Needs Assessments, Relief distributions, volunteer recruitment and training and many other activities. A third deployment of HMCI staff was to Turk & Caicos Islands. Director (McCleary Frederick), Deputy Director of Communication and Operations, Lee Madison and Awareness and Education Officer, Simon Boxall was part of a delegation from the Cayman Islands that delivered relief supplies to the Turks and Caicos Islands. While there they toured some of the damaged areas on Providenciales.

The objective of all 3 missions was to assist in the response and recovery of these OTs whilst at the same time, HMCI returned with invaluable lessons and some new ideas to ensure that Cayman's response to any future Hurricane is effective and timely.

Voluntary Agency Responders Emergency Support Team (VARs)-

Danielle Coleman

One of the many lessons to come out of HMCI staff deployments to Overseas Territories for the Hurricane Irma response this year was the need to re-invigorate coordination between HMCI/ Cayman Islands Red Cross (CIRC)/ NGOs and Service Clubs. Whilst the Voluntary Agency Response Sub-Committee (as it was formerly known as) was set up in the aftermath of Ivan, it has been dormant for several years.

To ensure communication, collaboration and lack of duplication in any disaster response, HMCI, in partnership with CIRC, contacted Rotary/ Lions/Kiwanis/ADRA/Rotaract/ Minister's Association and other Service Clubs, updated the contact database and co-hosted a re-engagement meeting of VARs members in December. CERTs Team Leaders also attended.

A full re-engagement strategy has been designed for 2018 which includes a meeting and the establishment of a training schedule for VARs members.

Earthquakes

Lee Madison

Earthquake activity along the Cayman Ridge was minimal in 2017 with some reports of felt earthquakes in the Cayman Islands. On the 8th of April 2017 at 23:35:09 UTC, the USGS registered a 4.0 earthquake, 69.59 miles (112 km) South of George Town, Cayman Islands. The earthquake was felt in West Bay however there were no reports of damage.

On the 31st of July 2017 at 20:19:57 UTC, the USGS registered a 4.0 earthquake, 27.34 miles (44 km) South of Bodden Town, Cayman Islands. The earthquake was felt in George Town however there were no reports of damage.

The seismic stations and tidal gauge continue to provide information to the world wide and regional earthquake and tsunami monitoring centres.

HMCI continues to provide Earthquake Awareness to the residence through schools, business, public events, and the media as a part of our Comprehensive Disaster Management program.

USGS Earthquake Records

4.0 112 km S of George Town, Cayman Islands 2017-04-08 23:35:09 UTC 10.0 km

4.0 44 km S of Bodden Town, Cayman Islands 2017-07-31 03:41:58 UTC 10.0 km



RECOVERY

There was no impact from disasters that required any recovery activities.

MITIGATION

Mitigation is the effort to reduce loss of life and property by lessening the impact of disasters. For mitigation to be effective we need to act now—before the next disaster—to reduce human and financial consequences later (analyzing risk, reducing risk, and insuring against risk). (FEMA). In 2018, HMCI plans to recruit a Mitigation Officer to develop, implement and manage all Mitigation activities.

COMMUNICATION

National Radio Communication System

Lee Madison

On Thursday the 14th, December the contract for the new radio communications system was signed with Motorola Solutions Ltd.

The new system will provide a much-needed upgrade to the current radio communication system and provide public safety officers with additional reliability and features.

The addition the three new sites will also help to eliminate the issues of availability in certain areas.

HMCI continues to deliver the communication needs of first responders, the table below provides the statistics related to the availability and maintenance of the network.

Availability and Maintenance for 2017					
	Number of Faults Reported	Radios Programmed	Radio Minor Repair	Radio Major Repair	Public Safety Com/911– Down Time (hrs)
Jan – Jun 2017	14	5	62	11	0
July – Dec 2017	8	14	100	1	30
TOTAL	22	19	162	12	30



HMCI Activities

HMCI Staff

Front Row

Tricia Bell, Financial Administrator, **Shenek Conolly**, Executive Officer II, **Danielle Coleman**, Deputy Director Preparedness & Planning, **Hon. Tara Rivers**, Minister, Financial Services & Home Affairs, **Kathryn Dinspel-Powell**, Deputy Chief Officer Financial Services & Home Affairs, **Leanna Rivers-Myles**, Executive Officer I, **Yadava Persad**, CCRIF Sponsored Intern

Back Row

Lee Madison, Deputy Director Communication & Operations, **Simon Boxall**, Public Education and Awareness Officer, **Shiann Powery**, Operations and Logistics Officer, **McCleary Frederick**, Director, **Dax Basdeo**, Chief Officer Financial Services & Home Affairs, **Teresita DaSilva**, Preparedness and Planning Officer, **Karefia Ross**, Communication Technology Officer, **Leslie Vernon**, Special Projects

LIFETIME ACHIEVEMENT AWARD

Simon Boxall

On May 18th, 2017 Director of Hazard Management Cayman Islands, Mr. McCleary Frederick, made history at the 31st Annual Governor's Hurricane Conference in Palm Beach, Florida as the first non-United States citizen to receive a Lifetime Achievement Award. He was recognized for his "major contributions and outstanding accomplishments in the field of hurricane preparedness, response, recovery and mitigation at both the local and national level."

The Lifetime achievement award is given to an individual that has made outstanding or substantial contributions and accomplishments in the field of hurricane preparedness, response, recovery or mitigation at local, state or national level over an entire career.

Conferences and Seminars

This year was the first time that HMCI staff had been approved to attend training at FEMA training facilities at Camp Blanding, Florida and the Emergency Management Institute in Emmitsburg. Staff attended courses in Science of Disasters, Public Information and Warnings, Emergency Operations Planning, Community Emergency Response Team Train the Trainer, Program Management and Designing Emergency Exercises, in addition to online training modules.

ECP-601 Effective Business Continuity Management

Dates: 8th – 10th February – Hilton Grand Vacation Suites, Florida

Attendee: Teresita DaSilva

This course is part of the Institute for Business Continuity Training program.

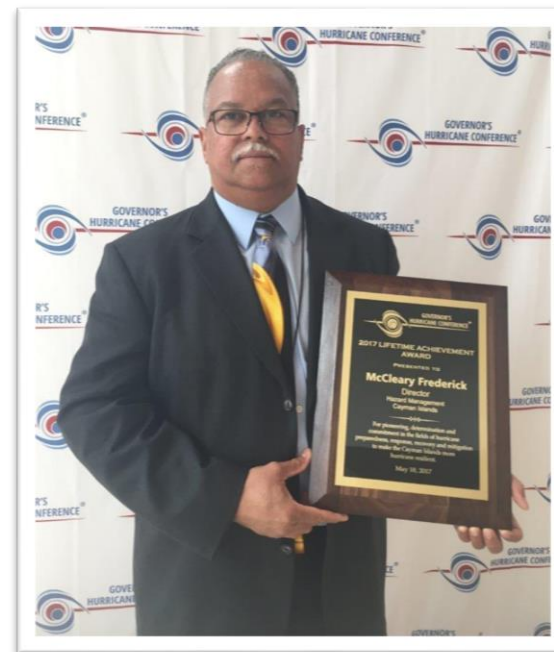
The course took place over 3 days and introduced persons new to Business Continuity to many topics. The topics provided an overall understanding of the Business Continuity Management lifecycle, equipped participants with the tools and knowledge required to conduct a Business impact analysis and risk assessment, and the ability to identify cost-effective strategies.

L-102 Science of Disaster/L-103 Emergency Planning/L-104 Exercise Planning/L-105 Public Information and Warning

Dates: 29th March – 7th April - Camp Blanding, Florida

Attendee: Lee Madison, Simon Boxall and Danielle Coleman

These courses are part of FEMA's National Emergency Management Academy



L-102 was a course that went into the science of disasters including chemical, biological, radiological, nuclear as well as weather related events, earthquakes and Tsunami's.

L-103 introduced basic concepts and steps to apply planning discipline and skills. It introduced the steps to accomplish writing plans and using them to deal with special events, which are common challenges.

L-104 introduced the fundamentals of exercise design including tabletop, functional and full-scale exercises as well of how to evaluate and improve exercises.

L-105 PIO topics covered include the role of the PIO (Program Information Officer); communication tools and resources encompassing social media; effective communication; preparing the community through outreach and other means; and communication in an incident.

CUC First Responder's Training

Dates: 6th May

Attendees: Danielle Coleman and Teresita DaSilva

CUC First Responder's Training was a 1-day course and covered many topics around electrical safety including what to do in a road traffic accident if a vehicle encounters an electrical pole. Participants were also given a tour of the CUC Emergency Operations Centre and met many key responders.

G428 Community Emergency Response Team Train the Trainer/ E/L/GO427 CERT Program Manager

Dates: 24th -28th July-Emergency Management Institute, Emmitsburg

Attendees: Danielle Coleman and Teresita DaSilva

These residential courses are part of FEMA's National Emergency Management Academy

G428-The purpose of CERT TTT was to produce competent instructors for the CERT Basic Training. The course acted as a refresher for the basic CERT material but also ensured that participants presented back the material daily at "Teach back" sessions.

E/L/GO427 CERT Program Manager Course is designed to prepare CERT Program Managers for the tasks required to establish and sustain an active local CERT Program. As the sustainability of CERTs is a key area for HMCI's Preparedness team, sharing ideas and best practices with other participants meant that the course was highly productive.

The HMCI Preparedness team has also taken advantage of several online FEMA training modules.

2017 Association of Professional Communications Officers Conference

Dates: 13th – 16th August 2017 – Denver, Colorado

Attendee: Lee Madison

The APCO Conference combines over 300 vendors as well as numerous seminars and workshops related to public safety communications. New products were showcased, the conference helped fine tune the impending Motorola contract for the upgrade of the public safety radio system. Various E-911 vendors were also spoken to as the government is planning an upgrade.

Motorola Trunked User Group Conference

Dates: 17th – 18th August 2017 - Denver, Colorado

Attendees: Lee Madison

MTUG brings together radio system managers as well as technicians and end users of Motorola systems. It provides a look at future products and allows direct access to senior Motorola technical staff and managers.

Regional “Seismic Network Operators Short Course on Best Practices”

Dates: 22nd – 25th August 2017 – Mayaguez, Puerto Rico

Attendees: Lee Madison

The course provided training for approximately 15 seismic station operators from across the Caribbean Sea and adjacent regions and was focused on t Earthworm and Seiscomp, data and metadata aspects and GNSS and GPS matters. The meeting of the WG1 (June 9) will focus on the status of the tsunami monitoring and detection systems of ICG/CARIBE EWS.

Caribbean sub-regional workshop on preparedness for and response to acute events related to chemical hazards

Dates: 30th September – 2nd November 2017 – Port of Spain, Trinidad

Attendee: Lee Madison

The workshop was to assist in the understanding and application of planning, preparing and coordinating response and recovery to chemical threats, including those arising from large-scale chemical incidents. The workshops included an exercise scenario of an acute event of regional (Caribbean) relevance, involving the accidental or deliberate release of chemicals.

OTHER MATTERS

RFA Mounts Bay

Teresita DaSilva

RFA Mounts Bay tested their disaster response capability on Friday, July 7th.



The amphibious operation tested the ship's ability to land vehicles and equipment on Seven Mile Beach. The capacity to land heavy equipment, water and medical supplies could prove useful for the Cayman Islands in the aftermath of a hurricane or earthquake, specifically if the main dock in George Town is damaged. The exercise was considered successful, with a track being laid down on the beach and the equipment and vehicles making it off the landing barge and onto the shore without incident.

The ship's visit also provided an opportunity for Hazard Management Cayman Islands officials from the RCIPS and other first response agencies to meet with the ship's crew, and review the possible range of support that could be provided by the RFA Mounts Bay auxiliary ship. In addition to RFA Mounts Bay visit, a training session

was organized to allow HMCI to further explore the capabilities of Crisis Hub and benefits that may be derived from use of this tool.

CCRIF Regional Internship Programme

Danielle Coleman

Again, this year, HMCI took part in CCRIF's Regional Internship Programme and welcomed Yadava Persad to our team for 3 months. Yadava assisted with a diverse range of activities from helping draft the Oil Spill plan, reviewing and amending the Community Emergency Response Team training programme, Disaster Risk Reduction day activities, warehousing and loading relief supplies (to help other OTs) in the aftermath of Hurricane Irma. Whilst HMCI's Hurricane Irma response was not in his original terms of reference, Yadava acted like a true 'emergency responder' and was involved in heavy lifting of relief supplies and various other response tasks.

The CCRIF internship serves as an excellent way of getting participants and host countries to learn more and share ideas/ best practices. Yadava shared with us stories about his previous placement at Montserrat; given that Montserrat has other hazards that aren't faced by us here in Cayman, it was thought provoking and helpful to hear how other OTs deal with the hazards they face. It encouraged us to see a wider perspective and look at ways we can make our response in future more effective.

Staff Secondment: 911 Staff member seconded to HMCI

Shiann Powery

In an effort to do our part in making the Civil Service, a "World Class Civil Service" and acknowledging that having experienced versatile staff is a significant part of that vision, HMCI welcomed Mr. Leslie "Lennox" Vernon to the team for a 5 month secondment, from July to December 2017. The goal of this opportunity was to afford Lennox with work experience in a new environment, where he could then in turn use the new skills at DPSC 9-1-1, on his return. Performance targets were identified by DPSC Director and agreed to by HMCI Director before Lennox's appointment, which included:

- Strategic coordination and proactive management of projects and programs
- The ability to provide direction, support teamwork and motivate others in such a way that instils confidence
- Get work done through others, while at the same time winning their confidence, respect, and loyalty and cooperation
- Provision of operational advice and support to improve delivery of services to internal and external customer bases.

During Lennox's tenure with the Department, he was assigned various projects. Such projects included, the review and development of existing NEOC policy/s; developing and implementing an action plan for DPSC 9-1-1 to use NEOC call-centre, at GAB, as a back-up or alternate facility; and to assist and/or identify a public mass-notification system (for residents near Jackson Point terminal) with the Cayman Islands Utility Regulation and Competition Office (OfReg). He was also required to complete FEMA courses on Incident Command Systems, as well as, familiarize himself with the various policies & procedures documents and emergency plans within the office.

Lennox's contributions to HMCI goals were well received and appreciated. Whilst there are some tasks still ongoing, they require input from other entities and Lennox did all he could to complete assigned task. In the end of this partnership, he gained valuable experience and skills in areas that he was unfamiliar with and HMCI gained valuable contribution.

In the words of Lennox himself, "This opportunity was very rewarding educationally and experientially. The most notable for me was that it allowed me to learn the inner workings of HMCI. I was able to immerse into the department's daily work activities, culture and atmosphere. I've garnered a new appreciation for disaster management in the Cayman Islands and furthermore now understand how both departments (HMCI & DPSC) fit into the larger scheme of the government's mission for public safety."

Looking Forward

Looking forward, some of the areas of focus for 2018 include:

Building Resilience

Community Emergency Response Teams (CERT)

Rebuilding and strengthening of the CERT program, supporting existing teams and developing new teams in other communities as well as a 'generalist' CERT course that is open to all. HMCI and the Cayman Islands Red Cross will continue to work together to training and developing CERT volunteers.

Volunteer Agency Responders (VARs)

Re-engaging and developing the Cayman Islands Volunteer Agency Responders (VARs) Emergency Support Team which has a vital role in disaster response. It is crucial that the roles and responsibilities of the volunteer agencies and civic clubs are understood, HMCI will continue to foster collaboration between the volunteer agencies and civic clubs

Maintaining volunteer interest and sustainability in both the CERT and VARs program is a challenge and is dependent on the ability to provide ongoing training opportunities and engagement of volunteers involved. An internal strategy has been developed which includes the rolling out of a robust training program in 2018.

First Responder Training

Continue to provide relevant hazard awareness and targeted training to first responders such as ECAT, Hazwoper, Mass Casualty and Incident Command.

Disaster Awareness in Schools

Expanding the school disaster awareness program to include all High School, Middle School and Primary Schools in 2018. Outreach in these schools will include interactive presentations, workshops and drills.

Business Continuity

HMCI plans to offer business continuity trainings in 2018

We would like to receive at least 80 percent of the Continuity of Operations Plans back from Government Departments and Agencies prior to the deadline, with more focus on quality relevance.

Social Media

Expand on our social media presence including strategies improve HMCI footprint on Facebook and Twitter and expanding to other social media platforms.

We are in the process of investigating new methods for sharing HMCI's messages on preparedness including the creation of documentaries and other mediums to reach a wide range of audiences.

Mitigation

The recruitment of a Mitigation Officer will provide HMCI with the necessary skills to develop a National Mitigation Strategy and to provide input on mitigation related issues such as planning and environmental impacts.

We will facilitate additional meetings with key stakeholders such as Lands and Survey, the Planning Department, Building Control, Utilities etc.

Hazard Analysis

Storm surge is the number one threat to life and property from hazards in the Cayman Islands. In 2018 -2019, we plan to identify a reliable and accurate storm surge modelling system (and associated costs) that will assist the Cayman Islands.

Response

Emergency Notification

The Disaster Preparedness and Hazard Management Law, 2016 requires the establishment of an Emergency Notification System which is well established in many countries, and provides an effective solution for distributing critical and sometimes lifesaving information to residents and visitors in a timely manner. The implementation of a National Emergency Notification System is underway with the implementation of Phase One – Radio Interrupts, which was signed off by Cabinet in the last financial year and will be implemented by quarter 2 of 2018.

This phase of the long-awaited project will allow Government to interrupt radio broadcasts with emergency notifications. Phases two and three, which are still in the planning stages, facilitate the interruption of television broadcasts and the guaranteed timely delivery of emergency notifications to communications devices.

HMCI will continue collaboration with other public safety agencies including the Department of Public Safety Communications, telecoms regulator OfReg, and various private telecoms companies to implement all stages of this national system.

Plan Development

We intend to complete the draft of the Earthquake Plan in 2018.

The assistance of the Department of Environment is needed to finalize the draft Marine Oil Spill Contingency Plan in 2018. After the plan is finalized an exercise with Department of the Environment and other key first responders for this hazard will be concluded.

Pet Friendly Emergency Shelter

It has long been recognized that in an emergency many persons are not willing to leave their pets behind, even if it means risking their own lives from the impending threat. The development of a "Pet Friendly Policy" and the identification of shelters as "Pet Friendly Shelters", provides an option for people with dogs and cats to shelter in a government approved shelter facility. This could save the lives of not just animals but of pet owners too. Some work remains to make this a reality for the 2018 hurricane season.

Appendix A

2016/2017 Budget

Budget 2015-16 Amount \$		Account	Description	Actual/ Forecast 15-16 Amount \$	6-Month Ending Dec-16	12-Month Ending Dec-17	Budget 2016/17 Amount \$
			<u>Expenses</u>				
573,312	PERS	50011	Basic Salary		286,656	573,312	842,416
114,457	PERH	50072	Employee Health Care Costs		44,820	89,640	134,460
34,399	PERP	50080	Government Pension Contribution		17,199	34,399	51,598
34,399	PERS	50082	Pension Contribution - PPE Employ		17,199	34,399	51,598
0	PERS	50083	Pension Contribution - Group				0
0	PERS	50017	Wages				0
2,608	OGX	55506	Financial Attest Services		1,210	2,419	3,629
0	PERS	50029	Acting Allowance				
0	PERS	50036	Entertainment				
0	PERO	50071	Recruitment				
0	PERS	50075	Deputy Governor Awar				
2,795	PERL	50155	Comp Time Expense		5,100	10,200	15,300
5,000	SACT	50224	Official Travel - Expense		3,600	5,100	8,700

8,999	SACR	50229	Training		2,000	12,000	14,000
3,000	SACS	50602	Food / Dietary Supplies		1,500	3,000	4,500
0	SACS	50620	Other Dietary Supplies				
500	SACS	50960	Uniforms		800	800	1,600
0	SACS	50961	Vehicle Fuel and Oil				
500	SACS	50962	Computer and Communications Supplies				
501	SACS	50964	Paper and Printing Consumables		300	600	900
1,200	SACS	51001	Office Supplies - Consumables		600	1,200	1,800
501	SACS	51051	Printing - Other				
201	SACS	51052	Publications, periodicals				
40,000	SACS	51075	Disaster Preparedness		17,000	48,000	65,000
1,501	SACR	51081	Training Materials				
90,003	SACU	51405	Electricity		45,600	91,200	136,800
18,000	SACU	51430	Telephone Charges		8,064	16,128	24,192
2,850	POS	51460	Data Communications Lines				
0	POS	51470	Cable Television				
399	POS	54211	Advertising		300	600	900
24,999	SACS	54218	Shelter Management		10,000	22,000	32,000
300	POS	54227	Bank Charges		600	1,200	1,800

4,999	POS	54256	Professional Fees		3,000	2,000	5,000
4,000	POS	54300	Freight and Shipping		2,100	4,200	6,300
1,000	POS	54304	Mail Courier Service		500	960	1,460
20,001	OSC	54308	Local Promotion / Community Sponsor		6,006	23,994	30,000
10,003	POS	54316	Maintenance - Buildings		4,800	9,600	14,400
250,000	POS	54319	Maintenance - Radios/Transmitter		56,200	157,400	213,600
1,000	POS	54320	Maintenance - Office Equipment				
24,999	POS	54324	Maintenance - Other Equipment		12,500	25,000	37,500
4,000	POS	54334	Maintenance - Vehicles and Equipment		1,800	3,600	5,400
1,201	POS	54351	Computer Software Maintenance				
20,001	POS	54352	Software Licensing Fees		21,100	21,100	42,200
1,001	POS	54361	Computer Hardware Maintenance		600	1,200	1,800
600	POS	54370	Miscellaneous Visits & Entertain				
4,999	POS	54401	Public Relations and Publicity		300	1,950	2,250
36,000	POS	54418	Hurricane Disaster Preparedness		22,000	43,000	65,000
500	POS	54424	Vehicle Cleaning			1,150	1,150
250	POS	54433	Overseas Postage				
3,090	POS	54457	Vehicle Licensing / Inspection		1,000	2,000	3,000
8,035	SUPI	57277	Insurance - Property (formerly Buildings)		20,904	41,808	62,712

1,174	SUPI	57278	Insurance - Liabilities		498	996	1,494
5,208	SUPI	57281	Insurance - Vehicles		288	576	864
44,195	SUPI	57287	Insurance - Content				
24,002	SACL	58001	Lease of Sites or Buildings		12,000	24,000	36,000
800	SACL	58004	Lease of Vehicles		240	480	720
0	FORX	59001	Gain/Loss on Foreign Exchange - Entity Transactions				
155,871	DINFA	60004	Depreciation Other Infrastructure Assets		24,150	48,299	72,449
5,400	DMV	60005	Depreciation Vehicles		7,200	14,400	21,600
670	DFN	60008	Depreciation Furniture and Fittings		285	571	856
12,862	DCPTH	60009	Depreciation Computer Hardware		8,289	16,579	24,868
65	DOEQ	60011	Depreciation Office Equipment		379	759	1,138
58,210	DPE	60012	Depreciation Other Plant and Equipment		31,342	62,683	94,025
0	OSC	57154	Radio/Other		200,000	400,000	600,000
0	OGX	55531	Purchase of Fuel -DVES		1,833	3,667	5,500
\$1,664,560.00			Total Entity Expenses	\$ -	\$901,863	\$1,858,168	\$2,742,480

Annual Budget Statement Extracts

NEM 1		\$636,941			
DESCRIPTION		Providing a comprehensive disaster management approach to risk management, including prevention, preparedness, mitigation, response and recovery			
- Ensuring public safety through maintaining a high level of community preparedness - Providing residents with adequate information, capacity and skills to allow them to take responsibility for their personal safety					
MEASURES		2016/17 1 Jul to 31 Dec 2016	2016/17 1 Jan to 31 Dec 2017	2015/16 Budget Forecast	
QUANTITY		2,000-2,500 75-100 5-15	4,500-5,000 250-300 10-30	3,500 500 10	
- Number of hours providing disaster preparedness - Hours to develop and coordinate community response through Community Emergency Response Teams. - Hours of meetings of the National Hazard Management Executive and Council					
QUALITY		90-100%	90-100%	90-100%	
- Ensure alignment of plans with credible scenarios and that plans address business continuity for all sectors. Public awareness programme relate to hazards - Increased community resilience through community based preparedness and response		100%	100%	100%	
TIME/NESS		95-100%	95-100%	95-100%	
- National disaster activities performed in accordance with the timescales agreed with the National Hazard Management Council and the Chief Officer Home Affairs - Develop local capacity through training and development of community hazard management teams and Non-Government Organisation network within agreed timelines - Meetings convened within 1/2 hour and concluded within 1 ½ hour of issue of weather reports by United States National Hurricane Centre		100%	100%	100%	
LOCATION		100%	100%	100%	
Cayman Islands					
COST		\$212,314	\$424,627	\$381,042	
RELATED BROAD OUTCOME:					
5. Modern, Smart Infrastructure					

CAYMAN ISLANDS GOVERNMENT

2016/17 BUDGET STATEMENTS

1.15

MEM 2		Policy Advice and Ministerial Servicing		\$276,696
DESCRIPTION				
Provide policy advice to the Ministers, Deputy Governor, Chief Officers, Government Departments and others on matters relating to national hazard management and disaster preparedness. Provision of technical advice to the Ministry and Government agencies and the private sector on telecommunication matters.				
MEASURES		2016/17 1 Jul to 31 Dec 2016	2016/17 1 Jan to 31 Dec 2017	2015/16 Budget Forecast
QUANTITY				
- Hours of advice on hazard management - Hours of advice on telecommunication matters		250-300 100-150	500-650 260-300	400 120
QUALITY				
All personnel providing policy advice is qualified in his/her area of expertise		100%	100%	100%
TIMELINESS				
Response to request for advice answered within the timeframe as agreed at time of request		90-100%	90-100%	90-100%
LOCATION				
Cayman Islands, Overseas		100%	100%	100%
COST		\$92,232	\$184,464	\$173,321
RELATED BROAD OUTCOME:				
5. Modern, Smart Infrastructure				

NEM 3		Hazard Mitigation		\$271,692
DESCRIPTION				
A cooperative proactive partnership of the public, private sectors to build a culture of safety and resilience, to encourage and facilitate implementation of mitigation measures and minimize the consequences of natural and other disasters.				
MEASURES	2016/17 1 Jul to 31 Dec 2016	2016/17 1 Jan to 31 Dec 2017	2015/16 Budget Forecast	
QUANTITY				
- Hours to ensure periodic review and update and application of codes and standards to meet emerging or changing threats - Days to provide seismic monitoring for the Cayman Islands of any natural seismic events - Hours developing the National Mitigation Policy	50-75 183 100-150	100-150 365 250-300	10 365 50	
QUALITY				
- Track performance in mitigation/risk reduction by using proven measures - Maintain seismic monitoring stations will also be part of a Caribbean wide network to allow greater accuracy in pinpointing area of seismic disturbance	80-90% 100%	80-90% 100%	80-90% 100%	
TIMELINESS				
- Risk assessment and development of risk maps and policy within the time frame agreed with the National Hazard Management Council and Chief Officer Home Affairs - Seismic monitoring 365 days per year	100% 100%	100% 100%	100% 100%	
LOCATION				
Cayman Islands, Overseas	100%	100%	100%	
COST	\$90,564	\$181,128	\$169,799	
RELATED BROAD OUTCOME:				
5. Modern, Smart Infrastructure				

NEM 4	National Disaster Response	\$627,658		
DESCRIPTION				
Provide the management and support needed to ensure National Response readiness in the event of any national disaster. The provision of assistance during or immediately after a disaster for the preservation of life and the provision of basic essential supply and services for those people affected. The deployment of telecommunications equipment and personnel.				
MEASURES		2016/17 1 Jul to 31 Dec 2016	2016/17 1 Jan to 31 Dec 2017	2015/16 Budget Forecast
QUANTITY				
• Number of hours providing National Emergency Operation Center management and coordination		1,500-2,000	3,000-4,000	1,500
• Hours to plan and conduct Annual Hurricane exercise and other Disaster exercise		100-150	250-300	100
• Hours to manage and coordinate relief assistance to the affected population		100-150	250-300	0
• Hours to ensure readiness of electronic incident management systems and emergency telecommunications		250-300	500-600	550
QUALITY				
• Ensure existence of coordinating focal point for multi-hazard responses		100%	100%	100%
• Improved coordination and communication between response agencies		80-90%	80-90%	80-90%
• Relief operations meet or exceed stated standards of basic essential supply and services for those people affected		80-100%	80-100%	80-100%
• Emergency telecommunications and electronic incident management systems available on standby		100%	100%	100%
TIMELINESS				
• National Emergency Operation Center activation depends on the occurrence of a National Incident		100%	100%	100%
• Annual National Exercise prior to 1 June each year		100%	100%	100%
• Disaster relief can be of an immediate, short-term, or protracted duration		100%	100%	100%
• Available 24 hours 365 days per year		100%	100%	100%
LOCATION				
Cayman Islands, Overseas		100%	100%	100%
COST		\$209,219	\$418,439	\$379,230
RELATED BROAD OUTCOME:				
5. Modern, Smart Infrastructure				

MEM 6	Emergency Shelters Management and Preparedness Activities		\$380,835	
DESCRIPTION				
Provide shelter management activities and ensure availability of shelters during and after a disaster. Maintain emergency generators and other essential facilities for shelter operations.				
• Inspection of physical facilities and liaising with Public Works Department to ensure necessary maintenance and repairs are carried out. • Restocking of essential supplies and documentation kit and post-disaster food supplies • Distribution of radios, keys and telephones to Shelter Managers and district representatives.				
MEASURES		2016/17 1 Jul to 31 Dec 2016	2016/17 1 Jan to 31 Dec 2017	2015/16 Budget Forecast
QUANTITY				
• Number of emergency shelters managed • Capacity to provide shelter occupancy • Maintain and fuel shelter generators • Number of hours managing shelters		20 5,000-6,000 16 16	20 5,000-6,000 16 16	20 5,000-6,000 16 16
QUALITY				
All National Disaster Plan requirements are compiled in agreement with the National Hazard Management Council and shelters are available for activation		95-100%	95-100%	95-100%
TIMELINESS				
• All Emergency Shelter capacity is available in the event of a tropical cyclone or other disaster occurring • Shelter remain open until alternative accommodation is found for displaced people • All shelter generators are maintained and fueled for operation • Shelter availability including adequate food and water supply is available at shelters		100% 95-100% 95-100% 100%	100% 95-100% 95-100% 100%	100% 95-100% 95-100% 100%
LOCATION				
Cayman Islands		100%	100%	100%
COST		\$126,945	\$253,890	\$232,532
RELATED BROAD OUTCOME:				
5. Modern, Smart Infrastructure				

NEM 8	Technical Services for Telecommunication System			\$178,218
DESCRIPTION Provision of technical services required for the planning, operating and maintaining of the telecommunication system infrastructure: Switching, Radio and ancillaries equipment that support the Government Agencies.				
MEASURES		2016/17 1 Jul to 31 Dec 2016	2016/17 1 Jan to 31 Dec 2017	2015/16 Budget Forecast
QUANTITY • Number of radios using system infrastructure • Hours of Radio System Management		1,700-1,800 700-750	1,700-1,800 1,400-1,500	1,700-1,800 1,600
QUALITY System infrastructure is continuous monitored for availability and reliability (overall network availability)		95-99%	95-99%	95-99%
TIMELINESS Response Times: For Critical System (911 system; paging systems; fire department) • During normal working hours: 15 minutes • Outside of normal working hours: 45 minutes Other Systems • Grand Cayman: within 1 Hour • Cayman Brac and Little Cayman: Next available flight				
LOCATION Cayman Islands		100%	100%	100%
COST		\$59,406	\$118,812	\$173,548
RELATED BROAD OUTCOME: 5. Modern, Smart Infrastructure				

Note: The total cost of supplying this output is \$548,658. However, the revenue of \$370,440 from other third parties reduces the cost to Cabinet to \$178,218.

A Thousand Words



Hurricane Exercise





Mounts Bay



HMCI Staff on Mounts Bay



Going for a ride

13 OCTOBER 2017
**INTERNATIONAL DAY
 FOR DISASTER REDUCTION**
 REDUCING THE NUMBER OF AFFECTED PEOPLE

