

### SITUATION

Hurricane Dorian, the 1<sup>st</sup> named hurricane of the 2019 Atlantic Hurricane season, formed on Saturday August 24, 2019. At the peak of strength, Dorian, a Category 5 hurricane had sustained winds of 185 mph with gusts of up to 220 mph. Estimated rainfall was 12-15 inches, and storm surge 18-23 feet above sea level.

As a Tropical Storm, Dorian placed four (4) CDEMA Participating States - Barbados, St. Vincent and the Grenadines, Saint Lucia and Dominica - under Tropical Storm Warning and one (1) CDEMA Participating State - British Virgin Islands under Hurricane Warning. The impacts on these five (5) states were negligible to minimal. Hurricane Dorian significantly impacted the north-western Bahamas islands of Abaco and Grand Bahama and the surrounding Cayes.

Hurricane Dorian made several records and is historic in many ways. It is the strongest Atlantic hurricane documented to directly impact a land mass since records began, tying it with the Labor Day Hurricane of 1935. Hurricane Dorian affected the north-western Bahamas islands for an approximate total of 68 hours, with the southern eye-wall planted over Grand Bahama for about 30 hours. The unpredictability and unprecedented nature of this hurricane is also record-making.

#### Grand Bahama and Abaco, The Bahamas Preliminary Exposed Population & Loss Estimates for Rapid Needs Assessment Teams (RNAT).

For Planning Purposes Only (Sept., 04, 2019)



#### Legend

-  Hurricane Dorian
-  Hurricane Track
- Exposed Population
-  17224.0000 - 24052.8000
-  24052.8000 - 30881.6000
-  30881.6000 - 37710.4000
-  37710.4000 - 44539.2000
-  44539.2000 - 51368.0000

Analysis conducted with QGIS Desktop 3.2.1  
 BaseMap: Google Terrain  
 Coordinate System: EPSG:3857-WGS84  
 Projection: Psuedo-Meractor  
 Units: Meters

# UPDATES PROVIDED BY THE NEMA EMERGENCY SUPPORT FUNCTION (ESF)

ESF with Bahamian Lead Agency	Role/ Area of Coverage	1600 HRS 5 SEPTEMBER 2019 UPDATE
<b>ESF 1- Transportation</b> (Ministry of Public Works)	<ul style="list-style-type: none"> <li>• Coordination of Land, Sea &amp; Air transportation services</li> <li>• Road repair and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Aircraft and vessel movement being updated to be issued 6 September 2019</li> </ul>
<b>ESF 2- Communication</b> (Royal Bahamas Police Force)	<ul style="list-style-type: none"> <li>• Inter and intra-departmental communication (services and equipment)</li> <li>• Family island communication</li> </ul>	<ul style="list-style-type: none"> <li>• 3 radio sites are down</li> <li>• Primarily using satellite phones for connectivity on affected islands</li> <li>• Cell service partially restored on the affected islands</li> <li>• VSAT to be established by WFP</li> </ul>
<b>ESF 3- Public Works and Transport</b> (Ministry of Public Works)	<ul style="list-style-type: none"> <li>• Civil Engineering</li> <li>• Utilities</li> <li>• Water &amp; Sewage</li> <li>• Damage Assessment</li> <li>• Debris Removal</li> <li>• Infrastructure &amp; Critical Facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Sandy Point and Cross Road Pump Stations are operational via generator</li> <li>• Spring City Sewer Station under water</li> <li>• Marsh Harbour Pump Station compromised</li> <li>• Well Field well pumps under water</li> <li>• Treasure Cay holding tank uprooted and cannot be located</li> <li>• Treasure Cay Sewer Station compromised</li> <li>• 2 Pumping Stations in Grand Bahamas under water- Generator and diesel pumps under water and damaged</li> <li>• Settlers Way Pumping Station under water</li> </ul>

ESF with Bahamian Lead Agency	Role/ Area of Coverage	1600 HRS 5 SEPTEMBER 2019 UPDATE
<p><b>ESF 4- International Assistance</b> (National Emergency Management Agency)</p>	<ul style="list-style-type: none"> <li>• Foreign Affairs</li> <li>• International Aid</li> </ul>	<ul style="list-style-type: none"> <li>• Self reports from USAID indicated that they are facilitating donations of hygiene kits, chainsaws and water containers</li> <li>• Online google docs established to facilitate registration of interest by INGOs and other entities. Process ongoing to connect INGOs and other entities to the ESFs based on their area of interest, resources and capabilities.</li> <li>• Daily Partner/Donor Coordination meetings held at 5pm</li> <li>• NEMA Financial Donations protocol established and shared through a diversity sources</li> </ul> <p>Bahamas Disaster Relief Fund established to receive cash via NEMA and cheque/wire via RBC Royal Bank (Bahamas) Limited account. Arrangements are being in place allow the receipt of credit card donations from 9 Sep 2019.</p>
<p><b>ESF 5 - Planning and Information</b> (National Emergency Management Agency)</p>	<ul style="list-style-type: none"> <li>• Information Management</li> </ul>	<ul style="list-style-type: none"> <li>• Status update mapping on critical infrastructure being facilitated with BNGIS and PDC. Additional products being produced by MapAction</li> <li>• Communication Strategy developed/enhanced and being implemented by NEMA and various entities using a diversity of distribution channels.</li> </ul>

ESF with Bahamian Lead Agency	Role/ Area of Coverage	1600 HRS 5 SEPTEMBER 2019 UPDATE
<p><b>ESF 6 - Mass Care and Shelter Service</b> (Department of Social Services)</p>	<ul style="list-style-type: none"> <li>• Social services</li> <li>• Shelter management</li> </ul>	<ul style="list-style-type: none"> <li>• Approximately 800 persons in shelter in Grand Bahama</li> <li>• Awaiting number of persons in Clinic and Admin Building in Marsh Harbour</li> <li>• Confirming other areas in Abaco being used as shelter</li> <li>• Arrangements facilitated to disseminate food and water to affected islands</li> <li>• Continuously working to ensure food/water distribution is meeting the needs of the affected populations</li> </ul>
<p><b>ESF 7 - Relief Supplies and Distribution</b> (National Emergency Management Agency)</p>	<ul style="list-style-type: none"> <li>• Logistics</li> <li>• Relief Supplies</li> <li>• Donation Management</li> </ul>	<ul style="list-style-type: none"> <li>• Protocols for relief supplies being finalized</li> </ul> <p>Information on donations through the national system being managed by NEMA should be sent to <a href="mailto:nemadonations@bahamas.gov.bb">nemadonations@bahamas.gov.bb</a> or communicated via telephone 242-323-5394 or 242-341-0127</p>
<p><b>ESF8 - Health and Medical Services</b> (Ministry of Health)</p>	<ul style="list-style-type: none"> <li>• National medical asset coordination and management</li> <li>• Public health</li> <li>• Medical care</li> </ul>	<ul style="list-style-type: none"> <li>• Health EOC (located at MoH HQ) activated and being managed. It includes the use of SUMA to manage the medical donations</li> <li>• Telephone number established (242-502-4771) to coordinate the offers of medical support (supplies, equipment and personnel)</li> </ul> <p>Details on the process to allow medical/allied health personnel to be registered for temporary work in the Bahamas will be communicated as well as the procedure for sending medical supplies and equipment</p> <ul style="list-style-type: none"> <li>• Abaco health facility was not compromised</li> <li>• Affected islands had received a pre-impact 2-month medical supplies/medication as part of the MoH Hurricane Plan. Currently working to top-up/replace the supplies in Freeport</li> </ul>

ESF with Bahamian Lead Agency	Role/ Area of Coverage	1600 HRS 5 SEPTEMBER 2019 UPDATE
<p><b>ESF9A - Urban Search and Rescue</b> (Royal Bahamas Defense Force)</p> <p><b>ESF9B- Marine Search and Rescue</b> (Royal Bahamas Defense Force)</p>	<ul style="list-style-type: none"> <li>• Search and Rescue</li> <li>• Evacuation and extraction of affected personnel</li> </ul>	<ul style="list-style-type: none"> <li>• Search and Rescue continue to be a priority and is being coordinated by Royal Bahamas Defence Force with assistance from the US/UK military and other SAR partners</li> <li>• Given the fluidity of the situation, the total number of evacuees still being compiled</li> </ul>
<p><b>ESF10A - Hazardous Materials Land</b> (Department of Environmental Health)</p> <p><b>ESF10B - Hazardous Materials Marine</b> (Ministry of Transport and Aviation, Port Department)</p> <p><b>ESF10C- Bioterrorism</b></p>	<ul style="list-style-type: none"> <li>• Hazardous Material spillage/release</li> </ul>	<ul style="list-style-type: none"> <li>• Oil and Refinery Specialist sourced through the CDEMA led RRM and is currently on the ground reviewing aerial footage</li> <li>• Arrangements are being facilitated to get Specialist to Grand Bahama</li> </ul>
<p><b>ESF11- Food</b> (National Emergency Management Agency)</p>	<ul style="list-style-type: none"> <li>• Design and execution of MOUs with wholesalers and retailers association for food procurement</li> </ul>	<ul style="list-style-type: none"> <li>• NEMA facilitated arrangements with various entities to procure and supply bulk food to persons in shelters as well as other affected persons</li> <li>○ Continuously working with ESFs 4, 6, 7 and 8 to get current status of needs of affected population</li> </ul>

ESF with Bahamian Lead Agency	Role/ Area of Coverage	1600 HRS 5 SEPTEMBER 2019 UPDATE
<b>ESF12- Tourism</b> (Ministry of Tourism)	<ul style="list-style-type: none"> <li>• Tourism affairs</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Tourism working with various entities to support the relief efforts while simultaneously promoting the Bahamas brand and the other affected islands/cays</li> </ul>
<b>ESF13- Volunteers</b> (National Emergency Management Agency)	<ul style="list-style-type: none"> <li>• Coordination of spontaneous volunteers, voluntary organizations and services</li> </ul>	<ul style="list-style-type: none"> <li>• Volunteers (individuals and organization both local and external) are expressing interest through the Google docs link, telephone and email</li> <li>• Arrangement in place to review volunteer interest to connect to unfolding needs</li> </ul>

# INITIAL DAMAGE ASSESSMENT- GRAND BAHAMA

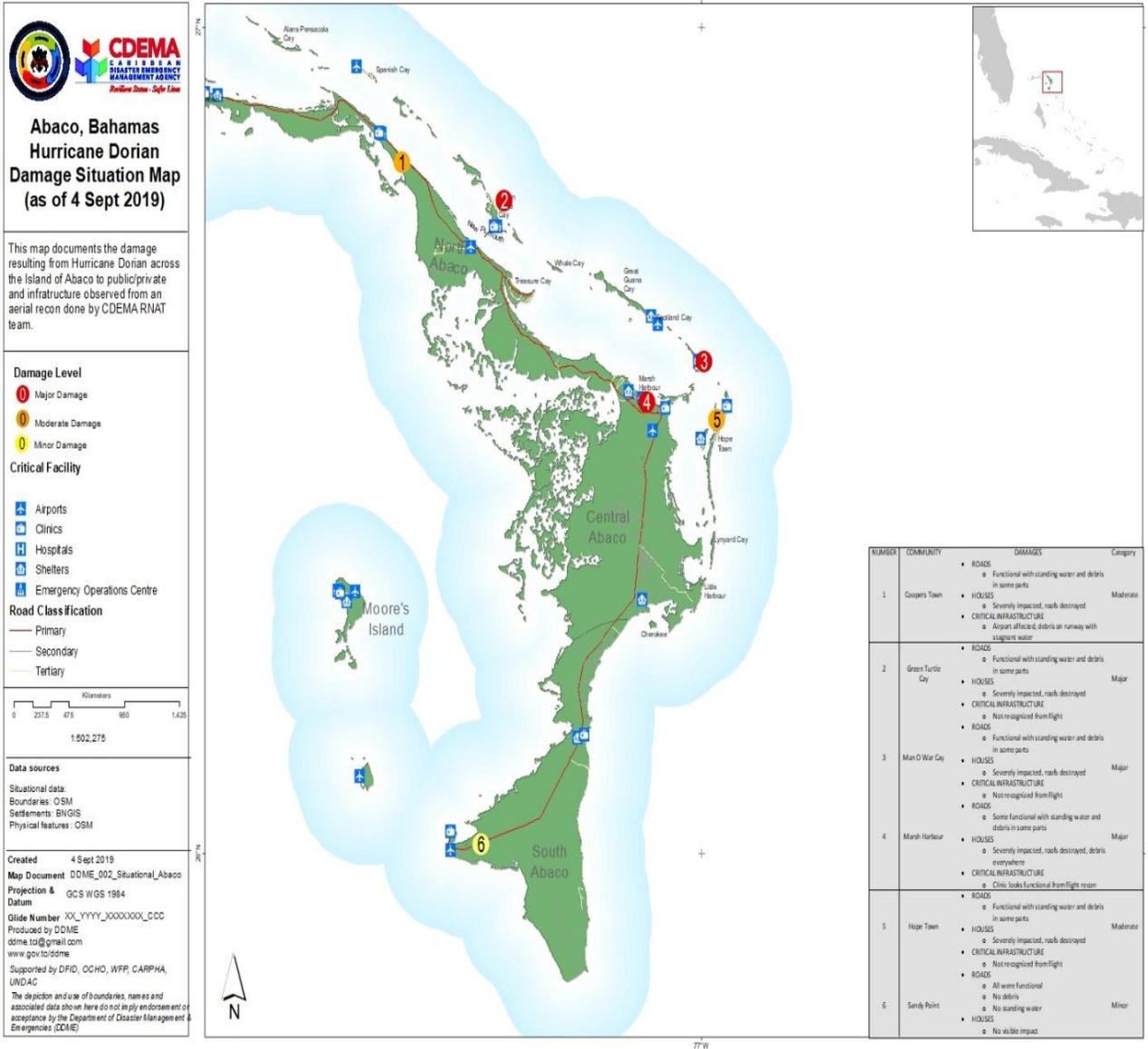


PDC – Hurricane Dorian Update (The Bahamas) - 06SEP19 1100EDT

•“Hurricane Dorian (The Bahamas Response)” event in

DisasterAWARE: [https://emops.pdc.org/emops/?hazard\\_id=96378](https://emops.pdc.org/emops/?hazard_id=96378)

# INITIAL DAMAGE ASSESSMENT- ABACO ISLAND



PDC – Hurricane Dorian Update (The Bahamas) - 06SEP19 1100EDT

•“Hurricane Dorian (The Bahamas Response)” event in

DisasterAWARE: [https://emops.pdc.org/emops/?hazard\\_id=96378](https://emops.pdc.org/emops/?hazard_id=96378)

# **Caribbean Disaster Emergency Management Agency (CDEMA) Actions**

- The CDEMA Executive Director accompanied the Hon. Hubert Minnis Prime Minister of The Bahamas on a tour of Abaco today, September 6, 2019 to assess damage.
- With the support of the UK Government, pre-deployed members for two (2) Rapid Needs Assessment Teams (RNAT), who started arriving in Nassau, Bahamas on Saturday August 31, 2019 and conducted assessments in the affected islands on Wednesday September 4, 2019 immediately after the all-clear was issued.
- The RNAT consisted of 18 persons from the CDEMA Participating States, Caribbean Public Health Agency (CARPHA), Global Affairs Canada (GAC), International Federation of Red Cross and Red Crescent Societies (IFRC); Pan American Health Organization (PAHO), Port Managers Association of the Caribbean (PMAC), Private Sector, United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) and the World Food Programme (WFP). The RNAT is deployed with the financial support of the Government of the United Kingdom and on behalf of the Caribbean Development Partners Group on Disaster Management.
- Oil Refinery and Coastal Zone Management Unit Specialists were deployed as a part of the RNAT to undertake assessments via aerial reconnaissance on Grand Bahama on September 6, 2019. The movement of the team was provided by the Government of Cayman Islands and facilitated through the United Kingdom Defense Attache based in Kingston.
- Provided periodic briefings to the Chair of CDEMA and the CARICOM Secretariat.
- Prepared and disseminated ten (10) daily Information Notes and Situation Reports on Dorian, one (1) Savingram and one (1) Press Release. Information updates may be viewed on CDEMA's website [www.cdema.org](http://www.cdema.org).
- Convened as co-chair - CDEMA and the UN Resident Coordinators for Barbados and Jamaica – eleven (11) meetings of the Regional Response Mechanism Partners - Caribbean Development Partners Group - Disaster Management (CDPG DM), at 1:00 PM each day.
- Advanced arrangements for the establishment of a logistics hub, with the support of the World Food Programme (WFP) to manage the inflow of relief assistance.
- Placed Regional Response Teams on ALERT: CARICOM Disaster Assessment and Coordination (CDAC), CARICOM Operational Support Team (COST), the Multi-National Civil Military Coordination Cell (MNCCC) and the CARICOM Disaster Relief Unit (CDRU), Search and Rescue (SAR) Teams.
- Requested cash contributions from all eighteen (18) CDEMA Participating States to support emergency relief in the Bahamas. The Summary of Support (pledged/provided) from CDEMA Participating States and Regional Institutions is on pages 10-11.
- Urged members of the Regional Response Mechanism (RRM) to continue to monitor the progress of this system.

**APPENDIX 3: SUMMARY OF SUPPORT FROM CDEMA PARTICIPATING STATES AND REGIONAL INSTITUTIONS**

<b>CDEMA Participating States</b>	
Antigua and Barbuda	<ul style="list-style-type: none"> <li>• Two (2) technical personnel for Rapid Needs Assessment Team (RNAT) - expertise in Disaster Risk Management and Port Assessment</li> </ul>
Barbados	<ul style="list-style-type: none"> <li>• Telethon to provide emergency response support for the people of the Bahamas <b>(TBC)</b>, • Search and Rescue (SAR) team on stand-by</li> </ul>
Dominica	<ul style="list-style-type: none"> <li>• Search and Rescue (SAR) team on stand-by</li> </ul>
Grenada	<ul style="list-style-type: none"> <li>• US \$100,000 <b>(TBC)</b></li> </ul>
Guyana	<ul style="list-style-type: none"> <li>• Oil Refinery Specialist on stand-by</li> </ul>
Jamaica	<ul style="list-style-type: none"> <li>• Two (2) technical personnel for Rapid Needs Assessment Team (RNAT) expertise in Coastal Zone Management and Oil Refinery Assessment</li> <li>• Pledged support through the Jamaica Defence Force - Sent in 3-member advance party to The Bahamas to discuss with Bahamian military the deployment of 120 member JDF team; 1 small truck, 2 patrol land cruisers; 96 hours sustainment upon deployment and resupply by JDF vessels; 1 GIS specialist; 1 Logistic expert; 1 Maritime patrol aircraft for reconnaissance.</li> </ul>
Saint Lucia	<ul style="list-style-type: none"> <li>• Pledged US 100,000 dollars towards recovery</li> <li>• NEMO Saint Lucia has activated disaster relief accounts at all banks and has made an appeal to the public for donations</li> </ul>
Suriname	<ul style="list-style-type: none"> <li>• Oil Refinery Specialist on stand-by</li> </ul>
Trinidad and Tobago	<ul style="list-style-type: none"> <li>• Committed to the deployment of 100 soldiers from the Trinidad and Tobago Defence Force</li> <li>• Seven (7) technical persons from T&amp;TEC to assist in the restoration of power</li> <li>• Pledged US 500,000 dollars to pay for expenses such as medical supplies</li> <li>• Oil Refinery Specialist on stand-by</li> </ul>
Turks and Caicos Islands	Four (4) technical personnel for Rapid Needs Assessment Team (RNAT) - Disaster Risk Management, Information Management, and Port Assessment Specialist
Virgin Islands	One (1) technical personnel for Rapid Needs Assessment Team (RNAT) - expertise in Disaster Risk Management

<b>Regional Institutions</b>	
CARICOM Implementation Agency for Crime and Security (CARICOM IMPACS)	• Pledged immigration support in event of displacement
Caribbean Electricity Utility Services Corporation (CARILEC)	• Pledged support for restoration of electricity
Caribbean Association of Fire Chiefs (CAFC)	• Search and Rescue Teams
Caribbean Public Health Agency (CARPHA)	• Provided support to the RNAT (WASH expert) • Will be on stand-by to provide technical support re: vector control, food safety and environmental safety, and risk communication
Caribbean Disaster Emergency Management Agency (CDEMA)	Two (2) technical personnel for Rapid Needs Assessment Team (RNAT) - expertise in Disaster Risk Management (Lead) and Logistics
Caribbean Development Bank (CDB)	Emergency Response Grant <b>(TBC)</b>
Caribbean Institute of Meteorology and Hydrology (CIMH)	Provided initial special weather interpretation of the current and forecasted tropical weather affecting the Caribbean Region for CDEMA's operation planning
Regional Security System (RSS)	• Placed the CDRU on alert. • Pledged support to conduct reconnaissance and damage assessment missions, if necessary. • RSS Security Chiefs advised to place a 15-man squad on alert for possible deployment.
University of the West Indies (UWI)	Psyco-social support and technical support in early recovery

## **List of actions being undertaken by International Partners as reported on September 6, 2019**



### **RELIEF SUPPORT**

#### **UK DFID**

- Distributing shelter, WASH, and Food in Marsh Harbour and the surrounding islands since September 4, 2019
- The RFA Mounts Bay ship has distributed relief items, including vital shelter kits. A rigid-hulled inflatable boat was deployed from RFA Mounts Bay on September 4, 2019 with a dedicated Humanitarian and Disaster Relief team to join up with the Royal Bahamas Defence Force and unload vital aid to some of those who have been worst hit.
- The RFA Mounts Bay is also carrying vital aid and specialist equipment, such as all-terrain quads, dump trucks, diggers and stores

# List of actions being undertaken by RRM Partners as reported on September 5, 2019



## RELIEF SUPPORT

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### Global Affairs Canada

- Royal Caribbean Cruise is willing to evacuate people
- Flights departing Freeport are scheduled for today, September 6, 2019
- Sending in Caribbean Disaster Team, 4 persons, to help coordinate their response on the ground & situation assessment.

### IFRC

- The first batch of relief supplies from IFRC arrived at Nassau yesterday, September 5, 2019.
- A second batch of relief supplies will be sent this weekend.
- Strengthening of the surge team of IFRC in the coming days. The head of country-cluster office arrived on September 5<sup>th</sup>, together with other specialists.

### IOM

- Activated logistical support from Panama regional office
- Confirmed provision of emergency equipment: two (2) logistics hubs and VSATs to Grand Bahama and Great Abaco courtesy of UNHRD. Equipment consists of: mobile storage units, generators, pre-fab offices, and lighting
- Emergency coordinator available and on standby to facilitate access to emergency shelter and distribution of non-food items (NFIs)
- Performed Displaced Tracking Matrix (DTM) Assessment to assess needs of displaced persons, including in emergency shelters.
- Camp Coordination and Camp Management conducted to shelter internally displaced persons (IDPs).
- Provided logistical support in NFI distribution
- Response team developed strategies and coordinated housing repairs
- Mobilized and distributed NFIs: Tarpaulins, tents, solar lights, jerrycans, hygiene kits etc., and 1000 tarpaulins to arrive on September 6, 2019

### UNFPA

- Volunteers to arrive in Bahamas on Sunday to assist in recovery efforts, logistics and coordination.

### UN WOMEN

- Staff on stand-by to assist with shelter assessment and GBV prevention interventions
- Staff on stand-by to assist with Post Disaster Needs Assessment – Technical support and assistance re: gender impact and gender responsive response
- Trained professionals to lead psychosocial support to affected persons and care givers.

## **UNOCHA**

- Under-Secretary-General and Emergency Relief Coordinator (ERC) Mark Lowcock visited The Bahamas on September 4 and announced a \$1 million contribution from the UN Central Emergency Response Fund (CERF) to support the delivery of life-saving assistance in Abaco and Grand Bahama.

## **USAID/OFDA**

- A USAID Disaster Assistance Response Team (DART), comprising 32 disaster response experts and 57 search and rescue personnel, positioned in The Bahamas continues to support GoB-led disaster assessment and response efforts.
- The U.S. Coast Guard (USCG) had rescued 114 people from flood-inundated areas of The Bahamas as of September 4.
- To date, the U.S. Government (USG) has contributed more than \$1.8 million toward the Hurricane Dorian response in The Bahamas.

## **WFP**

- Logistics experts - assessment, coordination, information management, response
- Food Security / Relief distribution experts- assessment, coordination, information management, response
- Assessment and vulnerability analysis experts - markets, food security
- Shock responsive social protection and cash transfer experts / technical support for medium-long term recovery

## **Please see links below to access previous Situation Reports Issued on Hurricane Dorian – The Bahamas**

SITREP #6

[https://www.cdema.org/CDEMA\\_Situation\\_Report\\_6\\_-\\_Hurricane\\_Dorian\\_Sept\\_5\\_2019\\_FINAL.pdf](https://www.cdema.org/CDEMA_Situation_Report_6_-_Hurricane_Dorian_Sept_5_2019_FINAL.pdf)

SITREP #5

[https://www.cdema.org/CDEMA\\_Situation\\_Report\\_5\\_-\\_Hurricane\\_Dorian\\_Sept\\_3\\_2019\\_FINAL.pdf](https://www.cdema.org/CDEMA_Situation_Report_5_-_Hurricane_Dorian_Sept_3_2019_FINAL.pdf)

SITREP #4

[https://www.cdema.org/CDEMA\\_Situation\\_Report\\_4\\_-\\_Hurricane\\_Dorian\\_Sept\\_2\\_2019.pdf](https://www.cdema.org/CDEMA_Situation_Report_4_-_Hurricane_Dorian_Sept_2_2019.pdf)