

# HURRICANE MARIA

## SITUATION REPORT #2

AS OF 9:00PM AST ON SEPTEMBER 22, 2017

### SYNOPSIS OF HURRICANE MARIA

Maria, the 13th named hurricane of the 2017 Atlantic Hurricane Season, became a category 5 hurricane near the Leeward Islands on Monday September 18<sup>th</sup>, 2017. Hurricane Maria impacted Dominica at approximately 9:35pm on September 18<sup>th</sup> as an extremely strong hurricane with wind speeds of 155 mph. Maria then impacted St. Kitts and Nevis and Antigua and Barbuda on September 19<sup>th</sup>, 2017 and the Virgin Islands September 19 – 20, 2017.

At 800 PM EDT (0000 UTC), September 22, 2017, the eye of Hurricane Maria was located near latitude 23.8 North, longitude 71.6 West. Maria is moving toward the north-northwest near 9 mph (15 km/h), and this general motion is expected to continue through Saturday. A turn toward the north is forecast by Saturday night.

Data from an Air Force and a NOAA Hurricane Hunter aircraft and the NOAA P3 aircraft indicate that the maximum sustained winds remain near 125 mph (205 km/h) with higher gusts. Maria is a category 3 hurricane on the Saffir-Simpson Hurricane Wind Scale. Gradual weakening is forecast during the next 48 hours.

Hurricane-force winds extend outward up to 60 miles (95 km) from the center, and tropical-storm-force winds extend outward up to 160 miles (260 km).

The minimum central pressure based on data from both reconnaissance planes is 953 mb (28.14 inches).

### **SUMMARY OF WATCHES AND WARNINGS IN EFFECT:**



#### **A Tropical Storm Warning is in effect for...**

- \* Turks and Caicos Islands
- \* Southeastern Bahamas
- \* Central Bahamas

### **PARTICIPATING STATES**

Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, Saint Lucia, St. Vincent and Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos Islands, Virgin Islands

## CDEMA'S IMPACTED PARTICIPATING STATES

 <h1 style="margin-left: 20px;">DOMINICA</h1>	
<p><b>Initial reports from Dominica indicate:</b></p> <ul style="list-style-type: none"> <li>● 15 confirmed deaths</li> <li>● At least 16 persons missing based on communities visited</li> <li>● 100% of country impacted</li> <li>● Full population affected</li> <li>● Disruption to power and water supplies</li> <li>● Significant damage to housing stock (98% roof damage, housing frame 50% damage)</li> <li>● Roseau flooded</li> <li>● Canefield airport covered with alluvium</li> <li>● Institutional buildings roofing mainly damaged, structural frames usable</li> <li>● 100% agriculture destroyed</li> <li>● Communications partly up and running</li> <li>● Melville Hall airport intact</li> <li>● Roseau hospital damaged</li> <li>● Telecommunications system severely damaged with only text messaging available through Digicel and Flow</li> </ul> <p><b>Priorities identified:</b></p> <ul style="list-style-type: none"> <li>● SAR and RNATs</li> <li>● Airlift</li> <li>● Food</li> </ul>	
<p><b>Immediate Needs:</b></p> <ul style="list-style-type: none"> <li>● Clearing of roadways</li> <li>● Reconstruction of bridges</li> <li>● Reestablishment of communication networks</li> <li>● Food</li> <li>● 14,000 Tarpaulins</li> <li>● Water 4,813 cases per day (24 (0.5l) bottles)</li> <li>● Roofing materials</li> <li>● Lumber</li> <li>● Plywood</li> <li>● Windows</li> <li>● Doors</li> <li>● Nails</li> </ul>	<ul style="list-style-type: none"> <li>● Water purification kits</li> <li>● Blankets</li> <li>● Communications equipment</li> <li>● Generators</li> <li>● Diapers</li> <li>● Hygiene kits/Comfort kits</li> <li>● Medical supplies</li> <li>● Baby supplies (formula/baby food)</li> <li>● Wipes</li> <li>● Adult pampers</li> <li>● Fuel</li> <li>● Energy biscuits</li> <li>● Portable stoves</li> <li>● Flashlights</li> </ul>

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<ul style="list-style-type: none"> <li>• Roofing screws</li> <li>• Generators (5kva to 10kva)</li> <li>• Chainsaws with cans, oil, fuel</li> <li>• Cots</li> <li>• Mattresses</li> </ul>	<ul style="list-style-type: none"> <li>• Batteries</li> <li>• Solar lanterns</li> <li>• Kitchen sets</li> <li>• Collapsible water containers (gallon)</li> </ul>
<p><b>Other Information:</b></p> <ul style="list-style-type: none"> <li>• Curfew in place from 4:00pm to 8:00am daily</li> </ul>	



## ST KITTS AND NEVIS

### ST. KITTS

- Damage to housing stock and agriculture
- Electricity poles down island-wide
- 10 Emergency Shelters open

### Immediate Needs:

- 5,000 tarpaulins

### NEVIS

- Compiling initial damage assessment report
- Key areas such as the business sector are without electricity
- Water has been restored as of September 21, 2017
- Schools resumed on September 21, 2017
- Agriculture sector significantly damaged
- Damage to roads
- Assisted 45 families with tarpaulins and additional tarpaulins were requested on September 21, 2017
- Working with the Red Cross more tarpaulin is needed Damage to health care centres
- Up to 80% electricity restored and clean up on-going, serious damage to housing stock
- Awaiting information on the environmental impact
- Coastal damage extensive on both islands
- Damage to main roads and jetties



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<ul style="list-style-type: none"> <li>Initial assessment of 34.5 million EC in damages</li> </ul>	
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## VIRGIN ISLANDS (UK)

### TORTOLA

- Experienced mainly rain, storm surge but not significant amount of wind.
- Damage to roads on the west end. Road is passable from the airport to the east end.
- Storm surge resulted in debris deposited on the road, particularly on the west end.
- Minor landslides occurred
- Additional shelters were opened including private facilities to accommodate persons whose homes were damaged.



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## REGIONAL RESPONSE ACTIONS

### CDEMA Coordinating Unit

- High Level mission to the Commonwealth of Dominica occurred on September 21, 2017 by Ambassador Irwin LaRocque, Secretary General and Chief Executive Officer of CARICOM, Dr. Hon. Keith Mitchell, Chief of Staff of the Barbados Defence Force, Colonel Glyne Grannum, Executive Director of CDEMA, Mr. Ronald Jackson and Captain (N) Errington Ricardo Shurland, Executive Director of the Regional Security System (RSS).
- Two (2) Rapid Needs Assessment Teams (RNATs) have been deployed to Dominica on September 19-20, 2017.
- RNAT conducted WASH and infrastructural assessments in Roseau.
- Search and Rescue (SAR) Teams from Barbados, and Saint Lucia deployed to Dominica on September 21, 2017. SAR Team from Antigua and Barbuda standing by for deployment on September 21, 2017.
- Partial CARICOM Disaster Relief Unit (CDRU) deployed to Dominica on September 18, 2017 through the RSS.
- The CARICOM Disaster Assessment and Coordination (CDAC) and the CARICOM Operational Support Team (COST) team were deployed to Dominica on September 20, 2017.
- Continue to monitor Amateur Radio communications to capture information from the Amateur Radio Association in Dominica.
- The 12<sup>th</sup> and 13<sup>th</sup> meetings of the RRM Partners were convened on Thursday, September 21, and Friday September 22, 2017 at the CDEMA Coordinating Unit, and was chaired by CDEMA's Deputy Executive Director. Forty (40) members from regional and international institutions participated in the meeting, which discussed response and relief efforts.

### CARPHA

#### Dominica

- One member of staff (WASH expert) currently deployed to Dominica as part of CDEMA's RNAT.

### CIMH

#### Regional

The Caribbean Institute for Meteorology and Hydrology (CIMH) provided a weather briefing today, September 22, 2017. In summary, hurricane Maria maintains its Category 3 status and now moves away from the Turks and Caicos. Hurricane force winds extend to 70 miles and encompass the Eastern TCI which, were experiencing the effects of Hurricane Maria with Hurricane force winds, heavy rains and wave heights, throughout Tuesday, as the storm moves northwest. Over the Turks and Caicos, the maximum wind forecast will be in the higher range of tropical storm force and the islands further to the west will experience even weaker winds.

**WEATHER** - Very heavy showers and thundershowers extend 95 km from the storm centre and will decrease in the vicinity of the TCI as Maria moves away from TCI. Rain bands with imbedded showers and thundershowers will begin to affect Eastern Bahamas. Expect gusty winds to increase beginning today into tonight.

**FLOOD/LANDSLIDES:** Flood producing rains are expected in the vicinity of TCI during the next 12 hours. This may lead to life threatening conditions especially due to weakened structures and exposure to the elements resulting from the passage of Irma. The persistence of rainfall and already saturated soils will exacerbate flooding especially in low lying coastal areas. Mudslides are always a concern in Haiti should prone areas receive periods of intense rainfall. Further damage to infrastructure is possible.

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**WINDS:** Maria approached TCI as a Category 3 storm. Wind speeds would have caused widespread damage. Damage to power lines, building stock and other infrastructure can be expected resulting in power outages, blocked roads and debris flows.

**WAVES:** Dangerous swells and further damage to coastal infrastructure can be expected in TCI. Rough seas, high surf and sea water inundation will be the continued greatest threat to TCI for the next 6 to 12 hours.

### Dominica

- Assisting the MET service in Dominica in getting the weather system back on stream.

### DOMLEC

- Established some communication
- Hydro system is 2/3 damaged
- 55% of generator fleet available for use
- Total restoration could take months starting with micro grid communication and restoration

### Emera Caribbean - Dominica

- Sending supplies via the BDF ships
- Making a recovery plan including resources from the larger Emera organisation.
- Anticipating a "list" from DOMLEC on September 21 as to priority items to be shipped (likely to be humanitarian)
- Shipped 12 generators over yesterday via the BDF ship.

### Regional Security System (RSS)

- Thirty (30) police officers (15 from Barbados and 15 from Grenada) for deployment to Dominica on September 23, 2017
- Deployed a partial CDRU team (8 members) to Dominica on September 18, 2017

### Government of Barbados

- Barbados Coast Guard departed on September 20, 2017 with relief supplies, equipment and the CDAC team out of Barbados into Dominica
- Deployed 17 artisans and 27 security personnel into Dominica to assist with the relief efforts
- Deployed 4 medical persons
- Deployed 8 persons from the Barbados Defence Force to the CDRU team

### Government of St. Vincent and the Grenadines

- Shipped 35 pallets of relief supplies for the Government and People of the Commonwealth of Dominica

### OAS

- The OAS has provided provisional financial support to Antigua and Barbuda in the amount of

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\$25,000 through a request submitted by that government to the OAS Emergency Fund, FONDEM

UWI
<ul style="list-style-type: none"> <li>• Coordinating re-development of Antigua</li> <li>• Counseling services available</li> <li>• Can also fill health gaps (personnel)</li> <li>• Possible establishment of Caribbean Emergency Management Alliance to get aid from the diaspora</li> </ul>

## INTERNATIONAL INSTITUTIONS UPDATES

Government of Canada (GAC)
DOMINICA
<ul style="list-style-type: none"> <li>• Canadian Air Force undertaking aerial reconnaissance of Dominica to further assess impacts</li> <li>• Canadian Disaster Assessment Team undertaking assessment</li> <li>• Canadian airports specialist deployed with the CDEMA led RNAT</li> <li>• HMCS St. Johns has been reassigned to provide support to Dominica, able to carry small boats, a helicopter and provide 4000 L of water per day</li> </ul>

European Civil Protection and Humanitarian Aid Operations (ECHO)
DOMINICA
<ul style="list-style-type: none"> <li>• Received request from the Government of Dominica for support in various areas</li> <li>• 250,000 euros humanitarian aid pledged</li> <li>• Expert on the ground</li> <li>• EU civil protection activated</li> <li>• Belgium and France offer of Aid</li> </ul>

### Additional Support from the EU Civil Protection Mechanism

Country	Date of offer	In-kind-assistance offered (type)	Quantity of assistance offered (number only)
United Kingdom	22/09/2017	Solar lights	5000.00
	22/09/2017	Shelter kits	1280.00
	22/09/2017	Hygiene kits	1560.00
	22/09/2017	Tents	100.00
	22/09/2017	Kitchen sets	1612.00
France	22/09/2017	Picks	270.00
	22/09/2017	Solar lights	667.00

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	22/09/2017	Chainsaw	11.00
	22/09/2017	Pair of gloves	23.00
	22/09/2017	Tarpaulins 4x60m	366.00
	22/09/2017	Ropes rolls	72.00
	22/09/2017	Blankets	2080.00
	22/09/2017	Medical supplies kit	10.00
	22/09/2017	Aquatabs	50000.00
Belgium	22/09/2017	Water Purification Module	1.00

**International Federation of the Red Cross and Red Crescent Societies (IFRC)**

- 8-person Red Cross Surge team being deployed
- Full team should be in place by tomorrow WASH, IT, Cash transfer, Health

**UK AID/DFID**

- Deploying 3 humanitarian advisers to support the CDEMA RNAT

**British Military**

- Montserrat all on the ground is fine to the point where they do not require assistance
- BVI- Got away lightly from Maria, asked for 50 police officers
- TCI- Asked for Tarps and shelter kits especially on South Caicos
- HMS Ocean going to BVI, Anguilla and TCI
- BT Communication is scheduled to arrive on Monday 25<sup>th</sup> September

**British Telecoms (BT)**

**BVI-Tortola**

- Establish satellite (voice and data) service in Tortola (Ritter Building), the system has 4 x Direct Exchange Lines
- Arranging for a phone to be installed in Barbados at the CDEMA office to facilitate direct call to the 4 sites

**Vodafone Foundation**

- Providing free charging station, free calls, free wifi, sat phones
- Linking with TSF and Digicel
- Needs assistance with transporting 2-300 kilos of equipment and identifying an area to set up

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## UNITED NATIONS (UN) AGENCIES

<b>International Telecommunications Union (ITU)</b>
<b>DOMINICA</b>
<ul style="list-style-type: none"> <li>• Deployed 2 persons to support the relief efforts</li> </ul>

<b>World Food Programme (WFP)</b>
<b>Dominica</b>
<ul style="list-style-type: none"> <li>• Fixed wing aircraft landed at Canefield.</li> <li>• Distribution of High Energy Biscuits (HEBs) to most vulnerable groups affected by the hurricane (including elderly people, families with children, pregnant and lactating women, disabled, people in shelter). Out of 9.66 MT: 4.11 MT distributed as of 20 September</li> <li>• Ongoing assessment for Food Security needs</li> <li>• Fixed wing caravan in operation with one rotation per day</li> </ul>
<b>Turks and Caicos Islands</b>
<ul style="list-style-type: none"> <li>• Distribution of High Energy Biscuits (HEBs) to most vulnerable groups affected by the hurricane (including elderly people, families with children, pregnant and lactating women, disabled, people in shelter). Out of 9.66 MT: 4.11 MT distributed as of 20 September</li> </ul>

<b>Pan American Health Organisation (PAHO)</b>
<ul style="list-style-type: none"> <li>• Deploying humanitarian advisers</li> <li>• Exploratory discussions being advanced with the Chinese Embassy to conduct initial assessment since they constructed the hospital in Dominica.</li> <li>• Dialysis patients will be taken to the Dominican Republic</li> <li>• The French has sent three nurses to assist</li> <li>• Venezuela has set up a medical clinic</li> <li>• China is sending a field hospital</li> <li>• 4 personnel on the ground</li> </ul>

<b>UNFPA</b>
<b>Regional</b>
<ul style="list-style-type: none"> <li>• There is a request in progress from UNDP – Trinidad, for 3 phones and from the government of Dominica for 15 satellite phones. (6) ITU is also working closely with and providing other support to WFP for telecommunication assistances to the affected countries.</li> </ul>

<b>United Nations Disaster Assessment and Coordination (UNDAC)</b>
<b>Regional</b>
<ul style="list-style-type: none"> <li>• UNDAC/OCHA continues to work in close coordination with CDEMA in the field and at its headquarters in Barbados.</li> <li>• At the CDEMA headquarters level, OCHA/UNDAC members continue supporting the Regional</li> </ul>

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<p>Coordination Center with the visual representation of data through maps and infographics.</p> <ul style="list-style-type: none"> <li>• Assist with the coordination of meetings between actors and CDEMA staff and support for CDEMA upon request to ensure a regional coordinated response.</li> <li>• OCHA/UNDAC is also supporting CDEMA to compile needs and match them with pledges.</li> <li>• 2 UNDAC/3MAP Action members on the ground</li> <li>• Telecom Sans Frontiers providing relief to communities and military hubs free communications</li> </ul>
<b>Dominica</b>
<ul style="list-style-type: none"> <li>• One (1) UNDAC member deployed to Dominica from Antigua on September 21 to work in collaboration with CDEMA at the NEOC</li> <li>• The UNDAC IM officer and two MapAction members in transit to Dominica to support the CDEMA assessment teams and to work together with the MapAction member who is a part of the RNAT team</li> </ul>

<b>USAID/OFDA</b>
<b>Dominica</b>
<ul style="list-style-type: none"> <li>• On September 19, U.S. Ambassador to Barbados and the Eastern Caribbean Linda S. Tagliatela issued a disaster declaration for Dominica due to the effects of Hurricane Maria. In response, USAID/OFDA is providing an initial \$100,000 to address the priority needs of hurricane - affected populations.</li> <li>• As soon as conditions allow, USAID plans to deploy DART staff to Dominica to conduct damage assessments, coordinate U.S. Government (USG) response efforts, and liaise with the Government of the Commonwealth of Dominica officials, relief organizations, and other stakeholders.</li> <li>• Activated a disaster risk management specialist and two local surge capacity consultants for Dominica ahead of the storm</li> </ul>
<b>Haiti</b>
<ul style="list-style-type: none"> <li>• On September 19, USAID/OFDA and USAID Office of Food for Peace (USAID/FFP) staff based in the capital city of Port-au-Prince met with the Government of Haiti (GoH) Directorate of Civil Protection to discuss hurricane preparedness efforts. In addition, USAID/OFDA has placed a DRMS at the national EOC to facilitate coordination with GoH authorities.</li> <li>• In preparation for the potential impacts of Hurricane Maria, USAID/OFDA activated seven local surge capacity consultants in the departments of Artibonite, Centre, Nord, Nord-Est, and Nord-Ouest on September 20</li> <li>• USAID/OFDA and USAID/FFP staff remain in contact with response partners, many of which have pre-positioned relief commodities ahead of Hurricane Maria. For example, the UN World Food Program (WFP) has pre-positioned high-energy biscuits—two-day rations for an estimated 40,000 people — in the northern city of Cap-Haïtien, as well as a contingency stock of rice, pulses, oil, salt, and other food items sufficient for an estimated 150,000 people for one month in Port-au-Prince.</li> </ul>

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