

# HURRICANE MARIA

## SITUATION REPORT #1

AS OF 9:00PM AST ON SEPTEMBER 20, 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 AST (2100 UTC), the eye of Hurricane Maria was located near latitude 18.9 North, longitude 67.5 West. Maria is moving toward the northwest near 12 mph (19 km/h), and this general motion with a decrease in forward speed is expected through Thursday night. Data from an Air Force Reserve Hurricane Hunter aircraft indicate that maximum sustained winds remain 110 mph (175 km/h) with higher gusts. Hurricane-force winds extend outward up to 60 miles (95 km) from the center, and tropical storm-force winds extend outward up to 150 miles (240 km). The minimum central pressure based on data from the Air Force aircraft remains at 958 mb (28.29 inches).

#### **PROGNOSIS:**

The National Hurricane Center (NHC) indicates that on the forecast track, the core of Hurricane Maria will continue to move away from the northwestern coast of Puerto Rico this evening. The core will then pass offshore of the northeastern coast of the Dominican Republic tonight and Thursday and then move near the Turks and Caicos Islands and southeastern Bahamas Thursday night and Friday. Some strengthening is forecast during the next day or two, and Maria could regain major hurricane status by Thursday. A turn toward the north-northwest is forecast on Friday.

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

##### **A Hurricane Warning is in effect for...**

- Turks and Caicos Islands and the Southern Bahamas



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

- Dominican Republic west of Puerto Plata to the northern border of the Dominican Republic and Haiti

#### **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

 <h3>DOMINICA</h3>	
<p>Initial reports from Dominica indicate:</p> <ul style="list-style-type: none"> <li>• 100% of country impacted</li> <li>• 56,890 persons affected</li> <li>• Significant damage to housing stock</li> <li>• Roseau flooded</li> <li>• Canefield airport covered with alluvium</li> <li>• Melville Hall airport intact</li> <li>• Roseau hospital damaged</li> </ul> <p>Immediate Needs:</p> <ul style="list-style-type: none"> <li>• 14,000 Tarpaulins</li> <li>• Water 4,813 cases per day (24 (0.5l) bottles)</li> <li>• Clearing of roadways</li> <li>• Reconstruction of bridges</li> <li>• Reestablishment of communication networks</li> </ul>	

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## DOMINICA: Initial damage assessment from flyover images

### ST JOHN 👤 6,561

#### Portsmouth

Ross University in Portsmouth appears to be intact but much of the student housing in surrounding area appear to have roofs partially damaged.

### ST JOSEPH 👤 5,637

#### Colihaut to Jimmit to Belfast

Colihaut, Coulibistrie, Salisbury, Mero, St Joseph, Layou, Tarou

In Colihaut, communications towers are damaged and the Colihaut river has overflowed. Damage to roofs is apparent; however, more damage seems to have been done from the river overflowing its banks. Many homes are without roofs and the river has caused flooding of homes in the river bed. Coulibistrie river overflowed its banks, segmenting the community into two. The river has caused flooding of some homes. The roof of the school seems intact. Widespread damage to roofs in Layou, St Joseph, Salisbury and areas nearby. Hillsborough seems severely impacted with some buildings blown down. Hillsborough bridge over Layou river is buckling on one side, however the other arm seems passable as individuals were seen making their way across.

### ST PAUL 👤 9,786

#### Tarou

Damage to roofs and river overflowed.

#### Canefield

Some roads flooded in the vicinity of the Canefield airport. Runway to Canefield airport underwater in many area. Roof damage to many homes and businesses with roofs partially or totally blown off. Damage to roofs in Canefield and Massacre. Some houses have been compromised from the overflowing Canefield river.

### ST GEORGE 👤 21,241

#### Woodbridge bay port Fond Colet

Damage to customs area, roofs of houses and businesses. Damage to boats and vehicles. Port jetty seems intact and undamaged.

Widespread damage to roofs in the areas of Elm's Hall, Bath Estate and Kings Hill.

#### Stockfarm and Goodwill

Dominica State College roofs damaged, blown off. Damage to roofs and buildings. Widespread damage to roofs and buildings in the area of the hospital and Lindo Park. Cannot determine state of PMH however the roof is still on. One building in the compound has no roof. Damage to the guard house, some buildings in compounds

#### Roseau

Damage to roofs. Library roof seems very damaged, Lots of debris in the vicinity of the Presidents house and Parliament. EC Loblack Bridge has debris on it, seems damaged, however the other three bridges in Roseau over the Roseau River seem intact and passable. The Newtown Primary school seems intact. Two communities before the quarry seem to be okay, however the video did not allow for a close look to assess the damage, as well as in Loubiere, Point Michel, Scotts Head and other areas in the south west. However in these areas we were able to see a lot of debris lying around.

### ST PATRICK 👤 7,622

#### Grandbay

Widespread destruction roofs in Grand Bay. Grand Bay Primary is damaged bit the roof is in intact. Debris littering the community. Some houses seen off their foundations. Some houses totally exposed to elements with no roofs.

#### Boetica

Significant roof damage in Boetica. Bridge created over the gorge in Boetica after TS Erika seems passable. Significant damage to structures in the area, houses completely destroyed. Significant debris littering the area. Vegetation severely destroyed.

#### La Plaine

Significant damage to roofs and structures. Some houses collapsed. Significant debris littering the area. Vegetation severely destroyed. La Plaine Bridge destroyed. There is one more bridge for entry that seems to be intact. Houses slid off foundations into rivers.

### ST DAVID 👤 6,043

#### Morne Jaune/Riviere Cyrique

Significant damage to houses in the area. Pentecostal church roof completely gone. Roofs blown off and significant debris. Houses hanging over cliffs, some seen blown off foundations. Roads seem passable.

#### Grand Fond

Significant damage to houses in Grand Fond. Practically destroyed. The road is intact. Most houses destroyed, some of the few left have no roofs. Near all homes have some damage, with most houses being inhospitable.

#### Rosalie

Bridge is impassable, with the water flowing over it. Cannot determine if the bridge is in totally intact, as one area can be seen as compromised on the bank. Rosalie Bay Resort significantly damaged, some areas.

#### Petit Soufriere / San sauveur

Significant damage to houses and roofs. Houses slid off foundations. SS PRIMARY and the church intact, Primary has lost some of its roof. Bridge over the river SSPrimary intact. Houses destroyed.

#### Good Hope/Castle Bruce

Extensive damage to houses and roofs. Many houses destroyed.

#### Sinuku

School and resource centre intact. Widespread damage to houses, many roof blown off. Roads have debris in them making them impassable, difficult to pass. Pagua bridge seems passage but damaged.

#### Marigot

Fisheries complex in intact. Boats do not seem destroyed. The airport runway is intact and dry. Bridge passable however there is a bulge on one corner. Buildings at airport seem intact. There is extensive damage to houses, many without any roofs.

#### Critical Infrastructure

##### Bridges

no bridges seen as totally destroyed.

Cell tower appears to be intact, but some damage to top of it. Observed downed telephone poles. Appears to be significant damage to housing stock. Much roof damage, upwards of 60%. DOWASCO water intake appears intact.

##### Roads

Appear to be passable throughout

##### Airport

seems intact. Runway clear. Buildings do not appear significantly damaged.

DOWASCO water in Morne Daniel appears to be intact



5 km

DATA SOURCES: CDEMA, Dominica de, OSM, Dominica Census  
Map created by MapAction and OCHA (19/09/2017)

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.



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## ST KITTS AND NEVIS

### **ST. KITTS**

- Old Road Building severely eroded. It will take a few days to re-establish and as such it is expected that there will be an increase in traffic.

### **Immediate Needs:**

- 5,000 tarpaulins

### **NEVIS**

- There are several reports of damages to the Housing stock and agriculture.
- Electrical poles are down island wide and several large trees have been uprooted.
- The coastline has been extensively damaged following the impact of a second Cat 5 Hurricane in 12 days.
- The entire island is without electricity. Persistent rainfall continues with gusty conditions.
- The PWD, volunteer heavy equipment operators and other Emergency Services have begun clean up exercises.
- A further inspection of the damages will be conducted.
- Some roads and culverts have been compromised.
- 10 Emergency Shelters are in operation with 100 evacuees. This will be monitored and updated.



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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

- Aerial reconnaissance conducted on September 19, 2017 by the Regional Security System (RSS) C26 Air wing.
- CDEMA prepared a shipment of 250 family packages of relief supplies (water and non-perishable food items) that were transported by the Barbados Coast Guard to Dominica. The supplies arrived in Dominica earlier today, September 20, 2017
- One (1) Search and Rescue (SAR) Team of 6 persons were deployed to Dominica on September 19, 2017. Other SAR teams confirmed for deployment from Antigua and Barbuda, Saint Lucia, and Trinidad and Tobago.
- The Rapid Needs Assessment Team (RNAT) was deployed today, September 20, 2017.
- The CARICOM Disaster Relief Unit (CDRU), the CARICOM Disaster Assessment and Coordination (CDAC) team, CARICOM Operational Support Team (COST) are all on standby.
- Monitoring Amateur Radio communications to capture information from the Amateur Radio Association in Dominica continues.
- The 11<sup>th</sup> meeting of the RRM Partners was convened on Tuesday, September 19, 2017 at the CDEMA Coordinating Unit, and was chaired by CDEMA's Executive Director. Twenty nine (29) members from regional and international institutions participated in the meeting, which discussed response and relief efforts to Dominica.

### CIMH

- The Caribbean Institute for Meteorology and Hydrology (CIMH) provided a weather briefing for today, September 20, 2017. In summary, hurricane Maria weakens but still continues as a dangerous Category four (4) hurricane. Today, Maria is bearing down on the Virgin Islands and Puerto Rico. These islands will experience major hurricane force winds, heavy rains and wave heights, throughout Wednesday, as the storm moves northwest. The trailing feeder band is expected to produce showers and thundershowers over the Leeward Islands. Over the next 24 to 48 hours as Maria progresses north, rain bands and moisture being pulled from South America could produce heavy rains over Haiti which could lead to flash flooding and landslides.
- **WEATHER** - Very heavy showers and thundershowers extend 30 km from the storm centre will move into the Caribbean Sea. Rain bands with imbedded showers and thundershowers will begin to affect Turks and Caicos Islands and Haiti. Expect gusty winds to increase beginning tonight into tomorrow.
- **FLOOD/LANDSLIDES:** Flood producing rains are expected in the vicinity of the Virgin Islands during the next 24 hours. Flooding is also likely in Anguilla, St. Kitts and Nevis and surrounding islands. 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 areas. Landslides in areas so prone, can be expected especially considering the damage to vegetation and exposed soils resulting from Irma. A further damage to infrastructure is likely.
- **WINDS:** Maria approached Dominica as a Category 5 storm. Wind speeds would have caused devastating to catastrophic damage. Damage to power lines, building stock and other infrastructure can be expected resulting in power outages, blocked roads and debris flows.
- **WAVES:** Dangerous sea conditions continue to persist with dangerous swells and damaging waves primarily on the western side of the Leeward Islands with rough seas extending south to the Windward Islands. Damage to coastal infrastructure can be expected due to a combination of rapid flood waters and tidal conditions. Marine operators should continue to exercise extreme caution.

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### Regional Security Systems (RSS)

- Standby arrangements have been made with the Barbados Coast Guard as an option for logistics support
- Placed the CARICOM Disaster Relief Unit (CDRU) on standby for deployment
- Have made standby arrangements for Security deployments into affected states if required

### Government of Barbados

- Facilitated immunization arrangements for teams being deployed in Dominica
- Organized health briefing for deployment teams to Dominica
- Barbados Coast Guard departed on September 19, 2017 with relief supplies, equipment and the Search and Rescue team out of Barbados to Dominica

### Government of Jamaica

- The Jamaica Public Service Limited (JPS) has pledged a team to restore the electrical infrastructure.

### Government of Trinidad and Tobago

- Trinidad and Tobago Coast Guard departed on September 19, 2017 with relief supplies to Dominica.

### Government of St. Vincent and the Grenadines

- Requested support from the Government of Venezuela to support the relief efforts in Dominica.

### University of the West Indies

- Team on standby to support needs assessment, assessment of health and education services and to support the rebuilding efforts in Dominica
- Mobilising support to the CDEMA Hurricane Relief Fund

### Caribbean Development Bank (CDB)

- Emergency Response Grant (ERG) available to Dominica
- Exploring options for direct support to CDEMA to support the logistical operations in Dominica

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## INTERNATIONAL INSTITUTIONS UPDATES

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

- Emergency Response Units (ERU) to support telecommunications and IT along with FACT teams are available for deployment

### UK AID/DFID

- Deploying 3 humanitarian advisers to support the CDEMA RNAT

## UNITED NATIONS (UN) AGENCIES

### United Nations Development Programme (UNDP)

- Deployed a support team to Dominica to support the relief efforts. Other teams are on standby to provide assistance if required.

### World Food Programme (WFP)

- Fixed wing aircraft in Trinidad and Antigua are being remobilized to Dominica
- Helicopter asset being deployed to Dominica
- Telecoms in Antigua sending VSAT links for deployment to Dominica

### Pan American Health Organisation (PAHO)

- Deploying humanitarian advisers.
- Exploratory discussions being advanced with the Chinese Embassy to conduct initial assessment since they constructed the hospital in Dominica.

### United Nations Children Fund (UNICEF)

- Surge capacity to be deployed (some already deployed);
- Essential relief commodities will be sent with colleagues from WHO and other partners

### International Telecommunications Union (ITU)

- Delivered 3 BGANs and 5 Satellite phones to the CDEMA CU to support the deployment teams

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### UN Women

- Joint efforts with UNFPA to supply dignity kits to Dominica
- Social assessment and gender specialists on standby for deployment

### United Nations Disaster Assessment and Coordination (UNDAC)

- UNDAC members on standby

### UN OCHA

- Team deployed to support the coordination efforts at the CDEMA Coordinating Unit

### USAID/OFDA

- Team in Antigua preparing to go as an advanced team to Dominica;

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