## CARIBBEAN DROUGHT BULLETIN

## March 2016 | Volume II | ISSUE 10

## **Announcement**

Drought conditions continue in the islands of the eastern and southern Caribbean and the Guianas in February, and has extended to southern Belize. The drought impacts are likely to continue into April/May 2016 in these regions. Concerns over drought impacts in Jamaica has lessened.

## Month at a Glance

Normal to below normal rainfall was experienced across the eastern Caribbean and Guyana in February. Trinidad was slight to moderately dry, Tobago slightly dry, Grenada, St. Vincent, St. Lucia and Antigua extremely dry; Barbados moderately dry; Dominica, St. Kitts, Anguilla, St. Maarten and St. Croix normal; and Guyana normal in the west to moderately dry in the east. Read more...

## **Headline Impacts**

Rice farmers in Trinidad worried about drought. (TV 6 TNT)

Hotels facing cancellations: Water shortage hits Tobago's tourism. (TT Guardian)

CDEMA places several Caribbean countries on drought warnings. (Jamaica Observer)

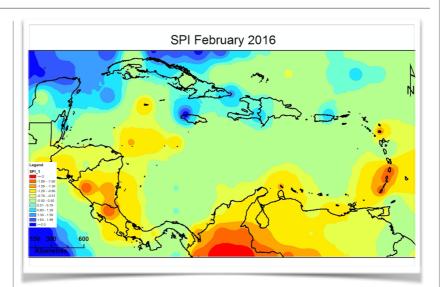
St. Kitts trying to manage agriculture amidst drought. (Nation News)

Trinidad's Water and Sewerage Authority has commenced implementation of its 2016 Water Supply and Conservation Plan. (Wasa Twitter)

Guyana establishes new task force to tackle drought. (Jamaica Observer)

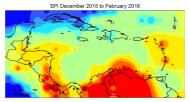
The Barbados Water Authority has implemented water restrictions from March 1st, 2016. (Loop News)

Guyana is now faced with one of the most severe droughts. (Kaiteur News)



# December-January-February Rainfall Summary

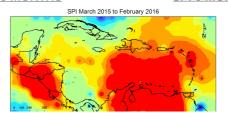
For the three month period, the eastern Caribbean and Guyana were normal to below normal. Trinidad, Tobago and Grenada were normal; Barbados, St. Vincent, Dominica, St. Kitts, St. Maarten and St Croix moderately dry; St. Lucia and Antigua exceptionally dry; Anguilla slightly dry; and Guyana normal to the west to moderately dry in the east. Aruba was severely dry while Puerto Rico was normal. The Dominican Republic was slightly wet in the west and normal in the east, while Jamaica was predominantly normal apart from in the extreme west that was slight to moderately wet. Grand Cayman was slightly wet. Conditions in Cuba ranged from extremely wet in western and central area to slightly wet in the east, while in Belize they ranged from severely dry in the south to normal in the north.



DEC 2015 - FEB 2016 SPI 3 MONTHS

SPI September 2015 to February 2016

SEP 2015 - FEB 2016 SPI 6 MONTHS



MAR 2015- FEB 2016\* SPI 12 MONTHS

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## The Caribbean **Drought & Precipitation and Monitoring Network** (CDPMN)

The Caribbean Drought and Precipitation Monitoring Network was launched in January 2009 under the Caribbean Water Initiative (CARIWIN). The goal of CARIWIN was to increase the capacity of Caribbean countries to deliver equitable and sustainable Integrated Water resources Management (IWRM).

The concept was born out of the need to mitigate and respond to the creeping phenomenon, drought. Drought and the general precipitation status is monitored at the regional scale. Efforts are being made to enhance drought monitoring at the national level.

## The Caribbean Climate Outlook Forum (CariCOF)

The CariCOF brings together climate experts and meteorological services in the Caribbean region on an operational basis to produce a monthly climate outlook. CariCOF interacts with sectoral users to assess the likely implications of the outlooks on the most pertinent socio-economic sectors. The Caribbean Institute for Meteorology and Hydrology (CIMH), in its role as WMO Regional Climate Centre in demonstration phase, coordinates the CariCOF process. Read more...

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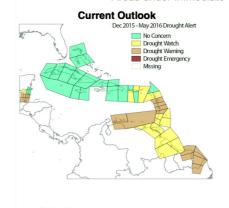
Mr. Anthony Moore: amoore@cimh.edu.bb

Ms. Shelly-Ann Cox: scox@cimh.edu.bb

Website: CDPMN Drought Monitor (Click here)

## **Drought Outlook for the End of May** CariCOF's Drought Alert Map

#### **Drought Outlook Dec to May** Areas under immediate drought concern?



#### Current update (February 2016):

Drought concern is noted in Belize and from the US C'bean Terr. east- and southward.

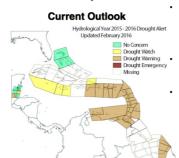
A **drought warning** is issued for ABC Islands, south and central Belize, Dominica, E Guianas, Guadeloupe, Martinique and St. Lucia.



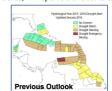


#### Long-term drought outlook

#### Concerns by the end of the Caribbean dry season (May 31st, 2016)?



- This 12-month SPI-based drought outlook uses observations until January 2016, with potential impacts on large surface water reserves and groundwater. In general, impacts are expected if the 12-month SPI is ≤-0.8 (moderately dry or worse - ref.: CDPMN).
- Impactful hydrological drought by the end of the dry season (May 31st) is a concern across all the Antilles (no data available for Cuba and Haïti), and the eastern Guianas.
- A drought warning is issued for the ABC Islands, French Guiana and the Antilles from S Hispaniola east- and southward, as well as for SW Belize. A drought watch is also issued for Cayman, central Belize, N Hispaniola and Jamaica.





## **Current Drought Situation**

- Because of below-normal rainfall during 2015, water shortages occur in many portions of the Antilles, notably Barbados, Haïti, St. Lucia and many of the Leewards.
- Nearly all island nations are in longer-term drought (except Bahamas and
- However, a failure of the secondary wet season in the Guianas has led to short-term drought.

#### • Shorter-term (till May 2016):

- We expect that a shorter-term drought situation may persist from Puerto Rico east- & southward, notably in ABC Islands, Dominica, Guadeloupe, E Guianas, Martinique, St. Lucia.

### • Longer-term (beyond May 2016):

- Very strong El Niño has peaked in strength last November and is slowly weakening.
- The El Niño results in a drier early part of the year in the Lesser Antilles and a failure of the secondary wet season in the northern Guianas. This leads to drought concerns towards the end of the Caribbean dry season (i.e. May 31).
- In the islands, the wet season may start up to one month earlier than usual, when recovery is expected for Barbados, Cayman, central Hispaniola, Jamaica, Leewards, Trinidad & Tobago, US Caribbean Terr. and Windwards.
- El Niño will possibly be replaced by a La Niña by the end of the year. This evolution should finally bring drought relief to the region, but may tilt the odds towards increased flash flood potential. [Available for download]

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