# CARIBBEAN DROUGHT BULLETIN

### February 2016 | Volume II | ISSUE 9

#### **Announcement**

Drought conditions continue in the eastern and southern Caribbean and has extended to the Guianas, with below normal rainfall expected at least until April. Drought concerns, with likely impacts, exist from Guyana across to Jamaica and Cayman Islands in the West into April/May 2016. Above normal rainfall is likely to curtail drought impacts anywhere from around May 2016.

#### Month at a Glance

Normal to below normal rainfall was experienced in the eastern Caribbean and northern Guyana in January. Trinidad, Grenada, St. Vincent, St. Lucia, Antigua, St. Kitts, Anguilla and St. Maarten were moderately dry. Tobago and Barbados normal; Dominica extremely dry; St. Croix exceptionally dry. Read more...

## **Headline Impacts**

Lengthy drought in Dom. Rep. caused serious agriculture losses and prompted water rationing measures. (IPS News)

NAWASA is partnering with a number of stakeholders to roll out what would be a proactive and robust dry season campaign. (NAWASA)

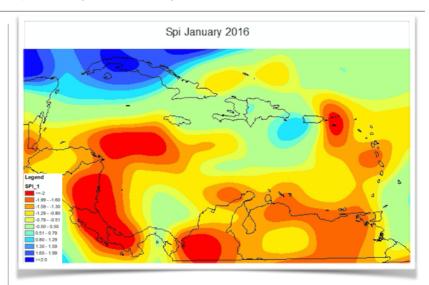
The East Demerara Water Conservancy (EDWC) is at a critically low level. (Guyana Chronicles)

The 2016 Sugar Cane Harvest in Barbados has suffered a major blow from the drought conditions. (Nation News)

Weather and drought to blame as food insecurity doubles in Haiti. (Caribbean 360)

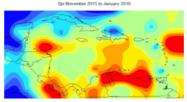
#### **Latest News**

OECS hosts drought management workshop in Saint Lucia. (St. Lucia Times)

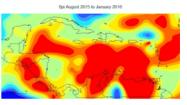


# November-December-January Rainfall Summary

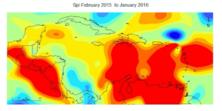
Apart from St. Kitts and Grenada that were moderately wet, the eastern Caribbean and northern Guyana were normal to below normal for the three-month period. Trinidad, Tobago, Barbados and St. Croix were normal; St. Vincent, St. Lucia and Anguilla slightly dry, Dominica, Antigua and St. Maarten moderately dry; and northern Guyana normal in the west to moderately dry in the east. Aruba was extremely dry, but Curacao moderately dry. Puerto Rico's rainfall was normal, while that of the Dominican Republic ranged from moderately dry in the south and east to extremely wet in the north. Jamaica was slightly dry, but Grand Cayman moderately wet. Conditions in Belize ranged from extremely wet in the west to slightly wet in the north.



NOV 2015 - JAN 2016 SPI 3 MONTHS



AUG 2015 - JAN 2016 SPI 6 MONTHS



FEB 2015- JAN 2016 SPI 12 MONTHS

Caribbean Drought Bulletin

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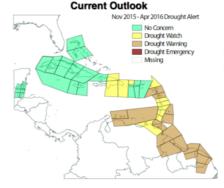
Ms. Shelly-Ann Cox: scox@cimh.edu.bb

Website: CDPMN Drought Monitor (Click here)

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

#### **Drought Outlook Nov to Apr**

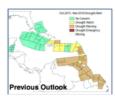
Areas under immediate drought concern?



#### Current update (January 2015):

Drought concern is noted from Hispaniola eastand southward, except for most parts of the US C'bean Territories.

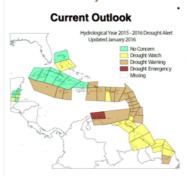
We issue a drought warning in ABC Islands, Antigua, Barbados, Guadeloupe, Guianas, St. Kitts, Trinidad & Tobago.





#### 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 December 2015, 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 except western Cuba (no data available for Haïti), and the Guianas.

A drought emergency is issued for ABC Islands. A drought warning is issued for southern French Guiana and the Antilles, except Cuba. A drought watch is also issued for parts of the Bahamas and Belize, and the rest of the Guianas.





# **Current Drought Situation**

- —Because of below-normal rainfall during 2015, water shortages occur in many portions of the Antilles, notably Barbados, St. Lucia and many of the Leewards.
- Nearly all island nations are in longer-term drought (except Bahamas & Cuba).
- Thanks to the return of more seasonable rainfall in parts of the region during
   October and November, some Antilles islands are currently no longer facing severe shorter-term drought. Likewise, Belize is no longer under drought.

#### • Shorter-term (till April 2016):

 We expect that a shorter-term drought situation may persist from Hispaniola east- & southward, notably in ABC Islands, Antigua, Barbados, Guadeloupe, St. Kitts, Trinidad & Tobago, Guianas.

#### • Longer-term (beyond April 2016):

- Very strong El Niño seems to have peaked in strength. El Niño often 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 may lead to drought concerns towards the end of the Caribbean dry season (i.e. May 31st).
- After El Niño peaked, it tends to dissipate towards the middle and possibly replaced by a La Niña by the end – of the year. This evolution could finally bring drought relief to the region.
- Areas with existing water shortages may not see recovery until the next wet season, in particular Barbados, Belize, Cayman, central Hispaniola, Jamaica, Leewards, Trinidad & Tobago, US Caribbean Territories and Windwards.

#### [Available for download]

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