CARIBBEAN DROUGHT BULLETIN

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Announcement

Rainfall increased during May, ending or at least relieving drought conditions in parts of the Caribbean. Rainfall will continue to increase during June, removing drought concerns across the Caribbean. It will take some time for large reservoirs, rivers and groundwater to be replenished where there were severe to exceptional rainfall deficits over the past year or more. However, the situation is highly likely to improve as the region goes deeper into the rainy season. Concerns will likely change from drought to the potential for flooding, particularly if La Niña develops. This, the region will continue to monitor.

Month at a Glance

Mixed conditions were experienced in the eastern Caribbean and Guyana. Trinidad was slightly wet; Tobago, Barbados, St. Vincent, Dominica, Antigua, Anguilla, St. Maarten, St. Croix normal; Grenada and St. Kitts slightly dry; and northern Guyana ranging from extremely wet in the north to slightly dry in the east. Aruba was severely dry, but Curacao normal. Puerto Rico was predominantly normal but slightly wet in the east, while conditions in the Dominican Republic ranged from moderately wet to moderately dry. Jamaica was normal, while Grand Cayman was slightly dry. <u>Read more...</u>

Headline Impacts

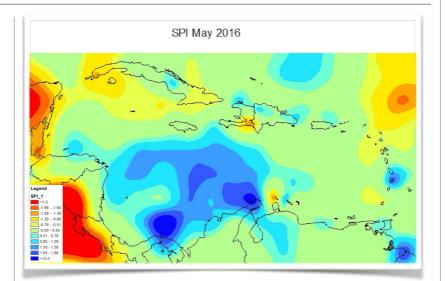
CDEMA Head cautions that coming out of a severe dry period moving in to the rainy season, there is a high possibility that there will be localised flood events. (<u>Barbados Advocate</u>)

Drought concerns over southern half of Belize. (My Belize)

Drought continues to affect Cuba. It has been reported that 70,000 people are currently receiving water supplies from tank trucks. (Granma)

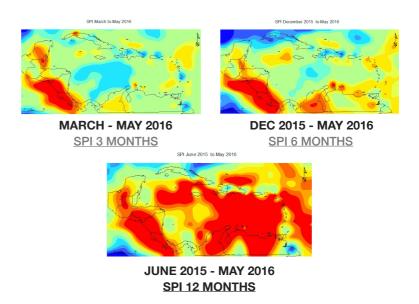
Latest News

Dominica releases findings of study on climate change and health vulnerability at the Wet/Hurricane Season CariCOF at the Fort Young Hotel in Roseau. (Antigua Observer)



March-April-May Rainfall Summary

For the three month period, mixed conditions were experienced in the eastern Caribbean and Guyana. Trinidad and Dominica normal to slightly wet; Tobago, Grenada, St. Vincent, Antigua and St. Croix normal; Barbados, St. Kitts and St. Maarten slightly dry; St. Lucia very wet; Anguilla slightly wet; and northern Guyana ranging from very wet in the north to normal in the east and south. Aruba was extremely dry, while Curacao was moderately dry. Conditions in Puerto Rico ranged from normal in the west to moderately wet in the east. In the Dominican Republic, northern and southern extremes were normal, while remaining areas were slight to very wet. Apart from northwestern areas that were slightly dry Jamaica was normal, but Grand Cayman was moderately dry. Cuba was predominantly normal to slightly wet apart from west central areas that were dry to exceptionally dry. Conditions in Belize ranged from severely dry in the south to exceptionally dry in the west.



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. <u>Read</u> <u>more...</u>

For more information contact:

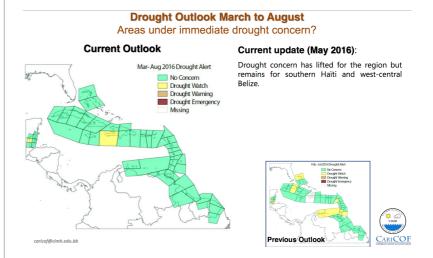
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Ms. Shelly-Ann Cox: scox@cimh.edu.bb

Website: CDPMN Drought Monitor (Click here)

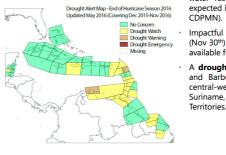
Drought Outlook for the End of August CariCOF's Drought Alert Map



Long-term drought outlook

Concerns by the end of the Caribbean wet/hurricane season (Nov 30th, 2016)?

Current Outlook



This 12-month SPI-based drought outlook uses observations through April 2016, with potential impacts on large surface water reserves and groundwater. In general, impacts are expected if the 12-month SPI is \leq -1.3 (*very dry or worse* – ref.: CDPMN).

Impactful hydrological drought by the end of the wet season (Nov 30th) is a concern across the Caribbean (insufficient data available for Haïti).

A **drought warning** is issued for the ABC Islands, Antigua and Barbuda. A **drought watch** is issued for Barbados, central-west Belize, south Haïti, Leewards except Guadeloupe, Suriname, Trinidad and Tobago, Windwards, and U.S. C'bean Territories.



Current Drought Situation

 After below-normal rainfall during 2015 resulting in long-term drought, water shortages persisted throughout the first 4 months of 2016 in many portions of the Antilles.

- Nearly all island nations of the Lesser Antilles are in longer-term drought.

- After a failure of the secondary wet season in the Guianas, short-term drought was alleviated in coastal areas by heavy rains in March, but persisted in the south-western areas of Guyana.

• Shorter-term drought situation (till August 2016):

- We expect that a shorter-term drought situation may develop in west-central Belize and southern Haïti.

• Longer-term drought situation (until November 2016):

- El Niño peaked in strength last November and has rapidly weakened since then. The El Niño resulted 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 has led to drought concerns carrying through to the end of the Caribbean dry season (i.e. May 31), except in coastal areas of the Guianas.

 In the islands, the wet season is expected to bring longer-term drought recovery for Barbados, Cayman, central Hispaniola, Jamaica, Leewards, Trinidad & Tobago, US Caribbean Terr. and Windwards.

- Fading El Niño will likely be followed by a La Niña later this year. This evolution should finally bring drought relief to the region, but may tilt the odds towards increased flash flood potential. [Available for download]