

CARIBBEAN DROUGHT BULLETIN

January 2016 | Volume II | ISSUE 8

Announcement

Dry season-like conditions were experienced over much of the Caribbean in December, particularly in the east, sounding what is most likely the end of the period of brief relief from the drought conditions. With most of the Caribbean receiving well below normal rainfall (and in some cases record low) in 2015, and with normal to below normal rainfall expected at least in the first half of the 2016 dry season, concerns over drought impacts would again heighten. This would be particularly so from the Guianas along the eastern Caribbean chain to the Greater Antilles. However, concerns about drought impacts are much reduced in the western Caribbean, particularly in The Bahamas, Cuba, Belize and Cayman Islands.

Month at a Glance

With the exceptions of Trinidad that was moderately wet and Grenada slightly wet, the rainfall in islands of the eastern Caribbean was predominantly normal to below normal. [Read more...](#)

Headline Impacts

Drought eased to moderate levels in Antigua resulting in improved soil moisture for farming but surface catchments still dry. ([Antigua CliSec](#))

Residents in the parishes of St. Thomas and St. Joseph in Barbados affected by water outages. ([Nation News](#))

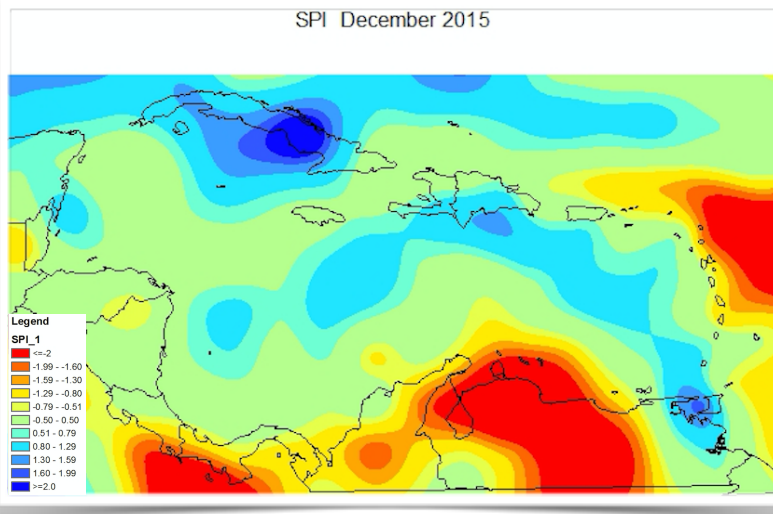
Minister with responsibility for water resources management in Barbados, Dr. Estwick, promises to alleviate severe shortages in the north. ([Barbados Today](#))

Trinidad met office warns of possible dry spell for first few months of 2016. ([Caribbean 360](#))

Jamaica's drought tool could turn table on climate change. ([Caribbean 360](#))

Water rationing resumes in St. Kitts and Nevis. ([Caribbean 360](#))

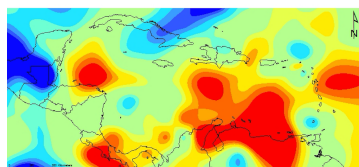
SPI December 2015



October-November-December Rainfall Summary

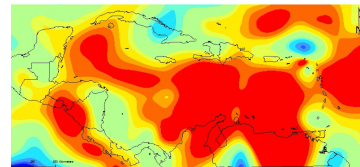
For the three-month period, apart from Grenada that was moderately wet and St. Kitts that was slightly wet, the eastern Caribbean, including northern Guyana, was normal to below normal. Trinidad, Tobago, Anguilla and St. Croix were normal; Barbados, St. Vincent, St. Lucia, and Antigua slightly dry; St.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

SPI October to December 2015



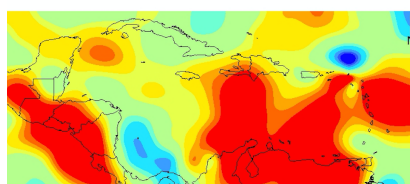
OCT - DEC 2015
SPI 3 MONTHS

SPI July to December 2015



JUL - DEC 2015
SPI 6 MONTHS

SPI January to December 2015



JAN - DEC 2015
SPI 12 MONTHS

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...](#)

For more information contact:

Mr. Adrian Trotman:
atrotman@cimh.edu.bb

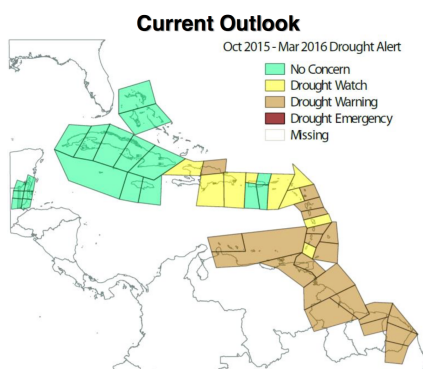
Mr. Anthony Moore:
amoore@cimh.edu.bb

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

Website: [CDPMN Drought Monitor](#) (Click here)

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

Drought Outlook Oct to Mar Areas under immediate drought concern?

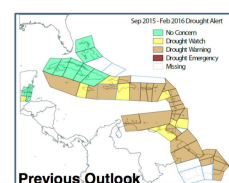


cariCOF@cimh.edu.bb

Current update (December 2015):

Drought concern is noted from Hispaniola east- and southward, except for most parts of Puerto Rico.

We issue a drought warning in northern Dom. Republic as well as from Antigua southwards, except Grenada and Martinique where we issue a drought watch.

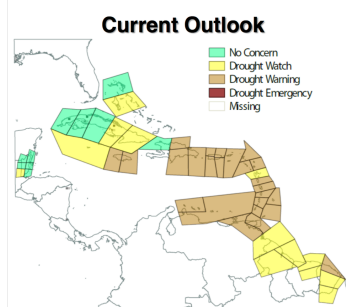


Previous Outlook



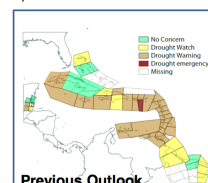
Long-term drought outlook

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



cariCOF@cimh.edu.bb

- This 12-month SPI-based drought outlook uses observations until November 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 Haiti), and the Guianas.
- A **drought warning** is issued for northern French Guiana and the Antilles, except Cayman, eastern Cuba, and Guadeloupe, for which we issue a drought watch. A **drought watch** is also issued for the Bahamas, southwest Belize and the rest of the Guianas.



Previous Outlook



Current Drought Situation

—Because of below-normal rainfall during the previous dry and wet seasons, water shortages occur in many portions of the Antilles.

—Nearly all island nations are in longer-term drought (except Bahamas and 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.

•Shorter-term (till March 2016):

—We expect that a shorter-term drought situation may arise (or persist) from Hispaniola east- and southward, especially in ABC Islands, Antigua, Barbados, Guianas, Leewards.

•Longer-term (beyond March 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 drier secondary wet season in the northern Guianas. This may lead to drought concerns towards the end of the Caribbean dry season (i.e. May 31, 2016).

— After El Niño peaks, it tends to dissipate towards the middle – and possibly replaced by a La Niña by the end – of the following 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, central Hispaniola, Jamaica, Leewards, Trinidad & Tobago, US Caribbean Terr. and Windwards.

[Available for download]