# CariCOF Drought Outlook By the end of March 2017

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### Participating territories

Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St. Martin, St. Vincent & the Grenadines, Suriname, Trinidad & Tobago and the US Virgin Islands



### **Drought Outlook October 2016 to March 2017**

Areas under immediate drought concern?

### **Current Outlook**



#### Current update (December 2016):

We continue to see no drought concern developing throughout the region.

#### A drought warning is issued for Cayman.

A **drought watch** is issued for most other portions of Cuba, Grenada, inland French Guiana, the Leewards (except Antigua) and Tobago.





# Long-term drought outlook

# Concerns by the end of the Hydrological year (May 30<sup>th</sup>, 2017)?

## **Current Outlook**



- This 12-month SPI-based drought outlook uses observations through November 2016, with potential impacts on large surface water reserves and groundwater. In general, impacts are expected if the 12-month SPI is ≤-0.8 (very dry or worse – ref.: CDPMN).
- A **drought emergency** is in effect for Cayman Islands
- A **drought warning** is in effect for central Cuba, Grenada, SE Puerto Rico and Tobago.
- A **drought watch** is in effect for N Belize, E Cuba, French Guiana, Jamaica, NW Puerto Rico and Trinidad.





# **Drought outlook** – shorter-/longer-term concern?

- Current drought situation (up to the end of November 2016): (more information here)
  - Grand Cayman is likely to experience its driest year on record with an observed wet season rainfall sum of only 50% of average. As a result, the island is in both short- and long-term drought. S Belize, central Cuba, N Leewards and Tobago are in long-term drought.
  - September, October and November rainfall was sufficient to continue alleviating adverse drought conditions from earlier in 2016 in most other areas
- Shorter-term drought situation (until March 2017):
  - We expect a shorter-term drought situation to continue in Cayman and to possibly develop in Cuba, Grenada, French Guiana, the Leewards (except Antigua), and to possibly remain in Tobago.
- Longer-term drought situation (until May 2017):
  - Longer-term drought is very likely to remain in Cayman (~90% chance) and potentially become more impactful as the dry (tourism) season progresses. It is evolving in central Cuba, Grenada, SE Puerto Rico and Tobago, and is possible in N Belize, French Guiana, NW Puerto Rico and Trinidad.
  - Though dry season impacts may be quite similar to the usual, longer-term drought will not likely be a major concern by the end of the dry season in other areas.
  - A borderline La Niña appeared since September and expected to fade by February. La Niña tends to suppress chances of drought during the dry season. The exception is the Bahamas and Cuba, where drought chances tend to increase towards March with La Niña.

# **CONTINUE TO MONITOR WATER USAGE!!**



ALERT LEVEL	MEANING	ACTION LEVEL
NO CONCERN	No drought concern	<ul> <li>✓ monitor resources</li> <li>✓ update and ratify management plans</li> <li>✓ public awareness campaigns</li> <li>✓ upgrade infrastructure</li> </ul>
DROUGHT WATCH	Drought possible	<ul> <li>✓ keep updated</li> <li>✓ protect resources and conserve water</li> <li>✓ implement management plans</li> <li>✓ response training</li> <li>✓ monitor and repair infrastructure</li> </ul>
DROUGHT WARNING	Drought evolving	<ul> <li>✓ protect resources</li> <li>✓ conserve and recycle water</li> <li>✓ implement management plans</li> <li>✓ release public service announcements</li> <li>✓ last minute infrastructural repairs and upgrades</li> <li>✓ report impacts</li> </ul>
DROUGHT EMERGENCY caricof@cimh.edu.bb	Drought of immediate concern	<ul> <li>✓ release public service announcements</li> <li>✓ implement management and response plans</li> <li>✓ enforce water restrictions and recycling</li> <li>✓ enforce resource protection</li> <li>✓ repair infrastructure</li> <li>✓ report impacts</li> </ul>





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