

# CariCOF Drought Outlook

## By the end of March 2019

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### Participating territories

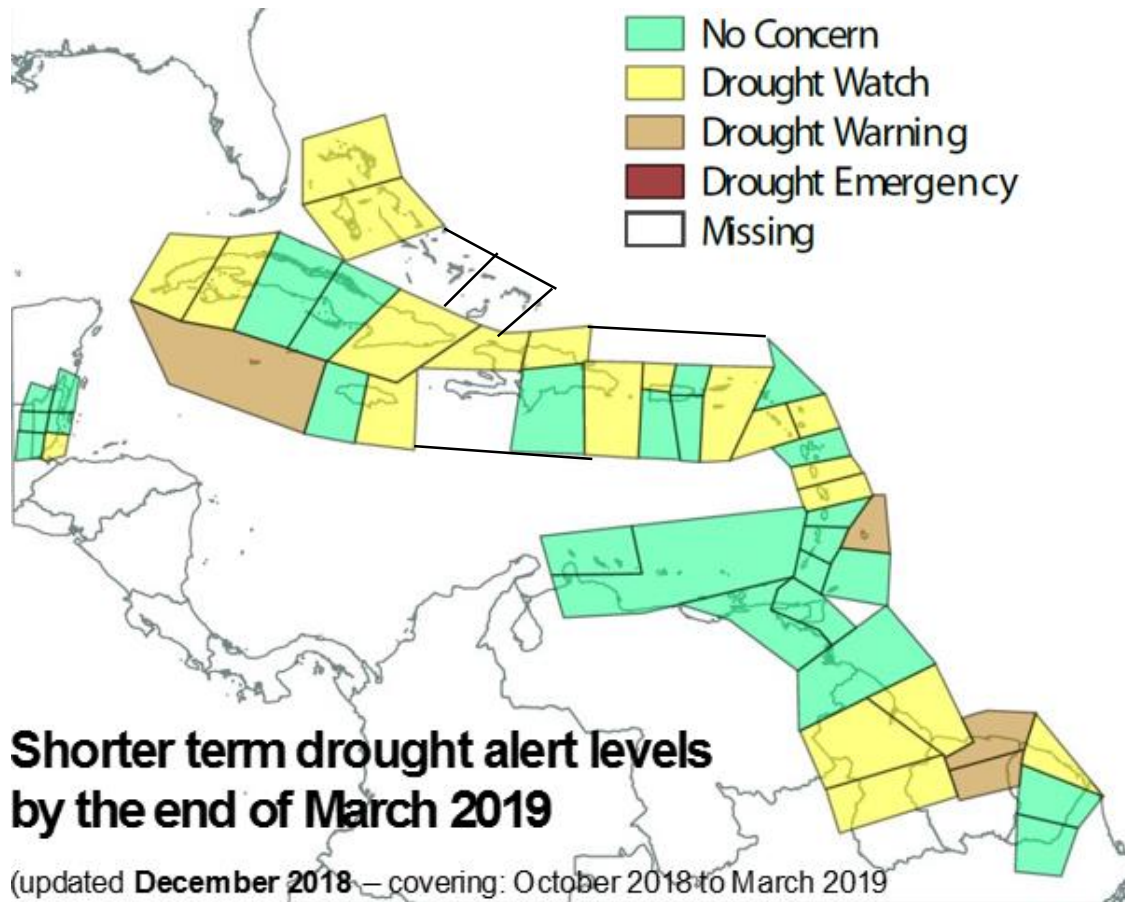
Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St. Martin, St. Vincent & the Grenadines, Suriname,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



# Shorter term Drought Outlook (October 2018 to March 2019)

## Areas under immediate drought concern?

### Current Outlook



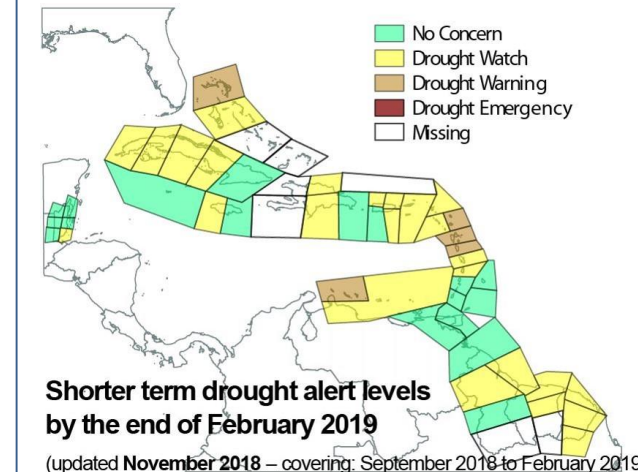
### Current update (December 2018):

We are currently entering the dry season when drought concern develops throughout much of the region.

A **drought warning** is issued for Barbados, The Cayman Islands, and, Suriname.

A **drought watch** is issued for Antigua, northern Bahamas, southeastern Belize, much of Cuba, Dominica, northern & eastern Dom. Republic, northern French Guiana, much of Guyana, eastern Jamaica, Martinique, northwestern Puerto Rico, USVI.

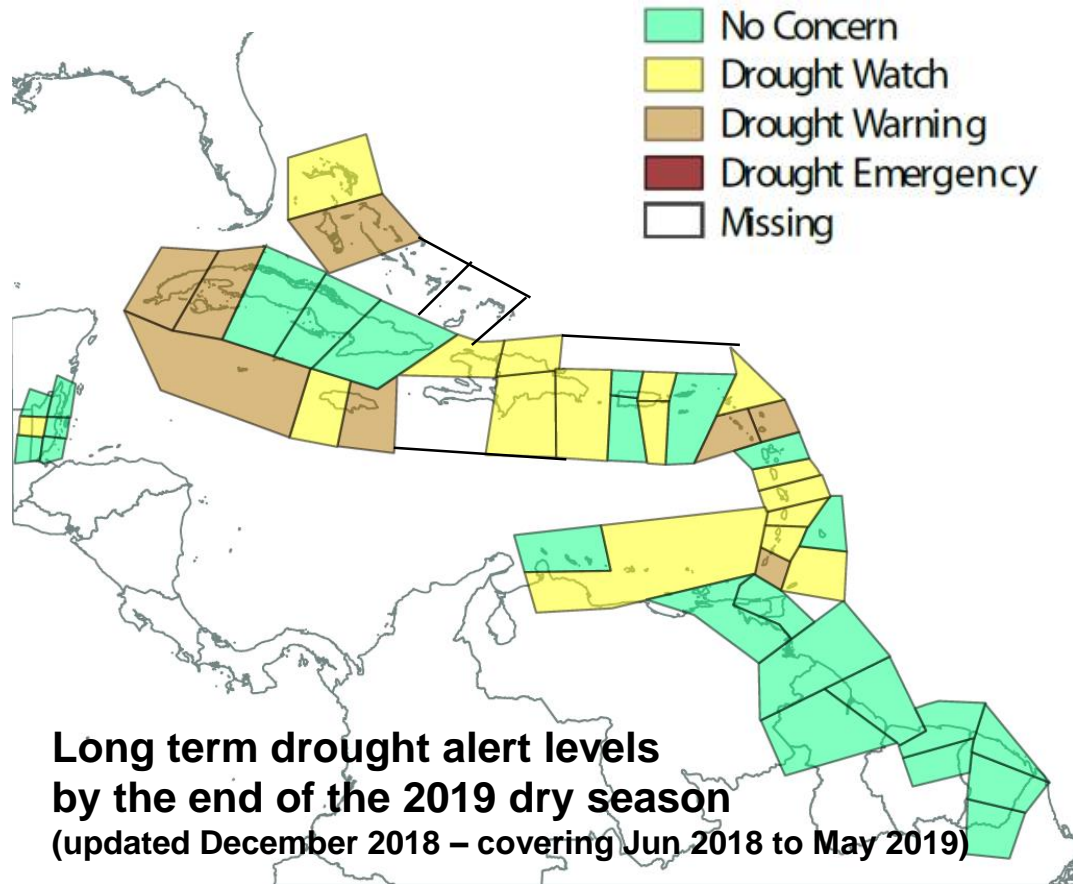
### Previous Outlook



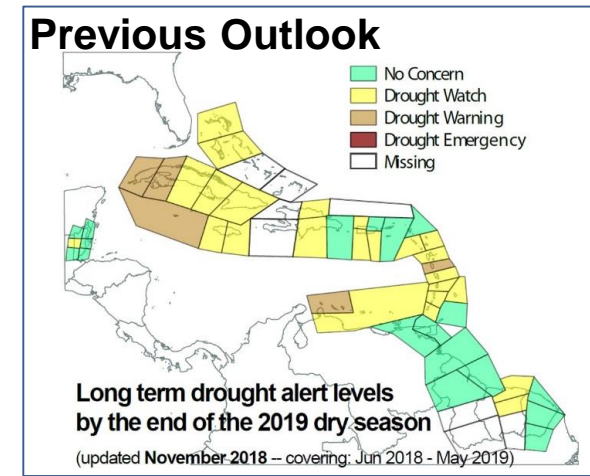
# Long term drought outlook

Concerns by the end of the dry season (May 31<sup>st</sup>, 2019)?

## Current Outlook



- This 12-month SPI-based drought outlook uses observations through November 2018, with potential impacts on large surface water reservoirs and groundwater. In general, impacts are expected if the 12-month SPI is  $\leq -0.8$  (*moderately dry or worse* – ref.: CDPMN).
- A **drought warning** is issued for Antigua, northern Bahamas, Cayman Islands, western Cuba, Grenada, eastern Jamaica, St. Kitts.
- A **drought watch** is issued for extreme northern Bahamas, Dominica, Hispaniola, western Jamaica, Martinique, eastern P.R., St. Lucia, St. Vincent, Tobago, northern Leewards,



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

- Current drought situation (up to the end of November 2018): *(more information [here](#))*
  - Cayman, Southern-most Hispaniola, eastern Jamaica and much of the Leeward Isls. have seen long term drought developing.
  - Shorter term drought is seen in northwestern parts of The Bahamas and Cuba, southern-most Hispaniola and northern Jamaica.
- Shorter term drought situation (by the end of March 2019):
  - Shorter term drought is evolving in Barbados, Cayman Islands, and coastal Suriname.
  - Shorter term drought might possibly develop in Antigua, N Bahamas, SE Belize, much of Cuba, Dominica, N & E Dom. Republic, N French Guiana, much of Guyana, E Jamaica, Martinique, NW Puerto Rico, USVI.
- Long term drought situation (by the end of May 2019):
  - A weak El Nino is expected to strengthen and contribute to reduced rainfall until at least March.
  - Long term drought is evolving in Antigua, northern Bahamas, Cayman Islands, western Cuba, Grenada, eastern Jamaica, St. Kitts.
  - Shorter term drought might possibly develop in extreme N Bahamas, Dominica, Hispaniola, W Jamaica, Martinique, E Puerto Rico, St. Lucia, St. Vincent, Tobago, N Leewards.

*\* We advise all stakeholders to keep monitoring drought and look for our monthly updates.\**

**CONTINUE TO MONITOR &  
CONSERVE WATER !!**

ALERT LEVEL	MEANING	ACTION LEVEL
<b>NO CONCERN</b>	No drought concern	<ul style="list-style-type: none"> <li>✓ <b>monitor resources</b></li> <li>✓ update and ratify management plans</li> <li>✓ public awareness campaigns</li> <li>✓ upgrade infrastructure</li> </ul>
<b>DROUGHT WATCH</b>	Drought possible	<ul style="list-style-type: none"> <li>✓ <b>keep updated</b></li> <li>✓ protect resources and conserve water</li> <li>✓ implement management plans</li> <li>✓ response training</li> <li>✓ monitor and repair infrastructure</li> </ul>
<b>DROUGHT WARNING</b>	Drought evolving	<ul style="list-style-type: none"> <li>✓ <b>protect resources</b></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>
<b>DROUGHT EMERGENCY</b>	Drought of immediate concern	<ul style="list-style-type: none"> <li>✓ <b>release public service announcements</b></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>



# THRESHOLDS

Drought	
Alert Levels	Probabilities
No Concern	< 33.3333
Drought Watch	33.3334 – 50
Drought Warning	50 – 83.3333
Drought Emergency	≥ 83.3334

ROC	
Discrimination	Thresholds
No	< 0.5
Poor	0.5 - 0.6
Moderate	0.6 – 0.7
Fair	0.7 -0.8
Good	0.8 – 0.95
Very Good	> 0.95

Goodness Index	
Skill	Thresholds
Negative Skill	< 0
Very Limited	0 – 0.1
Limited	0.1 – 0.2
Moderate	0.2 – 0.25
Fair	0.25 -0.3
Good	> 0.3



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