# CariCOF Drought Outlook By the end of March 2021

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Participating territories

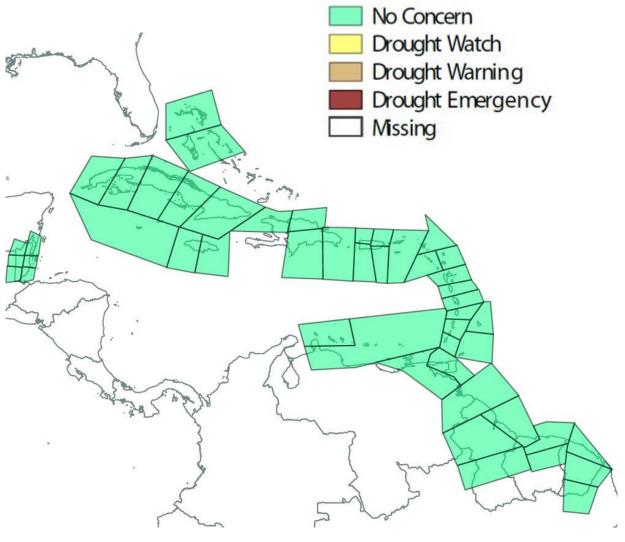
Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St-Martin, St. Vincent & the Grenadines, Suriname,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





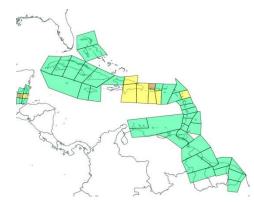


#### What is the predicted short term drought concern by the end of March 2021?



#### Current update (December 2020):

We are currently in the Caribbean dry season. Currently, no shorter term drought concern is developing throughout the region.



Previous short term drought alert levels by the end of February 2021

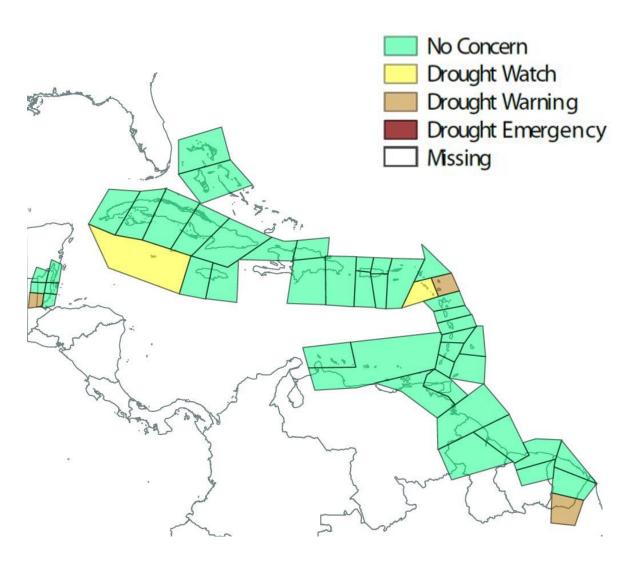
### Short term drought alert levels by the end of March 2021

(updated **December 2020** – covering October 2020 to March 2021)

For climate information specific to your country, please consult with your national meteorological service. CariCOF outlooks speak to recent and expected climate trends across the Caribbean in general.



#### What is the predicted long term drought concern by the end of May 2021?



- This 12-month SPI-based drought outlook uses observations through November 2020, with potential impacts on large surface water reservoirs and groundwater. In general, impacts are expected if the 12-month SPI is ≤-0.8 (moderately dry or worse – ref.: CDPMN).
- A **drought warning** should be considered for Antigua, southwest Belize, and southern French Guiana.
- A drought watch should be considered for Grand Cayman and St. Kitts.

### Long term drought alert levels by the end of May 2021

(updated **December 2020** – covering June 2020 to May 2021)



**For climate information specific to your country, please consult with your national meteorological service.** *CariCOF outlooks speak to recent and expected climate trends across the Caribbean in general.* 

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

- Current drought situation (up to the end of November 2020): (more information here)
  - Severe (or worse) shorter term drought has developed in parts of southwestern Guyana
  - Severe (or worse) long term drought has developed along the southern coastline of the Dominican Republic, locally along the north coast of French Guiana, and westernmost Puerto Rico.
- Shorter term drought situation (by the end of March 2021):
  - None
- Long term drought situation (by the end of May 2021):
  - Long term drought is evolving in Antigua, southwest Belize, and southern French Guiana.
  - Long term drought might possibly develop or continue in Grand Cayman and St. Kitts.
  - Areas that ended up in long term drought by the end of November 2020 may experience significantly reduced water levels in large reservoirs, large rivers and groundwater along the dry season.

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

## CONTINUE TO MONITOR & CONSERVE WATER !!



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>

### THRESHOLDS

> 0.95

Drought				
Alert Levels	Probabilities			
No Concern	< 33.3333			
Drought Watch	33.3334 – 50			
Drought Warning	50 - 83.3333			
Drought Emergency	≥ 83.3334	ROC		
		Discri	mination	Thresholds
		No		< 0.5
		Poor		0.5 0.6
		Mode	erate	0.6 - 0.7
		Fair		0.7 -0.8
		Good		0.8 - 0.95

Very Good

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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