

# CariCOF Drought Outlooks

—

**Short term drought concerns by the end of September 2020**

**Long term drought concerns by the end of November 2020**

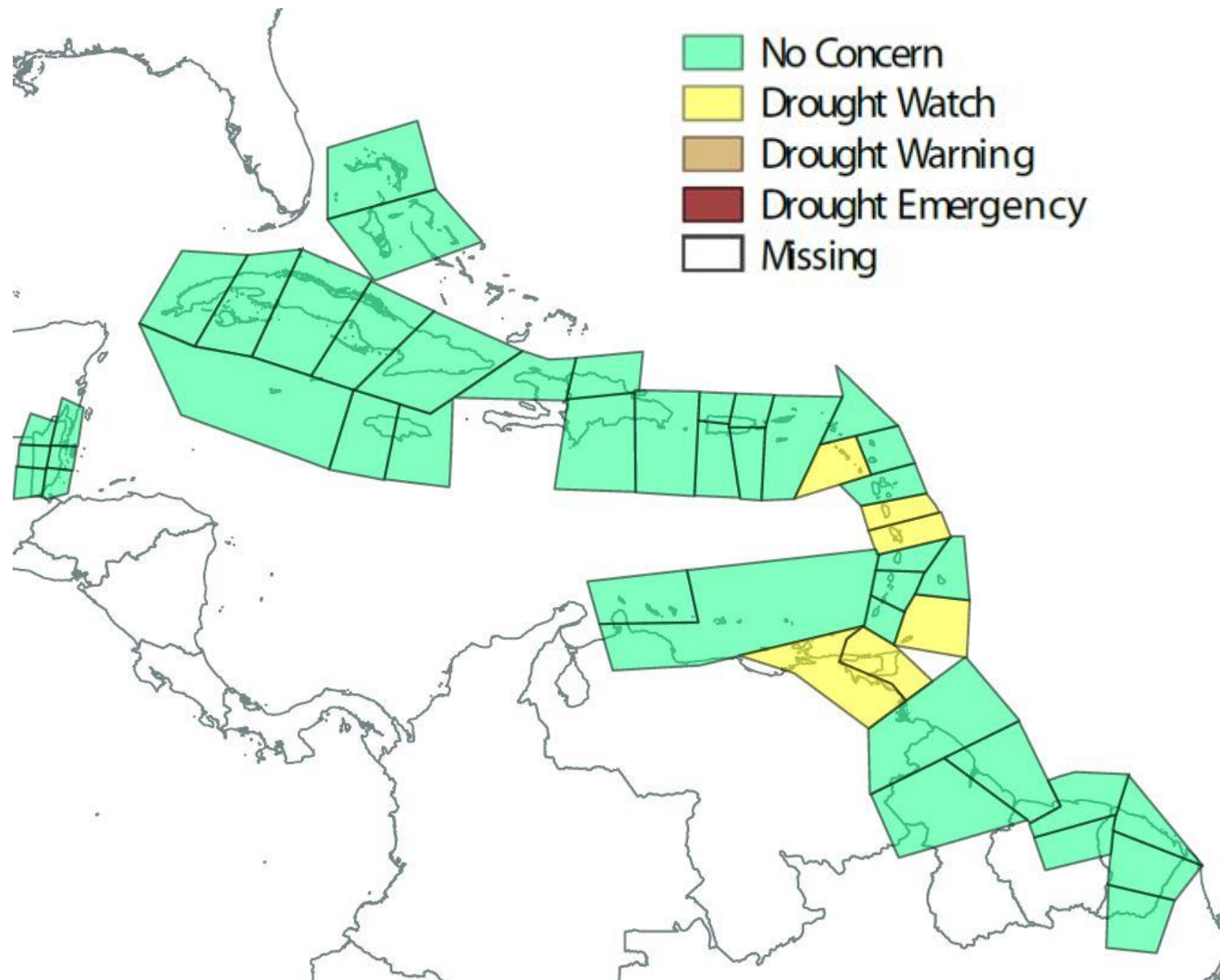
*Coordination: Caribbean Institute for Meteorology & Hydrology  
Dr. Cédric J. Van Meerbeeck - Climatologist  
Dr. Teddy Allen – Assistant Climatologist  
[caricof@cimh.edu.bb](mailto:caricof@cimh.edu.bb)*

## Participating territories

Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haiti, 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 September 2020?



## Suggested alert levels for short term drought at the end of September 2020

(updated June 2020 – covering April to September 2020)

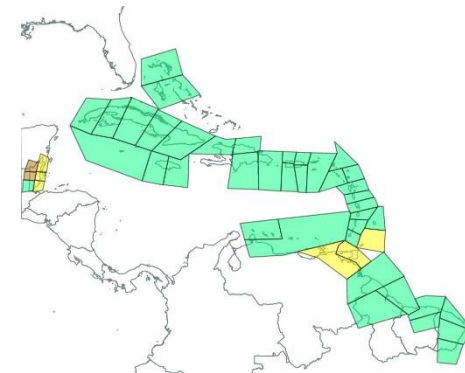
[caricof@cimh.edu.bb](mailto:caricof@cimh.edu.bb)

## Current update (June 2020):

We are currently entering the wet season.

This time around, there is little drought concern throughout much of the region.

- A **drought watch** should be considered for Dominica, Martinique, St. Kitts, and Trinidad and Tobago.



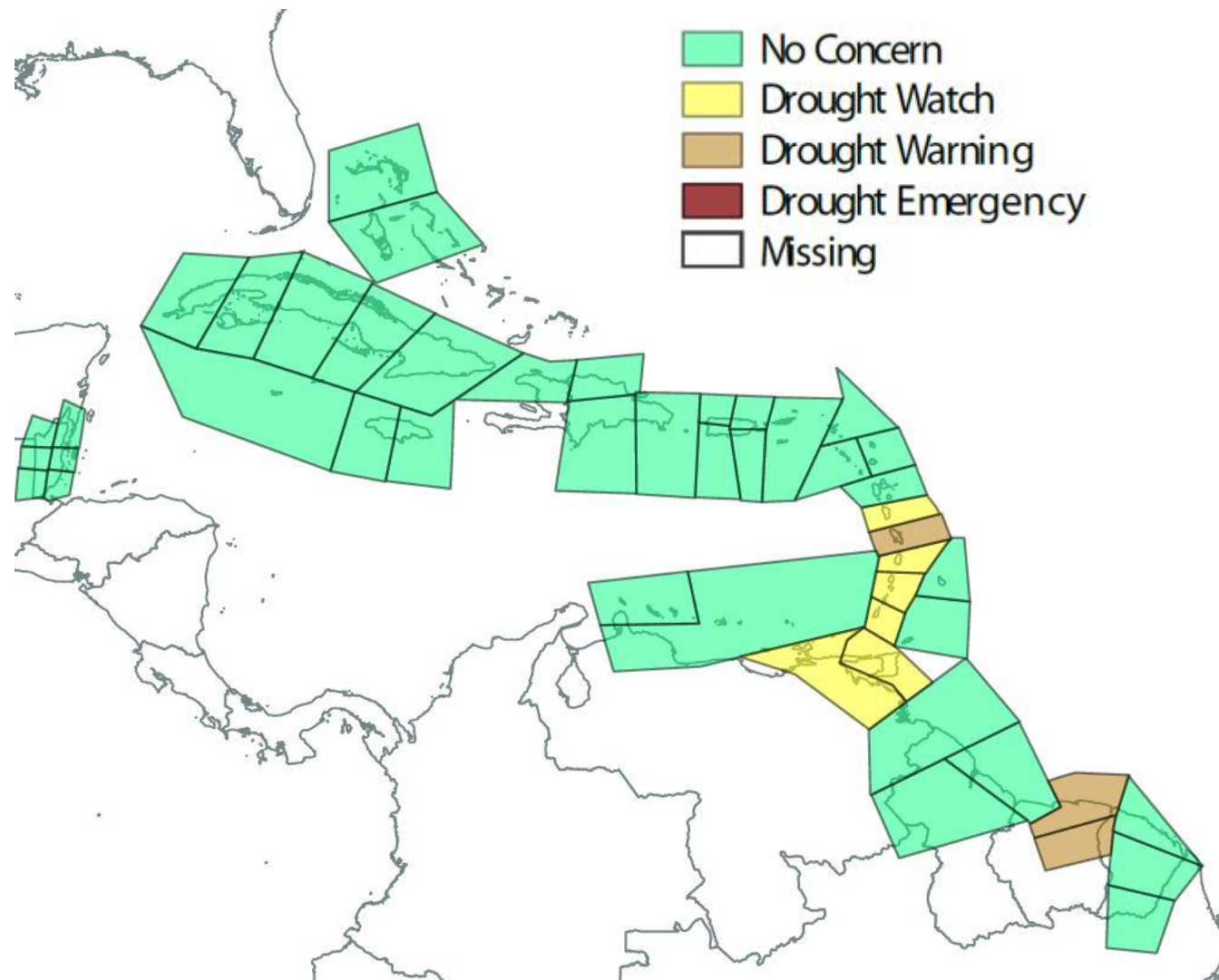
Previous short term drought alert levels by the end of August 2020

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.



**CARICOF**  
CARIBBEAN CLIMATE OUTLOOK FORUM

# What is the predicted long term drought concern by the end of November 2020?



## Current update (June 2020):

- This 12-month SPI-based drought outlook uses observations through April 2019, with potential impacts on large surface water reservoirs and groundwater. In general, impacts are expected if the 12-month SPI is  $\leq -1.3$  (*very dry or worse* – ref.: CDPMN).
- A **drought warning** should be considered for Martinique and Suriname.
- A **drought watch** should be considered for Dominica, Grenada, Saint Lucia, St. Vincent, and Trinidad.

## Suggested alert levels for long term drought at the end of November 2020

(updated June 2020 – covering December 2019 to November 2020)

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

- Current drought situation (at the end of May 2020): *(more information [here](#))*
    - Severe (or worse) shorter term drought has developed in Aruba, Barbados, southern Dominican Republic, southern Haiti, Martinique, Saint Lucia, and western Trinidad.
    - Severe (or worse) long term drought has developed in northern-most and eastern Bahamas, Barbados, northern and western Belize, the Dominican Republic, eastern Guadeloupe, Martinique, western-most Puerto Rico, Saint Lucia, St. Vincent, and Trinidad.
  - Shorter term drought situation (by the end of September 2020):
    - Shorter term drought might possibly develop or continue in Dominica, Martinique, St. Kitts, and Trinidad and Tobago..
  - Long term drought situation (by the end of November 2020):
    - Long term drought is evolving in Martinique and Suriname.
    - Long term drought might possibly develop or continue in Dominica, Grenada, Saint Lucia, St. Vincent, and Trinidad.
    - Areas ending up in long term drought by the end of November may experience **water levels in large reservoirs, large rivers and groundwater that are lower than usual, which would become a concern for the 2020-21 dry season.**
    - **Special note:** most areas that are currently experiencing agricultural drought are expected to see impacts ease by the end of July. Likewise, the majority of areas with lower water levels in very large surface and in underground reservoirs are expected to see progressive improvement towards August and September.
- \* 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 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>
DROUGHT WATCH	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>
DROUGHT WARNING	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>
DROUGHT EMERGENCY	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



**CARICOF**  
CARIBBEAN CLIMATE OUTLOOK FORUM

*caricof@cimh.edu.bb*

*rcc.cimh.edu.bb*

Caribbean Institute for Meteorology and Hydrology

TEL: (246) 425-1362/3 | FAX: (246) 424-4733