# CariCOF Drought Outlook By the end of September 2021

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

Participating territories

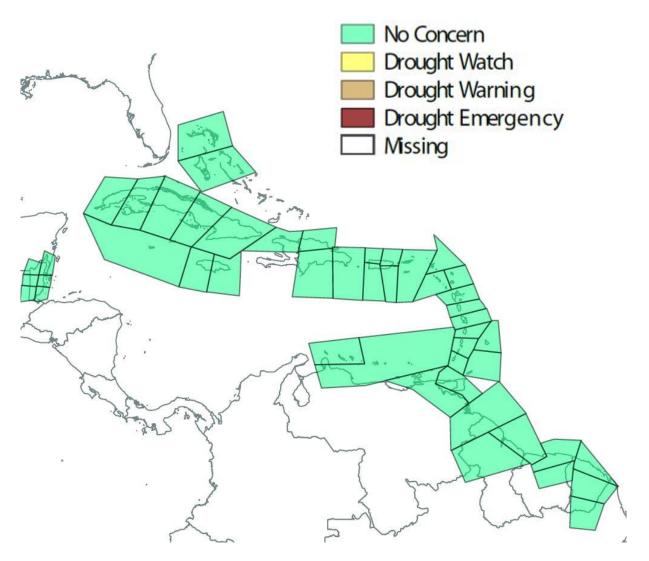
Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St-Martin, St. Vincent & the Grenadines, Suriname,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







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



#### **Current update (June 2021):**

We are entering middle portion of the wet season. Currently, no major shorter term drought concern is developing throughout the region.



Previous update (May): short term drought alert levels at the end of August 2021

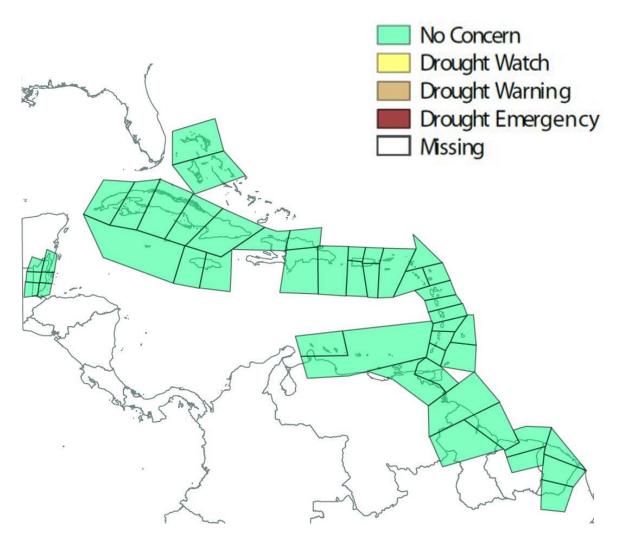
## Short term drought alert levels at the end of September 2021

(updated **June 2021** – covering April to September 2021)

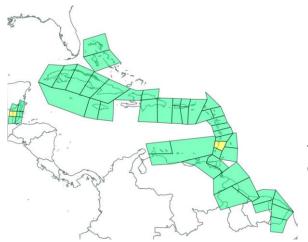
For climate information specific to your country, please consult with your national meteorological service. CariCOF outlooks speak to recent and expected climate trends across the Caribbean in general.



#### What is the predicted long term drought concern at the end of November 2021?



- This 12-month SPI-based drought outlook uses observations through May 2021, 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).
- Currently, no major long term drought concern is developing throughout the region.



Previous update (May): long term drought alert levels by the end of Nov 2021

### Long term drought alert levels at the end of November 2021

(updated **June 2021** – covering Dec 2020 to Nov 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 May 2021): (more information <a href="here">here</a>)
  - Moderate (or worse) short term drought has developed in Antigua, the northwestern Bahamas, the western half of Cuba, easternmost Guadeloupe, western- and easternmost Jamaica, eastern Martinique, St. Kitts and Sint Maarten.
  - Moderate long term drought has developed in southwest Belize, in southwest Dominica, westernmost Jamaica, northwest Martinique and St. Kitts.
- Shorter term drought situation (by the end of September 2021):
  - Short term drought is not expected.
- Long term drought situation (by the end of November 2021):
  - Long term drought is not expected.
  - \* We advise all stakeholders to keep monitoring drought and look for our monthly updates.\*



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

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

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@cimh.edu.bb rcc.cimh.edu.bb Caribbean Institute for Meteorology and Hydrology TEL: (246) 425-1362/3 | FAX: (246) 424-4733