### **CariCOF Drought Outlooks**

### Short term drought concerns by the end of October 2020 Long term drought concerns by the end of November 2020

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#### 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 October 2020?



#### Current update (July 2020):

We are currently in the wet season.

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



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

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

(updated July 2020 – covering May to October 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.



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



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

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

#### Current update (July 2020):

- This 12-month SPI-based drought outlook uses observations through June 2020, with potential impacts on large surface water reservoirs and groundwater. In general, impacts are expected if the 12-month SPI is ≤ -1.3 (very dry or worse – ref.: CDPMN).
- A **drought warning** should be considered for Martinique.
- A **drought watch** should be considered for Grand Cayman, Dominica, northernmost Guyana, Saint Lucia, and Trinidad.



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 (at the end of June 2020): (more information here)
  - Severe (or worse) shorter term drought has developed in Grand Cayman, Dominica, most parts of Hispaniola, the Leeward Islands (except the USVI), Martinique, northern Saint Lucia, and Tobago.
  - Severe (or worse) long term drought has developed in Aruba, northernmost and southeasternmost Bahamas, Barbados, parts of Belize, Cayman Islands, parts of Western Cuba, most parts of the Dominican Republic, northwestern French Guiana, eastern Guadeloupe, southwesternmost Puerto Rico, Trinidad, and the Windward Islands (except Grenada).
- Shorter term drought situation (by the end of October 2020):
  - This time around, there is little drought concern throughout much of the region.
- Long term drought situation (by the end of November 2020):
  - Long term drought is evolving in Martinique.
  - Long term drought might possibly develop or continue in Grand Cayman, Dominica, northernmost Guyana, Saint Lucia, 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: areas currently experiencing agricultural drought are expected to see impacts ease by the end of August. Likewise, the majority of areas with lower water levels in very large surface and in underground reservoirs are expected to see progressive improvement towards 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
<b>NO CONCERN</b>	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 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

				Goodness Index	
Drought				Skill	Thresholds
Alert Levels	Probabilities			Negative Skill	< 0
No Concern	< 33.3333			Very Limited	0-0.1
Drought Watch	33.3334 – 50			Limited	0.1-0.2
Drought Warning	50 - 83.3333			Moderate	0.2 – 0.25
Drought Emergency	≥ 83.3334	ROC		Fair	0.25 -0.3
		Discrimination	Thresholds	Fdli	0.25-0.5
		No	< 0.5	Good	> 0.3
Fair Good		Poor	0.5 0.6		
		Moderate	0.6 – 0.7		
		Fair	0.7 -0.8		
		Good	0.8 – 0.95		CIMH
		Very Good	> 0.95		CARIBBEAN CLIMATE OUTLOOK FORUM





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