# CariCOF Drought Outlook By the end of May 2021

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Participating territories

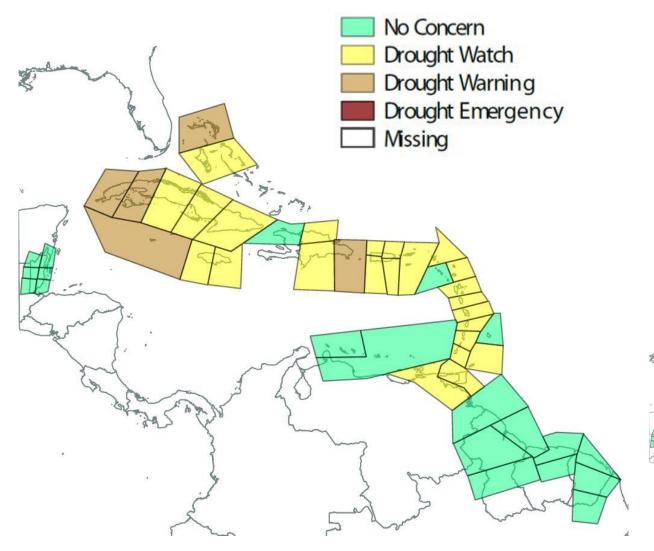
Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St-Martin, St. Vincent & the Grenadines, Suriname,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







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



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

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

- A drought warning should be considered for northernmost Bahamas, Cayman Is., Western Cuba, and eastern Dominican Republic
- A drought watch should be considered for the north-western Bahamas, the remainder of the Greater Antilles, for the Lesser Antilles (except Barbados, St. Kitts).

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

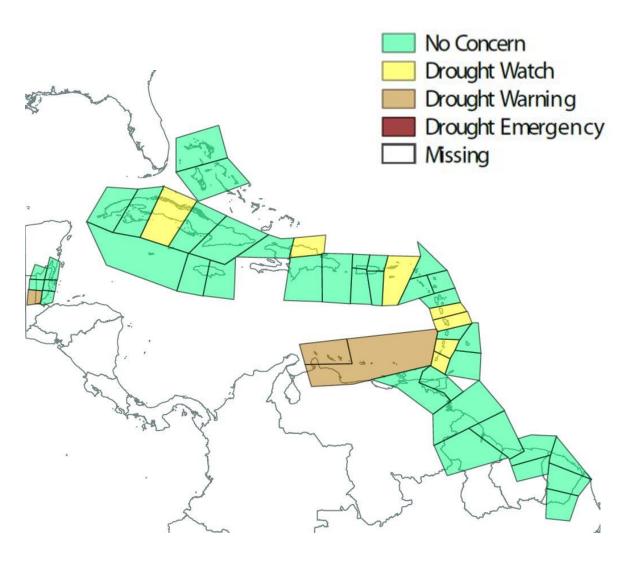
### Short term drought alert levels by the end of May 2021

(updated **February 2021** – covering December 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.



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



- This 12-month SPI-based drought outlook uses observations through January 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).
- A **drought warning** should be considered for the ABC Islands and southwest Belize.
- A **drought watch** should be considered for Central Cuba, Dominica, northern Dominican Republic, Grenada, Martinique, St. Vincent, US Virgin Islands.

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

(updated February 2020 – covering June 2020 to May 2021)



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

- Current drought situation (up to the end of January 2020): (more information here)
  - Moderate (or worse) shorter term drought has developed in southernmost parts of southern Dominica, northern Martinique, Sint Maarten/St-Martin and northwestern Trinidad.
  - Moderate (or worse) long term drought has developed in southwestern Belize, along the southern coastline of the Dominican Republic, south-westernmost Jamaica, and along the Windward Islands.
- Shorter term drought situation (by the end of May 2021):
  - Short term drought is evolving in the northernmost Bahamas, Cayman Is., Western Cuba, and eastern Dominican Republic.
  - Short term drought might possibly develop or continue in north-western Bahamas, the remainder of the Greater Antilles, for the Lesser Antilles (except Barbados, St. Kitts).
- Long term drought situation (by the end of May 2021):
  - Long term drought is evolving in Aruba and southwest Belize.
  - Long term drought might possibly develop in Central Cuba, Dominica, northern Dominican Republic,
     Grenada, Martinique, St. Vincent, US Virgin Islands.
  - Areas ending up in long term drought by the end of May may experience significantly reduced water levels in large reservoirs, large rivers and groundwater during 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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