CariCOF Drought Outlooks

Short term drought concerns by the end of November 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

Participating territories

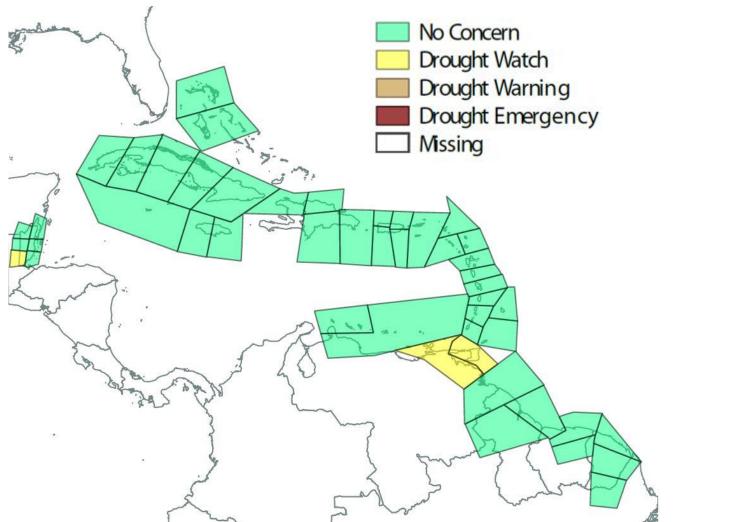
Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haiti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St-Martin, St. Vincent & the Grenadines, Suriname,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







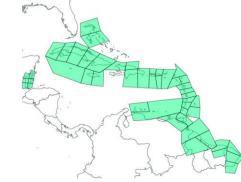
What is the predicted short term drought concern by the end of November 2020?



Current update (August 2020):

We are currently in the wet season.

• A **drought watch** should be considered for parts of southwest Belize and Trinidad.



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

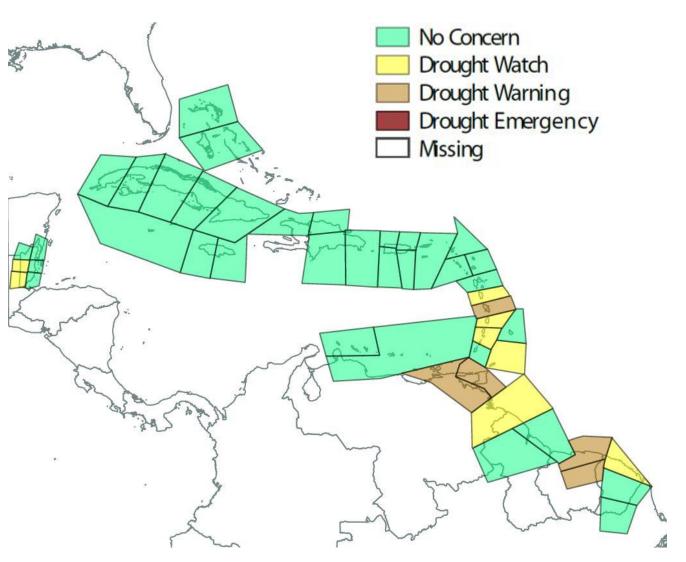
Suggested alert levels for short term drought at the end of November 2020

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

Current update (August 2020):

- This 12-month SPI-based drought outlook uses observations through July 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, Suriname, and Trinidad.
- A **drought watch** should be considered for parts of western Belize, Dominica, coastal French Guiana, northernmost Guyana, Saint Lucia, St. Vincent, and Tobago.



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@cimh.edu.bb

Drought outlook – shorter-/longer-term concern?

- Current drought situation (at the end of July 2020): (more information <u>here</u>)
 - Severe (or worse) shorter term drought has developed in Dominica, southern Guadeloupe, far southwestern French Guiana, southeast and southwest Hispaniola, Martinique, Saint Lucia, western Trinidad and eastern Tobago.
 - Severe (or worse) long term drought has developed in the northernmost and southeastern Bahamas, Belize, Cayman Islands, Dominican Republic, eastern Guadeloupe, western French Guiana, the Windward Islands (excluding Dominica and Grenada), southwestern Puerto Rico, St. Croix, and western Trinidad.
- Shorter term drought situation (by the end of November 2020):
 - Short term drought might possibly develop or continue for parts of southwest Belize and Trinidad.
- Long term drought situation (by the end of November 2020):
 - Long term drought is evolving in Martinique, Suriname, and Trinidad.
 - Long term drought might possibly develop or continue in parts of western Belize, Dominica, coastal French Guiana, northernmost Guyana, Saint Lucia, St. Vincent, and Tobago.
 - 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.
 - * We advise all stakeholders to keep monitoring drought and look for our monthly updates.*





ALERT LEVEL	MEANING	ACTION LEVEL
NO CONCERN	No drought concern	 ✓ monitor resources ✓ update and ratify management plans ✓ public awareness campaigns ✓ upgrade infrastructure
	Drought possible	 ✓ keep updated ✓ protect resources and conserve water ✓ implement management plans ✓ response training ✓ monitor and repair infrastructure
DROUGHT WARNING	Drought evolving	 ✓ protect resources ✓ conserve and recycle water ✓ implement management plans ✓ release public service announcements ✓ last minute infrastructural repairs and upgrades ✓ report impacts
DROUGHT EMERGENCY caricof@cimh.edu.bb	Drought of immediate concern	 ✓ release public service announcements ✓ implement management and response plans ✓ enforce water restrictions and recycling ✓ enforce resource protection ✓ repair infrastructure ✓ report impacts

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





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