CariCOF Drought Outlook By the end of November 2021

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

Participating territories

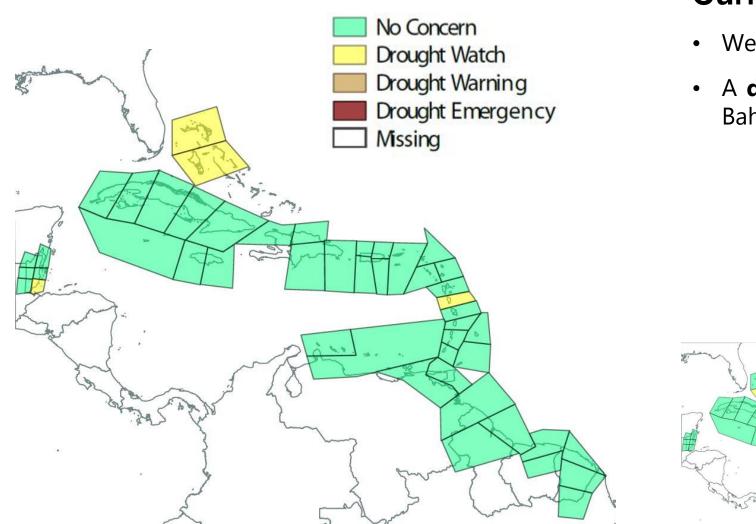
Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St-Martin, St. Vincent & the Grenadines, Suriname,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







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



Current update (August 2021):

- We are currently in the wet season.
- A drought watch should be considered for The Bahamas, southeast Belize and Dominica.

Previous update (July): short term drought alert levels at the end of October 2021

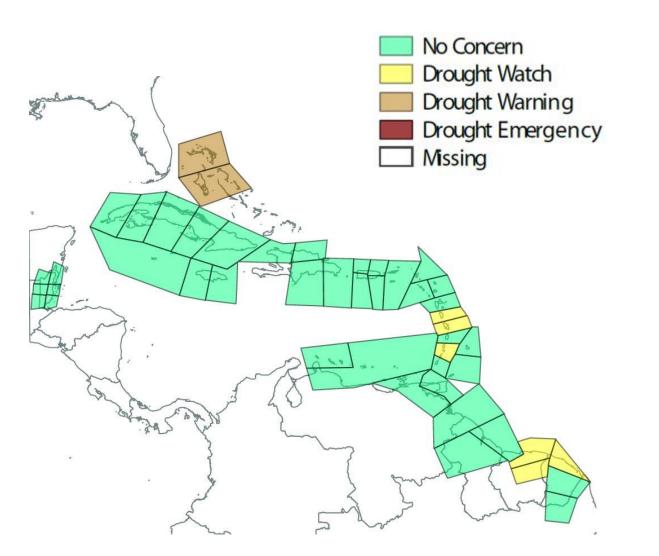
Short term drought alert levels at the end of November 2021

(updated **August 2021** – based on a 6-month SPI for June to November 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.



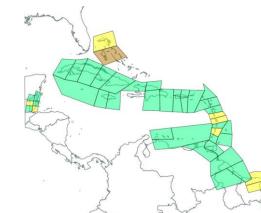
What is the predicted long term drought concern at the end of November 2021?



Long term drought alert levels at the end of November 2021

(updated August 2021 – based on a 12-month SPI for Dec 2020 to Nov 2021)

- This 12-month SPI-based drought outlook uses observations through July 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 Bahamas.
- A **drought watch** should be considered for Dominica, coastal French Guiana, Martinique, St. Vincent and parts of Suriname.



Previous update (July): long term drought alert levels by the end of 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 June 2021): (more information <u>here</u>)
 - Severe (or worse) short term drought has developed in Antigua, the northwestern Bahamas and northwest Martinique.
 - Severe long term drought has developed in northwest Martinique and St. Croix.
- Shorter term drought situation (by the end of November 2021):
 - Shorter term drought might possibly develop or continue in the northern Bahamas, southeast Belize, and Dominica.
- Long term drought situation (by the end of November 2021):
 - Long term drought is evolving in The Bahamas.
 - Long term drought might possibly develop or continue in Dominica, coastal French Guiana, Martinique, St. Vincent and parts of Suriname.
 - Areas ending up in long term drought by the end of November may experience lower than usual water levels in large reservoirs, large rivers and groundwater, which would become a concern for the 2021-'22 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	ern < 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	i dii	0.23 0.3	
		No	< 0.5	Good	> 0.3	
Fair Good		Poor	0.5 0.6			
		Moderate	0.6 – 0.7			
		Fair	0.7 -0.8		an ineric	
		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