CariCOF Drought Outlook By the end of December 2021

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Participating territories

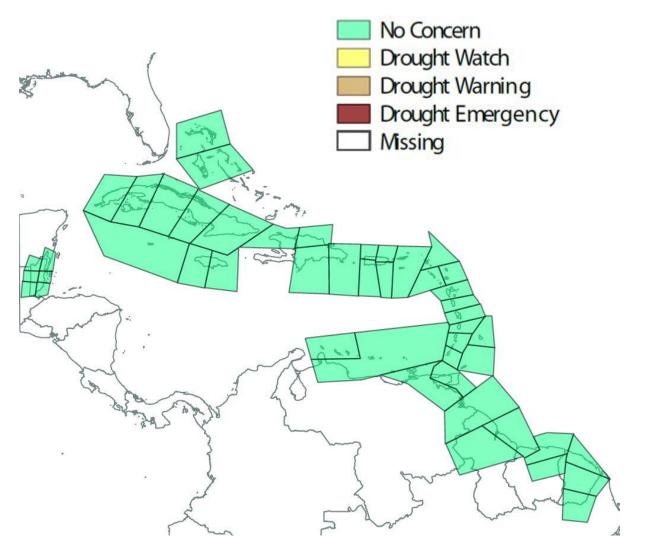
Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St-Martin, St. Vincent & the Grenadines, Suriname,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





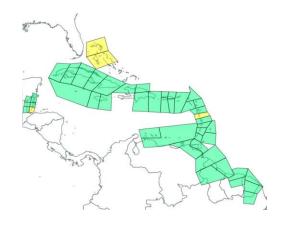


What is the predicted short term drought concern by the end of December 2021?



Current update (September 2021):

- We are currently in the wet season.
- No short term drought concern for the region by December.



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

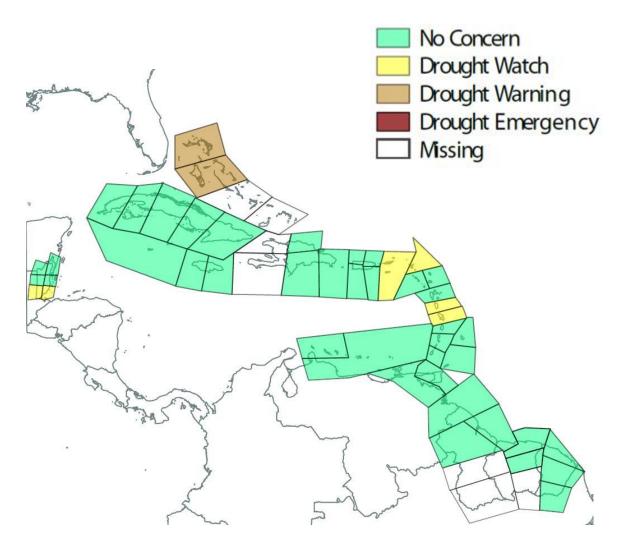
Short term drought alert levels at the end of December 2021

(updated **September 2021** – based on a 6-month SPI for July to December 2021)

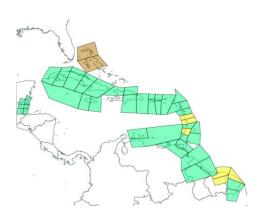
For climate information specific to your country, please consult with your national meteorological service. CariCOF outlooks speak to recent and expected climate trends across the Caribbean in general.



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



- This 12-month SPI-based drought outlook uses observations through August 2021, with potential impacts on large surface water reservoirs and groundwater. In general, impacts are expected if the 12-month SPI is ≤-1.3 (severely dry or worse – ref.: CDPMN).
- A **drought warning** should be considered for The Bahamas.
- A **drought watch** should be considered for southern Belize, Dominica, Martinique, Saint Barth's, Sint Maarten / St-Martin, and the USVI.



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

Long term drought alert levels at the end of November 2021

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



Drought outlook – shorter-/longer-term concern?

- Current drought situation (up to the end of August 2021): (more information here)
 - Severe (or worse) short term drought has developed in the northwestern Bahamas, northwest
 Martinique and St. Barth's.
 - Severe long term drought has developed in northwest Martinique, St. Barth's and St. Croix.
- Shorter term drought situation (by the end of December 2021):
 - There is no concern for short term drought for the region at the end of 2021.
- 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 southern Belize, Dominica, Martinique, St. Barth's, Sint Maarten/St-Martin, and the USVI.
 - 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.*



CONTINUE TO MONITOR & CONSERVE WATER !!

ALERT LEVEL	MEANING	ACTION LEVEL
NO CONCERN	No drought concern	 ✓ monitor resources ✓ update and ratify management plans ✓ public awareness campaigns ✓ upgrade infrastructure
DROUGHT WATCH	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

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		





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