CariCOF Drought Outlook By the end of April 2019

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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







Shorter term Drought Outlook (November 2018 to April 2019) Areas under immediate drought concern?

Current Outlook



Current update (December 2018):

We are currently entering the core of the dry season. This time around, drought concern develops throughout much of the region.

A **drought warning** should be considered for the ABC Islands, Barbados, Grenada, Trinidad & Tobago.

A **drought watch** should be considered for Antigua, southern and central Belize, Cayman, N & S French Guiana, Guyana, Hispaniola, Martinique, NE Puerto Rico, St. Kitts, St. Vincent, Suriname.





Long term drought outlook Concerns by the end of the dry season (May 31st, 2019)?

Current Outlook



- This 12-month SPI-based drought outlook uses observations through December 2018, 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 Antigua, Cayman, Dominica, N Dominican Rep., Grenada, S French Guiana, Martinique, E Jamaica, St. Kitts, St. Lucia, Tobago.
- A **drought watch** should be considered in most other locations.





Drought outlook – shorter-/longer-term concern?

- Current drought situation (up to the end of December 2018): (more information here)
 - Portions of The Bahamas, Barbados, Belize, Cayman Isl., Guadeloupe, coastal Guyana, Hispaniola, Jamaica, Martinique, St. Barth's, Trinidad and the US C'bean Territories have seen shorter term drought developing.
 - Moderate long term drought is seen in much of Antilles, with even severe to extreme droughts in small pockets of Guadeloupe, Hispaniola and Martinique, but with the notable exception of Cuba.
- Shorter term drought situation (by the end of April 2019):
 - Shorter term drought is evolving in the ABC Islands, Barbados, Grenada, Trinidad & Tobago.
 - Shorter term drought might possibly develop in Antigua, southern and central Belize, Cayman, northern and southern French Guiana, Guyana, Hispaniola, Martinique, St. Kitts, St. Vincent, Suriname.
- Long term drought situation (by the end of May 2019):
 - A weak El Niño is expected to contribute to reduced rainfall up until April.
 - Long term drought is evolving in Antigua, Cayman, Dominica, northern Dominican Rep., Grenada, southern French Guiana, Martinique, eastern Jamaica, northeast Puerto Rico, St. Kitts, St. Lucia, Tobago.
 - Long term drought might possibly develop in most other areas in the region.

* We advise all stakeholders to keep monitoring drought and look for our monthly updates.*

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 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
Mod Fair Goo		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