

# CariCOF Drought Outlooks

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**Short term drought concerns by the end of December 2020**  
**Long term drought concerns by the end of November 2020**

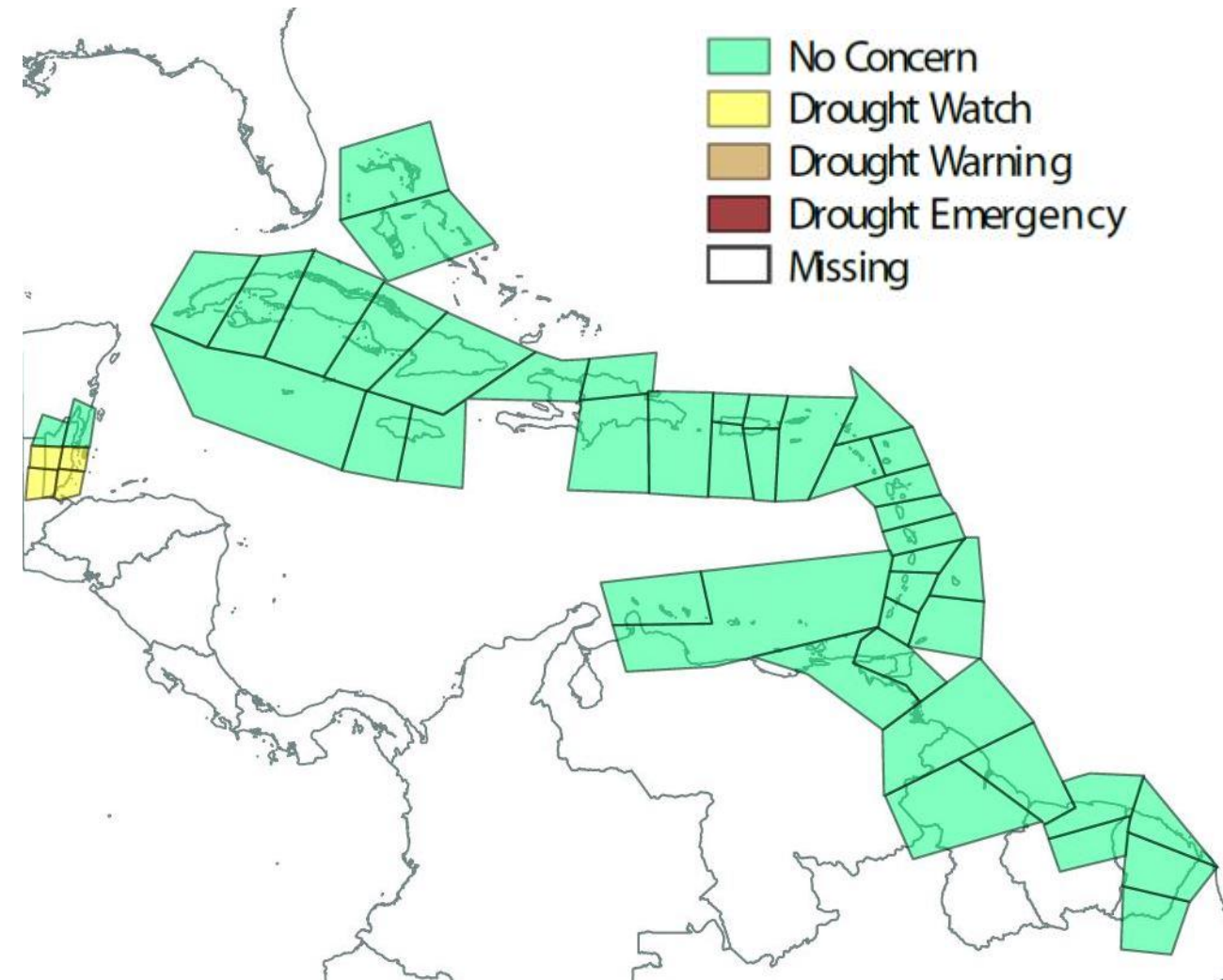
*Coordination: Caribbean Institute for Meteorology & Hydrology  
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Dr. Teddy Allen – Assistant Climatologist  
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## Participating territories

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



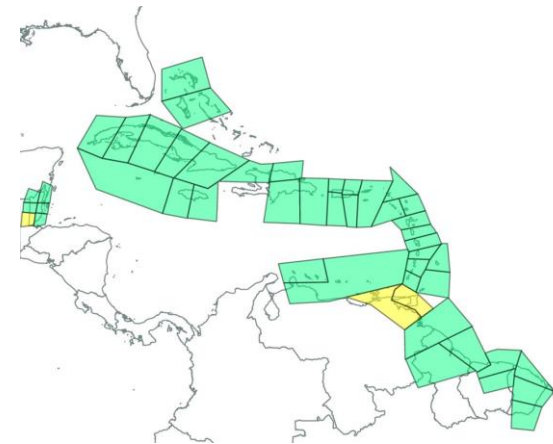
# What is the predicted short term drought concern by the end of December 2020?



## Current update (September 2020):

We are currently in the wet season.

- A **drought watch** should be considered for southern Belize.



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

(updated September 2020 – covering July to December 2020)

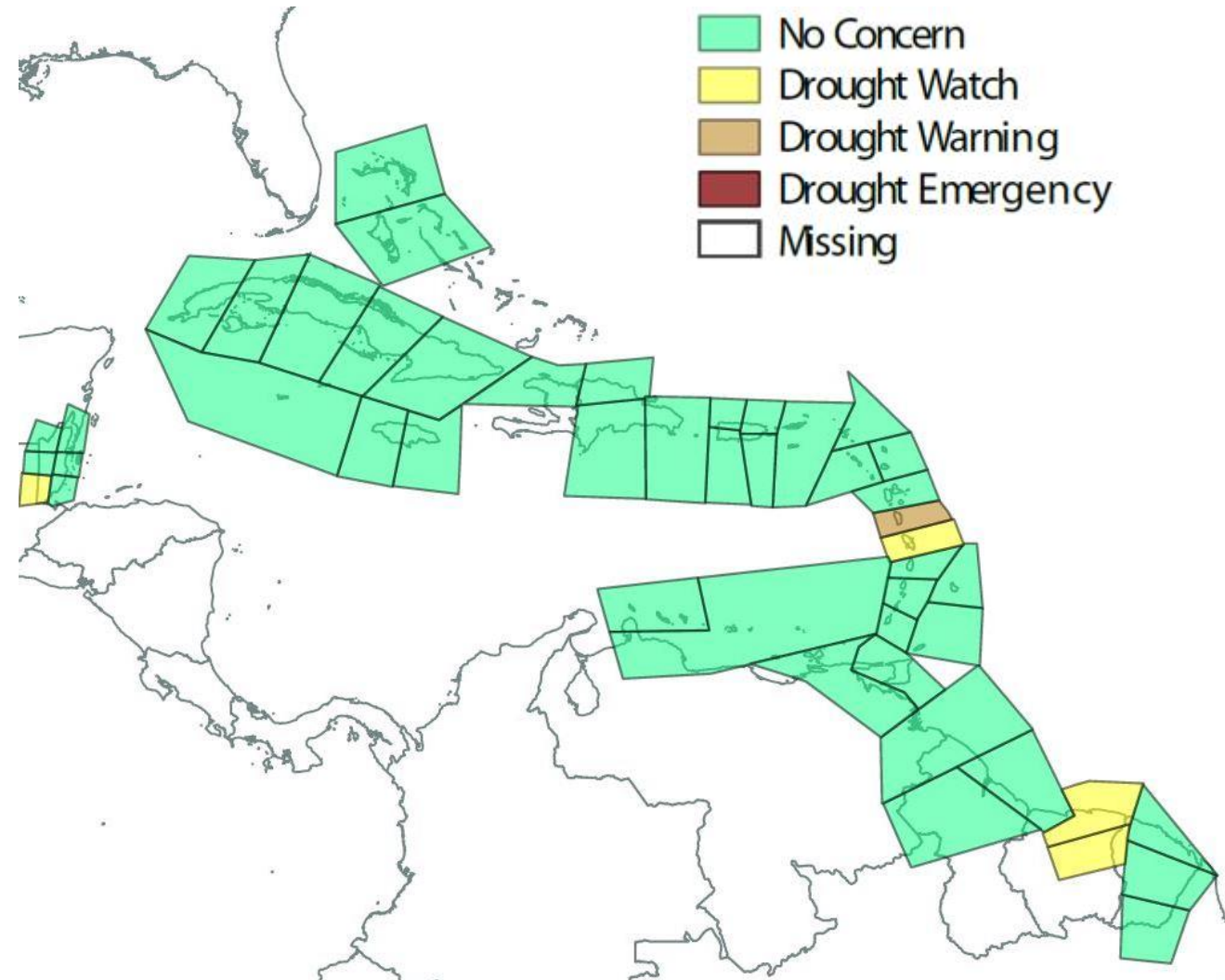
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For climate information specific to your country, please consult with your national meteorological service. *CariCOF* outlooks speak to recent and expected climate trends across the Caribbean in general.



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# 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

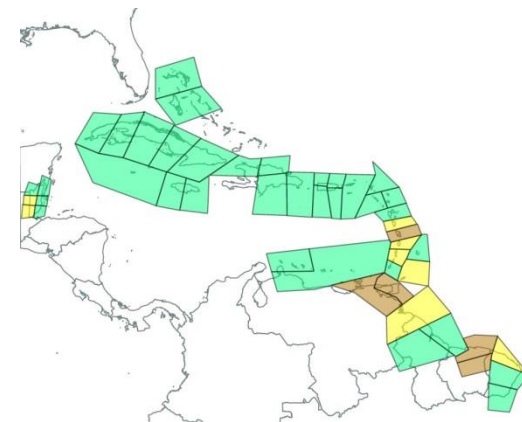
(updated September 2020 – covering December 2019 to November 2020)

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## Current update (September 2020):

- This 12-month SPI-based drought outlook uses observations through August 2020, with potential impacts on large surface water reservoirs and groundwater. In general, impacts are expected if the 12-month SPI is  $\leq -1.3$  (*very dry or worse* – ref.: CDPMN).
- A **drought warning** should be considered for Dominica.
- A **drought watch** should be considered for southwest Belize, Suriname, and Martinique.



Previous (i.e. August 2020 update) long term drought alert levels by the end of November 2020



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

- Current drought situation (at the end of August 2020): *(more information [here](#))*
  - Severe (or worse) shorter term drought has developed in coastal Belize and far eastern Guadeloupe, and continues in southwestern Dominica, northwestern Martinique and northern Saint Lucia.
  - Severe (or worse) long term drought has developed in the northernmost and south-easternmost Bahamas, southeastern Barbados, eastern Belize, Grand Cayman, central Dominican Republic, eastern Guadeloupe, northwest French Guiana, far northern Guyana, southwestern Puerto Rico, St. Croix, eastern Suriname, western Trinidad, Turks and Caicos Islands, the Windward Islands (except Dominica and Grenada).
- Shorter term drought situation (by the end of December 2020):
  - Short term drought might possibly develop or continue for parts of southern Belize.
- Long term drought situation (by the end of November 2020):
  - Long term drought is evolving in Dominica.
  - Long term drought might possibly develop or continue in southwest Belize, Martinique and Suriname.
  - 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.\**

**CONTINUE TO MONITOR &  
CONSERVE WATER !!**



ALERT LEVEL	MEANING	ACTION LEVEL
NO CONCERN	No drought concern	<ul style="list-style-type: none"> <li>✓ <b>monitor resources</b></li> <li>✓ update and ratify management plans</li> <li>✓ public awareness campaigns</li> <li>✓ upgrade infrastructure</li> </ul>
DROUGHT WATCH	Drought possible	<ul style="list-style-type: none"> <li>✓ <b>keep updated</b></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 style="list-style-type: none"> <li>✓ <b>protect resources</b></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>
<b>DROUGHT EMERGENCY</b>  caricof@cimh.edu.bb	Drought of immediate concern	<ul style="list-style-type: none"> <li>✓ <b>release public service announcements</b></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

Drought	
Alert Levels	Probabilities
No Concern	< 33.3333
Drought Watch	33.3334 – 50
Drought Warning	50 – 83.3333
Drought Emergency	≥ 83.3334

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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