

CariCOF Drought Outlook

By the end of October 2021

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

Participating territories

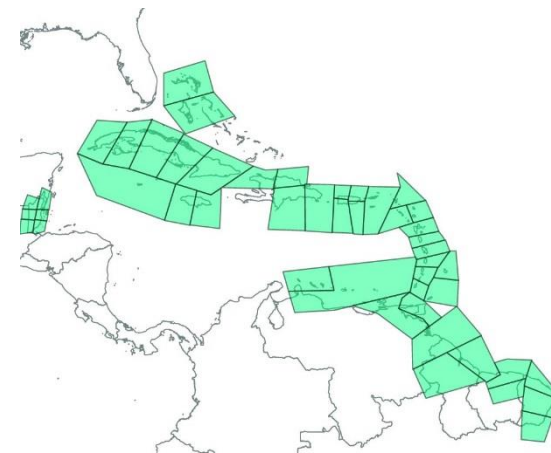
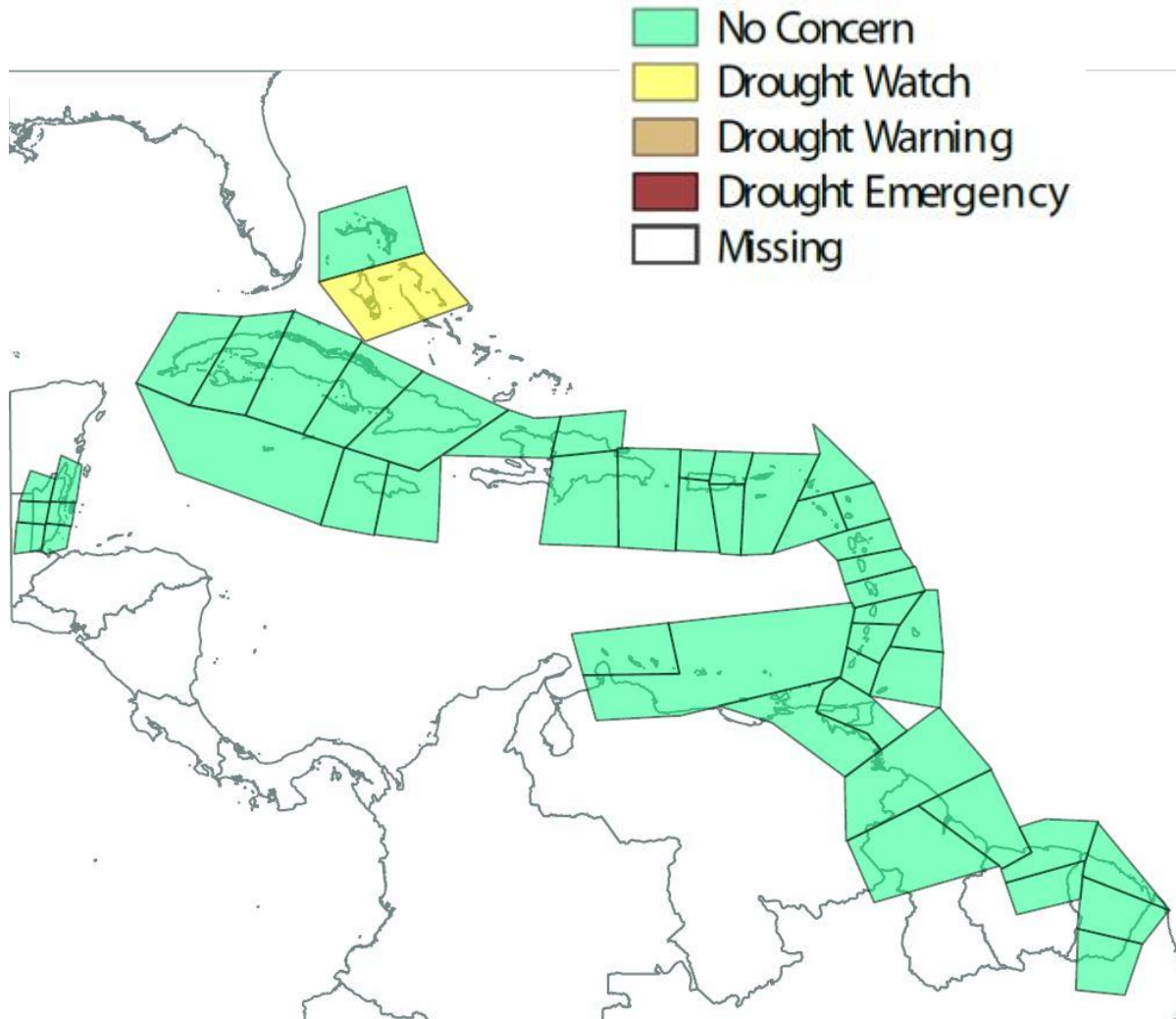
Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St-Martin, St. Vincent & the Grenadines, Suriname,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



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

Current update (July 2021):

- We are currently in the wet season.
- A **drought watch** should be considered for The Bahamas.



Previous update (June): short term drought alert levels at the end of September 2021

Short term drought alert levels at the end of October 2021

(updated July 2021 – based on a 6-month SPI for May to October 2021)

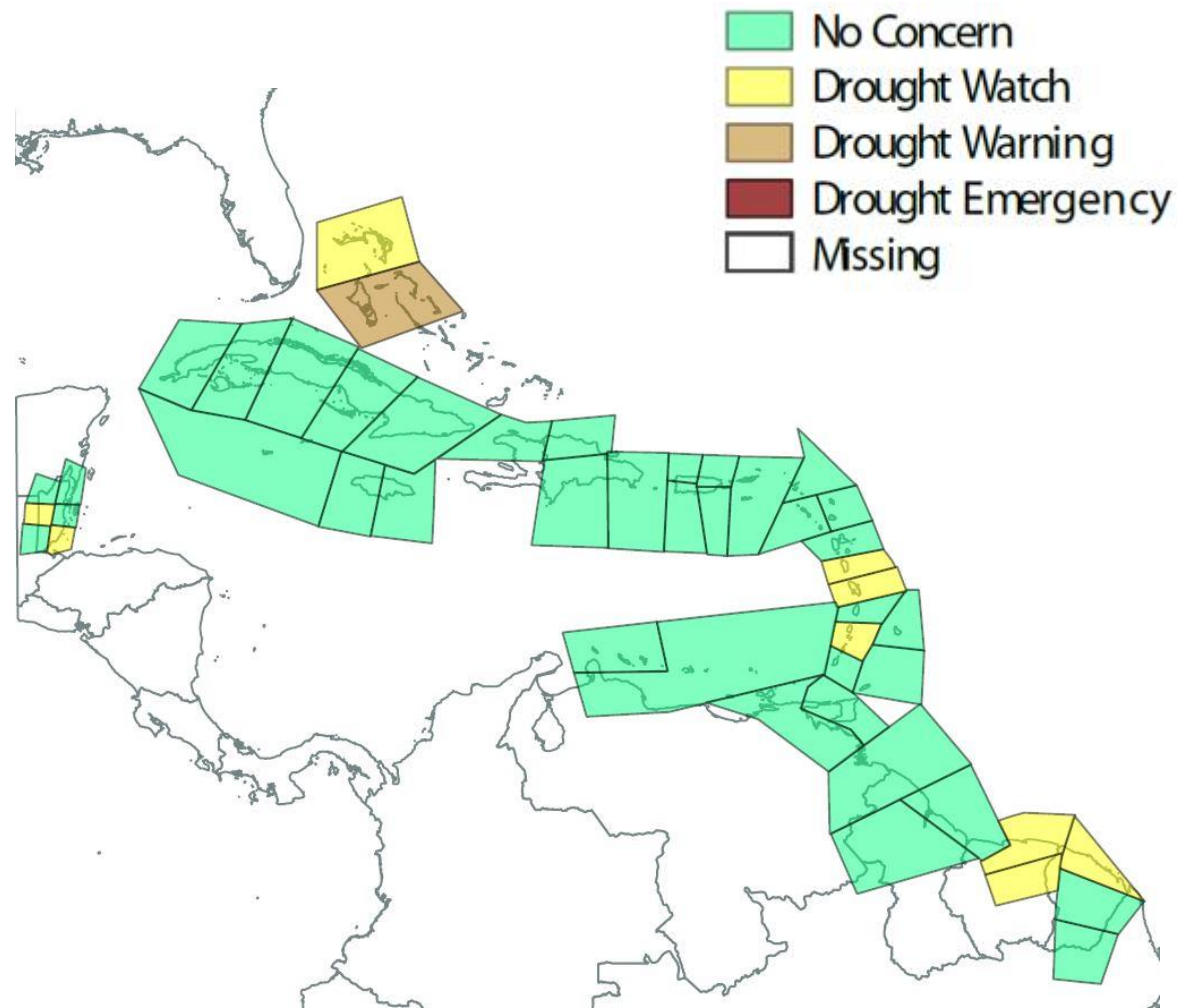
caricof@cimh.edu.bb

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
CARIBBEAN CLIMATE OUTLOOK FORUM

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



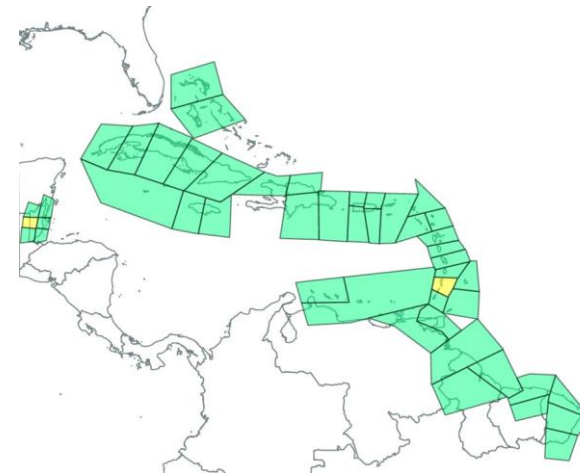
Long term drought alert levels at the end of November 2021

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

caricof@cimh.edu.bb

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.

- This 12-month SPI-based drought outlook uses observations through May 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 parts of Belize, Dominica, Martinique, and Saint Vincent.



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



CARICOF
CARIBBEAN CLIMATE OUTLOOK FORUM

Drought outlook – shorter-/longer-term concern?

- Current drought situation (up to the end of June 2021): *(more information [here](#))*
 - Severe (or worse) short term drought has developed in Antigua, the northwestern Bahamas, easternmost Jamaica, northwest Martinique.
 - Severe long term drought has developed in southwest Belize, northwest Martinique and St. Croix.
- Shorter term drought situation (by the end of October 2021):
 - Shorter term drought might possibly continue in the northwestern Bahamas.
- 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 Belize, Dominica, Martinique, and St. Vincent.
 - 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 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	<ul style="list-style-type: none"> ✓ monitor resources ✓ update and ratify management plans ✓ public awareness campaigns ✓ upgrade infrastructure
DROUGHT WATCH	Drought possible	<ul style="list-style-type: none"> ✓ keep updated ✓ protect resources and conserve water ✓ implement management plans ✓ response training ✓ monitor and repair infrastructure
DROUGHT WARNING	Drought evolving	<ul style="list-style-type: none"> ✓ protect resources ✓ conserve and recycle water ✓ implement management plans ✓ release public service announcements ✓ last minute infrastructural repairs and upgrades ✓ report impacts
DROUGHT EMERGENCY	Drought of immediate concern	<ul style="list-style-type: none"> ✓ 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	
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



CARICOF
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