

CariCOF Drought Outlook

By the end of April 2022

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

Participating territories

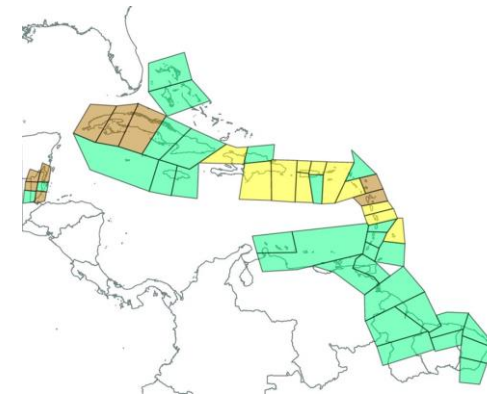
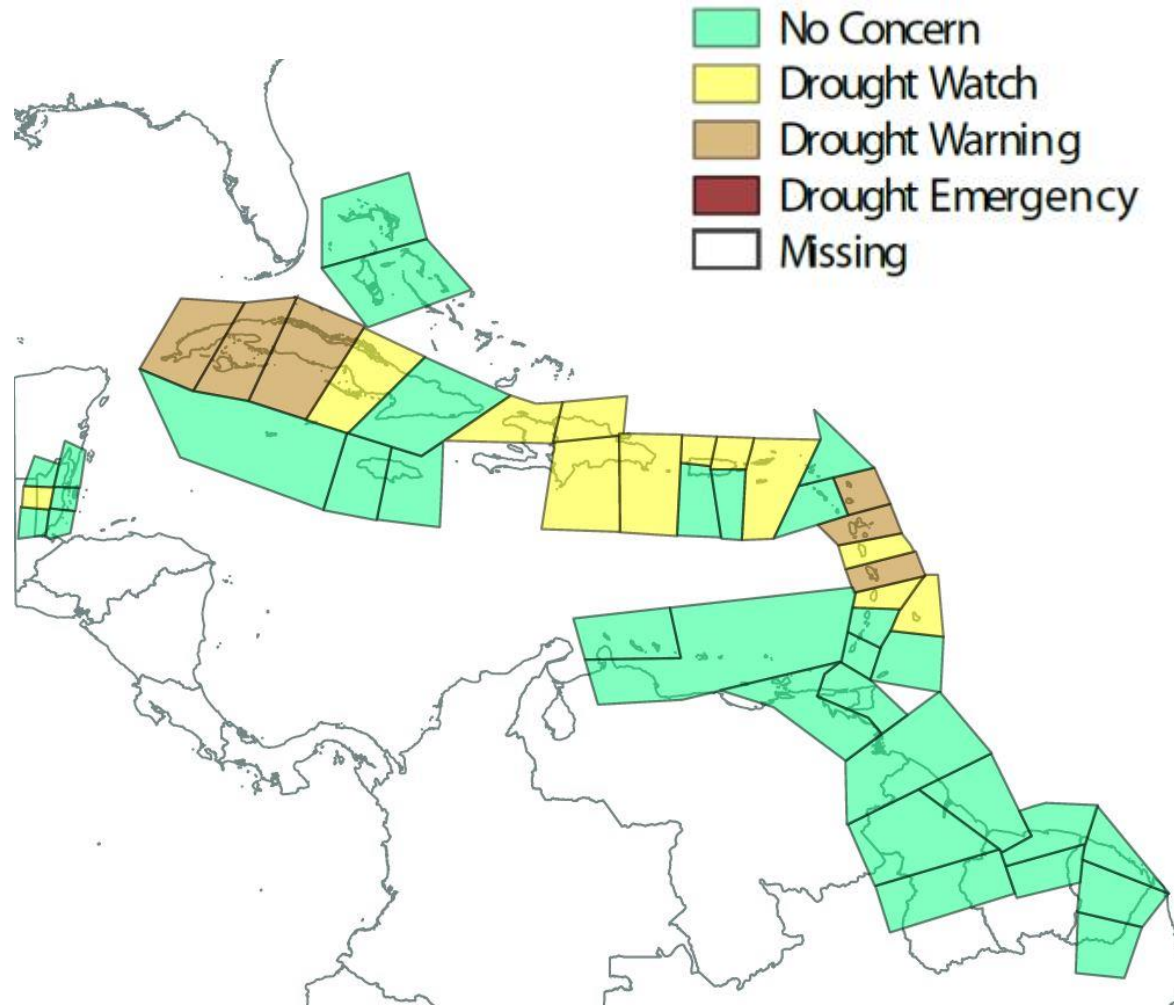
Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St-Martin, St. Vincent & the Grenadines, Suriname,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



What is the predicted short-term drought concern by the end of April 2022?

Current update (January 2022):

- We are currently entering the dry season.
- A **drought warning** should be considered for Antigua, western Cuba, Guadeloupe, and Martinique.
- A **drought watch** should be considered for Barbados, western Belize, Dominica, Dominican Republic, northern Haiti, northern Puerto Rico, Saint Vincent, and the USVI.



Previous update (December): short term drought alert levels at the end of March 2022

Short-term drought alert levels at the end of April 2022

(updated January 2022 – based on a 6-month SPI for November 2021 to April 2022)

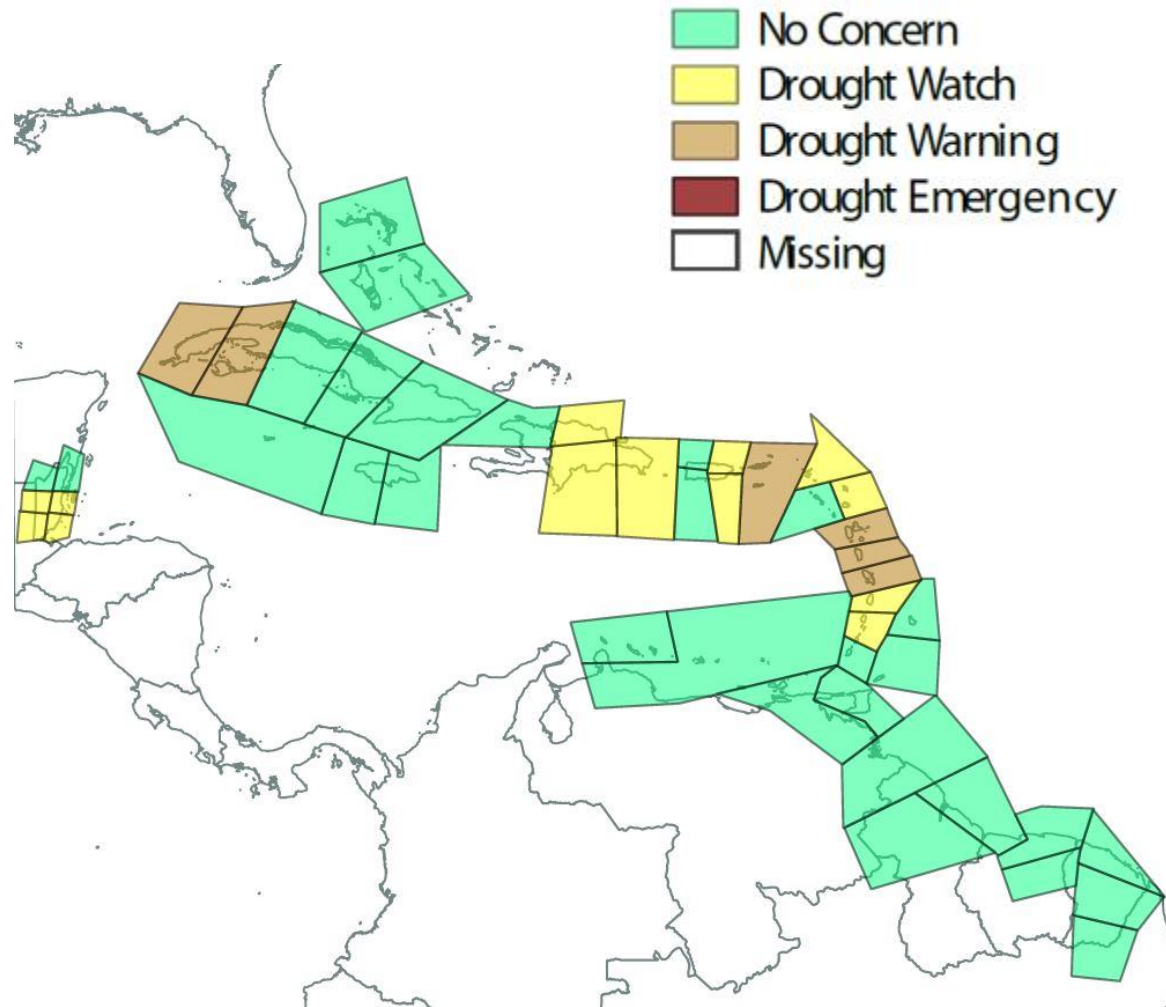
caricof@cimh.edu.bb

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.



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CARIBBEAN CLIMATE OUTLOOK FORUM

What is the predicted long-term drought concern at the end of May 2022?



- This 12-month SPI-based drought outlook uses observations through December 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 **long-term drought warning** should be considered for western Cuba, Dominica, Guadeloupe, Martinique, and USVI.
- A **long-term drought watch** should be considered for Antigua, southern Belize, Dominican Republic, western Puerto Rico, Saint Lucia, Saint Vincent, and Sint Martin.

Long-term drought alert levels at the end of May 2022

(updated January 2022 – based on a 12-month SPI for June 2021 to May 2022)

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 concerns?

- **Current drought** (*situation up to the end of December 2021*): (more information [here](#))
 - Moderate (or worse) short-term drought has developed in Antigua, Barbados, western Cuba, Dominican Republic, Haiti, USVI, Guadeloupe, Guyana, Martinique, Saint Lucia, and Saint Vincent.
 - Moderate (or worse) long-term drought has developed in The Bahamas, Cuba, Dominica, Dominican Republic, throughout the Leeward Islands, Martinique.
- **Short-term drought** (*expected situation by the end of April 2022*):
 - Short term drought is evolving in Antigua, western Cuba, Guadeloupe, and Martinique.
 - Short term drought might possibly develop or continue in Barbados, western Belize, Dominica, Dominican Republic, northern Haiti, northern Puerto Rico, Saint Vincent, and the USVI.
- **Long-term drought** (*expected situation by the end of May 2022*):
 - Long term drought is evolving in western Cuba, Dominica, Guadeloupe, Martinique, and USVI.
 - Long term drought might possibly develop or continue in Antigua, southern Belize, Dominican Republic, western Puerto Rico, Saint Lucia, Saint Vincent, and Sint Martin.
 - Areas ending up in long term drought by the end of May may experience lower than usual water levels in large reservoirs, large rivers and groundwater at that time.

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



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

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
ROC score (<i>area under the curve</i>)	
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

caricof@cimh.edu.bb

Drought

SPI threshold for impactful drought used in forecasts issued starting in November and ending in April	-0.8 (moderately dry or worse)
SPI threshold for impactful drought used in forecasts issued starting in May and ending in October	-1.3 (severely dry or worse)
Alert Levels	Probabilities of exceeding SPI threshold
No Concern	< 33.3333
Drought Watch	$33.3334 - 50$
Drought Warning	$50 - 83.3333$
Drought Emergency	≥ 83.3334



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caricof@cimh.edu.bb

rcc.cimh.edu.bb

Caribbean Institute for Meteorology and Hydrology

TEL: (246) 425-1362/3 | FAX: (246) 424-4733