

CariCOF Drought Outlook

By the end of July 2018

Coordination: Caribbean Institute for Meteorology & Hydrology

Dr. Cédric J. Van Meerbeeck - Climatologist

Wazita B. Scott – Asst. Climatologist

caricof@cimh.edu.bb

Participating territories

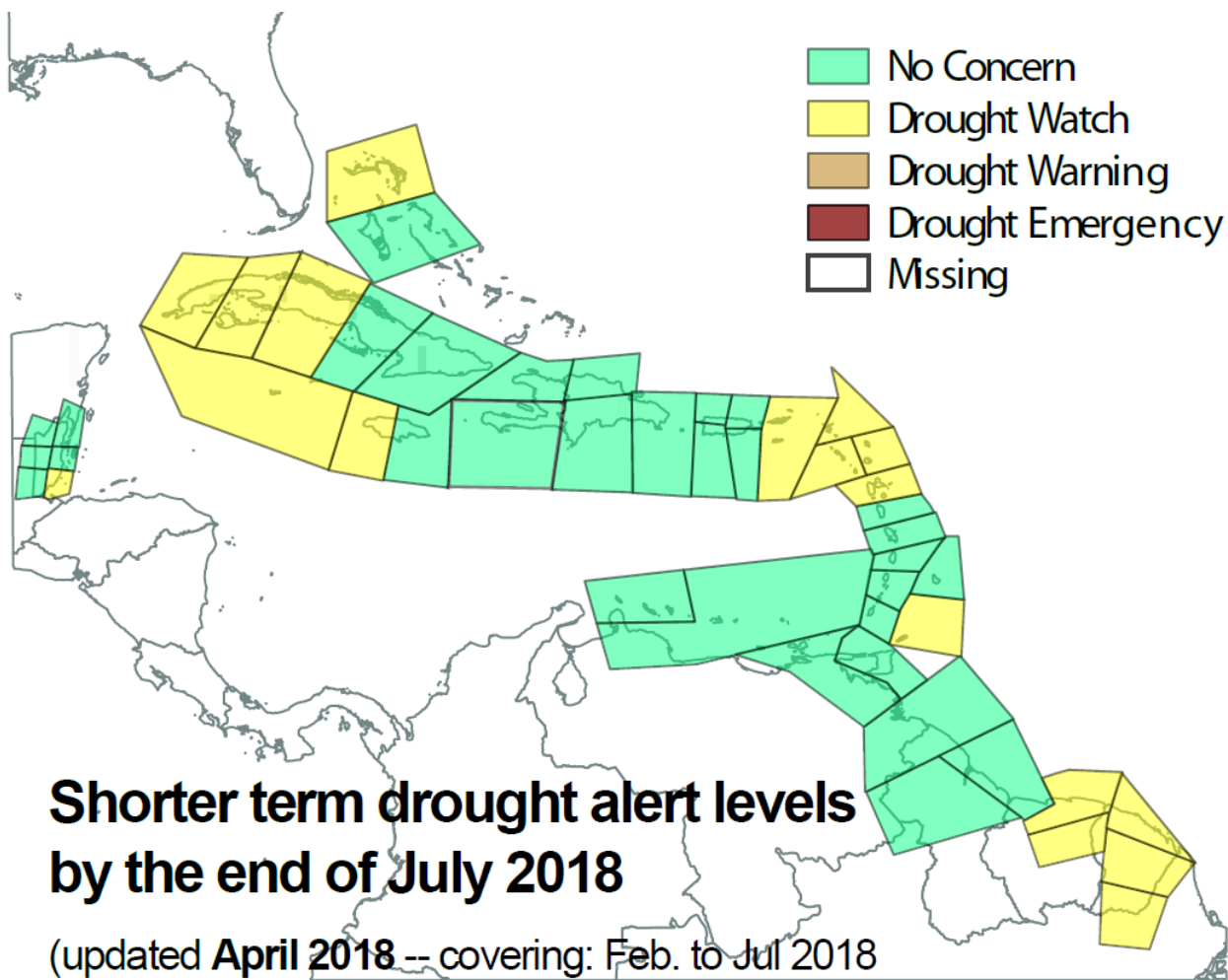
Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St. Martin, St. Vincent & the Grenadines, Suriname,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



Shorter term Drought Outlook (February to July 2018)

Areas under immediate drought concern?

Current Outlook

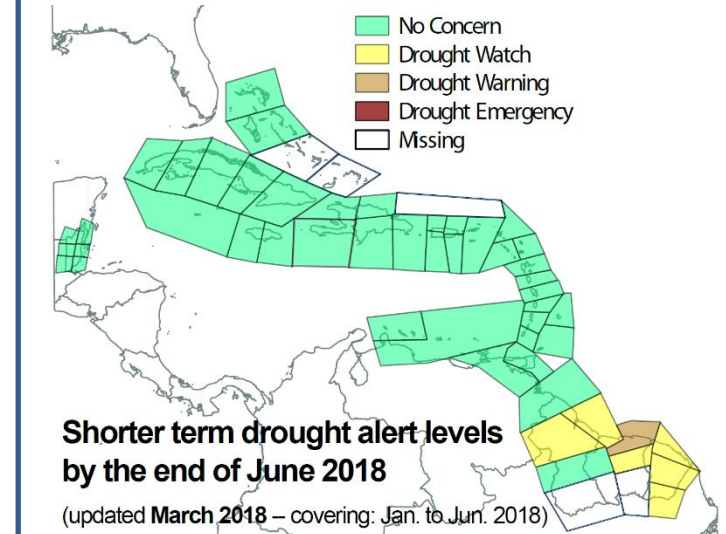


Current update (April 2018):

We continue to see no drought concern developing throughout most of the region. Exceptions are:

A **drought watch** is issued for Antigua, N Bahamas, SE Belize, W Cuba, French Guiana, Guadeloupe, St. Maarten, St. Kitts, central Suriname, Tobago, Virgin Is.

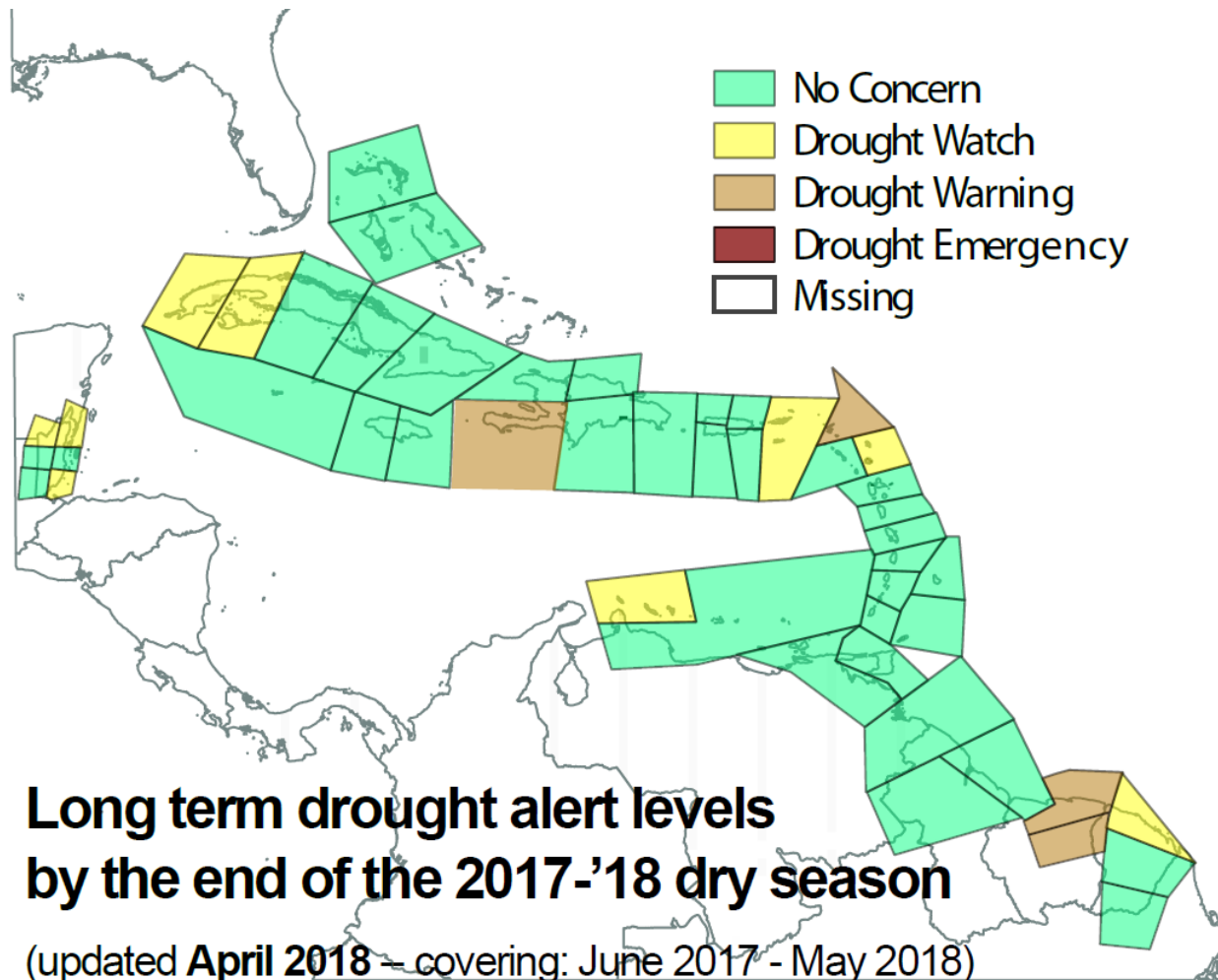
Previous Outlook



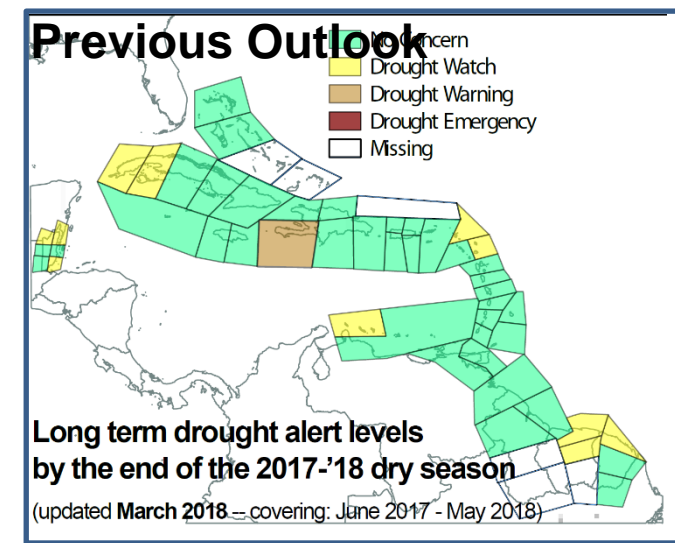
Long term drought outlook

Concerns by the end of the dry season (May 31st, 2018)?

Current Outlook



- This 12-month SPI-based drought outlook uses observations through March 2018, with potential impacts on large surface water reserves and groundwater. In general, impacts are expected if the 12-month SPI is ≤ -0.8 (*moderately dry or worse* – ref.: CDPMN).
- A **drought warning** is in effect for St. Maarten / St. Martin, Suriname, SE Haiti.
- A **drought watch** is in effect for ABC Islands, Antigua, N & SE Belize, W Cuba, N French Guiana, N French Guiana and Virgin Is..



Drought outlook – shorter-/longer-term concern?

- Current drought situation (up to the end of March 2018): *(more information [here](#))*
 - Copious rainfall during the wet season of 2017 and no large deficits having been built up since the start of the Caribbean dry season in most places.
 - Southeastern Haiti, north-western most Guyana, south-western most Jamaica, western-most Puerto Rico is under long term drought.
 - Short term drought is seen NW Guyana.
- Shorter term drought situation (by the end of July 2018):
 - Shorter term drought is evolving in coastal portions of Suriname, and might possibly develop in other portions of the Guianas.
- Long term drought situation (by the end of May 2018):
 - Long term drought is evolving in southeastern Haiti, and might possibly develop in ABC Is., Antigua, western Cuba, northern and south-eastern Belize, coastal portions of French Guiana, St. Maarten, and portions of eastern Suriname.
 - 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