

# CariCOF Drought Outlook

## By the end of August 2017

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### Participating territories

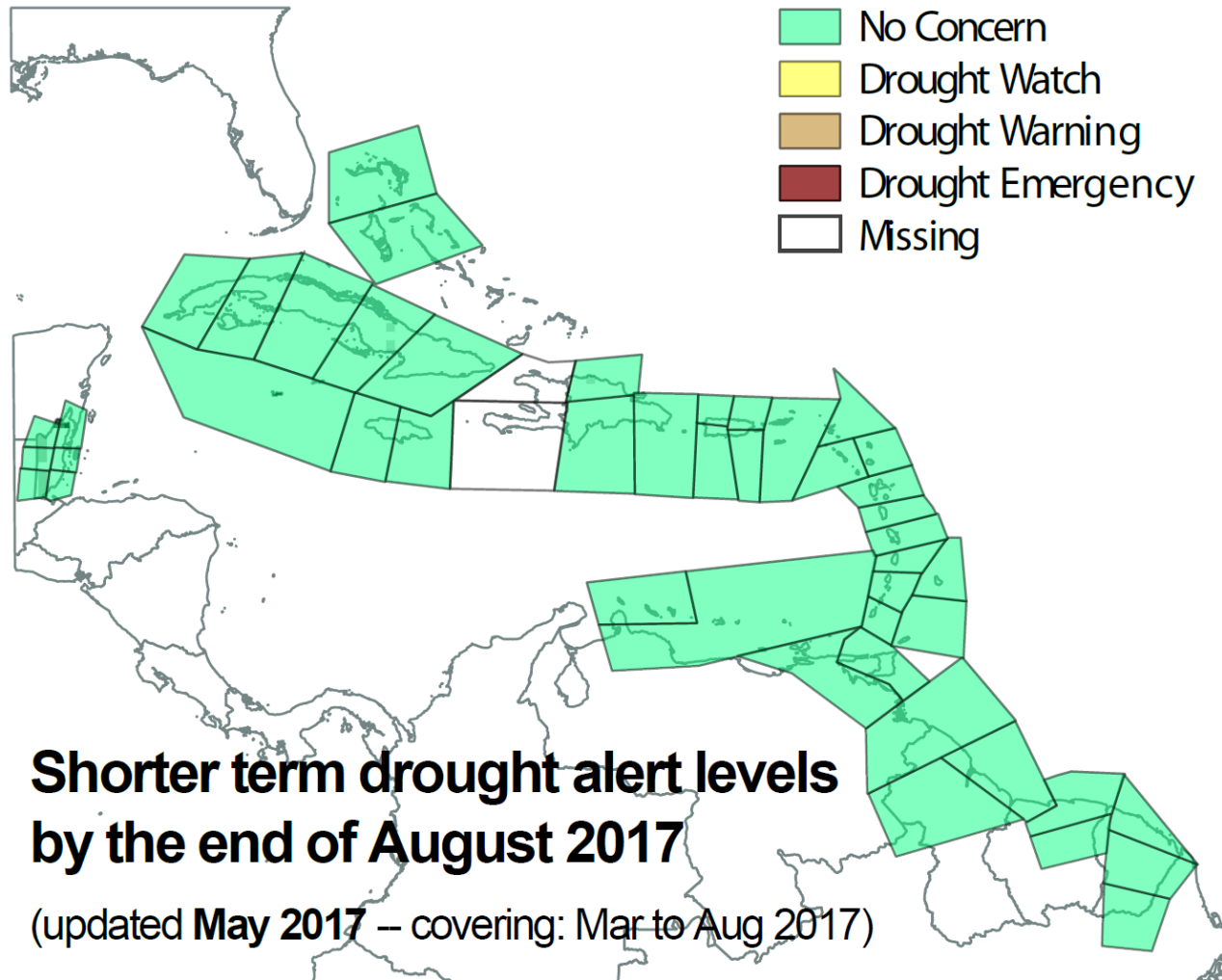
Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, French Guiana, Grenada, Guadeloupe, Guyana, Haïti, Jamaica, Martinique, Puerto Rico, St. Barth's, St. Kitts & Nevis, St. Lucia, St. Maarten/St. Martin, St. Vincent & the Grenadines, Suriname,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



# Shorter term Drought Outlook (March to August 2017)

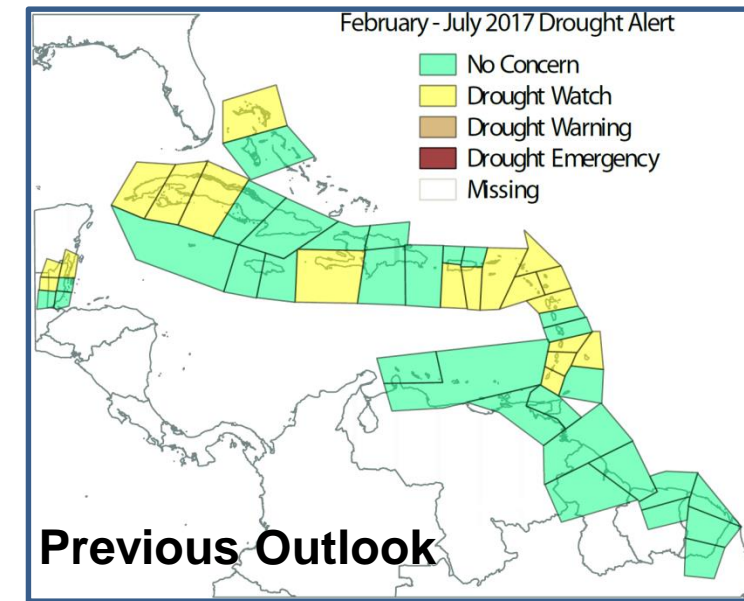
Areas under immediate drought concern?

## Current Outlook



## Current update (May 2017):

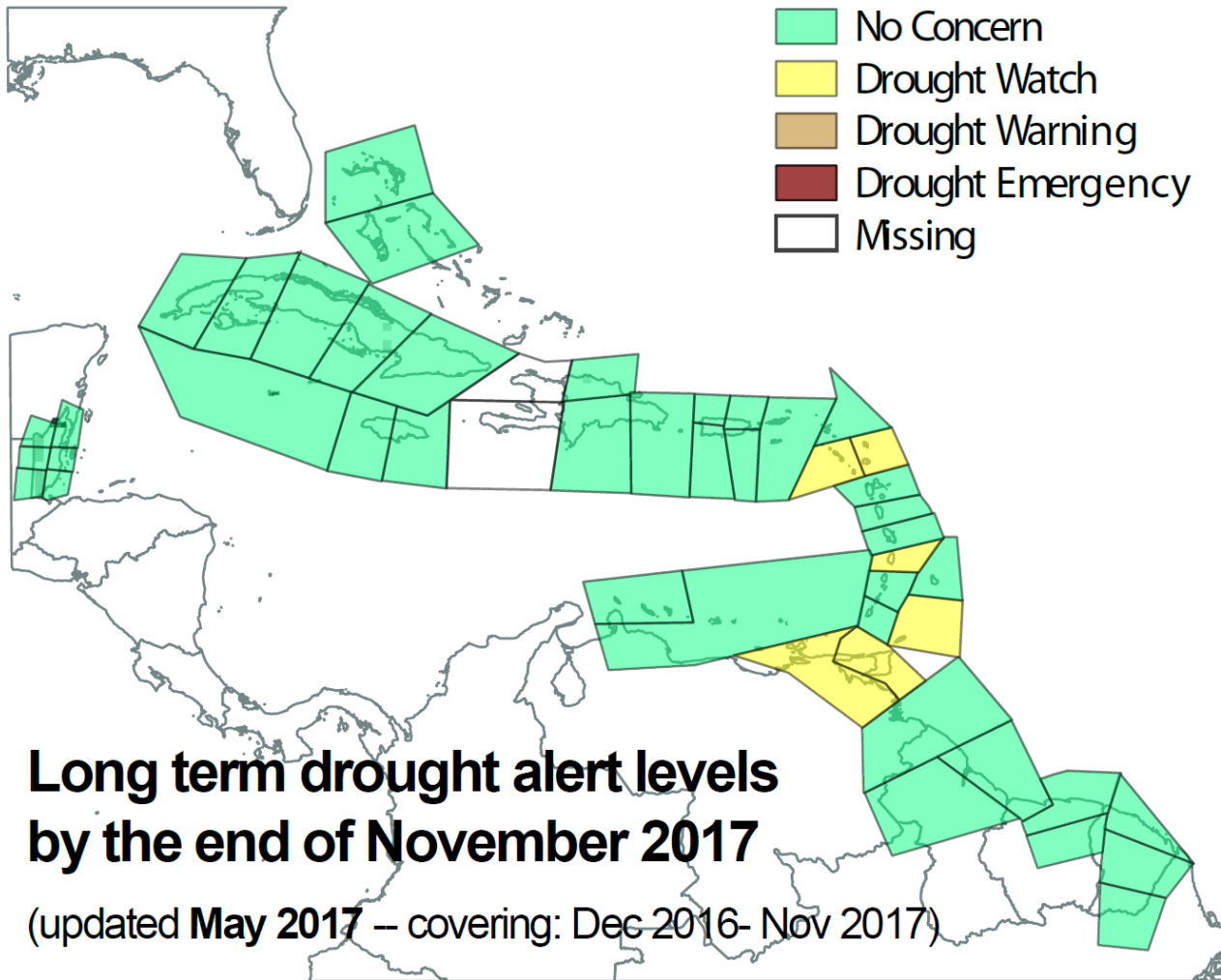
As we transition from the dry into the wet season, we are currently not seeing any shorter term drought concern developing throughout the region.



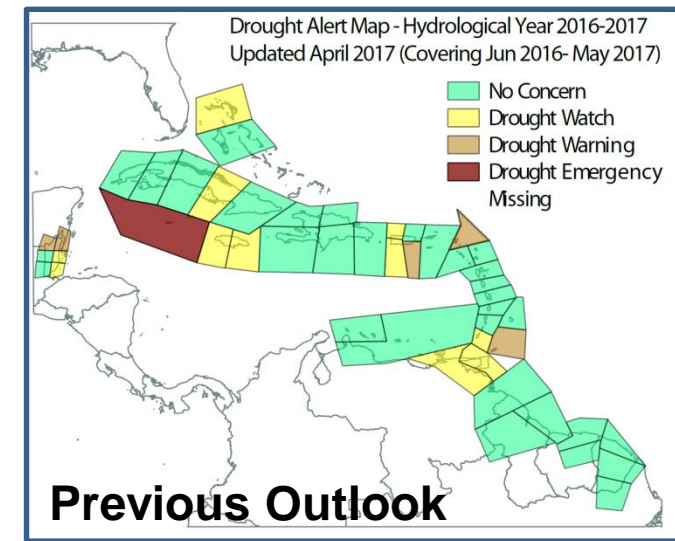
# Long-term drought outlook

Concerns by the end of the wet season (November 30<sup>th</sup>, 2017)?

## Current Outlook



- This 12-month SPI-based drought outlook uses observations through April 2017, with potential impacts on large surface water reserves and groundwater. In general, impacts are expected if the 12-month SPI is  $\leq -1.3$  (*very dry or worse* – ref.: CDPMN).
- A **drought watch** is in effect for Antigua, St. Kitts, St. Lucia, and Trinidad & Tobago.



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

- Current drought situation (up to the end of April 2017): *(more information [here](#))*
  - After an exceptionally wet month of April, a substantial improvement in short and mid term drought conditions were seen in Grand Cayman. Nevertheless, it remains in long term drought.
  - Some other areas in the Caribbean are also facing short term drought concerns, incl. N Bahamas, St. Barth's, as well as potentially Belize and Trinidad & Tobago, which are also in long term drought.
- Shorter term drought situation (by the end of August 2017):
  - We expect the shorter term drought situation to continue to improve in all areas affected as we are transitioning into the wet season.
- Long term drought situation (by the end of November 2017):
  - Long term drought is likely to continue to improve in Cayman and improve in Belize. It remains possible in Trinidad & Tobago, and is also possible in Antigua, St. Kitts and St. Lucia.
  - Though the potential long term drought concerns are region-wide at its lowest since at least 2014, we advise all stakeholders to keep monitoring drought and look for our monthly updates.
  - One definite reason to keep monitoring the situation is the possibility of an El Niño by August. If a moderate or strong El Niño manifests, that may once again raise drought concerns when we will go into the next dry season by the end of 2017.

**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>
DROUGHT EMERGENCY	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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