Climate and Hydrology Monthly Report for Puerto Rico and the US Virgin Islands

Valid for May 2024

Issued By: WFO San Juan, PR

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May Climate Summary for Primary Climate Sites

San Juan Area

Highest: **95 °F** on the 21st
Lowest: **75 °F** on the 3rd
Average: 84.5 °F (+2.9; above normal)
Rain Total: 11.51” (+5.97; above normal)

Days with T_{max} >= 90F: 17
Nights with T_{min} >= 80F: 12
Days with Rain (>= 0.01”): 21

Rankings:

2nd warmest
12th wettest

Remarks:
Daily Records set:
15 warmest min temp
4 daily maximum

St. Thomas

Highest: **Missing data**
Lowest: **Missing data**
Average: Missing data
Rain Total: Not available

Days with T_{max} >= 90F: N/A
Nights with T_{min} >= 80F: N/A
Days with Rain (>= 0.01”): N/A

Rankings:

Remarks:
Unavailable data for St. Thomas due to technical problems with the equipment

St. Croix

Highest: **Missing data**
Lowest: **Missing data**
Average: Missing data
Rain Total: Not available

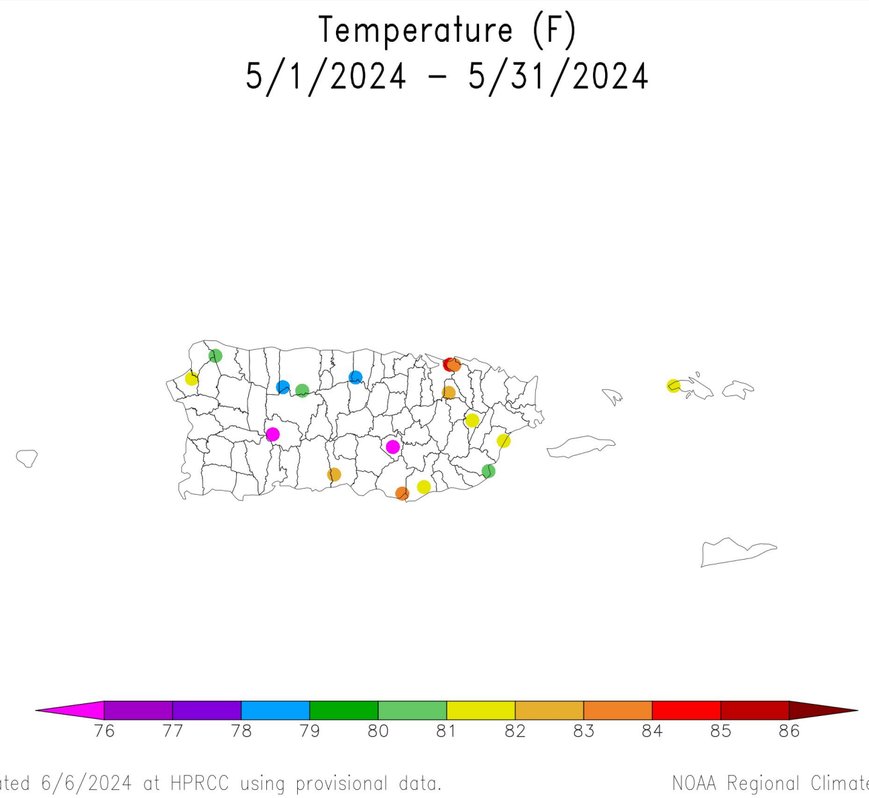
Days with T_{max} >= 90F: N/A
Nights with T_{min} >= 80F: N/A
Days with Rain (>= 0.01”): N/A

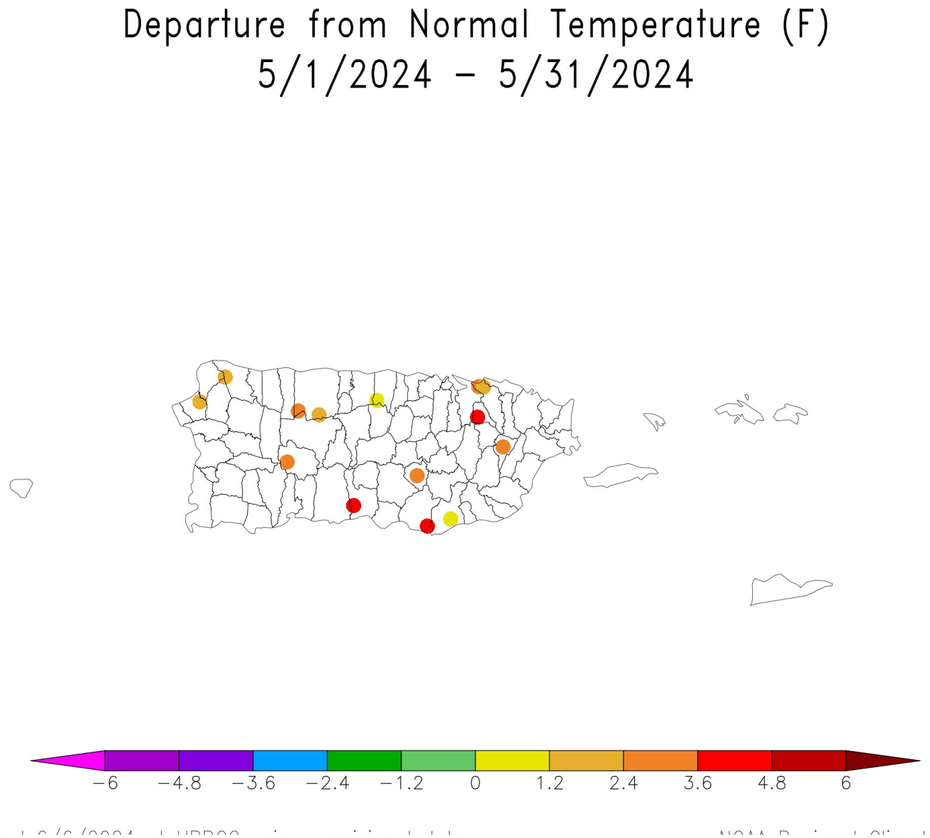
Rankings:

Remarks:
Unavailable data for St. Croix due to technical problems with the equipment

Observed Temperature

Link to generate the latest [ACIS Climate Maps]



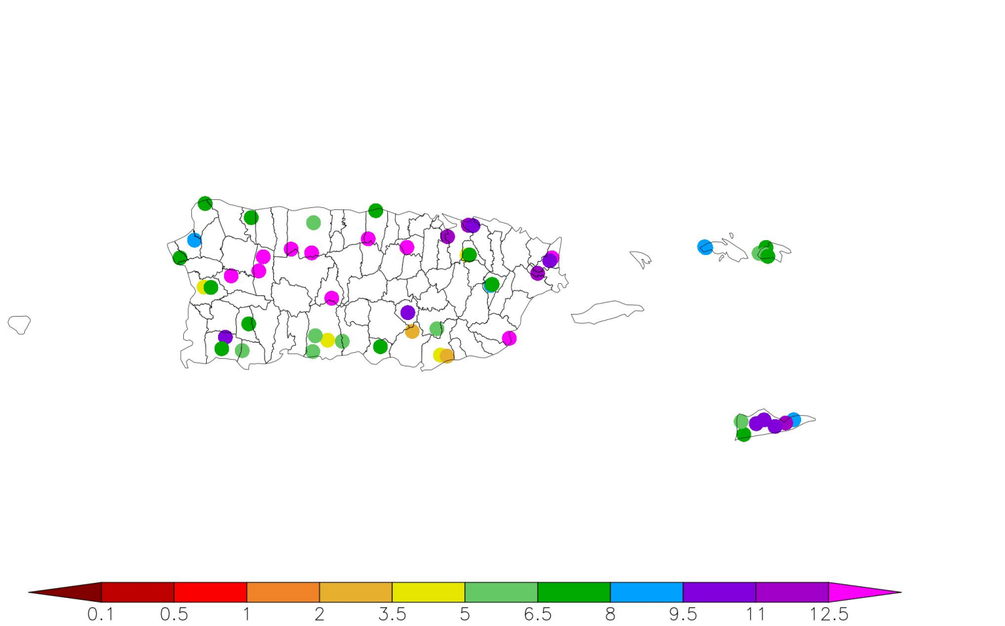


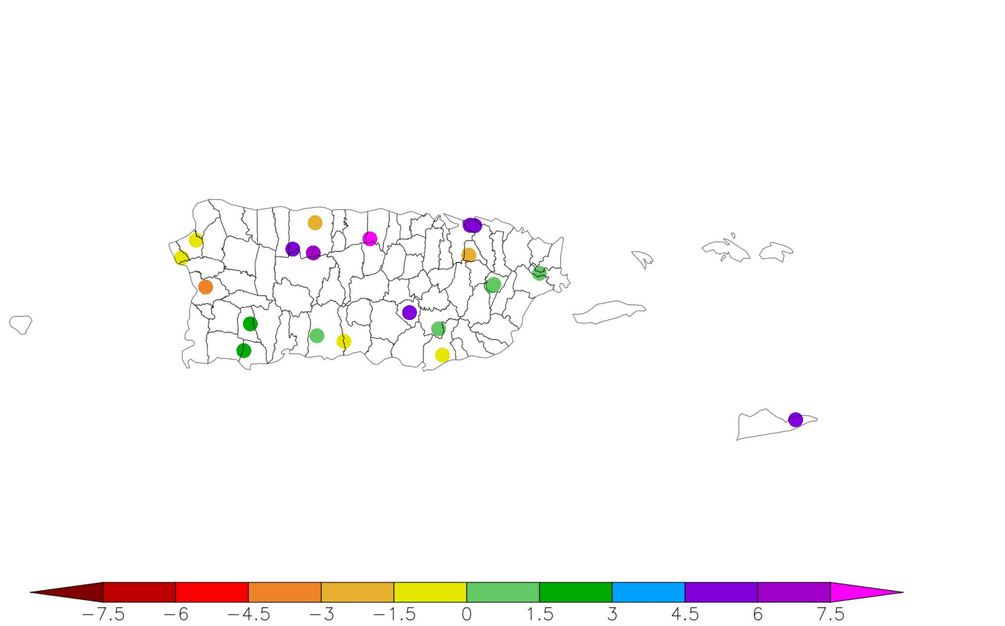
- Temperatures across the majority of the local sites have been mostly above normal, with two stations below normal. The COOP station with the highest temperature during May was Trujillo Alto 2SSW 1SE with 95F.

Image Captions:
Left - Observed Average Temperature for Puerto Rico and US Virgin Islands (COOP)
Right - Departure from normal temperature for Puerto Rico and US Virgin Islands (COOP)
Data Courtesy High Plains Regional Climate Center/NWS COOP Stations.

Observed Rainfall

Link to generate the latest ACIS Climate Maps





- It was a very wet May. Rainfall patterns during the last month have been above normal for most of the region. Most of the sites reported +1 inch from the normal departures. The COOP station with the highest amount of precipitation was Maricao Fish Hatchery in Maricao with 20.16 inches.

Image Captions:
Left - Observed Precipitation for Puerto Rico and US Virgin Islands (COOP & CoCoRaHS)
Right - Departure from normal Precipitation for Puerto Rico and US Virgin Islands (COOP & CoCoRaHS)
Data Courtesy High Plains Regional Climate Center/NWS COOP Stations.

Estimated Rainfall

Estimated Rainfall was obtained from NWPS (Puerto Rico); and COOP, RAWS, and CoCoRaHS stations (U.S. Virgin Islands)

- A wet May was recorded across most of Puerto Rico. Most of the islands observed +5 inches, with the highest values over the western sector of PR with +20 inches.
- The Cordillera Central and the western interior also received +10 inches of rain.
- The only areas with less precipitation observed were the south coastal area of Cabo Rojo and the south and southeast sectors of PR with less than 5 inches.
- The island of St. Croix received over 10 inches of precipitation, with the greatest amounts over the central sector.
- St. Thomas & St. John ended with amounts ranging between 6 and 9 inches of accumulation.

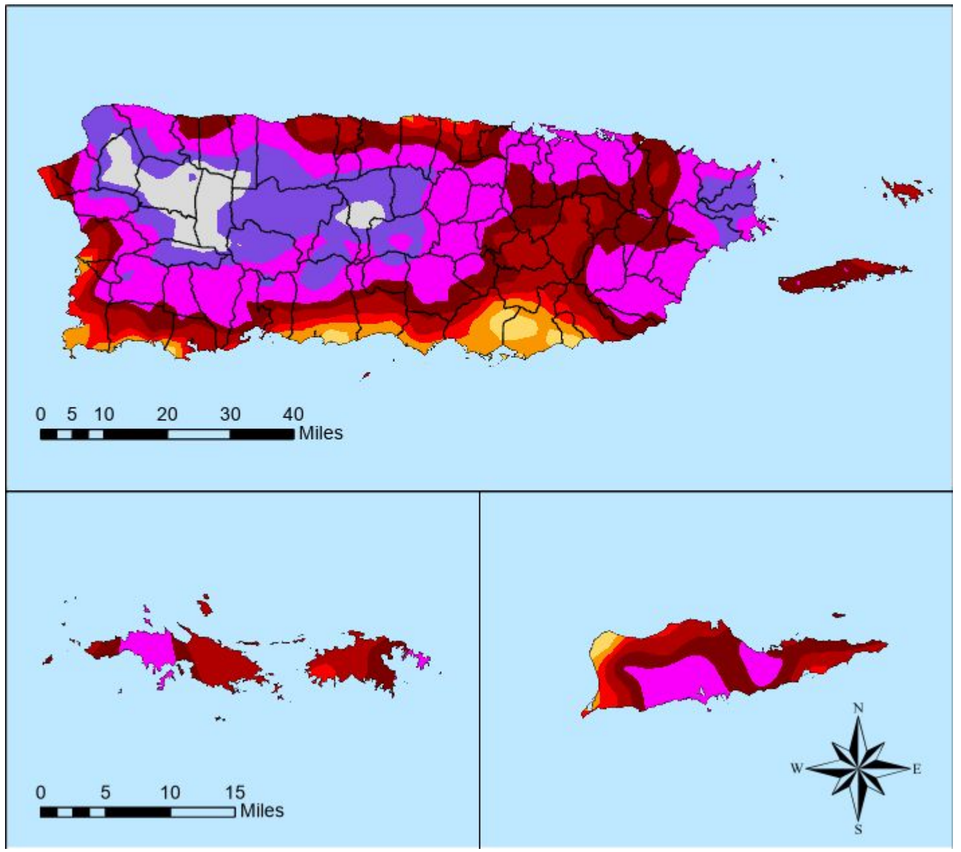


Image Captions:
Estimated Rainfall for the month of May. This map is courtesy of the NWS SJU GIS Team.

Departure from Normal Rainfall

Estimated Departure from normal was obtained from AHPS

- Most of Puerto Rico ended above normal, with a surplus of more than 4 inches. Some areas with +8 inches across PR.
- The story was different for eastern sections of PR. These areas ended with a rainfall deficit nearly 4 inches.

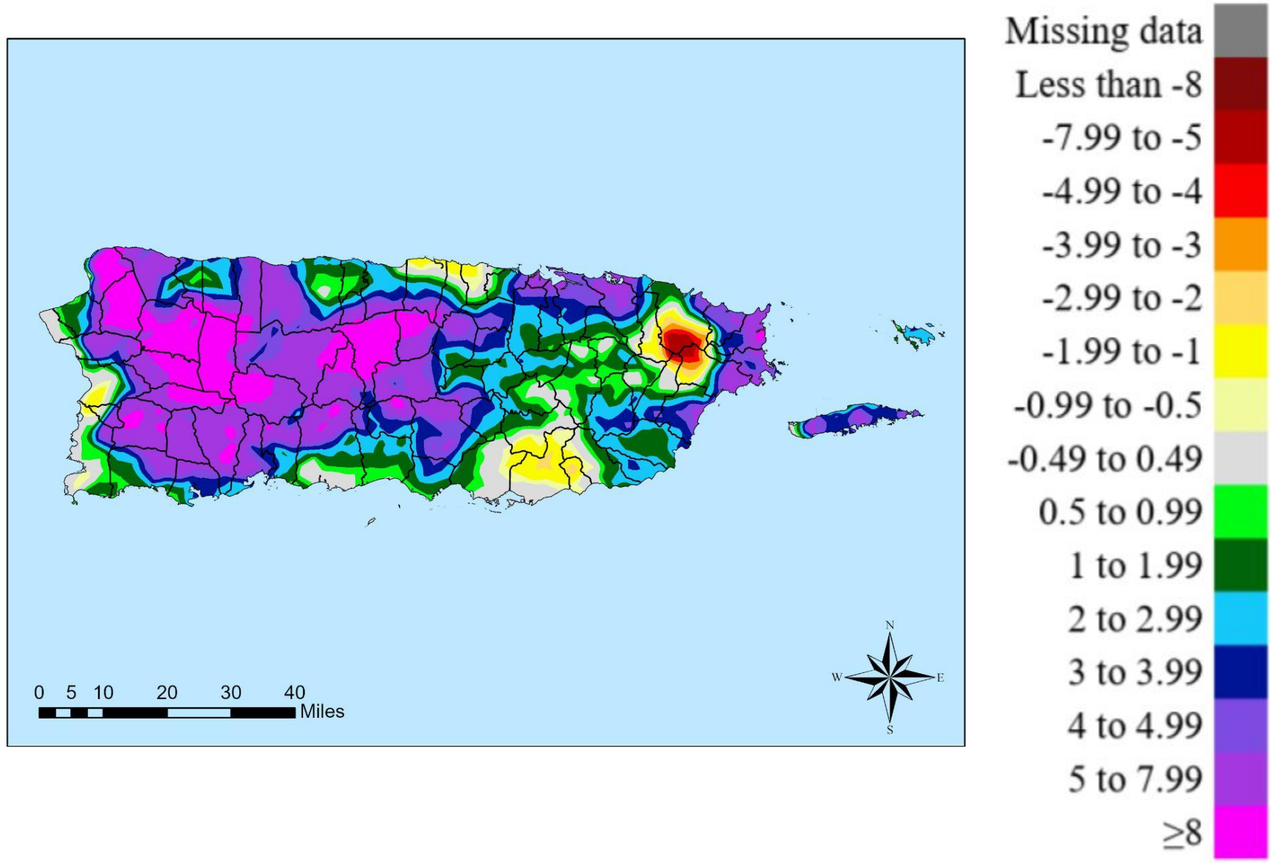


Image Captions:
Estimated Departure from Normal Rainfall for Puerto Rico during the month of May. This map is courtesy of the NWS SJU GIS Team.
*NWPS does not provide rainfall departure from normal for the USVI.

Hydrologic Conditions and Impacts

The latest soil monthly streamflow for Puerto Rico can be found on WaterWatch

- The 28-day average streamflow from the USGS river gauge network indicates most streamflows running normal to much above normal or high. For Reservoir levels, click here.

Non-Routine Hydrologic Products Issued	Products issued for the month
Hydrologic Outlooks (SJUESFSJU)	2
Flood Watches (SJUFFASJU)	1
Flood Warnings (SJUFLWSJU)	15
Flash Flood Warnings (SJUFFWSJU)	41
Urban/Small Stream Flood Advisories (SJUFLSSJU)	138
Severe Thunderstorm Warnings (SJUSVRSJU)	1

Latest Monthly Average Streamflow from USGS

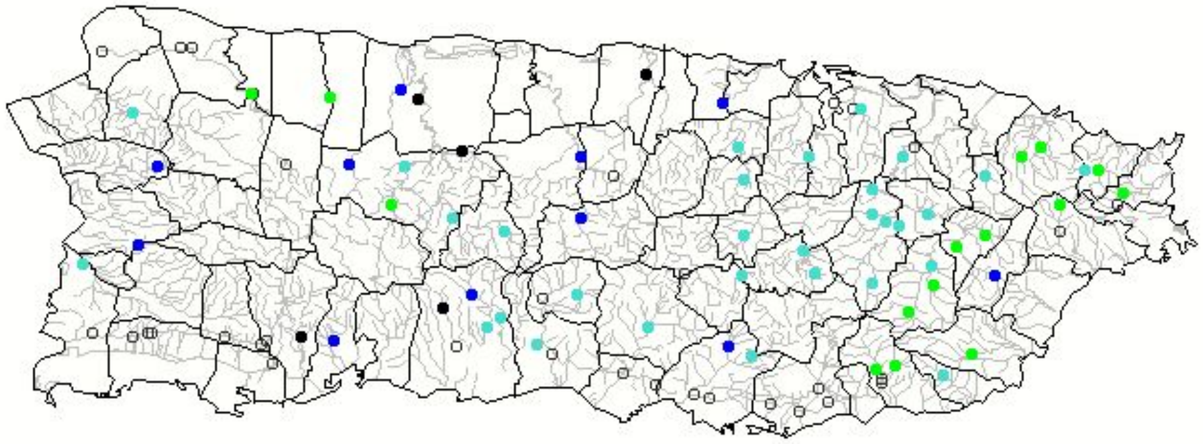
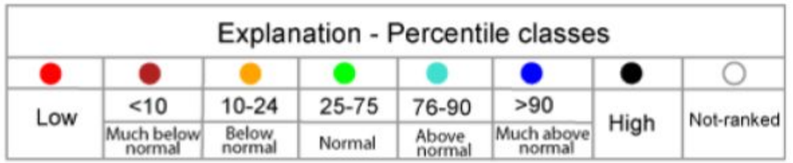


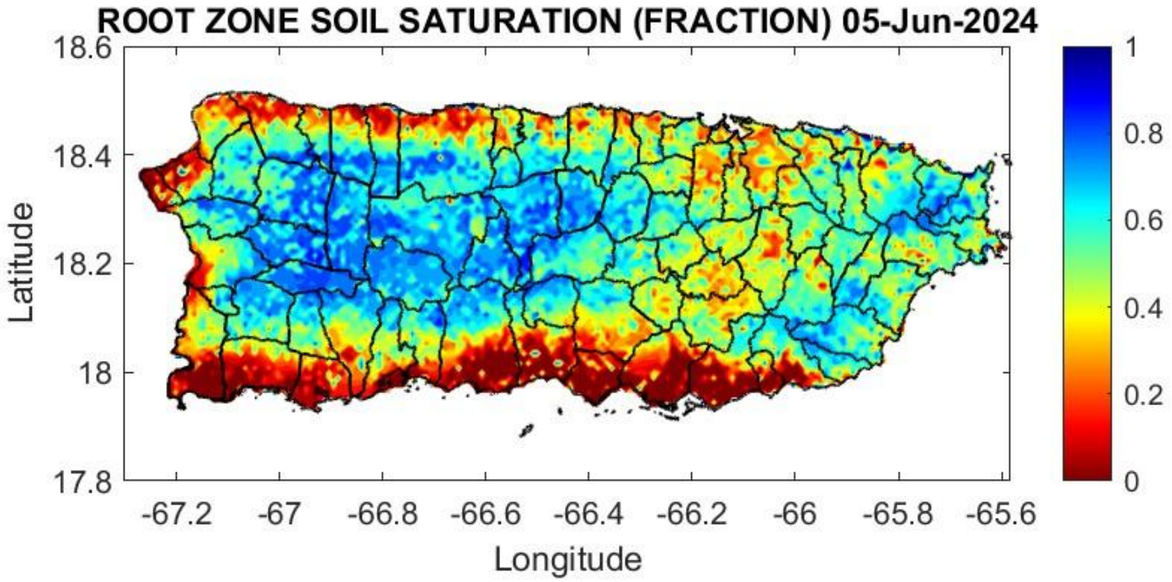
Image Caption: April 2024 compared to historical november streamflows for Puerto Rico.



Soil Saturation

The latest soil moisture information for Puerto Rico can be found on PRAGWATER

The latest data retrieved from PRAGWATER indicates generally saturated soils across the region, except for the extreme west, northwest and for the southern plains.



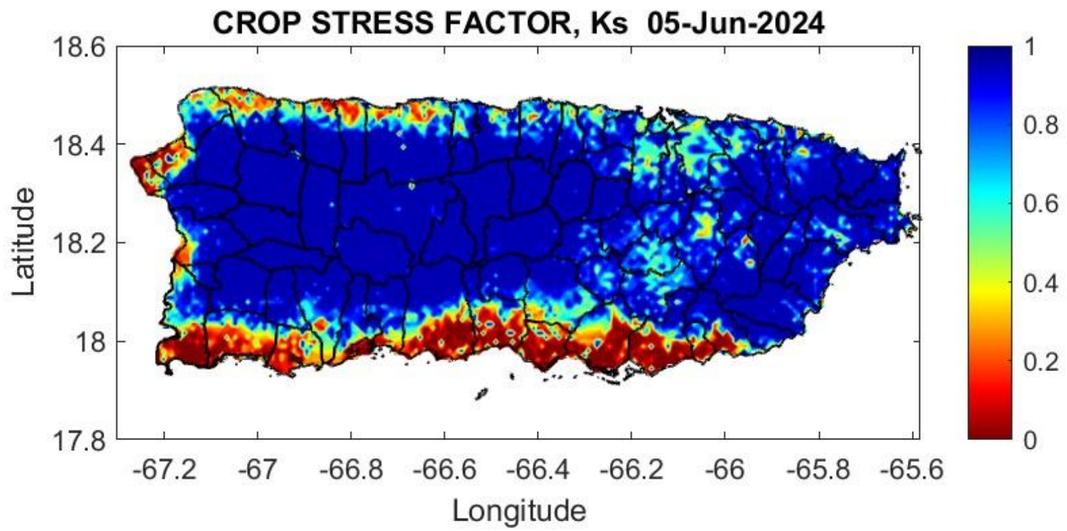


Image Caption: (Left) Crop Stress Factor for Puerto Rico. (Right) Root Zone Soil Saturation Fraction. (Valid: May 1st) Soil saturation: 1=Saturated. Crop Stress Factor: 0=high

U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor] for the Caribbean

DROUGHT CONDITIONS : The territories are **drought free.**

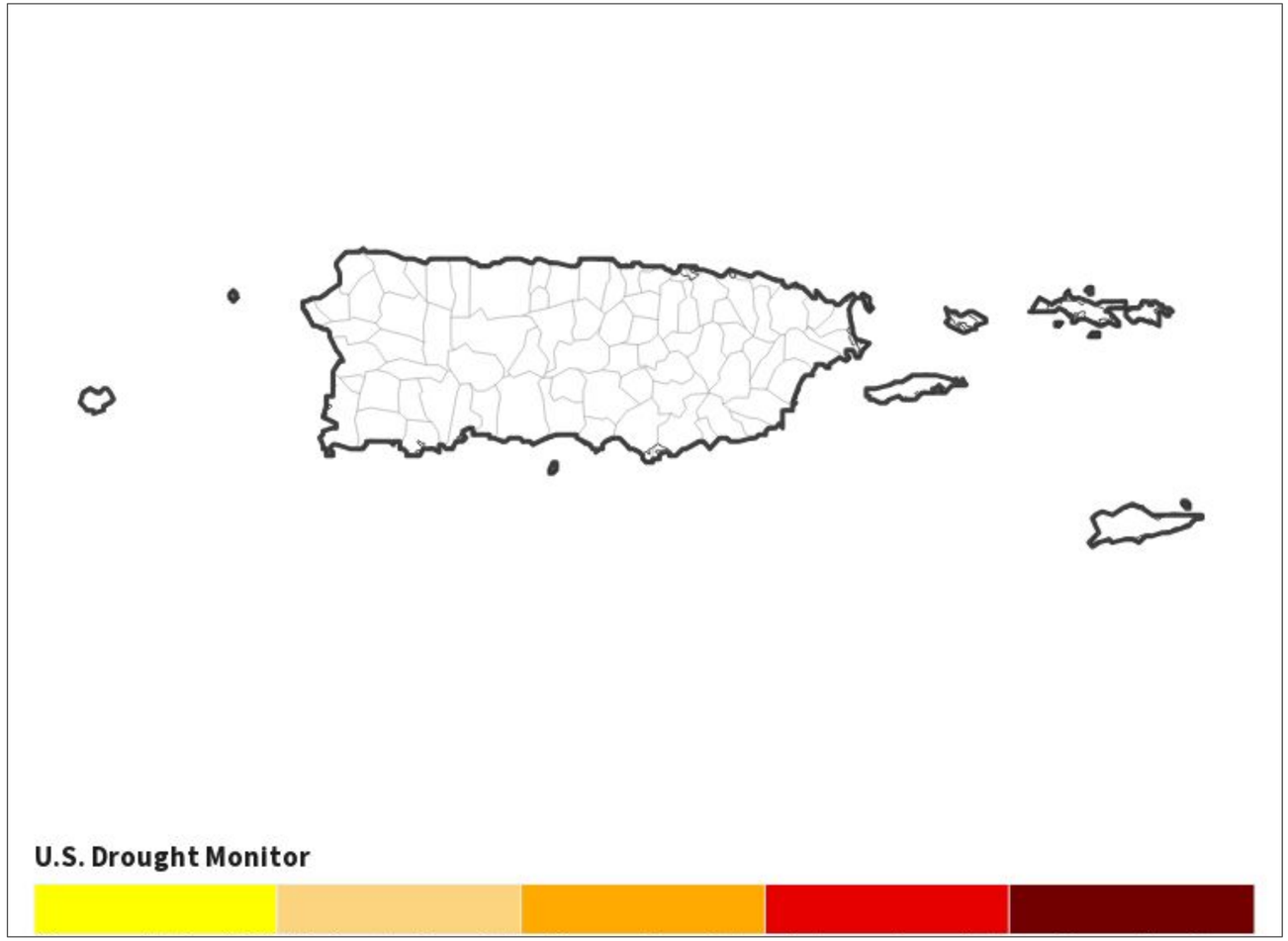


Image Caption: U.S. Drought Monitor valid 8am EDT May 7th.

Recent Change in Drought Intensity

Link to the latest 4-week change map for the Caribbean

Four Week Drought Monitor Class Change.

- A significant improvement in the drought monitor was observed with no drought classification for the forecast area.

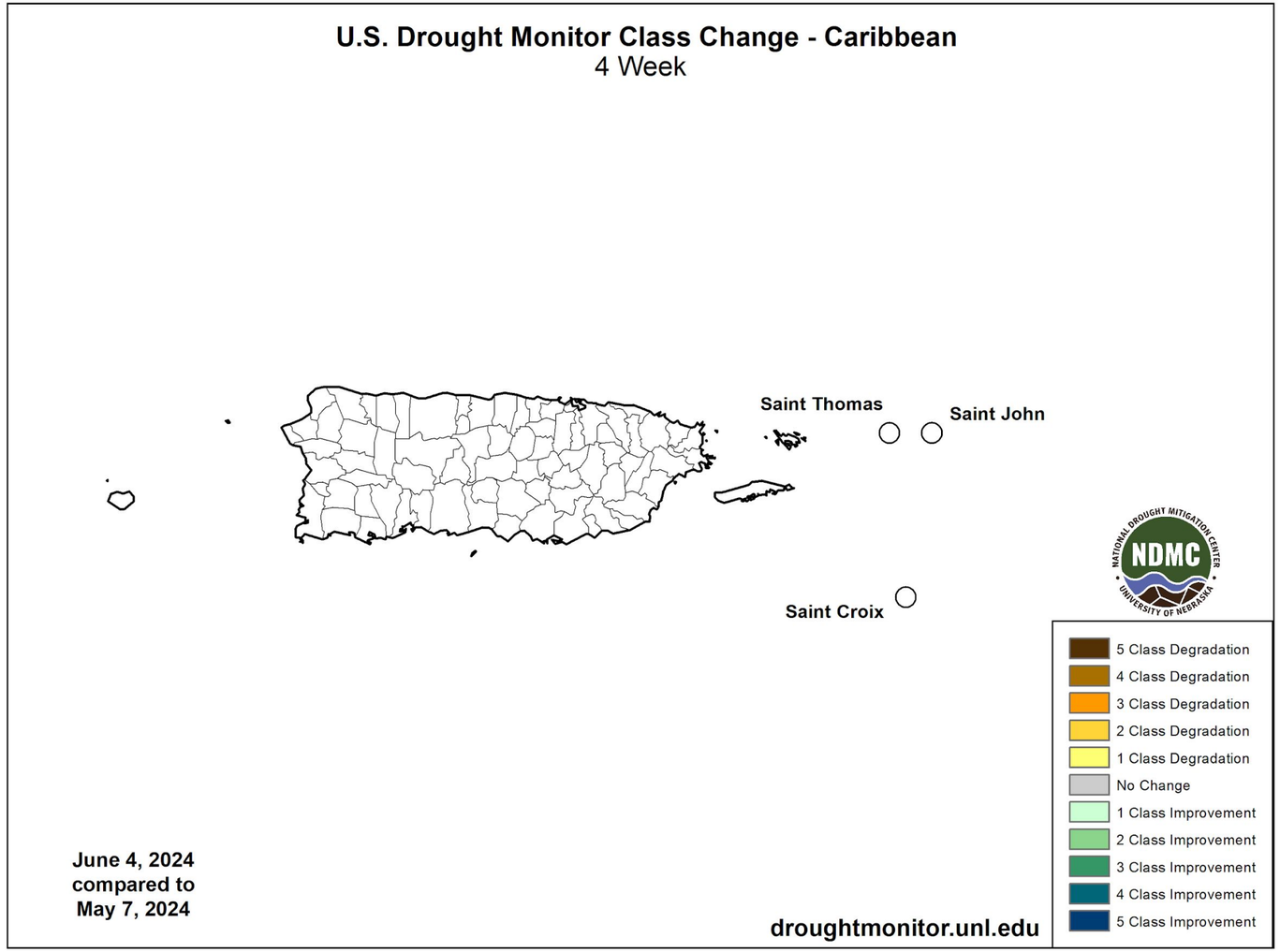


Image Caption: U.S. Drought Monitor 4-week change map valid 8am EDT June 4th, 2024.

Long-Range Precipitation Outlook

The latest monthly and seasonal outlooks can be found on the CPC homepage

- The **North American Multi-Model Ensemble (NMME)** shows a chance higher than 70% of above normal precipitation into the summer months (July-August-September) across the Caribbean.

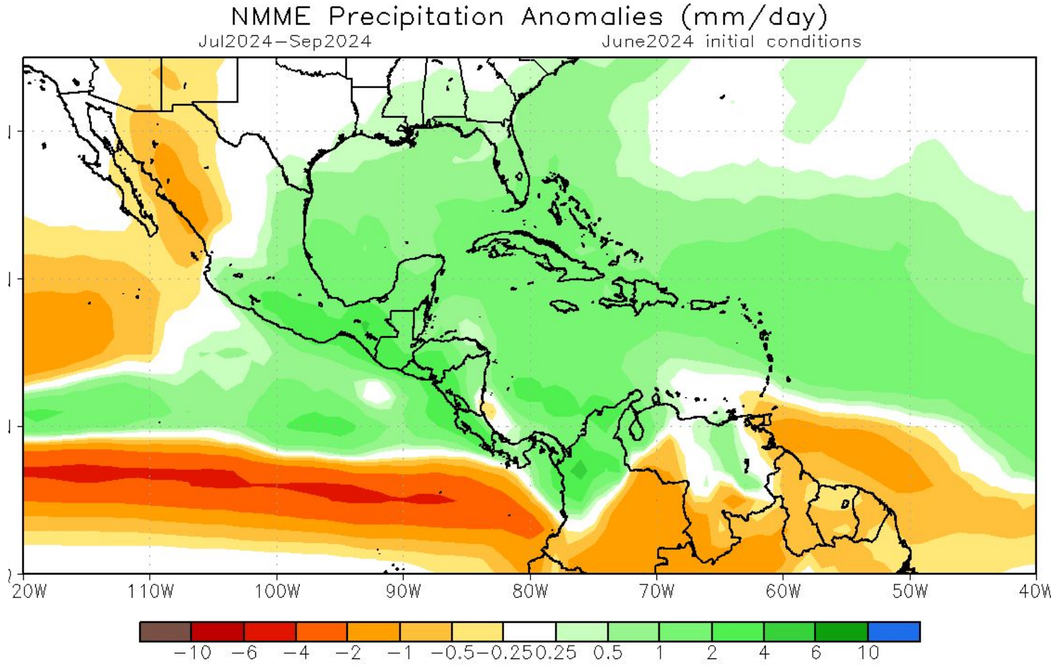


Image caption: NMME precipitation forecast issued June 2024. Valid July-August-September 2024.

Long-Range Temperature Outlook

The latest three-months temperature outlook can be found on the [CPC homepage]

- Based on the **North American Multi-Model Ensemble (NMME)**, there is a ≥ 70% chance of observing above normal temperature for the period of July-August-September 2024. The temperatures are forecast to be nearly +1° C (1.8 °F) above normal .

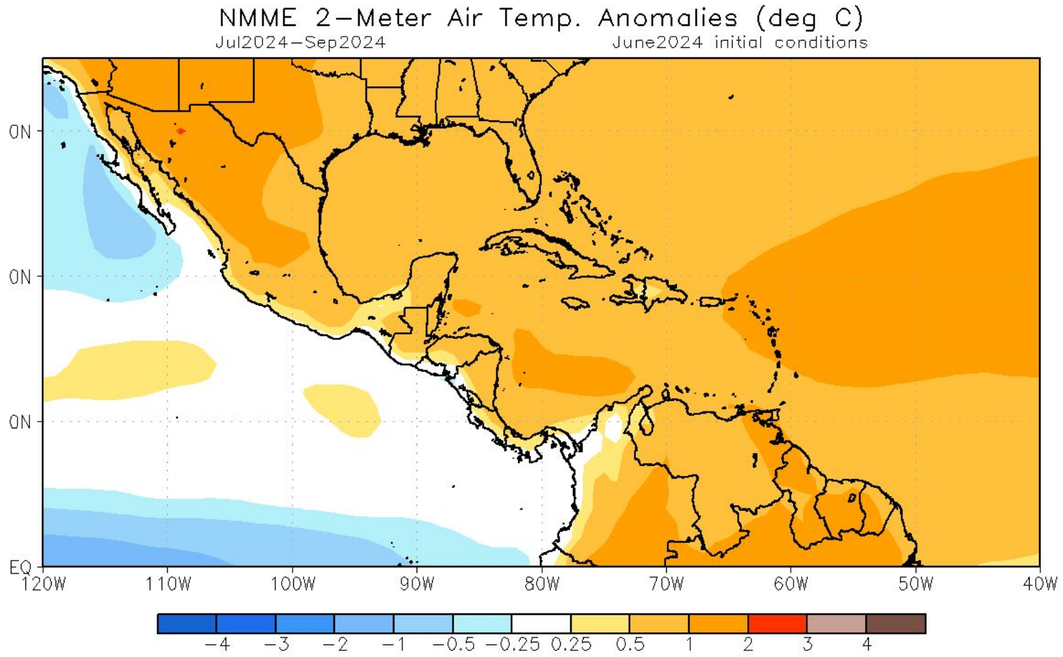


Image caption: NMME temperature forecast issued June 2024. Valid July-August-September 2024.

Long Range Drought Outlook

The latest monthly and seasonal outlooks can be found on the CPC homepage

- Based on the expected conditions, no additional drought is expected to develop in Puerto Rico in the upcoming three months.

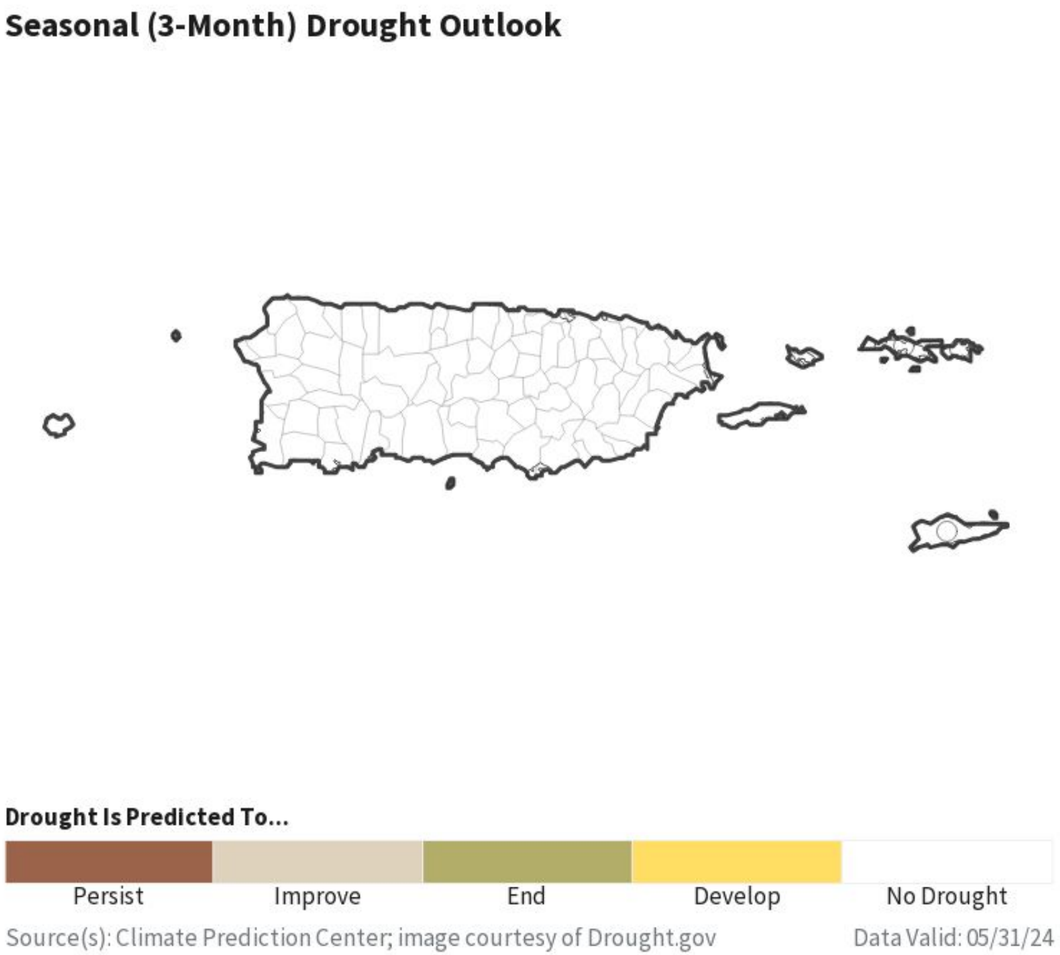


Image Caption: U.S. Seasonal Drought Outlook Valid for May 31st, 2024.