

Trinidad and Tobago Dryness Monitor and Outlook by End of September 2024

[Late Wet Season rainfall is expected to temper the nationwide rainfall deficit by end of the year.](#)

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Key Message: Late Wet Season rainfall is expected to temper the nationwide rainfall deficit by end of the year. Near-normal rainfall amounts forecast October through December are expected to gradually ease the threat of very dry conditions by the end of 2024.

Trinidad and Tobago has continued to receive rainfall deficits for the period July to September 2024. Trinidad received below-normal rainfall in August despite near-normal rainfall in July and September. The rainfall totals for July, August and September consecutively are 248.3 mm (109% of average), 159.0mm (62% of average) and 209.3 mm (117% of average). Tobago received near-normal rainfall for the three months July to September. The rainfall totals for July, August and September consecutively are as follows 123.2 mm (77% of average), 193.4 mm (115% of average) and 109.3mm (76% of average). The 3-month dryness levels across the country ranged from borderline dry to extremely dry.

The dryness outlook shows most areas will experience a gradual improvement by the end of December 2024 with fewer concerns of significant dryness in the short-term.

Dryness Indicator for July to September 2024:

Dryness conditions ranged from very dry to borderline dry across Trinidad and Tobago. Portions of southwest and northeast Trinidad were moderately dry to very dry in August. As a result, slight to moderate dryness evolved over a large portion of eastern Trinidad by the end of the September. Elsewhere, portions of eastern Trinidad and the majority of Tobago were borderline dry. There was less significant dryness observed over portions of southeastern Trinidad.

In July, Trinidad had eight wet days (>10.0mm) and ten relatively wet days (<10.0mm) and Tobago had six wet days (>10.0 mm), ten relatively wet days (<10.0 mm) and the rest of month was a mixture of relatively dry days (< 1.0 mm) and dry days (0.0 mm). In August, Trinidad had seven wet days (>10.0mm), ten relatively wet days (< 10.0 mm) and Tobago had five wet days (>10.0 mm), seven relatively wet days (<10.0mm), with the rest of days a mixture of relatively dry days (< 1.0 mm) and dry days (0.0 mm). In September, Trinidad had five wet days (>10.0mm), six relatively wet days (< 10.0 mm) while Tobago had one wet day (>10.0mm), five relatively wet days (<10.0 mm) and the rest of days were a mixture of relatively dry days (<1.0 mm) and dry days (0.0mm).

The 3-month dryness indicator July to September shows dryness indicator values that ranged from -1.89 to +1.07, so the dryness category ranged from very dry to no concern (see Figure 1). The colour-coded dryness indicator map showing observed level of dryness is based solely on rainfall and can be used for decision-making or for heightening awareness on dryness.

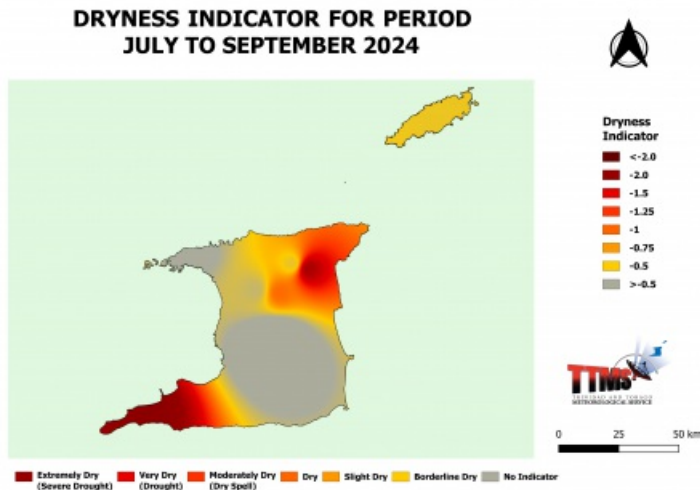


Figure 1. The colours on this map show observed dryness levels based on the rainfall differences from average, which have been standardized and expressed as the number standard deviations less than average. The 3-month period used to compute the dryness is July to September 2024 compared to the historical average for the same 3-month period. The yellow to red colours on the map indicate areas with borderline-dry to extremely dry levels of dryness. The grey colour indicates areas where there are no significant dryness concerns.

Dryness Outlook for October to December 2024:

There remains an overall rainfall deficit to date in 2024. However, the dryness concern will lessen for Trinidad and Tobago through November and December. Near normal rainfall amounts are expected November through December due to the passage of rain-bearing systems during the second peak of the wet season and last month of the Atlantic Hurricane Season. The recent cooling of sea surface temperatures in the eastern Pacific Ocean and the expected transition from ENSO Neutral to weak La Nina conditions November to December is expected increase rainfall intensity and amount from mid-November.

The predicted volume of rainfall from October to December 2024 will likely increase soil moisture and also raise streams and river levels within catchment areas and begin to replenish reservoirs.

The Dryness Outlook shows dryness indicator values between -0.098 and -0.036 are likely to develop across the vast majority of Trinidad and Tobago by the end of December (see Figure 2).

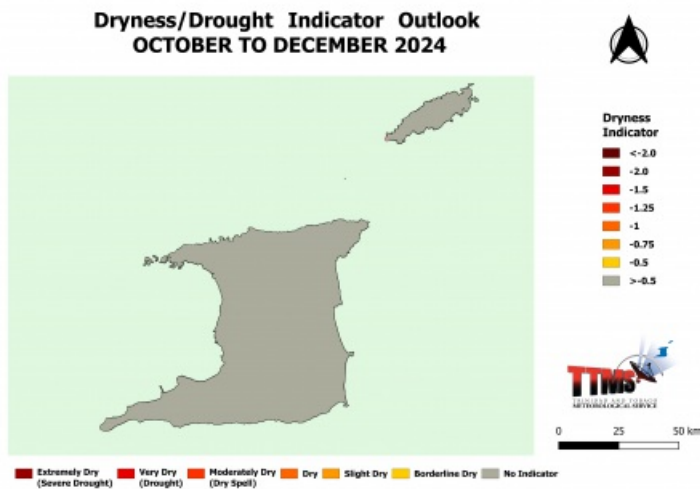


Figure 2. The colours on this map show the predicted levels of dryness for the October to December 2024. It is based on the difference between standardized accumulated rainfall (observed and predicted) from October to December 2024 and the historical average rainfall for the same period. The yellow to red colours indicate borderline dry to extremely dry levels. The grey colour indicates areas where there are no significant dryness concerns.

Standardized Precipitation Index:

The Standardized Precipitation Index (SPI) is an index showing the severity and rarity of dryness or wetness of an area. Negative values of SPI indicate less than median rainfall and drier conditions; positive values indicate greater than median rainfall and wetter conditions. In general, dryness impacts are expected when the value of the 3-month SPI lies near -1.0. As the negative SPI value becomes larger in amount than -1.0, the severity of impacts increases. For Trinidad and Tobago, extreme dryness occurs in the dry season when negative SPIs are larger than -1.25.