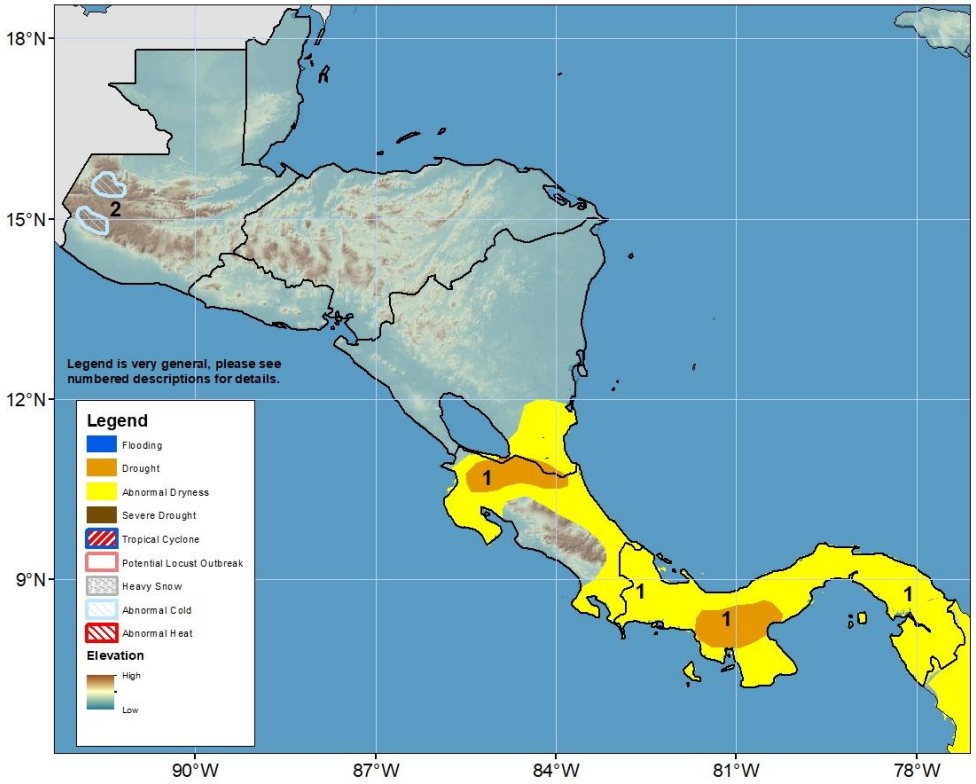
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
14 December – 20 December 2023

The rainfall season has ended for the northern half of the region, while below average rain is onging in the South.



1) Reasonable amounts of rainfall during the last month have helped improve short-term deficits across much of the region, but irregular and insufficient rainfall in the 90 days (long-term) and 30 days (short-term) is persisting in southern Central America. The rainfall deficits are affecting the shipping industry in Panama Canal, where the water level of Gatun Lake is below average. Drought and abnormal dryness polygons are removed in the North where the rainfall season ended several weeks ago, but polygons are kept in the South where end-of-season occurs later.

2) A colder air mass from the North may bring some of the first frost or freezes to higher elevations of of southwestern Guatemala

Note: The Hazards outlook map is based on current weather/climate information, short and medium-range weather forecasts (up to 1 week), sub-seasonal forecasts up to 4 weeks, and assesses the potential impact of extreme events on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed and predicted to continue during the outlook period. The boundaries of these polygons are only approximate at the spatial scale of the map. This product takes into account long-range seasonal climate forecasts but does not reflect current or projected food security conditions. FEWS NET is a USAID-funded activity whose purpose is to provide objective information about food security conditions. Its views are not necessarily reflective of those of USAID or the U.S. Government. The FEWS NET weather hazards outlook process and products include participation by FEWS NET field and home offices, NOAA-CPC, USGS, USDA, NASA, and a number of other national and regional organizations in the countries concerned.

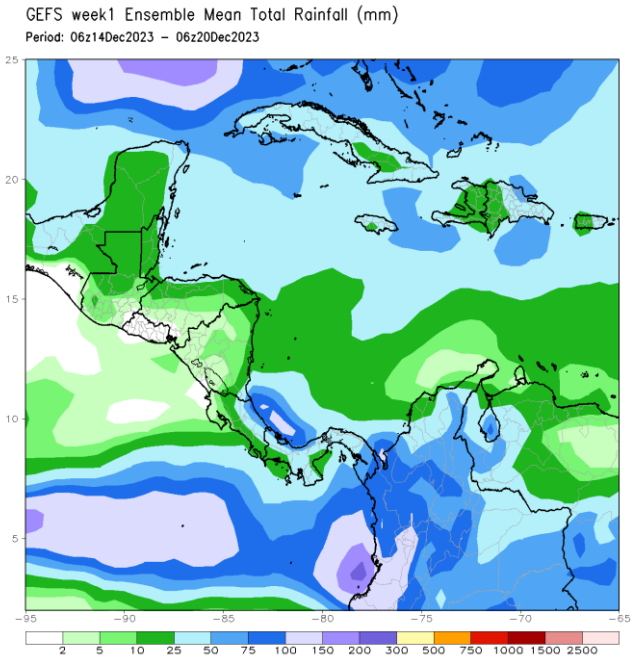
Questions or comments about the hazards outlooks may be directed to Dr. Wassila Thiaw, Head, International Desks/NOAA, wassila.thiaw@noaa.gov. Questions about the USAID FEWS NET activity may be directed to Dr. James Verdin, Program Manager, FEWS NET/USAID, jverdin@usaid.gov

Rainfall is forecasted to be near to above-average for Caribbean-facing areas in the coming week.

During last week, central and Pacific-facing portions of the region received little to no rainfall. Northern Guatemala, and Caribbean-facing portions of Belize, Honduras, Nicaragua, and Costa Rica observed moderate to locally heavy rains totaling 25–75 mm, and locally more. Scattered light rains with some embedded heavier showers were also observed in parts of Panama. Rainfall was slightly above average in Belize, northern Guatemala, and northern Honduras and was less than average to the South. Rainfall conditions across the region have improved over the last 30 days to 2 months, showing above-average rainfall and SPI values larger than 0.5 over large portions of the region. Conversely, southwestern Guatemala and Panama exhibit negative SPI values. The wet period was too short in the context of the season to have large benefits. In the long-term (the past 90 days), northern and southern Guatemala, southern, eastern, and western Honduras, northern Nicaragua, most of Costa Rica, and Panama still registered rainfall less than 80% of their long-term period averages. High temperatures have especially limited any recent improvement in soil moisture. The irregular rainfall and the prolonged insufficient rainfall during the 'Postrera' have contributed to the degradation of the vegetation in some regions and have impacted the agricultural sector in Guatemala. High temperatures and humidity in the next few days could negatively impact populations in parts of Panama.

For next week, the GEFS forecast suggests Caribbean-facing portions of the region, as well as northern Guatemala, should receive below-average rainfall amounts of 10 mm to 50 mm. Belize and eastern Costa Rica are forecasted as the wettest areas and could locally receive more than 75mm. Cold air filtering in from the north this week may bring some overnight freezing conditions to the highest elevations of western Guatemala which could hurt sensitive vegetation.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly Forecast (mm)
14 December – 20 December 2023



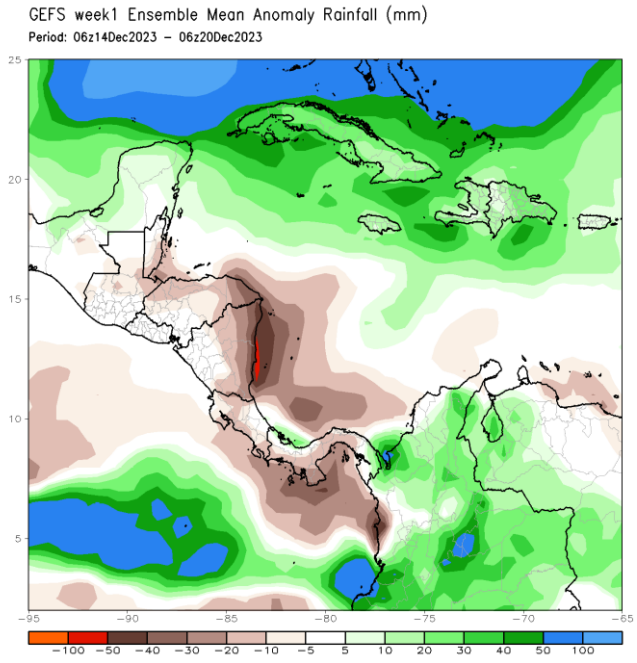


Figure 1: Source NOAA / CPC

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